



Islands Trust Conservancy

Regular Meeting Agenda

Date: Tuesday, November 26, 2019
Time: 10:00 am
Location: Islands Trust - Victoria
200 - 1627 Fort Street, Victoria, BC

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PROVINCE OF BRITISH COLUMBIA
ORDER OF THE MINISTER OF
MUNICIPAL AFFAIRS AND HOUSING

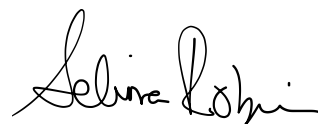
ISLANDS TRUST ACT

Ministerial Order No. **M376**

I, Selina Robinson, Minister of Municipal Affairs and Housing, order that, Susan Jean Hannon is appointed as a member of the Islands Trust Conservancy Board for a term ending August 27, 2021.

2019-10-28

Date



Minister of Municipal Affairs and Housing

(This part is for administrative purposes only and is not part of the Order)

Authority under which Order is made:

Act and Section: *Islands Trust Act*, R.S.B.C. 1996, c. 239, s. 40(3)

Other (Specify):



Islands Trust Conservancy

DRAFT Minutes of Regular Meeting

Date: Tuesday, October 1, 2019
Time: 10:02 am
Location: Islands Trust - Victoria
200 - 1627 Fort Street, Victoria, BC

Board Members Present: Kate-Louise Stamford, Chair (by teleconference)
Linda Adams (by teleconference)
Doug Fenton (by teleconference)
Robin Williams (by teleconference)

Board Member Regrets: Sue Ellen Fast

Staff Present: Kate Emmings, Acting Islands Trust Conservancy (ITC) Manager
Nuala Murphy, Property Management Specialist
Jemma Green, Covenant Management and Outreach Specialist
Wayne Bourque, Acting Ecosystems Protection Specialist
Clare Frater, Director of Trust Area Services joined the meeting at 11:40 am and left at 12:01 pm returning at 1:13 pm.
Alexandra Trifonidis, Acting Administrative Assistant

1. CALL TO ORDER

Chair Stamford called the meeting to order at 10:02 am and acknowledged that the meeting was being held in Coast Salish First Nations territory.

1.1 Electronic Meeting Participation

ITC-2019-030

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board agree to waive section 10.1 (b) of the meeting procedures bylaw for Trustee Fenton to attend the meeting by phone for the second time in a row this year.

CARRIED

1.2 Election of Vice Chair

The ITC Acting Manager called for nominations for the position of Islands Trust Conservancy Vice Chair. Chair Stamford nominated Trustee Fast from Bowen Island. Prior to the meeting Trustee Fast had confirmed her willingness to act as Vice Chair by email. ITC Acting Manager called a second and third time for nominations. No other nominations were brought forward. Trustee Fast was elected by acclamation as Islands Trust Conservancy Vice Chair.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- 1.1 Electronic Meeting Participation

By general consent, the agenda was approved as amended.

3. CLOSED MEETING

ITC-2019-031

It was MOVED and SECONDED,

that the meeting be closed to the public in accordance with the Community Charter, Part 4 Division 3, section: 90 (1) (d) the security of the property of the Islands Trust Conservancy board; (e) the acquisition, disposition or expropriation of land or improvements, if the board considers that disclosure could reasonably be expected to harm the interests of the Islands Trust Conservancy board; (f) law enforcement, if the board considers that disclosure could reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment; (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and that staff be invited to remain in the meeting.

CARRIED

The Islands Trust Conservancy convened the closed portion of the meeting at 10:15 am and resumed in open meeting at 11:15 am to Rise and Report.

4. RISE AND REPORT

The Islands Trust Conservancy reported on the following items:

- The ITC Board rise and report to the landowners affected regarding the decision of the Board.

5. MINUTES/COORDINATION

5.1 Minutes of Meetings/Resolutions without Meetings

5.1.1 Approval of July 16, 2019 Meeting Minutes

By general consent, the Islands Trust Conservancy meeting minutes of July 16, 2019 were adopted.

5.1.2 Approval of July 16, 2019 ITC/EC Liaison Meeting Minutes

By general consent, the Islands Trust Conservancy/Executive Committee Liaison meeting minutes of July 16, 2019 were adopted.

5.1.3 Approval of August 7, 2019 Special Meeting Minutes

By general consent, the Islands Trust Conservancy Special meeting minutes of August 7, 2019 were adopted.

5.1.4 Resolution without Meeting - UBCM

The Islands Trust Conservancy Board reviewed resolution number: ITC-2019-029
CARRIED August 21, 2019.

It was MOVED and SECONDED that the Islands Trust Conservancy Board supports the attendance of Chair Stamford to the 2019 Union of British Columbia Municipalities and that the related expenses of up to \$1,300 be paid out of the Islands Trust Conservancy Board Training and Conferences budget.

Islands Trust Conservancy Acting Manager noted the RWM will need to be amended in item 6.1.7 later in the agenda.

5.2 Follow-up Action List

The Islands Trust Conservancy Acting Manager provided an update on each of the items in the Follow-up Action List.

Trustee Williams expressed his appreciation of the Acting Manager regarding her work load and extended managerial role.

6. BUSINESS

6.1 Items for Approval

6.1.1 Reconciliation Action Plan

The Islands Trust Conservancy Acting (ITC) Manager provided the Board with a backgrounder and conveyed the Islands Trust Senior Intergovernmental Policy Advisor suggestion that the ITC wait and see how the Islands Trust Reconciliation Action Plan develops prior to making a decision on what ITC would like to do.

ITC-2019-032

It was MOVED and SECONDED,
that resolution ITC-2019-018 be amended by deleting the words “and action plan” so that the resolution reads as follows:

“That the Islands Trust Conservancy Board direct staff to develop a specific draft reconciliation declaration for the Islands Trust Conservancy.”

CARRIED

ITC-2019-033

It was MOVED and SECONDED,
that the Islands Trust Conservancy Board endorse the participation of board members and staff in training and development opportunities provided through Trust Council’s Reconciliation Action Plan.

CARRIED

ITC-2019-034

It was MOVED and SECONDED,
that the Islands Trust Conservancy Board direct staff to review the Islands Trust Reconciliation Action Plan and provide feedback to the Board prior to the ITC Board / Executive Committee Liaison Meeting for possible discussion at the 2020 Liaison Meeting.

CARRIED

6.1.2 Budget Requests (late item)

ITC Acting Manager presented the proposal for a permanent Covenant Management and Outreach Specialist Position. In previous years, the property monitoring has been done out of house by contracted individuals. This year, part of the monitoring was done in house by the Covenant Management and Outreach Specialist position with the intention of doing all the monitoring in house in years to come. The continued growth of ITC's protected properties, including new factors such as climate change impacts, fire management concerns and prevention, ecosystem shifts, cultural significant areas and more, brings higher management costs and a need for more resources. With this new permanent position a nice division of labour will occur between the Covenant Management and Outreach Specialist and Property Management Specialist as well as targeted outreach to existing and new landowners.

The Board questioned what will make a good argument for this additional full time position when bringing the budget proposal to Trust Council. Some suggestions were as follows:

- strengthen language
- infographic (one pager) for a communications tool that includes the properties protected compared to the number of staff
- amplify climate change and First Nations aspect
- clean confident affirmative approach
- accountable
- note - work is now all in house

ITC-2019-035

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board recommend to the Islands Trust Council that the 2019-2020 budget include funding for a permanent Covenant Management and Outreach Specialist position.

CARRIED

6.1.3 ITC Nature Reserve and NAPTEP Covenants Monitoring

The Covenant Management and Outreach Specialist gave the Board a backgrounder on this years monitoring report highlighting that there was one case of potential trespass, one confirmed trespass, and no breaches in the past year.

ITC-2019-036

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board accept the "Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019."

CARRIED

The meeting broke for lunch at 12:07 pm and returned at 12:32 pm.

6.1.4 Brigade Bay Bluffs Management Plan

The Covenant Management and Outreach Specialist presented the Board with a thorough summary of the Brigade Bay Bluffs Nature Reserve management plan.

Chair would like the report to go to Gambier LTC.

Discussion ensued on the following:

- use of motorized vehicles (local activity)
- trails and paths
- ITC wild fire strategies approach (ecosystems in mind) vs. BC WildFire approach.

The Chair noted that the dock is not owned by the Regional District and the reference to dock ownership should be revised.

ITC-2019-037

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board approve the 2019 update of the Brigade Bay Bluffs Nature Reserve Management Plan as amended dated September 18, 2019.

CARRIED

6.1.5 Long Bay Wetland Nature Reserve Management Plan

The Covenant Management and Outreach Specialist (CMOS) stated there is a lot of overlap between the Long Bay Wetland Nature Reserve Management Plan and the Brigade Bay Bluffs Management Plan. In the past, the two management plans were combined in a single plan. This year they have been separated into two plans. The CMOS gave the Board an overview of the nature reserve noting the trails are in good condition.

The Chair noted that the dock is not owned by the Regional District and the reference to dock ownership should be revised.

ITC-2019-038

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board approve the 2019 update of the Long Bay Wetland Nature Reserve Management Plan as amended dated September 20, 2019.

CARRIED

6.1.6 Video Recording and Streaming of Meetings

ITC Acting Manager presented the item to the Board.

Discussion ensued on the following:

- public attendance at meetings
- transparency
- comments and responses from public
- formal delegation policy

ITC-2019-039

It was MOVED and SECONDED,

that Islands Trust Conservancy Board communicate to Trust Council its interest in filming and streaming its public meetings.

CARRIED

6.1.7 Board attendance at LTABC Seminar Series

ITC Acting Manager brought to attention of the Board the upcoming Land Title Alliance British Columbia seminar series for interest in attending. Prior to the meeting Trustee Fast expressed her desire to attend this years series.

ITC-2019-040

It was MOVED and SECONDED,

that the Islands Trust Conservancy Board supports the attendance of trustee Fast at the 2019 Land Trust Alliance of British Columbia Seminar Series (November 4-5, 2019) and that the related expenses of up to \$1,000 be paid out of the Islands Trust Conservancy Board Training and Conferences budget.

CARRIED

ITC-2019-041

It was MOVED and SECONDED,

that resolution ITC-2019-029 be amended by changing the words “up to \$1,300” to “up to \$2,000” so that the resolution reads as follows:

“That the Islands Trust Conservancy Board supports the attendance of Chair Stamford at the 2019 Union of British Columbia Municipalities Convention and that the related expenses of up to \$2,000 be paid out of the Islands Trust Conservancy Board Training and Conferences budget.”

CARRIED

Clare Frater, Director of Trust Area Services, joined the meeting at 1:13 pm.

6.2 Items for Discussion/Direction

6.2.1 UBCM Update (Chair Stamford)

Chair Stamford attended the breakfast at UBCM and gave a 7-minute presentation to around 10 people in attendance including 4 MLA's. Chair Stamford felt it went very well.

6.2.2 Ruby Alton House History and Status

Trustee Williams requested an overview of the Ruby Alton Nature Reserve to provide information about recent and past activity on the property.

ITC's Property Management Specialist provided a briefing on the Ruby Alton Nature Reserve history and endowment, including information regarding the use and management of the house. Key points brought up were as follows:

- condition of the house
- rental circumstances

- benefits of on site care taker
- maintenance
- management plan
- public use has risen within the last year

Discussion ensued on the following:

- rainwater collection – filtration system – demonstration center
- ITC can own rental properties
- meeting space for community events
- Ruby's will and wishes
- CRD website / ITC website rainwater catchment tours
- land issues vs/ house issues
- management plan update and public process

6.2.3 Meeting Dates

ITC Acting Manager presented potential meeting dates for 2020. The Board reviewed the dates and presented the following comments for consideration:

- Trustee Williams - Tuesdays work better
- Chair Stamford - Sept 29th does not work
- Trustee Fenton - Sept 29th does not work/Oct 6th does work
- Trustee Adams - Feb 13th works better than the 12th

6.3 **Correspondence**

6.3.1 ITC Chair to First Nations

The Islands Trust Conservancy Board received correspondence for information.

6.4 **Updates for Information**

6.4.1 Executive Committee Updates (Verbal)

No updates from Executive Committee (EC) were received this meeting as Trustee Fast, our EC representative, was not in attendance.

ITC Acting Manager informed the Board that the website work is moving along and carries a heavy schedule but is to be complete in March 2020.

Director of Trust Area Services gave an update on the Islands 2050 engagement process. The director and her staff are pleasantly surprised by how many people are turning out. The open houses are a great way to showcase ITC work.

For everyone's information the Islands Trust is now on Facebook.

6.4.2 Public Acquisitions Report

The Islands Trust Conservancy Board reviewed the Public Acquisitions Report for information. ITC held three celebration events for newly protected properties this summer: Swift Family Link Island NAPTEP Covenant, Salish View Nature Reserve and Valens Brook Nature Reserve. The Salish View Nature Reserve celebration was a public event held during Lasqueti Island's Squitty Bay Day and

was attended by approximately 80 people. There was also an open house held for the Salish View Nature Reserve Management Plan.

6.4.3 Public Covenants Report

The Islands Trust Conservancy Board reviewed the Public Covenants Report for information.

6.4.4 Regional Conservation Plan Progress Report

The Islands Trust Conservancy Board reviewed the Regional Conservation Plan Progress Report for information.

6.4.5 Budget Report

The Islands Trust Conservancy Board reviewed the Budget Report for information. ITC Acting Manager informed the Board that the Annual Report is now complete is online and includes this fiscal year's financial audit statements.

6.4.6 Board Appointment and Staff Updates (Verbal)

- ITC Acting Manager welcomed back Nuala Murphy who has been away travelling for 6 months.
- At this time, the Covenant Management and Outreach Specialist position continues until the end of March 2020.
- Wayne Bourque and Kate Emmings will continue in their roles until November 15.
- Jennifer Eliason is on temporary assignment with BC Parks until 2022.
- Trustee Adams' appointment has been extended for an additional two years.
- There is currently a vacancy on the ITC Board. Crown Agencies and Board Resourcing Office (CABRO) does have someone waiting in the wings that they are hoping to announce in November. Currently the candidate is away and cannot confirm yet but hopefully will before the next board meeting.
- The Communications and Fundraising Specialist position has been posted and has now closed; interviews are being held October 1 and 2.

7. NEW BUSINESS

There was no new business.

8. NEXT MEETING

The next meeting will take place on November 26, 2019 at 10:00 am.

9. ADJOURNMENT

By general consent, the meeting adjourned at 2:06 pm.

Kate-Louise Stamford, Chair

Certified Correct:

Alexandra Trifonidis, Recorder

DRAFT

Follow Up Action Report

Trust Conservancy Board

24-Sep-2010

Activity	Responsibility	Dates	Status
1 Staff to work with landowners to clarify wording of Cunningham Covenant regarding vegetation removal, while maintaining conservation as a priority.	Kate Emmings	Target: 31-Dec-2020	In Progress

31-Mar-2015

Activity	Responsibility	Dates	Status
1 Staff to prepare possible revisions to the Trust Council Procedure 2.1.xxi Administration of the Crown Land Acquisition Initiative.	Clare Frater Kate Emmings	Target: 21-Mar-2019	In Progress

27-Nov-2018

Activity	Responsibility	Dates	Status
1 Staff to continue to pursue the following options and report back to the ITC board regarding their status at future board meetings until they are complete: 1. Work with Islands Trust and BIM staff to link individual LTC/BIM webpages with their RCP Local Area Profiles located on the ITC website; 2. Provide community engagement tools for LTCs, including an LTC/BIM profile information sheet for each LTC highlighting a few fun facts about the ecology specific to their island. Include a link to the appropriate section of the RCP;	Carla Funk	Target: 01-Oct-2019	In Progress

Follow Up Action Report

Trust Conservancy Board

27-Nov-2018

Activity	Responsibility	Dates	Status
2 The ITC board members to provide further ideas for LTC incorporation of the RCP to staff for further discussion of "Strategies to reach out to LTCS and BIM" at the January 2019 meeting.	Kate-Louise Stamford Sue Ellen Fast	Target: 29-Jan-2019	In Progress
3 Staff to continue to pursue the following options and report back to the ITC board regarding their status at future board meetings until they are complete: ... 3. Integrate reminders into planning processes that provide opportunities for the RCP to inform the work of the LTCs and BIM such as integration of RCP consideration into LTC Staff Report and Site Context Report templates and investigate with BIM to see if they can be integrated into BIM templates...	David Marlor Kate Emmings	Target: 15-Nov-2019	In Progress
4 Staff to continue to pursue the following options and report back to the ITC board regarding their status at future board meetings until they are complete: ... 4. Coordinate with Islands Trust Council to ensure that RCP goals are recognized in the Islands Trust Policy Statement and the Islands Trust Strategic Plan; ...	Clare Frater Kate Emmings	Target: 31-Dec-2019	In Progress

29-Jan-2019

Activity	Responsibility	Dates	Status
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Follow Up Action Report

Trust Conservancy Board

29-Jan-2019

Activity	Responsibility	Dates	Status
1 Staff to work with the Comox Valley Regional District and the Denman Conservancy Association on the location and design of the Lindsay Dickson Nature Reserve portion of the Denman Cross-island Trail and return to the Board for approval of the trail location and design prior to dedicating resources to developing the associated legal agreements.	Nuala Murphy	Target: 20-Mar-2019	In Progress

21-May-2019

Activity	Responsibility	Dates	Status
1 Staff to continue to explore the implications of a Section 11 Agreement with ECCC with regard to benefits to the Islands Trust Conservancy and Islands Trust mandate.	Clare Frater Kate Emmings	Target: 15-Nov-2019	In Progress

16-Jul-2019

Activity	Responsibility	Dates	Status
1 Staff to refer the Audited Financial Statements for the 2018-2019 fiscal year to Islands Trust Council for information.	Kate Emmings	Target: 01-Oct-2019	Completed
2 Staff to write to First Nations in the Islands Trust Area to provide Islands Trust Conservancy Reconciliation Declaration to those First Nations.	Crystal Oberg Lisa Wilcox	Target: 31-Dec-2019	Completed

Follow Up Action Report

Trust Conservancy Board

16-Jul-2019

Activity	Responsibility	Dates	Status
3 Staff to create a special meeting for the ITC Board to discuss climate actions that the Board could undertake alongside the RCP and request staff to provide a report and recommendations.	Kate Emmings	Target: 21-Aug-2019	Completed
4 Staff and ITC Chair to complete legal paper work (Assignment of Agreement of Purchase and Sale) between LINC and ITC.	Kate Emmings Kate-Louise Stamford	Target: 31-Jul-2019	Completed
5 The ITC Board added Trustee Fast to the ITC FDAC.	Kate Emmings	Target: 01-Aug-2019	Completed
6 EC/ITC Liaison Mtg Follow up: That staff be requested to add a standing item to the agendas of the ITC/EC regarding consulting with each other for mutual interest.	Kate Emmings Lori Foster	Target: 01-Oct-2019	Completed

07-Aug-2019

Activity	Responsibility	Dates	Status
1 Staff to incorporate the climate change actions as discussed at the meeting of August 7, 2019 into staff work programs and develop budgets as required.	Kate Emmings	Target: 26-Nov-2019	In Progress

Follow Up Action Report

Trust Conservancy Board

07-Aug-2019

Activity	Responsibility	Dates	Status
2 Islands Trust Conservancy Board ask Trust Council to request that the province amend legislation to increase the percentage of the Natural Area Protection Tax Exemption Program (NAPTEP) tax exemption in order to incentivize the protection of forest cover for climate change mitigation and adaptation in the Islands Trust Area.	Kate Emmings	Target: 01-Oct-2019	Completed
3 The Islands Trust Conservancy Board request that Trust Council consider the following as it develops a climate emergency strategy for inclusion in the Strategic Plan: - Increased budget for professional advice and mapping - The role of the Islands Trust Conservancy in storage and sequestration of carbon within its Nature Reserves and Covenant Areas and the property management needs associated with this role - Education about the benefits of forest cover - Increase communications resources to promote voluntary conservation options such as NAPTEP - Information regarding all current ITC climate change mitigation and adaptation activities	Kate Emmings	Target: 01-Oct-2019	Completed

01-Oct-2019

Activity	Responsibility	Dates	Status
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Follow Up Action Report

Trust Conservancy Board

01-Oct-2019

Activity	Responsibility	Dates	Status
1 Staff to amend resolution number ITC-2019-018 by deleting the words "and action plan" so that the resolution reads as follows: "That the Islands Trust Conservancy Board direct staff to develop a specific draft reconciliation declaration for the Islands Trust Conservancy."	Alexandra Trifonidis Kate Emmings		Completed
2 Staff to review the Islands Trust Reconciliation Action Plan and provide feedback to the Board prior to the ITC Board / Executive Committee Liaison Meeting for possible discussion at the 2020 Liaison Meeting.	Kate Emmings Lisa Wilcox	Target: 30-Jun-2020	In Progress
3 The Islands Trust Conservancy Board recommend to the Islands Trust Council that the 2019-2020 budget include funding for a permanent Covenant Management and Outreach Specialist position.	Kate Emmings	Target: 23-Oct-2019	Completed
4 The Islands Trust Conservancy Board is to communicate to Trust Council its interest in filming and streaming its public meetings.	Kate Emmings	Target: 03-Dec-2019	Completed
5 The Islands Trust Conservancy Board supports the attendance of trustee Fast at the 2019 Land Trust Alliance of British Columbia Seminar Series (November 4-5, 2019) and that the related expenses of up to \$1,000 be paid out of the Islands Trust Conservancy Board Training and Conferences budget.	Alexandra Trifonidis Kate Emmings	Target: 15-Oct-2019	Completed



Follow Up Action Report

Trust Conservancy Board

01-Oct-2019

Activity	Responsibility	Dates	Status
6 Staff are to update that resolution ITC-2019-029 be amended by changing the words "up to \$1,300" to "up to \$2,000" so that the resolution reads as follows: "That the Islands Trust Conservancy Board supports the attendance of Chair Stamford at the 2019 Union of British Columbia Municipalities Convention and that the related expenses of up to \$2,000 be paid out of the Islands Trust Conservancy Board Training and Conferences budget."	Alexandra Trifonidis		Completed



REQUEST FOR DECISION

To: ITC Board **For the Meeting of:** November 26, 2019
From: Staff **Date Prepared:** September 6, 2019
SUBJECT: 2020 Islands Trust Conservancy Board Meeting Dates

RECOMENDATION: That the Islands Trust Conservancy Board approves the 2020 Meeting Schedule, as attached.

- 1 PURPOSE:** To set an Islands Trust Conservancy (ITC) board meeting schedule for 2020.
- 2 BACKGROUND:** Each year the ITC must determine a meeting schedule, which can then be posted to the ITC website and shared with other units of the Islands Trust. The Islands Trust Conservancy Board Meeting Bylaw states that six meetings should be held each year spread evenly through the calendar year and that the first meeting of the year shall be held in January or February.
- 3 IMPLICATIONS OF RECOMMENDATION**

ORGANIZATIONAL: None

FINANCIAL: None

POLICY: None

IMPLEMENTATION/COMMUNICATIONS: Approved meeting schedule will be posted to the website and added to relevant electronic calendars.

FIRST NATIONS: None
- 4 RELEVANT POLICY(S):**
[Bylaw 2 - A Bylaw to Regulate the Meetings of the Islands Trust Conservancy Board and Committees of the ITC Board](#)
- 5 ATTACHMENT(S):** Draft 2020 Islands Trust Conservancy Meeting Schedule

RESPONSE OPTIONS

Recommendation: That the Islands Trust Conservancy Board approves the 2020 Meeting Schedule, as attached.

Alternative: None

Prepared By: Alexandra Trifonidis, A/Administrative Assistant & Kate Emmings, A/ ITC Manager



DRAFT

2020 Islands Trust Conservancy Board Meeting Schedule

Date - Potential

Thursday, February 13th

Tuesday, April 7th

Tuesday, May 26th

Tuesday, July 14th

****Annual Meeting with Executive Committee***

Tuesday, October 6th

Tuesday, November 24th

Time

10:00 am – 2:30pm

10:00 am – 2:30pm

10:00 am – 2:30pm

10:00 am – 12:30pm

1:00 pm – 2:30 pm

10:00 am – 2:30pm

10:00 am – 2:30pm

All Islands Trust Conservancy board meetings are held in Victoria in the Islands Trust office boardroom.

2020 IMPORTANT DATES TO NOTE

Trust Council (TC)

March 10-12

June 16-18

September 15-17

December 1-3

Financial Planning Committee (FPC)

January 22

February 19

May 27

August 19

October 14

November 12

Local Planning Committee (LPC)

February 12

May 20

August 12

November 9

Trust Programs Committee (TPC)

February 10

May 21

June 23

August 13

October 20
November 5

Executive Committee (EC)

January 15
February 5
February 26
March 10-12 TC
March 25
April 15
May 13
June 3

June 16-18 TC

July 8
August 5
September 2
September 15-17 TC
September 30
October 21
November 18
December 1-3 TC
December 16

Bowen Island Municipality Meetings (Selected)

*Dates available December 2019

Statutory Holidays

New Year's Day	Wednesday, January 1
Family Day	Monday, February 17
Good Friday	Friday, April 10
Victoria Day	Monday, May 18
Canada Day	Wednesday, July 1
B.C. Day	Monday, August 3
Labour Day	Monday, September 7
Thanksgiving Day	Monday, October 12
Remembrance Day	Wednesday, November 11
Christmas Day	Friday, December 25

All Islands Trust offices are closed December 25, 2020 until January 3, 2021 inclusive.

Other

LGMA Leadership Forum (Kelowna)	June 9-11 th
UBCM Vancouver	September 21-25 th



REQUEST FOR DECISION

To: ITC Board

For the Meeting of: November 26, 2019

From: Staff

Date Prepared: November 19, 2019

SUBJECT: Fund Development Advisory Committee Terms of Reference

RECOMMENDATION: that the Islands Trust Conservancy Board amend the Fund Development Advisory Committee terms of reference to reflect the new timeline and budget as proposed by the Committee and as amended by staff.

- 1 **PURPOSE:** To amend the Fund Development Advisory Committee Terms of Reference to reflect a revised timeline and budget.

BACKGROUND: At its meeting October 31, the Fund Development Advisory Committee passed the following resolution:

ITC-FDAC-2019-005

It was **MOVED and SECONDED**, that the Fund Development Advisory Committee request that the ITC Board amend the Fund Development Advisory Committee terms of reference to reflect the new timeline outlined in the October 31st briefing and increase the Fund Development Advisory Committee budget up to \$6000.

2 **IMPLICATIONS OF RECOMMENDATION**

ORGANIZATIONAL: Staff and the FDAC will adjust the timelines for project deliverables as approved.

FINANCIAL: None. Timelines for submission to the 2020-2021 budget have passed. Costs for 2020-2021 will be taken from existing budgets.

POLICY: None.

IMPLEMENTATION/COMMUNICATIONS: Staff will amend and circulate the Terms of Reference as amended.

FIRST NATIONS: None.

CLIMATE CHANGE: None.

- 3 **RELEVANT POLICY(S):**
[Islands Trust Conservancy, Bylaw 2](#)
[Islands Trust Conservancy, Five-Year Plan](#)

- 4 **ATTACHMENT(S):** Fund Development Committee Terms of Reference (Revised)

RESPONSE OPTIONS

Recommendation: that the Islands Trust Conservancy Board amend the Fund Development Advisory Committee terms of reference to reflect the new timeline and budget as proposed by the Committee.

Alternative: None proposed.

Prepared By: Kate Emmings, A/Manager, Islands Trust Conservancy



Fund Development Advisory Committee Terms of Reference and Operating Guidelines

May 21, 2019
Revised November 26, 2019

BACKGROUND

At its 2017 Board Retreat, the Islands Trust Conservancy Board (ITC Board) (Trust Fund Board at that time) discussed follow up for its Long-term Funding Strategy. In 2018, the ITC Board approved its 2018-2027 Regional Conservation Plan and completed its name change from Islands Trust Fund to Islands Trust Conservancy. With these two large projects complete, the ITC Board is well poised to consider ongoing funding.

At its January 2019 meeting, the ITC Board created a Fund Development Advisory Committee (the Committee) and requested and received funds from the Trust Council, to fund the Committee.

1. PURPOSE

1.1 To provide advice to the ITC Board, the Committee will focus on the creation of a strategy and an action plan to meet ITC funding needs, including:

- clear statement of funding need;
- financial analysis;
- key fundraising strategies;
- staff roles;
- ITC Board member roles;
- Budget requirements; and,
- timelines.

2. GUIDING PRINCIPLES

2.1 The Committee will be guided by the general principle that efforts to secure funding should respect the values of the Islands Trust and local trust committees (e.g., retaining the social diversity and rural character of the islands).

2.2 The Committee will adhere to bylaws and be guided by policies of the Islands Trust Conservancy, including policies that address communications with other agencies of the Islands Trust.

2.3 The Committee will remain committed to maintaining the ITC's positive relationships with other conservancies by being sensitive to the competitive nature of fundraising.

3. ADVICE

- 3.1 The Committee is an advisory body of the ITC Board. The Committee's advice will inform decisions of the ITC Board.

4. MEETINGS

4.1. Notification

- 4.1.1 The date, time and agenda for an upcoming meeting will be provided to Committee members at least five working days in advance.

4.2. Type

- 4.2.1 As required by the *Community Charter*, Committee meetings will be open to the public and will be subject to public notice. The Committee may move to close meetings to the public in order to discuss matters pursuant to s. 90 of the *Community Charter* (meetings that may or must be closed to the public).
- 4.2.2 When the Chair considers an issue to be urgent and that calling a regular or special meeting to conduct the voting is impractical, the Committee may hold a vote on an urgent matter and pass a resolution without meeting.

5. COMMUNICATIONS

- 5.1 Communications with the media and members of the public regarding the activities of the Islands Trust Conservancy, including the activities of the Committee, are the responsibility of the ITC Board Chair. The ITC Board Chair will be the designated spokesperson regarding the activities of the Committee, unless otherwise determined by the ITC Board.
- 5.2 While other members of the Committee are free to have informal conversations with members of the public regarding the activities of the Committee, they will refer media enquiries, formal enquiries from organized groups and correspondence regarding the activities of the Committee to the Chair of the ITC Board.
- 5.3 The ITC's Communications and Fundraising Specialist will provide communications assistance to the Committee in regards to any communications plans, news releases, website postings and other communication matters requested by the Committee.
- 5.4 Staff will coordinate the public postings of Committee meeting agendas and minutes.
- 5.5 The ITC Board will coordinate political liaison with other governments regarding the work of the Committee, including liaison with the Minister of Municipal Affairs and Housing, other provincial ministers, chairs of Regional Districts and political heads of First Nations.
- 5.6 The Islands Trust's Chief Administrative Officer or the ITC Manager will coordinate liaison with the staff of regional districts, provincial agencies, First Nations and other third parties.

6. MEMBERSHIP

6.1 Membership is voluntary. The Committee will consist of at least three ITC Board members, one of which shall be the ITC Board Chair, at least one Trust Council member and at least one resident of the Trust Area. The Committee may invite additional members of the ITC Board, Trust Council or members of the public to join the Committee.

6.2 The Committee Chair shall be the Board Chair for the term of the Committee.

6.3 An election will be triggered if a vacancy in the Chair position arises for any reason. Elections for Chair shall be guided by the procedures outlined in ITC Policy 1.2 Election of ITC Board Chair policy.

7. ROLES AND RESPONSIBILITIES

7.1 The Chair of the Committee will be responsible for the coordination of meeting agendas and for conducting meetings in accordance with Robert's Rules of Order.

7.2 Committee members will attend meetings as agreed and will participate in the work of the Committee as assigned by the Committee. Missing two consecutive meetings may trigger replacement on the Committee.

8. STAFF RESOURCES

8.1 The ITC Manager and/or the Communications and Fundraising Specialist will provide staff support to the Committee, subject to other on-going responsibilities and other requests of the ITC Board.

8.2 All Islands Trust staff activities in regards to the Committee require resolutions from the Committee. Staff may not respond to requests from individual Committee members.

9. TIMELINES

The Committee will work to meet the following deadlines by March 31, 2020, at which point the Committee will dissolve:

<i>July 16, 2019</i>	<i>Report out to the ITC Board / Executive Committee Liaison Meeting regarding the progress of the Committee DONE</i>
<i>November 26, 2019</i>	<i>Strategic approach approved by ITC Board & associated budget discussion</i>
<i>January 2020</i>	<i>Draft strategy and action plan reviewed by the Committee</i>
<i>February 2020</i>	<i>Present Draft strategy and action plan to the ITC Board for approval</i>
<i>March 31, 2020</i>	<i>Committee dissolution and incorporation of strategy and action plan into ITC Board work</i>

10. BUDGET

- 10.1 The Trust Council has allocated \$4,000 to the ITC Board for use by the Committee. The ITC Board will allocate funds from this budget and an additional \$2,000 from its meeting expenses budget, for a total of \$6,000, for the operations of the Committee.
- 10.2 Annually, the Committee will approve a budget for its activities. An honorarium of up to \$100 per meeting may be available to Committee members for meeting preparation and attendance. Committee members will be reimbursed for ferry costs and vehicle travel at the Trustee rate established by the Islands Trust.

¹ At its March 2019 meeting the Trust Council voted to allocate \$4,000 to the ITC Board to support honoraria, travel and meeting costs associated with the Committee in the 2019-2020 fiscal year. The ITC Board will decide on how to allocate these funds to the Committee.



REQUEST FOR DECISION

To: Islands Trust Conservancy Board **For the Meeting of:** November 26, 2019

From: Staff **Date Prepared:** November 7, 2019

SUBJECT: Mount Artaban Nature Reserve Management Plan, Gambier Island

RECOMMENDATION: That the Islands Trust Conservancy Board approve the 2019 update of the Mount Artaban Nature Reserve Management Plan dated October 24, 2019

PURPOSE:

To approve the first 10-year revision of the management plan for Mount Artaban Nature Reserve.

BACKGROUND:

Islands Trust Conservancy Board policy (ITC 2.3) indicates, “The Board will prepare and approve a management plan for each property it acquires as a Nature Reserve...within one year of acquisition, and will update each management plan approximately every 10 years.” Islands Trust Conservancy management plans:

- Provide general and descriptive information on the property, including location, history, and land use;
- Set out the conservation goals and objectives for the property;
- Identify the property's ecological and/or cultural values and features;
- Describe the management issues associated with the property; and
- Provide short and long-term management recommendations (action items or tasks) on issues such as: invasive species management; species at risk protection; public access and safety; educational and research opportunities; and signage needs.

Mount Artaban Nature Reserve (MANR) was established in June 2008. The 107-hectare (264-acre) property spans 531 m (1,742 ft) in elevation and includes the landmark summit of Mount Artaban. The Reserve protects a mix of second-growth and old-growth Coastal Western Hemlock forests as well as two ephemeral wetlands and two seasonal streams. The Reserve represents a significant part of a large, contiguous natural area that spans from sea level to 614 m (2015 ft) across much of the southeastern arm of Gambier Island; thus, it plays an important role in enhancing the habitat connectivity and climate change adaptation values of the area.

Due to its recent history of wildfire (1922) and logging (1950s), the reserve is predominantly composed of recovering second-growth mixed forests; however, large veteran trees are still found in many areas on the mountain, particularly in higher-elevation, unlogged portions of the Reserve. Eight provincially-listed ecosystems at risk are found in the Reserve (Table 1). Only one Species at Risk occurrence is recorded by the BC Conservation Data Centre for Gambier Island: the northern red-legged frog (blue listed), though the presence of this species in the Reserve is unconfirmed. Black Swifts (blue listed) were noted over the summit of Mt. Artaban during field reconnaissance for the management plan. It is likely that additional Species at Risk will be detected if surveys are completed at appropriate times of the year.

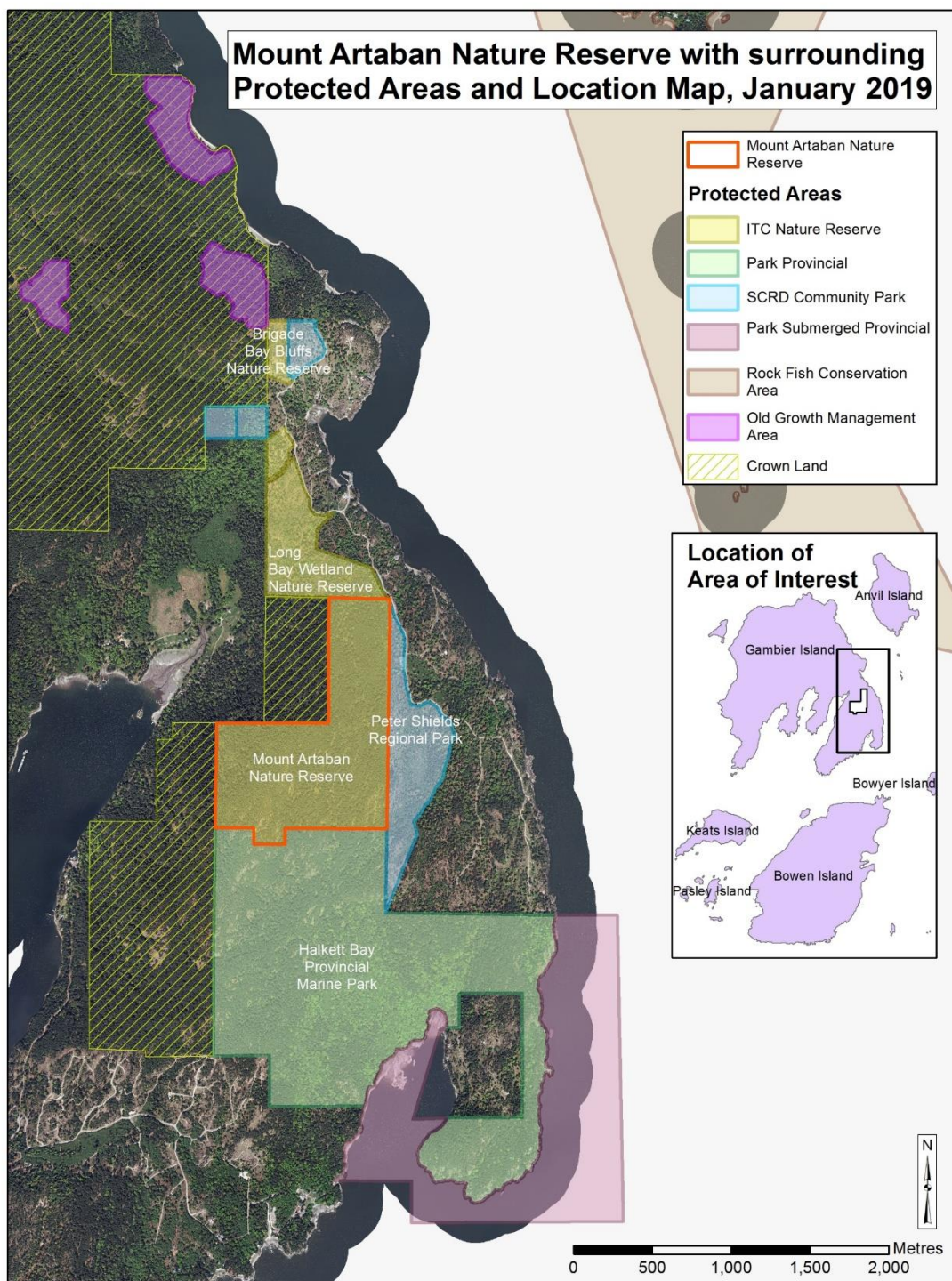
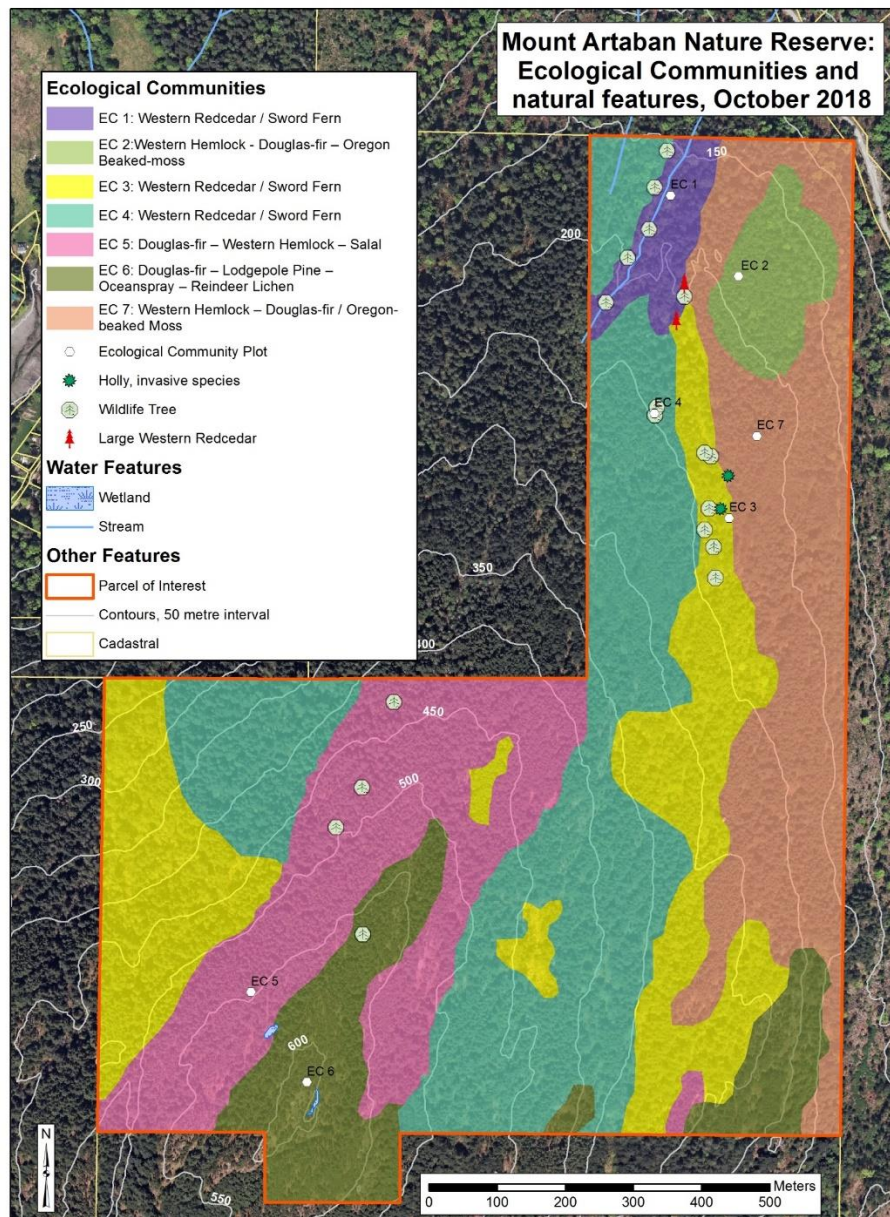


Table 1 Ecological communities in Mt. Artaban Nature Reserve and their status.

Ecological Community Name		Status		
English	Scientific	Provincial	BC List	Global
Western hemlock - Douglas-fir / Oregon beaked-moss very dry maritime (CWHxm1/01)	<i>Tsuga heterophylla</i> - <i>Pseudotsuga menziesii</i> / <i>Eurynchium oregonum</i>	S2 (2013)	Red	G3G4
Western redcedar / sword fern very dry maritime (CWHxm1/05)	<i>Thuja plicata</i> / <i>Polystichum munitum</i>	S2S3 (2009)	Blue	GNR

Western redcedar/ three-leaved foamflower Very Dry Maritime (CWHxm1/07)	Thuja plicata / Tiarella trifoliata	S2S3 (2013)	Blue	G3
Western hemlock / flat moss dry maritime (CWHdm/01)	Tsuga heterophylla / Buckiella undulata	S3 (2016)	Blue	G3G4
Douglas-fir - lodgepole pine / oceanspray / reindeer lichens dry maritime (CWHdm/02)	Pseudotsuga menziesii - Pinus contorta / Holodiscus discolor / Cladina spp.	S2 (2005)	Red	G2G3
Douglas-fir - western hemlock / salal dry maritime (CWHdm/03)	Pseudotsuga menziesii - Tsuga heterophylla / Gaultheria shallon	S2S3 (2013)	Blue	G3G4
Western redcedar / sword fern dry maritime (CWHdm/05)	Thuja plicata / Polystichum munitum	S2? (2016)	Red	G2G3
Western redcedar / three-leaved foamflower dry maritime (CWHdm/07)	Thuja plicata / Tiarella trifoliata	S2S3 (2018)	Blue	G3



This is the first revision of the management plan since the first plan was written in 2009 (by Doug Hopwood, RPF). This revised plan was prepared by biologists Carrina Maslovat and Laura Matthias in 2018 and has since been provided as a draft to the covenant holders, Gambier Island Conservancy and Sunshine Coast Conservation Association, for their input. Key management recommendations are to continue an annual monitoring program; maintain the existing trail and update signage and trail markers; develop a wildfire management plan; conduct further inventories for Species at Risk to provide a clearer picture of the ecology of the reserve and guide future management; and to explore cooperative management opportunities with First Nations.

ITC will continue to take into consideration new information about First Nations interests, species at risk, invasive species, and management techniques over the course of the lifetime of the plan.

The management objectives for Long Bay Wetland Nature Reserve are to:

- Conserve the ecosystem values and biodiversity of the reserve;
- Protect the water quality and flow regimes of all streams and wetlands within the reserve;
- Support ongoing inventory, mapping and monitoring to guide management;
- Remove invasive plant species throughout the reserve and hazard trees around the trail system;
- Allow for low-impact use of the reserve for hiking, nature appreciation and similar activities, provided it does not significantly impair the natural condition of the reserve or its special features;
- Support and enhance continued use of areas of sacred and cultural significance by First Nations where such uses are compatible with protection of ecological values and in compliance with the conservation covenant held by Gambier Island Conservancy and the Sunshine Coast Conservation Association; and
- Allow natural ecological processes to function without human interference, except in the case of wildfire.

Immediate Actions proposed for the next 1-2 years:

1. Continue to work with the Gambier Island Conservancy and Sunshine Coast Conservation Association to complete management activities as funds allow.
2. Identify opportunities for cooperative management with First Nations.

Short Term Actions proposed for the next 3-5 years:

1. Remove metal wayfinder markers along the trail and replace with spray painted markings to avoid long-term damage to trees while ensuring that the trail is well marked for public safety. Consultation with BC Parks staff may be required to ensure consistent marking over the length of the trail.
2. In consultation with the local fire authorities, prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods.
3. Initiate development of parallel Management Plan for Areas of Cultural Heritage and Sacred Significance documents with First Nations.

Long Term Actions proposed for the next 5+ years:

1. Conduct surveys for species at risk and other wildlife (e.g. amphibians, bats) to provide a better understanding of the natural values of the reserve.

Ongoing or Annual Actions proposed:

1. Conduct annual monitoring to identify management concerns, including impacts from public use (e.g. trail monitoring) and invasive species.

2. Communicate annually with the Gambier Island Conservancy and Sunshine Coast Conservation Association to provide updates on the reserve, seek approvals for stewardship activities as necessary, and maintain compliance with the conservation covenant.
3. Work with First Nations towards cooperative management of the reserve using a Management Plan for Areas of Cultural Heritage and Sacred Significance as a guide.
4. Conduct ongoing maintenance of trails and signs.
5. Continue to inform the public of the natural values of the site and the permitted and prohibited uses through information placed in local publications.

IMPLICATIONS OF RECOMMENDATION:

ORGANIZATIONAL: This management plan will guide the management of this property and assist staff in budgeting property management funds over the next 10 years.

FINANCIAL: The property management budget is allocated each year depending on available funds and the work that is most needed, balanced between all ITC properties. The primary management costs for this nature reserve will be for trail maintenance. Existing trail markers are in need of replacement and signage would benefit from updated information. Though the trail itself is in good condition and historic use has been light, Mount Artaban is expected to become an increasingly popular hiking destination. Secondary management costs will include species at risk surveys and control of invasive species (currently English holly).

POLICY: Consistent with policy.

IMPLEMENTATION/COMMUNICATIONS: Staff will provide the Board-approved version of the management plan to the covenant holders, Gambier Island Conservancy and Sunshine Coast Conservation Association, for their final approval. Once approved by all parties, the management plan will be posted to the ITC website. ITC contractors and conservation partners working within the Reserve, such as property monitors, will be provided with the management plan.

FIRST NATIONS: ITC staff are currently in discussion with three First Nations who have asserted traditional rights on Gambier Island to discuss management planning. Meetings are being held with the Musqueam Nation, Tsleil-Waututh Nation and the Squamish Nation and this communication will continue.

CLIMATE CHANGE: The future impacts of climate change on Mount Artaban Nature Reserve are unknown, although a summer drying trend and an increase in both frequency and intensity of storm events are predicted. More powerful storms may cause increasing erosion, especially in areas with exposed soil, such as trails. The regular monitoring program recommended in the management plan will ensure timely attention to trail damage and public safety concerns. Increasingly hotter, drier summers are also increasing risk of catastrophic wildfire. The management plan proposes the development of a wildfire mitigation and response plan in consultation with local fire authorities. Ongoing protection of Mount Artaban Nature Reserve will facilitate the south-to-north and low-to-high-elevation shifts in ecological communities that are predicted with climate change.

OTHER: None.

- 1 **RELEVANT POLICY(S):** ITC 2.3 - Acquisition and Management of Land
- 2 **ATTACHMENT(S):** Mt Artaban Nature Reserve Management Plan

RESPONSE OPTIONS

Recommendation: That the Islands Trust Conservancy Board approve the 2019 update of the Mount Artaban Nature Reserve Management Plan dated October 24, 2019.

Alternative: That the Islands Trust Conservancy Board approve the Mount Artaban Nature Reserve Management Plan as amended.

Prepared By: Jemma Green, Covenant Management and Outreach Specialist

Reviewed By/Date: Kate Emmings, A/Manager, Islands Trust Conservancy / November 14, 2019

Mount Artaban Nature Reserve Management Plan Gambier Island, BC



PREPARED FOR



PREPARED BY Doug Hopwood in 2009
REVISED in 2018 by Carrina Maslovat, R. P. Bio. #1407
and Laura Matthias, Consultant Biologist, Salt Spring Island, BC

APPROVED BY

Islands Trust Conservancy, **Date: Resolution #**
Gambier Island Conservancy, **Date**
Sunshine Coast Conservation Association, **Date**

i. Executive Summary ¹

Islands Trust Conservancy acknowledges and respects that Gambier Island is within the traditional territory of multiple Coast Salish peoples, whose historical relationship to the land, culture, and spirit of this place continues to this day. Islands Trust Conservancy is committed to honoring the rich history of Indigenous stewardship in the lands and waters of the Islands Trust Area and to building mutually respectful relationships between Indigenous and non-Indigenous partners in conservation. Therefore, this Management Plan for Brigade Bay Bluffs Nature Reserve is a living document that will evolve as opportunities for knowledge sharing arise and understanding grows.

The Islands Trust Conservancy's Mount Artaban Nature Reserve (MANR) was established in June 2008. The property is 107 hectares (264 acres) in area. Mount Artaban Nature Reserve is located inland on the southeastern arm of Gambier Island, south of Brigade Bay and north of Halkett Bay. It includes the summit of Mount Artaban, which is a significant landmark of Gambier Island and the adjacent area. The property is rugged and steep, spanning an elevation range of approximately 531 metres (1742 feet) from its lowest point at the Northeast corner to the summit of Mount Artaban at 614 metres (2015 feet) elevation.

The reserve is mostly covered in second-growth forest of Douglas-fir, western hemlock, western redcedar, red alder and bigleaf maple, that originated by natural regeneration after logging and/or wildfires approximately 80 years ago, and a smaller area regenerated after logging about 65 years ago. The higher elevation areas are occupied by an un-logged forest, primarily of smaller-diameter shore pine and Douglas-fir trees, ranging in ages up to about 100 years old. There are older veteran trees throughout the reserve. The reserve is part of a large, contiguous natural area within the Coastal Western Hemlock Very Dry Maritime (CWHxm) and Coastal Western Hemlock Dry Maritime (CWHdm) subzones on Gambier Island. There are two ephemeral wetlands near the summit and two seasonal streams that flow in the southern part of the reserve.

The Mount Artaban property was held as Provincial Crown Land for many years, and was transferred in June 2008 through the provincial Free Crown Grant program to the Islands Trust Fund (now the Islands Trust Conservancy) to be managed as a nature reserve. The Gambier Island Conservancy partnered with the Islands Trust Fund to fundraise over \$40,000 to cover the costs of the land survey and a management plan.

In 2009, a community consultation process was undertaken for Gambier Island residents and property owners, as well as other interested parties, to participate in setting objectives, identifying issues, and proposing strategies for inclusion in the original Management Plan (Hopwood 2009). The objectives for management of the Mount Artaban Nature Reserve are to:

- conserve the ecosystem values and biodiversity of the reserve;

¹ Updated from Hopwood 2009

- protect the water quality and flow regimes of all streams and wetlands within the reserve;
- support the ongoing inventory, mapping and monitoring that inform management;
- remove invasive plant species throughout the reserve and hazard trees around the trail system;
- allow for low-impact use of the reserve for hiking, nature appreciation and similar activities, provided it does not significantly impair the natural condition of the reserve or its special features; and
- allow natural ecological processes to function without human interference, except in the case of wildfire.

Key management recommendations are to maintain existing trails and signage (including updating wayfinders), remove invasive species as required, develop a wildfire management plan, continue monitoring annually, and investigate partnerships with local organizations to collaboratively manage lands. Additionally, inventories for species at risk would provide a clearer picture of the ecology of the reserve and guide future management.

ii. Tables and Lists

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All photos: L. Matthias

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iii. Acknowledgements

Table 1. Acknowledgement of thanks

Name	Position/Affiliation	Professional Accreditation or subject expertise	Contribution
Carrina Maslovat	Botanist/Consultant	R.P. Bio.	Primary Author, field data collection
Laura Matthias	Independent Biologist/ Subcontractor	Species at Risk Biologist	Secondary Author, field data collection
Nuala Murphy	Property Management Specialist/Islands Trust Conservancy		Background information and mapping, local contacts
Jemma Green	Property Management Specialist/Islands Trust Conservancy		Document review
Doug Hopwood	Biologist/Consultant	R.P. Forester	Author of the original Management Plan, background history, access information
Peter Scholefield	Volunteer/Gambier Island Conservancy		Background data and assistance with field logistics including access
Jason Herz	Conservation Committee Chair/Sunshine Coast Conservation Association		Document review
Ruth Simons	Volunteer/Gambier Island Conservancy		Background data and assistance with field logistics, access via marina

1.0 Introduction

Gambier Island is situated within the traditional territory of the Coast Salish peoples, who share a rich history of stewardship in the lands and waters of the Islands Trust Area that inspires the work of Islands Trust Conservancy and its partners. Mount Artaban Nature Reserve (MANR) was protected by the Islands Trust Conservancy (ITC) in 2008 after a transfer through the provincial Free Crown Grant program. The reserve is characterized by steep and rugged terrain that covers an elevation range of 531 metres (1742 feet) and includes Gambier Island's landmark summit of Mount Artaban (614 metres/2015 feet). As a result of previous logging and wildfires, the reserve is primarily composed of second growth forests with some interspersed veteran trees, including Douglas-fir, western hemlock, western redcedar, red alder, and bigleaf maple. Small-diameter shore pine and Douglas-fir can be found in the unlogged, higher elevations of the reserve.

The Gambier Island Conservancy and the Sunshine Coast Conservation Association are registered as joint holders of a conservation covenant on MANR (New Westminster Land Title Office 2013). These organizations co-manage the reserve with ITC.

The initial Management Plan for Mount Artaban Nature Reserve was developed by Doug Hopwood in 2009 (Hopwood 2009). This document is an update of that plan.

1.1 Islands Trust Conservancy

Since time immemorial, the lands and waters between Vancouver Island and mainland British Columbia have been home to the Coast Salish people, whose ecological, cultural, and spiritual connections to this place continue to this day. In 1974, the Province of British Columbia recognized this region as a special place within the province where the unique beauty, rural character and diverse ecosystems should be protected for future generations. Through the Islands Trust Act, the province established the Islands Trust, a local government, with the following mandate (known as the Object of the Islands Trust):

To preserve and protect the trust area and its unique amenities and environment for the benefit of the residents of the trust area and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia. (Islands Trust 2018)

In 1990, through the enactment of a section of *Islands Trust Act*, the Islands Trust Conservancy (originally called the Islands Trust Fund) was established as a conservation land trust to assist in carrying out the “preserve and protect” mandate. Part 6 of the *Islands Trust Act* establishes the corporate status, responsibilities, and governance structure of the Islands Trust Conservancy. The Islands Trust Conservancy is one of fifteen corporate entities charged to uphold the Object of the Islands Trust. Since 1990, ITC has protected over 1,267 hectares (3,130 acres) of land as nature reserves, nature sanctuaries and conservation covenants.

The vision of the Islands Trust Conservancy is that the islands and waters of the Strait of Georgia and Howe Sound will be a vibrant tapestry of culture and ecology where humans live and work in harmony with the natural world. This special place will have a network of protected

areas that preserve in perpetuity the native species and natural systems of the islands. Engaged residents and conservation partners will work together to protect large natural areas and key wildlife habitat. Viable ecosystems will flourish alongside healthy island communities.

The mission of the Islands Trust Conservancy is to protect special places by encouraging, undertaking and assisting in voluntary conservation initiatives within the Islands Trust Area. Islands Trust Conservancy nature reserves are managed to maintain, preserve and protect the natural features and values of ecosystems. This level of protection is similar to the International Union for Conservation of Nature (IUCN) protected area Category 1B: Wilderness area:

Large area of unmodified or slightly modified land and/or sea; retaining its natural character and influence, without permanent or significant habitation, which is protected and managed in order to preserve its natural condition. (Lockwood 2006)

1.2 Purpose of Islands Trust Conservancy Management Plans

ITC management plans provide background information and set out the direction of property management as follows:

- Provide general and descriptive information on the property, including location, history, and land use.
- Set out the conservation goals and objectives for the property.
- Identify the property's ecological and/or cultural values and features.
- Describe the management issues associated with the property.
- Provide short, medium and long-term management recommendations (action items or tasks) on issues such as: species at risk protection; ecological restoration; public access; educational and research opportunities; invasive species management; and signage needs.
- Preserve and protect cultural, spiritual, and sacred locations.

Once the management plan process is complete, the ITC will work to carry out the management actions or strategies identified in the plan, as resources allow. Following general practice and as outlined in the conservation covenant and statutory right of way, the ITC will revise the Management Plan every ten years.

1.3 Scope of Islands Trust Conservancy Management Plans

Consistent with the Islands Trust Reconciliation Declaration (Islands Trust 2019), ITC recognizes that its nature reserves may be places of great cultural and spiritual significance to First Nations. Cooperative management of these protected places will provide opportunities to establish and maintain mutually respectful relationships between the Islands Trust Conservancy and First Nations. Relationship-building, knowledge-sharing, healing, and establishment of trust are long-term processes that do not necessarily conform to the timeline required for many management activities (e.g. protecting species at risk, maintaining trails and signage, controlling invasive species, etc.); therefore, Islands Trust Conservancy is committed to developing a

parallel *Management Plan for Areas of Cultural Heritage and Sacred Significance* with a flexible timeline. This parallel Management Plan sets out guiding principles for cooperative collaboration between ITC and those First Nations with historical and cultural interests in the area defined by one or more nature reserves. Moreover, the Management Plan defines the common vision, objectives, policies, and best management practices for the nature reserve(s) to ensure that its natural values and cultural and sacred heritage are maintained for future generations.

1.4 Protected Area Purpose

The purpose of the MANR is to preserve and protect the natural ecosystems and natural values of the site and to maintain the biodiversity of the site for the benefit of the flora and fauna of the reserve, the residents of the island and the province generally. The site is to be protected in accordance with the conservation covenant, the objectives of the Islands Trust Conservancy, and the mandate of the Islands Trust.

1.5 Protected Area Objectives

The objectives of the Mount Artaban Nature Reserve are to:

- conserve the ecosystem values and biodiversity of the reserve;
- protect the water quality and flow regimes of all streams and wetlands within the reserve;
- support ongoing inventory, mapping and monitoring to guide management;
- remove invasive plant species throughout the reserve and hazard trees around the trail system;
- allow for low-impact use of the reserve for hiking, nature appreciation and similar activities, provided it does not significantly impair the natural condition of the reserve or its special features;
- support and enhance continued use of areas of sacred and cultural significance by First Nations where such uses are compatible with protection of ecological values and in compliance with the conservation covenant held by Gambier Island Conservancy and the Sunshine Coast Conservation Association; and
- allow natural ecological processes to function without human interference, except in the case of wildfire.

2.0 Property Information

Mount Artaban Nature Reserve is 107 hectares (264 acres), spanning 531 metres (1742 feet) in elevation to reach the Mount Artaban summit, at an elevation of 614 metres (2015 feet) (survey in Appendix A).

2.1 Location

Gambier Island can be accessed by a passenger ferry that sails between the BC Ferries Langdale Terminal in Gibsons and the New Brighton Dock, located on the west side of Gambier Island. There is no road access to MANR from the dock at New Brighton. There is a Gambier Island trail network but the route to MANR from New Brighton is lengthy, not direct, and the trail is not well marked or signed in places.

MANR is best accessed from three public dock locations on Gambier Island. From the public dock at Camp Artaban, at the head of Long Bay, there is a short public trail that leads through the camp property and then along the Brigade Bay Road easement through the Gambier Island Sea Ranch property to Mount Artaban Road in the Brigade Bay subdivision. This is about a 30 minute hike. It takes another 30 minutes to walk south on the Mount Artaban Road to the trailhead that connects into MANR through Long Bay Wetland Nature Reserve. Alternatively, the MANR trailhead can be reached from the public dock in the Halkett Bay Provincial Marine Park by hiking south on a trail through the park, then walking north along Mount Artaban Road. This route also takes about one hour. The hike from the trailhead south to the peak of Mount Artaban takes just less than two hours.

The south end of MANR, just south of the peak of Mount Artaban, can also be reached in about two hours by hiking from either the public dock in the Halkett Bay Provincial Marine Park or the public dock at Camp Fircom. Part of the route from both docks to the peak of Mount Artaban requires walking on roads in the Fircom Plateau subdivision, which is well signed.

The docks at Camp Artaban, Halkett Bay Provincial Marine Park, and Camp Fircom can be reached by regularly scheduled water taxi runs from Horseshoe Bay on weekends and on Wednesday evenings in the summer.

2.2 Legal description

The legal description of the property is District Lot 8095, Group 1, New Westminster Land District, Gambier Island. The PID number is 027-522-539. A covenant covers the entire property.

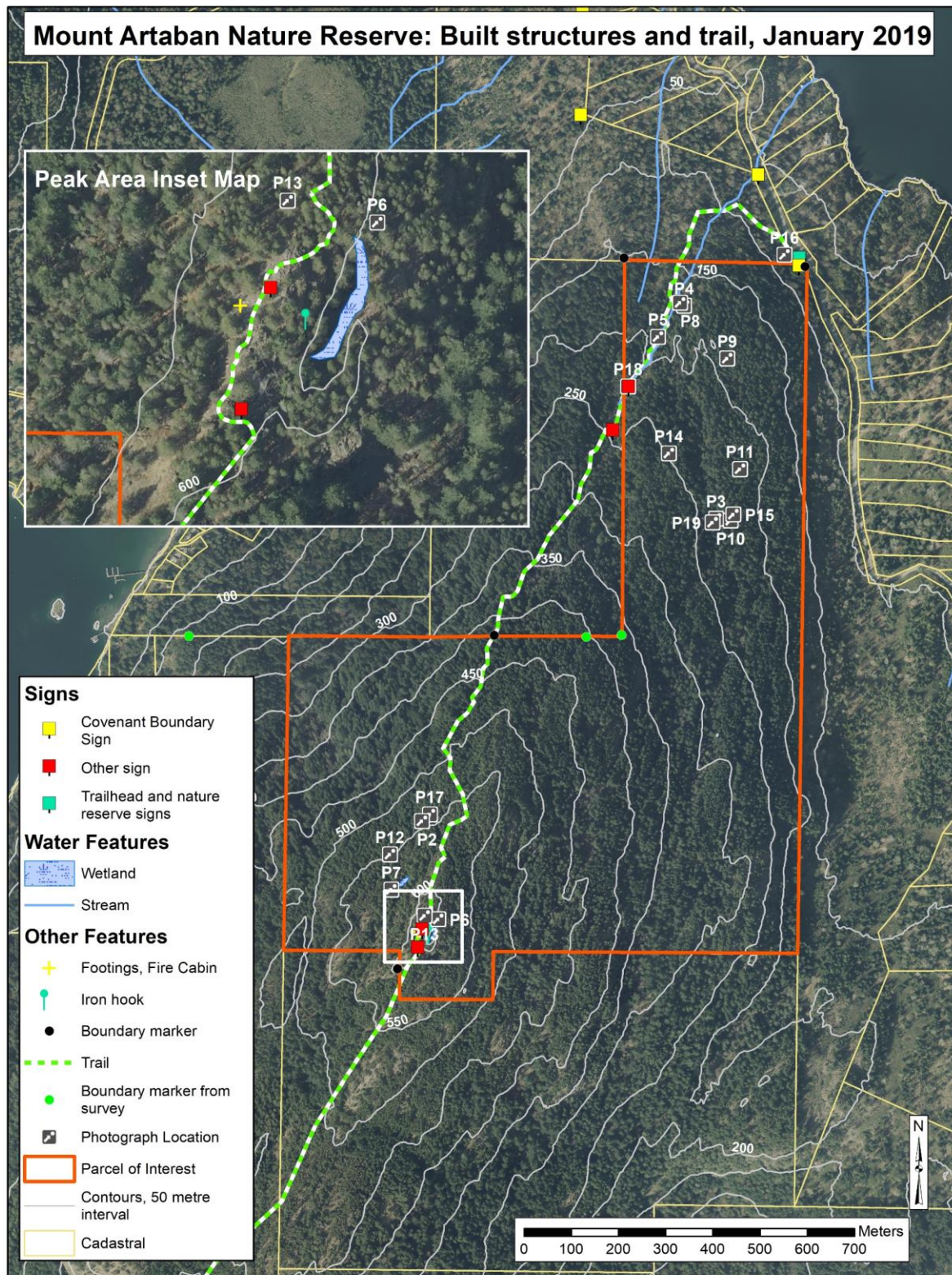
The property was surveyed in 2007 by Penonzek Land Surveying Ltd. The Association of British Columbia Land Surveyors exempted the survey from several customary requirements of legal land survey, specifically:

- cutting and blazing of boundary lines,
- marking new bearing trees,
- posting east-west boundaries adjacent to Halkett Bay Provincial Marine Park and unsurveyed provincially-managed land.

In 2009, during field surveys for the initial management plan, Doug Hopwood noted five survey markers (3 capped posts and 2 bronze disks set in the rock). Each marker was marked with flagging tape and the location was recorded using a hand-held GPS (Hopwood 2009).

2.3 Legal Access

Legal road access to MANR is through the northeast corner of the reserve via Mount Artaban Road, which runs north and south of MANR through the Brigade Bay subdivision. A re-routed access trail from the Brigade Bay subdivision road was built through the Long Bay Wetland Nature Reserve in the winter of 2009 to avoid crossing privately-managed land; a new sign was placed at the trailhead. Figure 1 shows the road access to the Nature Reserve and the hiking trail within the Nature Reserve.



2.4 Landscape Context

Gambier Island is located in Howe Sound. MANR is on the east side of Gambier Island, south of Brigade Bay (see Figure 2 for location and protected area context). To the north of MANR is Long Bay Wetland Nature Reserve (38 ha) and provincially-managed land. To the east is Pete Shields Regional Park (Sunshine Coast Regional District). To the west is a provincially-managed lot. MANR is part of a contiguous protected area of parks and nature reserves (469.12 ha), including Long Bay Wetland Nature Reserve (ITC), Halkett Bay Provincial Marine Park (BC Parks), and Pete Shields Regional Park (Sunshine Coast Regional District), and connects further with provincially-managed lands (171.35 ha) to total 640.47 ha of contiguous natural area. There is a marine portion (149.99 ha) of the Halkett Bay Provincial Marine Park that extends from the shoreline of the land-based portion of the park.

To the north (275 m) is a non-contiguous matrix of protected areas (30.97 ha) that includes Brigade Bay Bluffs Nature Reserve (ITC) and two small community parks (Sunshine Coast Regional District). This connects further to a large network of undeveloped provincially managed parcels and old-growth management areas (3345.83 ha), totaling 3376.81 ha of contiguous protected areas. Because the surrounding area is protected, external threats are minimal; therefore, management concerns are focused within the boundaries of the reserve.



Photo 2. View of Howe Sound and Coast Mountains looking east from summit of Mount Artaban.

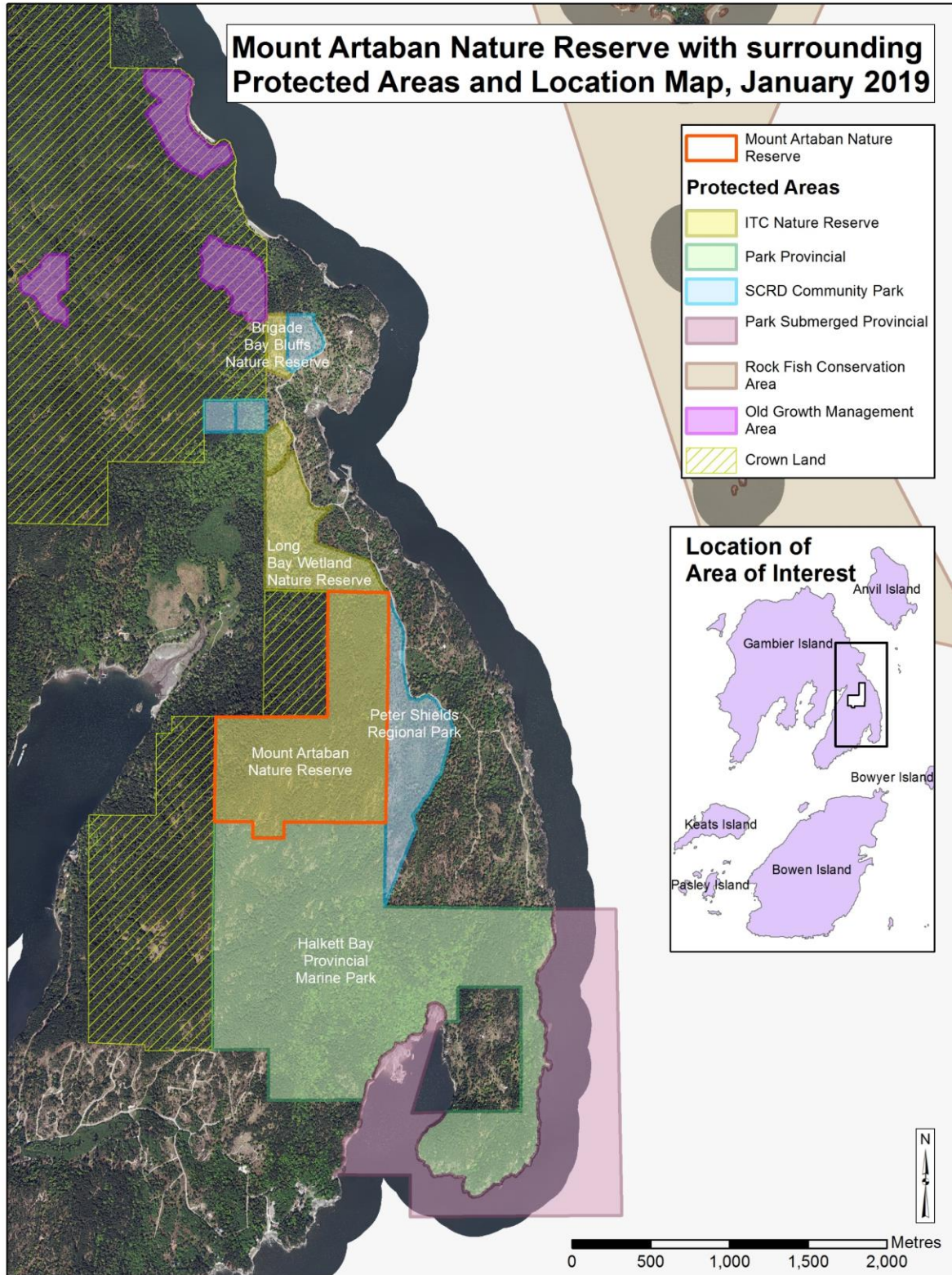


Figure 2. Location of Gambier Island (inset), Mount Artaban Nature Reserve (outlined in orange), and other protected areas.

2.5 Site History²

Gambier Island is within the traditional territory of several Coast Salish First Nations who have called this place home since time immemorial. The Coast Salish peoples maintained a vital, dynamic, and sustainable connection to their territory and developed rich cultural, spiritual, and traditional ecological knowledge. However, cultural heritage and sacred sites of Gambier Island and the greater Islands Trust Area were negatively impacted by European settlement. Past archeological activities, vandalism, and land use have disturbed sites of cultural and spiritual importance. Nevertheless, the land and the greater territory remains an embodiment of the stories, oral history, and culture of these First Nations.

Two archaeological sites on nearby Brigade Bay are protected under the *Heritage Conservation Act* (Cascade 2005). Consultation between the Squamish Nation and Fisheries and Oceans Canada during the Brigade Bay subdivision development determined that the Brigade Bay Site, Ho-mahmk, and surrounding environs are well known for deer hunting and plant collection, and as a camp site and safe haven for members of the Squamish Nation traveling in Howe Sound (FOC 2003 in Cascade 2005). Therefore, adjacent properties in the Brigade Bay subdivision have covenants that allow “the right of passage by members of the Squamish Nation for the purposes related to continuation of current use of lands or resources for traditional purposes” (FOC 2004 in Cascade 2005).

European settlement began in the mid to late 1800’s, primarily in low-elevation coastal areas considered suitable for farming and homesteading. It is likely that prospectors in search of minerals visited and collected samples from the Mount Artaban area (Hopwood 2009).

A BC Forest Service fire history map of the Mount Artaban area (Figure 3) indicates that the entire reserve was burned by a human-caused fire which ignited on July 9, 1922 (shown in pink shaded area as Fire # 459).



Photo 3. Fire scars on western redcedar trees in Ecological Community 3

² The Islands Trust Conservancy recognizes that the language commonly used to refer to land may be disrespectful to First Nations. For example, notions of ‘private’ and ‘Crown’ land do not appropriately recognize aboriginal title. The words “provincially-managed land” or “federally managed land” will be used in place of “Crown”. “Privately managed” will be used in place of “private” and “land holder” instead of “land owner”.

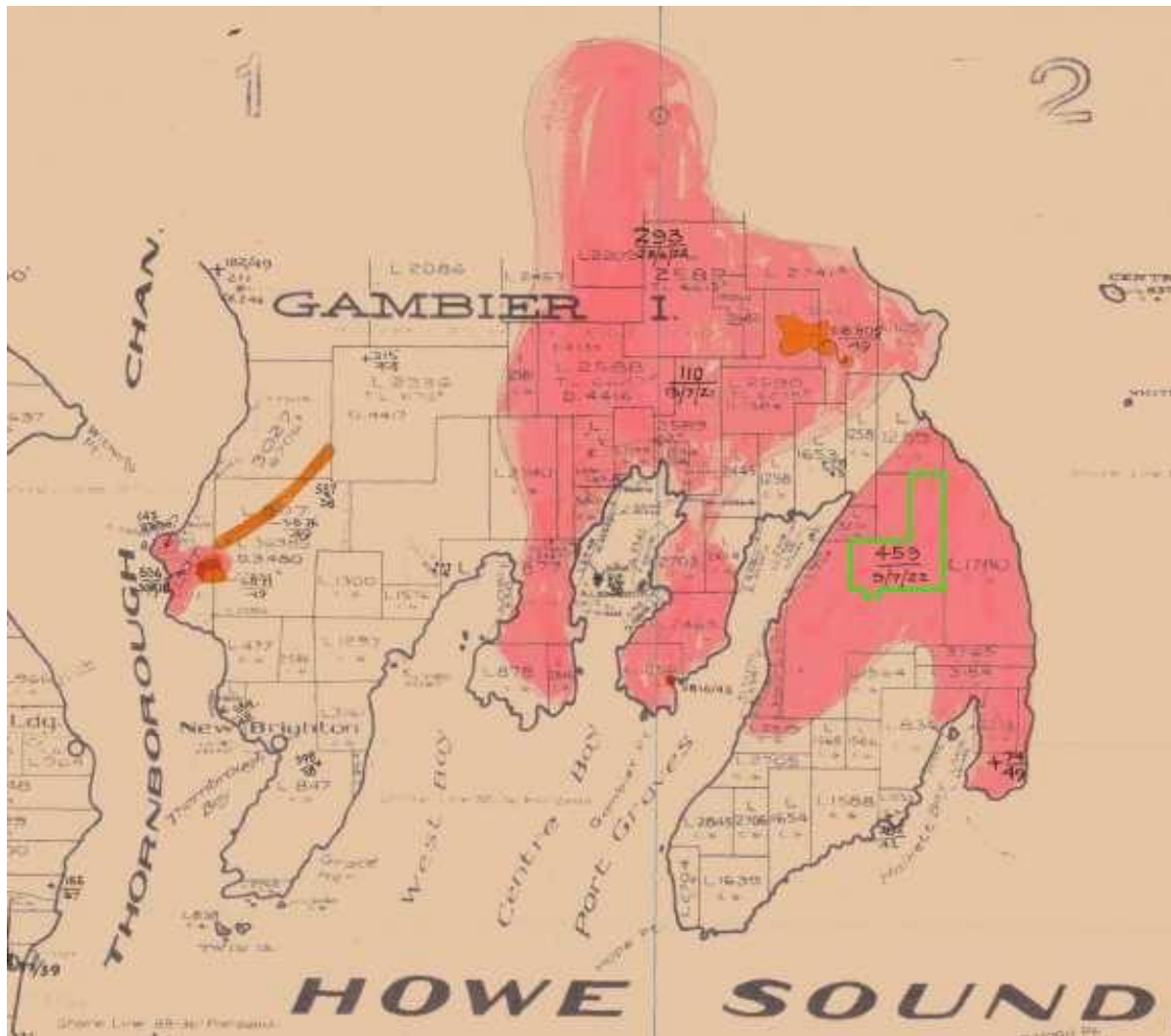


Figure 3. Historic wildfire and burn areas on Gambier Island (Hopwood 2009). Mount Artaban Nature Reserve indicated by green polygon within pink shaded area (labelled Fire # 459).

Stumps with spring-board notches indicate that some of the reserve was logged in the pre-World War II period, perhaps as post-fire salvage logging. Tree core samples indicate that most of the current forests originated between 1938 and 1940, probably as trees that seeded naturally following the fire and logging. Some forest stands in the lower-elevation northern part of the reserve originated around 1953, and stumps cut with chain saws in this area are consistent with early post-War “Cat-logging” methods.

Mount Artaban has long been a popular hiking destination. A tree core sample from a western hemlock tree with a trail blaze indicates that the blaze was cut around 1946 (Hopwood 2009).

The fire lookout tower at the summit of Mount Artaban was established in 1957 (John Parminter, pers. comm. in Hopwood 2009) and was probably one of the first Forest Service fire

towers to be pre-fabricated off-site and lifted to the site by helicopter as pre-assembled panels. The date when the tower was last used is not known but it was probably around 1970 (Hopwood 2009). The tower has fallen down but the footings and iron hook are still in place.

The Mount Artaban property was held as provincially-managed land and was transferred on June 6, 2008 through the provincial Free Crown Grant program to the Islands Trust Conservancy to be held and managed as a nature reserve. To satisfy the province's conditions for the transfer, the Gambier Island Conservancy partnered with the Islands Trust Conservancy to fundraise over \$40,000 to cover the costs of the land survey and a management plan. In addition to the support of the Islands Trust Conservancy, the Gambier Island Conservancy and the Sunshine Coast Regional District, over 80 contributions were made by individuals, businesses and community groups.

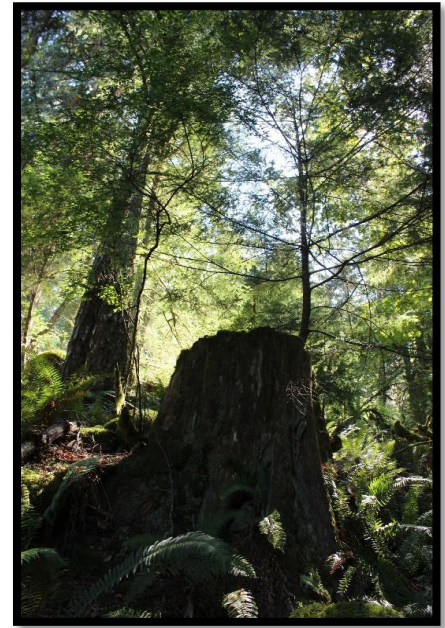


Photo 4. Large stumps in Ecological Community 1

2.6 Anthropogenic Features

There are no buildings or structures within the reserve. An archeological survey has not been completed for MANR.

Table 2. Anthropogenic Features in MANR

Anthropogenic Feature	Description	Condition	Photopoint Location
Trail	Backcountry hiking trail from Long Bay Wetland Nature Reserve in the north to Halkett Bay Provincial Marine Park in the south.	Good	Figure 1. No photo
Entrance, trailhead and covenant boundary signs	Decorative wooden nature reserve entrance sign. Trailhead sign and metal covenant boundary signs located off Mount Artaban Road that indicate access to the Reserve through Long Bay Wetland Nature Reserve.	Good	P16, Figure 1. 10 U 476130; 5480906
Fire cabin footings	Footings remaining from old fire cabin that was removed. Glass and debris noted in previous		Figure 1. No photo 10 U 475335 5479461

	management plan have been removed.		
Directional sign	Directional wooden trail sign on tree.	Fair	P18 Figure 1. 10U 475776; 5480615
Directional sign	Wooden sign on tree along trail.	Fair	Figure 1. No photo 10 U 475743 5480523
Boundary marker (iron pin)	Along border of Crown land.	Good	Figure 1. No photo 10 U 475492 5480088
Boundary marker (iron pin)	Brass monument at northwest corner of reserve (standard capped post set).	Unknown	Figure 1. No photo 10U 475767 5480887
Boundary marker (iron pin)	Brass monument south of summit (standard rock post set).	Unknown	Figure 1. No photo 10 U 475287 5479382
Signs	Decorative wooden nature reserve entrance sign and metal "Respect this Nature Reserve" sign at south of reserve.	Good	Figure 1. No photo 10U 475330 5479428
Summit sign	Summit sign to respect the environment.	Good	P17 475339; 5479467
Iron hooks	Two iron hooks embedded in rocks by summit sign.	Fair	Figure 1. No photo taken 10 U 475341; 5479463

2.7 Undersurface Rights

The undersurface rights are registered in favour of the provincial crown under registration Number BB864259 (dated June 2, 2008).

2.8 Notations, Charges, Liens and Interests

A Section 219 Conservation Covenant (Registration Number: CA3219711) and Section 218 Statutory Right of Way (Registration Number: CA3219712) were registered on the lands in 2013 in favour of Gambier Island Conservancy and Sunshine Coast Conservation Association. The general intent of the agreement is:

- a) to protect, preserve, conserve, maintain, enhance and, if applicable from time to time restore, the natural state of the Land and the Amenities as described in the Report (baseline documentation); and
- b) to prevent any occupation or use of the Land that will impair or interfere with the natural state of the Land and the Amenities as described in the Report.

2.9 Local Planning Designations

The MANR is within Development Permit Area #3 which protects all mapped and unmapped streams on Gambier Island under the Riparian Areas Regulation (Islands Trust 2017).

The reserve is zoned G1 (Wilderness Conservation) (Islands Trust 2004). Although permitted uses within this zoning include “wilderness camping” and “woodlot use and timber harvesting use,” these uses are not permitted in the reserve.

2.10 Existing Public and Other Use

Mount Artaban Nature Reserve falls within the territory of multiple First Nations, and as such has been a site of cultural activity for thousands of years. There is knowledge and oral history relating to this site that may or may not be shared outside of the membership of a First Nation. As a first step toward strengthening cultural connections to the land that were negatively impacted by European settlement, ITC is exploring the potential of a Management Plan for Areas of Cultural Heritage and Sacred Significance that will support and enhance the continued use of the site by First Nations.

There is light recreational activity on the existing public trail in the reserve. The trailhead is off Mount Artaban Road and accesses the reserve through a portion of Long Bay Wetland Nature Reserve. This trail crosses through a section of adjacent provincially-managed land on route to the summit, and connects to Halkett Bay Provincial Marine Park to the south before continuing on to the docks at Camp Fircom and Halkett Bay (Map 1). For those entering the nature reserve on the trail from the south, there is wooden entrance sign near the MANR boundary just before the peak. There are exceptional views from several viewpoints, including the summit of Mount Artaban (Photo 2). The trailhead and summit are well signed.

3.0 Inventory by Ecological Community

3.1 Ecological Significance

Mount Artaban is a significant landmark on Gambier Island, with a summit of 614 metres (2015 feet). The reserve’s steep trails lead to spectacular views of Howe Sound and the Coast Mountain ranges north of Vancouver. Due to its recent history of logging, the reserve is predominantly composed of second growth mixed forests; however, large veteran trees are still found in many areas on the mountain. The habitat around the summit includes unlogged shore pine and Douglas-fir forests and two high-elevation ephemeral wetlands.

A search of the BC Conservation Data Centre (CDC) data revealed only one species at risk occurrence on Gambier Island: the Northern Red-legged Frog (*Rana aurora*). During site visits in

August 2018, Black Swifts were noted over the summit of Mount Artaban. It is likely that other rare species will be found in the reserve if surveys are completed at appropriate times of the year.

Islands Trust Conservancy acknowledges that there is a wealth of traditional ecological knowledge and a long history of ecosystem stewardship among the First Nations whose territory encompasses Mount Artaban Nature Reserve. ITC will strive to work with First Nations knowledge holders to deepen its understanding, improve its stewardship practices, and, ultimately, support the transfer of traditional ecological knowledge to younger generations within First Nations communities to ensure that it is not lost. At this time, the ecological information presented in this management plan was formed using systems that are based in foundations of Western science.

Table 3. Species at Risk in MANR

Species Name		Status				
English	Scientific	Provincial	BC List	COSEWIC	SARA	Global
Black Swift	<i>Cypseloides niger</i>	S2S3B (2015)	Blue	E (2015)		G4 (2015)

Table 4. Ecological Communities in MANR

Ecological Community Name		Status		
English	Scientific	Provincial	BC List	Global
Western hemlock - Douglas-fir / Oregon beaked-moss very dry maritime (CWHxm1/01)	<i>Tsuga heterophylla</i> - <i>Pseudotsuga menziesii</i> / <i>Eurynchium oreganum</i>	S2 (2013)	Red	G3G4
Western redcedar / sword fern very dry maritime (CWHxm1/05)	<i>Thuja plicata</i> / <i>Polystichum munitum</i>	S2S3 (2009)	Blue	GNR
Western redcedar/ three-leaved foamflower Very Dry Maritime (CWHxm1/07)	<i>Thuja plicata</i> / <i>Tiarella trifoliata</i>	S2S3 (2013)	Blue	G3
Western hemlock / flat moss dry maritime (CWHdm/01)	<i>Tsuga heterophylla</i> / <i>Buckiella undulata</i>	S3 (2016)	Blue	G3G4
Douglas-fir - lodgepole pine / oceanspray / reindeer lichens dry maritime (CWHdm/02)	<i>Pseudotsuga menziesii</i> - <i>Pinus contorta</i> / <i>Holodiscus discolor</i> / <i>Cladina</i> spp.	S2 (2005)	Red	G2G3
Douglas-fir - western hemlock / salal dry maritime (CWHdm/03)	<i>Pseudotsuga menziesii</i> - <i>Tsuga heterophylla</i> / <i>Gaultheria shallon</i>	S2S3 (2013)	Blue	G3G4
Western redcedar / sword fern dry maritime (CWHdm/05)	<i>Thuja plicata</i> / <i>Polystichum munitum</i>	S2? (2016)	Red	G2G3

western redcedar / three-leaved foamflower dry maritime (CWHdm/07)	<i>Thuja plicata</i> / <i>Tiarella trifoliata</i>	S2S3 (2018)	Blue	G3
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There are two high-elevation ephemeral wetlands near the summit of Mount Artaban. In August, both wetlands were dry and there was no evidence of amphibians. Depending on their hydroperiod, the ponds may provide frog and salamander breeding habitat. The ponds are likely important foraging habitats for bats and other wildlife in an area with little standing water.

3.2 Climate

The southern Gulf Islands, which include the islands in Howe Sound, have a climate pattern of warm, dry summers and mild, wet winters with little snowfall. The maritime influence moderates the effect of elevation, latitude, and aspect on local temperature and precipitation. The climate is also influenced by the rain shadow effect of the Vancouver Island Ranges, and experiences similar temperatures and precipitation to the North Shore Mountains on the mainland.

Weather statistics from the adjacent Bowen Island station in Howe Sound show that annual precipitation is approximately 1507 mm, mostly falling as rain (The Weather Network 2018). Average daily temperatures peak in the summer months (July and August) at 23°C and are lowest in the winter at 0°C (December and January) (Figure 4). The winter months from November to January have the highest rainfall (averaging 506-420 mm), while July and August are the driest months (58-78 mm) (Meteoblue 2018).

Average temperatures and precipitation

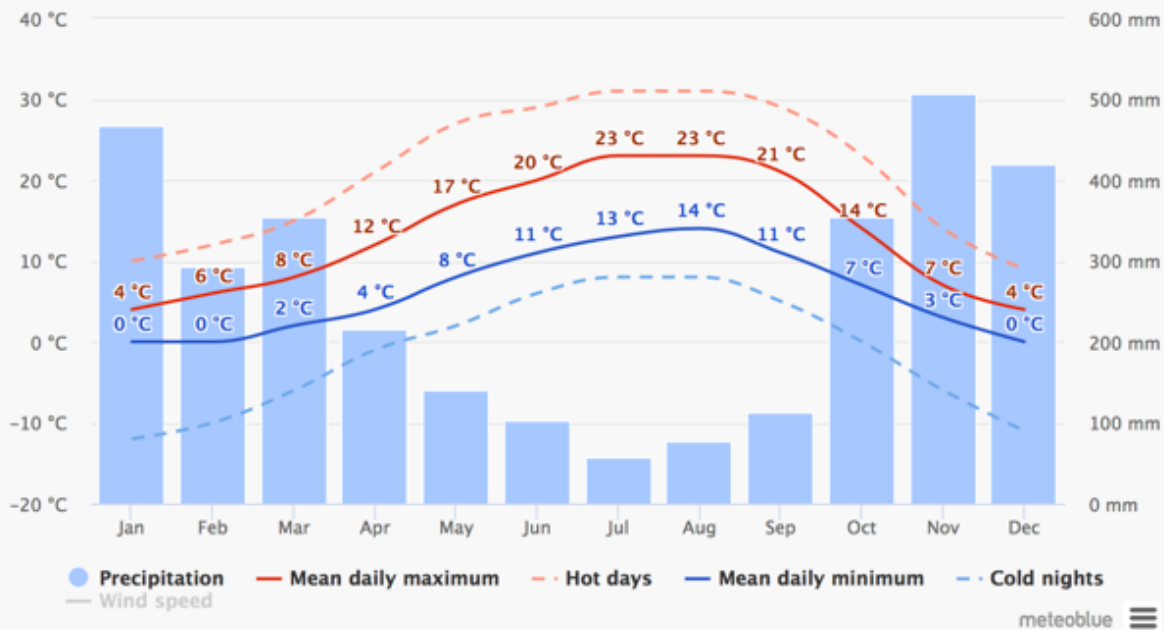


Figure 4. Average temperature and precipitation of Bowen Island (nearest weather station to Gambier Island) from 1985-2018 (Meteoblue 2018)

The future impacts of climate change are unknown, although a summer drying trend and an increase in both frequency and intensity of storm events are predicted (Mauger et. al. 2015). More powerful storms may cause increasing erosion especially in areas with exposed soil, such as trails, and in riparian areas due to increased flows. Drier summers may impact the wetlands and riparian hydrology causing premature drying. Over time, there may be shifts in the vegetation community away from western redcedar (*Thuja plicata*) to Douglas-fir (*Pseudotsuga menziesii*) and shore pine (*Pinus contorta*). Higher temperatures and less precipitation may lead to localized stress on trees and plants. Maintaining habitat connectivity, biodiversity and ecosystem resilience may assist the flora and fauna in adapting to climate change stresses.

3.3 Geology and Physiology

Geologically, most of Gambier Island is underlain by mafic volcanic strata and associated sediments of

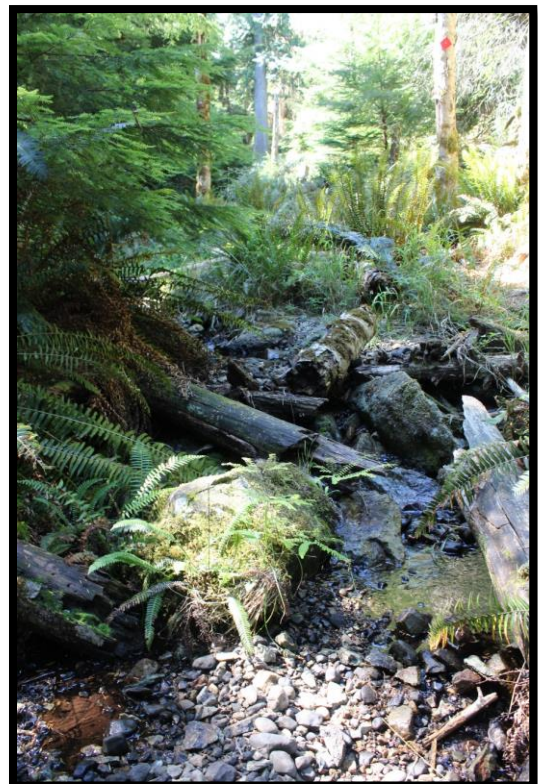


Photo 5. Small stream in lower region of MANR. There was still some flow on August 7, 2018. Note red metal trail wayfinder on tree in background beside trail.

the Lower Cretaceous Gambier Group (approximately 100 million years old). Granitic rocks of the Jurassic to Cretaceous Coast Plutonic Complex (approximately 160 million years old) underlie the southern part of the island. (BC Ministry of Energy, Mines and Petroleum Resources 2009 in Hopwood 2009). According to the map compiled by Armstrong (1965), the boundary between these two rock formations lies just south of the summit of Mount Artaban, indicating that the bedrock geology of the Nature Reserve belongs to the Gambier Group (Hopwood 2009). This complex geological group is primarily of volcanic origin; however, this does not mean that Mount Artaban was originally a volcano. Rather, these rocks originated in an ancient eruption and have since been moved by plate tectonics from their original location. In the process, they have collided with other terrains, undergoing considerable deformation and other changes (Clague and Turner 2003 in Hopwood 2009). The Gambier Group also occurs in the vicinity of Britannia Beach on the mainland shore of Howe Sound, an area with significant mineral deposits that were mined for many years. However, the BC Minerals Title Online website shows no current or historical mineral titles covering any part of the MANR (BC Minerals Titles 2018).



Photo 6. Ephemeral, high elevation pond on east side of summit

The Howe Sound region was covered by glaciers from approximately 29,000 to 12,000 years ago. During glaciation, the weight of the ice depressed the land surface so that some lower-elevation portions of Gambier Island were below sea level. As the glaciers retreated and the land rebounded, marine and coastal processes eroded loose materials from the higher and steeper parts of the island and laid down finer-textured soil parent materials on many of the lower-lying and more gently sloping areas of the island (Hopwood 2009).

3.4 Hydrology

There are two small seasonal streams that originate within the reserve (or on adjacent Crown land) and flow roughly northwards, through the Long Bay Wetland Nature Reserve and Brigade Bay subdivision, entering Howe Sound a short distance south of Brigade Bay (Figure 1). These streams do not support resident or anadromous salmonid populations, probably because the summer and autumn flow levels are low to minimal, and the gradients are too steep for fish (Hopwood 2009). In addition to these two well-defined streams, there are many small ephemeral streams that flow during periods of heavy rainfall (Hopwood 2009). It is likely that a small area at the extreme southern end of MANR drains into Fircom Creek, even though it lies outside the mapped Community Watershed (Hopwood 2009).

Several small streams originating within the reserve are used by local residents as water supply sources for individual residences and run off from Mount Artaban supplies freshwater for Sea Ranch strata. Protecting the water quality and flow regimes of all streams within the reserve is an important objective in this plan. This can be accomplished by maintaining forest cover and not allowing uses that could jeopardize water quality, such as camping, fires or motorized recreation.

There are two ephemeral wetlands near the summit of MANR. The wetland on the east side of the summit is approximately 8 m x 40 m with sparse pockets of sedges. A second pond on the west side of the summit was found within denser forest and is approximately 15 m x 25 m in size, with moderate patches of sedges. Both ponds were dry on August 7, 2018.



Photo 7. Ephemeral forest wetland on west side of summit

3.5 Soils

Mount Artaban Nature Reserve has predominantly rocky and steep landforms with shallow, coarse-textured soils. Colluvial deposits (rocky material that has been moved down-slope by gravity) occur on the steep slopes and at the bases of the many cliffs. Soils on the sides and tops of the hills vary from bare rock to morainal deposits (mixed material deposited by the glaciers), typically shallow, coarse-textured, and rapidly drained. Soils are somewhat deeper in the several narrow stream valleys that dissect the slopes of Mount Artaban. In the gentler terrain of the lower slopes of the mountain, soil deposits are up to several meters deep and consist of morainal material as well as finer-textured material deposited in a marine environment during the retreat of the glaciers (Hopwood 2009).

3.6 Ecological Classifications

Mount Artaban Nature Reserve is within the Very Dry Maritime subzone (xm) and the slightly cooler and moister Dry Maritime subzone (CWHdm) of the Coastal Western Hemlock Zone (CWH) (Green & Klinka, 1994) (see Figure 5 for subzone locations within MANR). Climatic factors, in conjunction with existing soil conditions, result in a productive coastal forest with a long growing season—although water deficits may occur on zonal sites. MANR is within the Pacific Maritime Ecozone and the Georgia Puget Basin Ecoregion.

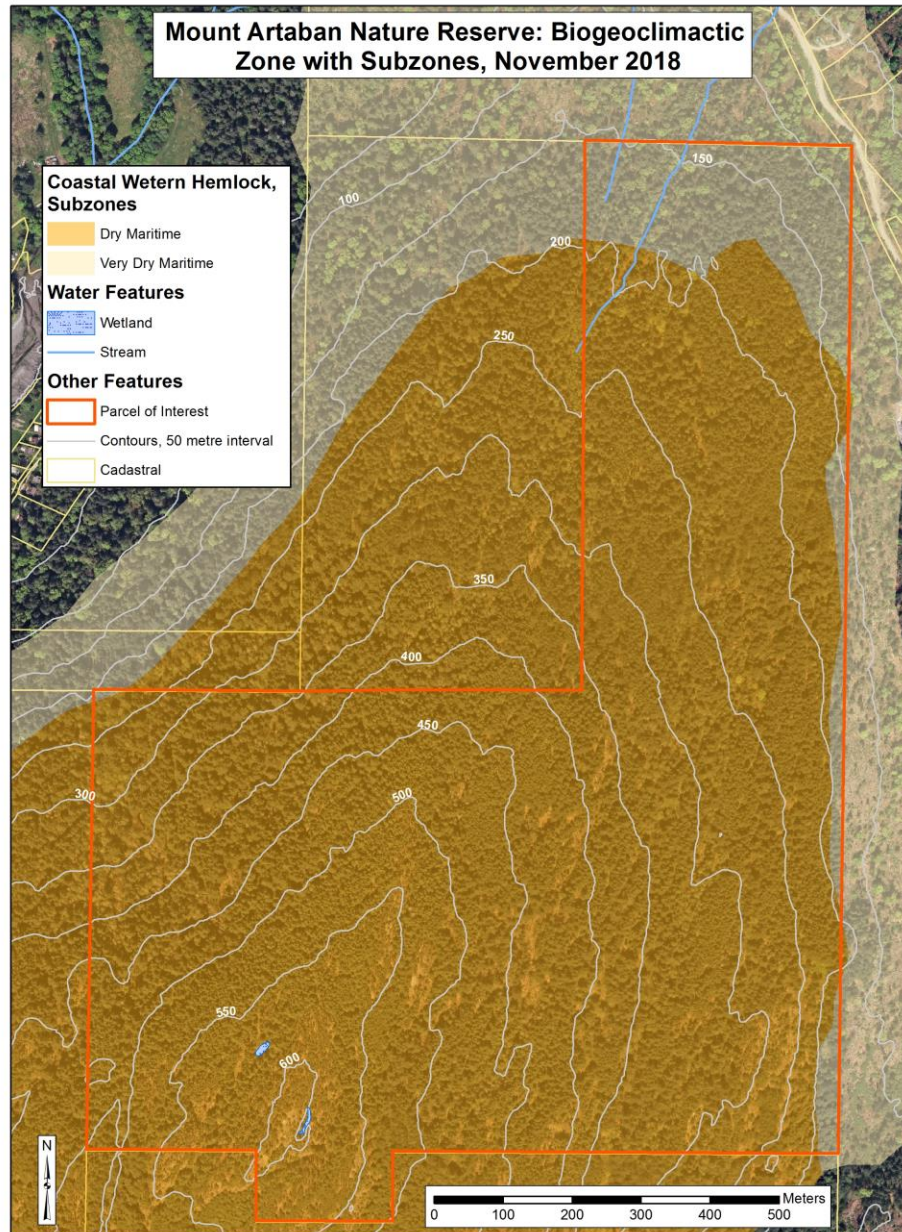


Figure 5. Map of Coastal Western Hemlock biogeoclimatic subzones within MANR (orange boundary)

3.7 Ecological Communities and Site Series

An ecological inventory of biological features was conducted in the reserve on August 7th and 8th, 2018. Site series were identified using *A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region* (Green and Klinka, 1994) (see Figure 6 for Ecological Community polygons within MANR). Structural stage was defined as per *Standards for Terrestrial Ecosystems Mapping in British Columbia* (RIC 1998).

A list of all plant species observed is included in Appendix B. Locations of photopoints and other photograph locations are given in Appendix C.

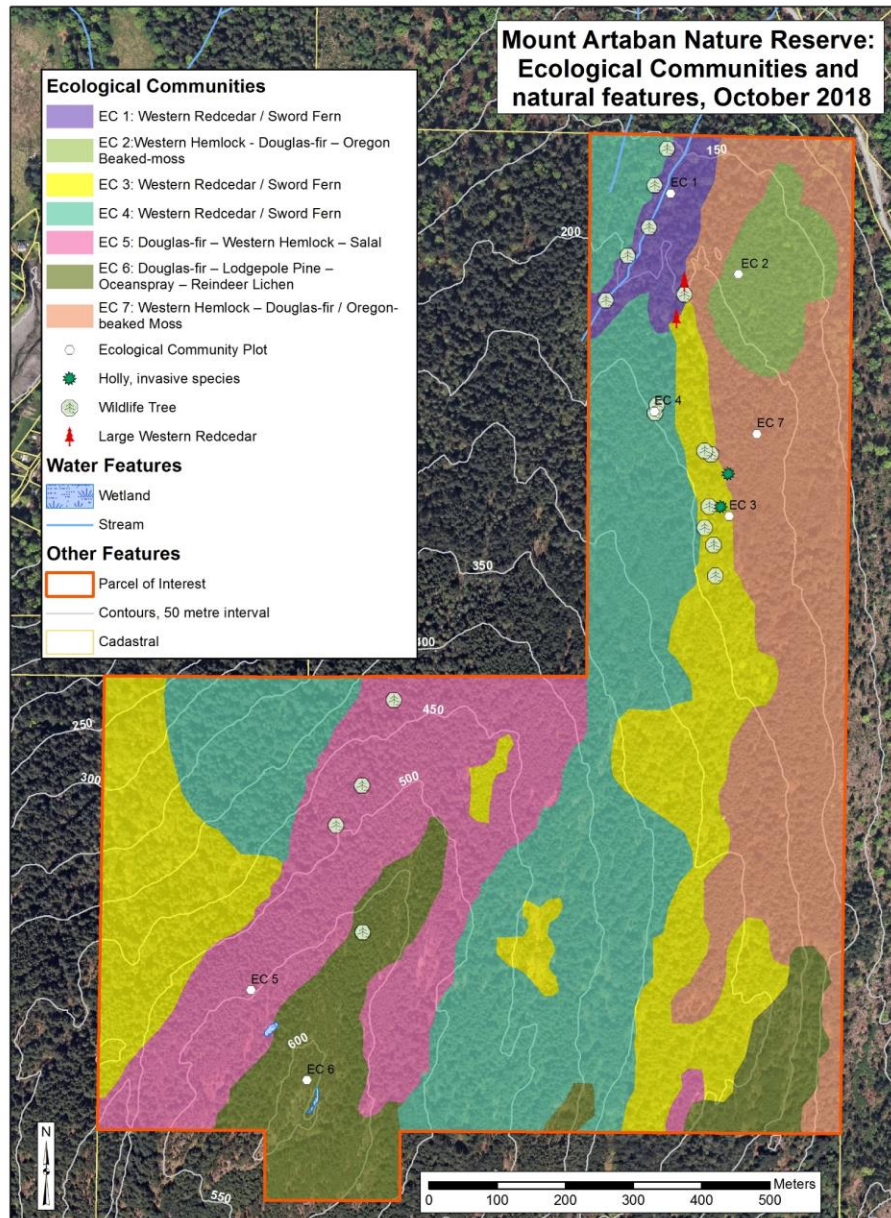


Figure 6. Ecological communities in MANR, including wildlife trees, invasive plants, and vegetation plots

Ecological Community 1. Western Redcedar / Sword Fern (CWHxm1/05); Western Redcedar / Three-leaved Foamflower (CWHxm1/07) Very Dry Maritime to Dry Maritime

Ecological Community 1 is found at lower elevations in the northern portion of the MANR. The soils are rich to very rich and the community includes the riparian areas associated with one of the ephemeral streams. The main canopy trees are Douglas-fir (*Pseudotsuga menziesii*) and western redcedar (*Thuja plicata*) with some red alder (*Alnus rubra*), western hemlock (*Tsuga heterophylla*) and bigleaf maple (*Acer macrophyllum*). The main community is Western Redcedar / Sword Fern Very Dry Maritime, with small pockets of Western Redcedar / Three-leaved Foamflower Very Dry Maritime in slightly drier areas. As the elevation increases above

200 m, the site series changes from Very Dry Maritime to Dry Maritime. Lower slopes are gentle to moderate, with some areas steeply sloping. The understory in some locations is dominated by thick sword fern and in other locations the vegetation is more mixed. The community is in disturbed early to mid-seral stages, recovering from past logging activities.



Photo 8. Western redcedar by creek gully in Ecological Community 1

Table 5. Description of Ecological Community 1

Polygon ID:	Ecological Community 1
Ecological Community:	Western Redcedar / Sword Fern Very Dry Maritime Western Redcedar / Three-leaved Foamflower Very Dry Maritime
Classification:	CWHxm1/05, CWHxm1/07 at lower elevations (transitions to CWHdm/05, CWHdm/07 above 200 m)
Structural Stage:	6-Mature Forest/5-Young Forest
Status (BC List):	Blue-listed/Red-listed
Photopoint(s):	P8
Ecological Community Description:	Mix of young red alder and conifer species on fresh to moist sites and riparian areas. Includes second growth, post-logging riparian ecosystems, adjacent to a small stream in the lower-elevation portion of the Nature Reserve (below 250 m). Many large wildlife trees.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance with individual tree death resulting in gap dynamics. Large windthrow over creek.
Anticipated Change/Succession:	Future dying off of red alder will provide more light for understory conifers to grow. In areas with heavy deer browsing, conifers may be impeded and an open stand or gap may result. Slow development of old forest characteristics will occur through tree growth and development of gaps by natural mortality and wind.
Wildlife observations:	Audio: Swainson's Thrush (<i>Catharus ustulatus</i>), Chestnut-backed Chickadee (<i>Poecile rufescens</i>), Red-breasted Nuthatch (<i>Sitta canadensis</i>)

Table 6. Vegetation Species in Ecological Community 1

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy+	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Thuja plicata</i> (western redcedar)	25	1					MC: 80-150 yrs, ht: 20-30 m, DBH: 50-120 cm SC: 10-15 yrs, ht: 3 m, DBH: 10-15 cm
<i>Pseudotsuga menziesii</i> (Douglas-fir)	15						MC: 20-60 yrs, ht: 15-20 m, DBH: 15-50 cm
<i>Tsuga heterophylla</i> (western hemlock)	5	1					MC: 40-60 yrs, ht: 15-20 m, DBH: 40 cm SC: 10-15 yrs, ht: 3 m, DBH: 8-10 cm
<i>Alnus rubra</i> (red alder)	3						MC: 20-40 yrs, ht: 10-15 m, DBH: 20-25 cm
<i>Acer macrophyllum</i> (bigleaf maple)	2						MC: 80-100 yrs, ht: 15 m, DBH: 70 cm
<i>Vaccinium parvifolium</i> (red huckleberry)			5				
<i>Berberis nervosa</i> (dull Oregon-grape)			T				
<i>Rubus spectabilis</i> (salmonberry)			T				
<i>Polystichum munitum</i> (sword fern)				60			
<i>Adiantum aleuticum</i> (maidenhair fern)				T			
Moss Layer							Total Moss Layer: 5%
<i>Eurynchium oreganum</i> (Oregon-beaked moss)							
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
<i>Rhytidiadelphus loreus</i> (lanky moss)							
Cover by Layer (%)	50	2	5	60	5		Total Canopy Cover: 50%

Ecological Community 2. Western Hemlock - Douglas-fir / Oregon Beaked-moss (CWHxm1/01) below 200 m; transitions to Western Hemlock / Flat Moss (CWHdm/01) above 200 m.

This community is densely forested and the dominant trees are Douglas-fir and western hemlock with some older western redcedar in the wetter areas. The understory is very open and dominated by bryophytes, with few shrubs present. The community is classified as Western Hemlock - Douglas-fir/Oregon beaked-moss Dry Maritime. It is found on the lower slopes in the northeast corner of the MANR. The slopes are mostly gentle to moderate middle slopes, in some locations quite steeply sloping to the east.



Photo 9. Western hemlock, Douglas-fir with Oregon-beaked moss understory in Ecological Community 2

Table 7. Description of Ecological Community 2

Polygon ID:	Ecological Community 2
Ecological Community:	Western Hemlock - Douglas-fir / Oregon Beaked-moss Transitions to Western Hemlock / Flat Moss above 200 m.
Classification:	CWHxm1/01 (transitions to CWHdm/01).
Structural Stage:	5 – Young Forest (some mature/old forest attributes and scattered veteran trees)
Status (BC List):	Red-listed/Blue-listed
Photopoint(s):	P9
Ecological Community Description:	Young, maturing Douglas-fir forest on slightly dry to fresh sites with eastern aspect. Surface boulders throughout, some smaller windfall and woody debris. One red alder wildlife snag in polygon.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance. Logging stumps present, old veteran trees with burn scars in polygon. Gap dynamics. Some smaller windfall. Natural regeneration from past wildfire and logging events.
Anticipated Change/Succession:	Stand self-thinning due to density-related mortality. Slow development of old forest characteristics through tree growth and development of gaps by natural mortality and wind.
Wildlife observations:	Visual: Black-tailed deer (<i>Odocoileus hemionus</i>) scat, Douglas' squirrel (<i>Tamiasciurus douglasii</i>) Audio: Common Raven (<i>Corvus corax</i>), Chestnut-backed Chickadee (<i>Poecile rufescens</i>), Red Crossbill (<i>Loxia curvirostra</i>), Western Tanager (<i>Piranga ludoviciana</i>)

Table 8. Vegetation Species in Ecological Community 2

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy+	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Pseudotsuga menziesii</i> (Douglas-fir)	40						MC: 60-80 yrs, ht: 25-30 m DBH: 30-55 cm
<i>Tsuga heterophylla</i> (western hemlock)	3	T					MC: 60-80 yrs, ht: 25-30 m DBH: 55 cm SC: 15-20 yrs, ht: 8-10 m, DBH: 15 cm
<i>Thuja plicata</i> (western redcedar)	2	T					MC: 80-100 yrs, ht: 25-30 m, DBH: 130 cm SC: 15-20 yrs, ht: 5 m, DBH: 20 cm
<i>Berberis nervosa</i> (dull Oregon-grape)			2				
<i>Vaccinium parvifolium</i> (red huckleberry)			1				
<i>Holodiscus discolor</i> (oceanspray)			T				
<i>Tsuga heterophylla</i> (western hemlock) seedlings			T				
<i>Vaccinium membranaceum</i> (black huckleberry)			T				
<i>Polystichum munitum</i> (sword fern)				5			
<i>Festuca occidentalis</i> (western fescue)				T			
<i>Galium triflorum</i> (sweet-scented bedstraw)				T			
<i>Goodyera oblongifolia</i> (rattlesnake plantain)				T			
<i>Trientalis borealis</i> (broad-leaved starflower)				T			
<i>Mycelis muralis</i> (wall lettuce)						T	
Moss Layer							Total Moss Layer: 85%
<i>Eurynchium oregonum</i> (Oregon-beaked moss)							
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
<i>Rhytidiadelphus loreus</i> (lanky moss)							
Cover by Layer (%)	45	<1	4	6	85	<1	Total Canopy Cover: 45%

Ecological Community 3. Western Redcedar / Sword Fern (CWHdm/05)

This community is a mix of mature forest (red alder component) and young forest (coniferous component), with larger, older veteran trees scattered throughout. It is dominated by early to mid-seral Western Redcedar / Sword Fern Dry Maritime community, with smaller portions of Western Hemlock - Douglas-fir / Oregon-beaked Moss and Western Redcedar / Three-leaved Foamflower communities. The understory is sparse with a small amount of sword fern. The Ecological Community is in moisture-receiving sites at the bottom of a draw. It occurs between 200 and 500 m elevation, mostly on gentle to moderate middle to lower slopes that are east facing.



Photo 10. Western redcedar with fire scars, sword fern, and some large veteran trees in Ecological Community 3

Table 9. Description of Ecological Community 3

Polygon ID:	Ecological Community 3
Ecological Community:	Western Redcedar / Sword Fern (dominant) Western Hemlock - Douglas-fir / Oregon-beaked Moss Western Redcedar / Three-leaved Foamflower
Classification:	CWHdm/05 (CWHdm/01, CWHdm/07)
Structural Stage:	Hybrid of mature forest (6) and young forest (5)
Status (BC List):	Red-listed/Blue-listed
Photopoint(s):	P10
Ecological Community Description:	Mature red alder and young conifer forest on slightly dry to fresh sites that has regenerated after fire and/or logging. There is a seasonal creekbed running through the plot, with many veteran trees and several dead red alder snags.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance. Gap dynamics. Fire scars in polygon, no stumps visible.
Anticipated Change/Succession:	Continued dying off of red alder will provide more light for understory conifers to grow. In areas with heavy deer browsing, conifers may be impeded and an open stand or gap may result. Slow development of old forest characteristics through tree growth and gaps created by natural mortality and wind.
Wildlife observations:	Visual: Black-tailed deer (<i>Odocoileus hemionus</i>) scat, Chestnut-backed Chickadee (<i>Poecile rufescens</i>), Dark-eyed Junco (<i>Junco hyemalis</i>), woodpecker sp. feather Audio: Red-tailed Hawk (<i>Buteo jamacensis</i>), Cassin's Vireo (<i>Vireo cassinii</i>)

Table 10. Vegetation Species in Ecological Community 3

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy+	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Pseudotsuga menziesii</i> (Douglas-fir) - veteran	5						MC: 150+ yrs, ht: 35-40 m, DBH: 130-170 cm (vet)
<i>Pseudotsuga menziesii</i> (Douglas-fir)	15	1					MC: 20-80 yrs, ht: 30-30 m, DBH: 20-70 cm SC: 15-25 yrs, ht: 10-15 m, DBH: 15-20 cm
<i>Thuja plicata</i> (Western redcedar) - veteran	2	1					MC: 150+ yrs, ht: 30-35 m, DBH: 180 cm (vet) SC: 10-15 yrs, ht: 5 m, DBH: 20 cm
<i>Alnus rubra</i> (red alder)	5	2					MC: 30-40 yrs, ht: 20 m, DBH: 30-35 cm
<i>Tsuga heterophylla</i> (western hemlock)		2					SC: 15-30 yrs, ht: 5-12 m, DBH: 10-20 cm
<i>Amelanchier alnifolia</i> (Saskatoon)			T				
<i>Berberis nervosa</i> (dull Oregon-grape)			T				
<i>Rosa gymnocarpa</i> (baldhip rose)			T				
<i>Thuja plicata</i> (western redcedar) - seedlings			T				
<i>Tsuga heterophylla</i> (western hemlock) - seedlings			T				
<i>Vaccinium membranaceum</i> (black huckleberry)			T				
<i>Vaccinium parvifolium</i> (red huckleberry)			T				
<i>Polystichum munitum</i> (sword fern)				5			
<i>Bromus pacificus</i> (Pacific brome)				T			
<i>Carex</i> spp. (sedge)				T			
<i>Festuca occidentalis</i> (western fescue)				T			
<i>Galium triflorum</i> (sweet-scented bedstraw)				T			
<i>Pteridium aquilinum</i> (bracken fern)				T			
<i>Rubus ursinus</i> (trailing blackberry)				T			
<i>Trientalis borealis</i> (broad-leaved starflower)				T			
<i>Viola sempervirens</i> (evergreen violet)				T			
<i>Epipactis helleborine</i> (broadleaf helleborine)						T	
<i>Ilex aquifolium</i> (English holly)						T	

<i>Mycelis muralis</i> (wall lettuce)						T	
Moss Layer							Total Moss Layer: 30%
<i>Dicranum</i> spp.							
<i>Eurynchium oregonum</i> (Oregon-beaked moss)							
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
<i>Rhytidiadelphus loreus</i> (lanky moss)							
Cover by Layer (%)	30	6	1	6		<1	Total Canopy Cover: 30%

Ecological Community 4. Western Redcedar / Sword Fern (CWHdm/05); Douglas-fir – Western Hemlock / Salal (CWHdm/03)

The community is a mix of young second-growth Western Redcedar / Sword Fern and young second-growth Douglas-fir - Western Hemlock / Salal site series. The dominant tree species is Douglas-fir and the understory is sparse with a few shrubs and mosses. This community is found along the eastern part of the reserve, mostly on moderate to steep middle to lower slopes, with some cliff bands and rocky outcrops, from 100 to 500 m elevation.



Photo 11. Maturing young forest with Sword Fern and moss understory in Ecological Community 4

Table 11. Description of Ecological Community 4

Polygon ID:	Ecological Community 4
Ecological Community:	This polygon is dominated by Western Redcedar / Sword Fern with Douglas-fir - Western Hemlock / Salal.
Classification:	CWHdm/05 with CWHdm/03 Transitioning to CWHxm1/05 and CWHxm1/03 at lower elevations (<200 m).
Structural Stage:	5 - Young forest to 6 - Mature forest
Status (BC List):	Blue-listed
Photopoint(s):	P11
Ecological Community Description:	Second growth young mixed forest, with veteran trees, on moderately dry to moister sites. Includes some mature/old forest attributes (veteran trees, large snags, canopy gaps). Regeneration after fire or logging. Plot is moderately sloping to east, on overall steeply sloping hillside. Significant woody debris.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance. Gap dynamics.
Anticipated Change/Succession:	Stand self-thinning due to density-related mortality. Slow development of old forest characteristics through tree growth and creation of gaps by natural mortality and wind.
Wildlife observations:	Visual: Black-tailed deer (<i>Odocoileus hemionus</i>) scat, Lorquin's Admiral (<i>Limenitis lorquini</i>), Turkey Vulture (<i>Cathartes aura</i>), Chestnut-backed Chickadee (<i>Poecile rufescens</i>) Audio: Common Raven (<i>Corvus corax</i>), Red Crossbill (<i>Loxia curvirostra</i>), Western Tanager (<i>Piranga ludoviciana</i>), Red-breasted Nuthatch (<i>Sitta canadensis</i>), Red-tailed Hawk (<i>Buteo jamacensis</i>)

Table 12. Vegetation Species in Ecological Community 4

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy+	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Pseudotsuga menziesii</i> (Douglas-fir)	48	2					MC: 70-90 yrs, ht: 30-40 m, DBH: 40-80 cm SC: 5-10 yrs, ht: 1-2 m, DBH: 3-5 cm SC: 30-40 yrs, ht: 20-30 m, DBH: 20-30 cm
<i>Pseudotsuga menziesii</i> (Douglas-fir) – veteran	2						MC: 150 yrs, ht: 30-40 m, DBH: 130 cm (vet)
<i>Thuja plicata</i> (Western redcedar)		T					SC: 10-15 yrs, ht: 5 m, DBH: 15 cm
<i>Tsuga heterophylla</i> (western hemlock)		T					SC: 10-15 yrs, ht: 3-5 m, DBH: 8-10 cm
<i>Berberis nervosa</i> (dull Oregon-grape)			30				
<i>Holodiscus discolor</i> (oceanspray)			T				
<i>Vaccinium parvifolium</i> (red huckleberry)			T				
<i>Rosa gymnocarpa</i> (baldhip rose)			T				
<i>Polystichum munitum</i> (sword fern)				5			
<i>Pteridium aquilinum</i> (bracken fern)				1			
<i>Festuca occidentalis</i> (western fescue)				T			
<i>Goodyera oblongifolia</i> (rattlesnake plantain)				T			
<i>Linnaea borealis</i> (twinline)				T			
<i>Trientalis borealis</i> (broad-leaved starflower)				T			
Moss Layer							Total Moss Layer: 70%
<i>Eurynchium oreganum</i> (Oregon-beaked moss)							
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
<i>Rhytidiadelphus loreus</i> (lanky moss)							
Cover by Layer (%)	50	3	30	7	70		Total Canopy Cover: 50%

Ecological Community 5. Douglas-fir – Western Hemlock / Salal (CWHdm/03); Coastal Western Hemlock / Flat Moss (CWHdm/01)

This Ecological Community is a mix of early- to mid-seral Douglas-fir - Western Hemlock / Salal and Coastal Western Hemlock / Flat Moss communities. Dominant trees include Douglas-fir and western hemlock with very little understory development resulting in mainly litter and duff on the ground. It occurs on very dry sites on moderate to steep ridges, middle and upper slopes, some cliff bands and rock outcrops, from 350 m to 600 m elevation. There are many steep, rocky outcrops on west-facing slopes. The forest developed following natural disturbance (fire), resulting in a young, dense stand. It is found at the higher elevation areas of the reserve below the summit.

Table 13. Description of Ecological Community 5

Polygon ID:	Ecological Community 5
Ecological Community:	Douglas-fir - Western Hemlock / Salal Coastal Western Hemlock / Flat Moss
Classification:	CWHdm/03, CWHdm/01
Structural Stage:	5 – Young Forest (some mature/old forest attributes)
Status (BC List):	Red-listed/Blue-listed
Photopoint(s):	P12
Ecological Community Description:	Moderate to steep ridges, middle and upper slopes, some cliff bands and rock outcrops, from 350 m to 600 m elevation. Young Douglas-fir and western hemlock forest on dry to moist sites. Developed following natural disturbance (fire). Many steep rocky outcrops on west-facing slope. Very dry with little ground vegetation, mainly litter and duff on ground with some small woody debris.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance. Gap dynamics.
Anticipated Change/Succession:	Stand self-thinning due to density-related mortality. Slow development of old forest characteristics through tree growth and creation of gaps by natural mortality and wind.
Wildlife observations:	None observed



Photo 12. Douglas-fir, western hemlock, with sparse understory in Ecological Community 5

Table 14. Vegetation Species in Ecological Community 5

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Tsuga heterophylla</i> (western hemlock)	35	1					MC: 40-60 yrs, ht: 25-30 m DBH: 25-45 cm SC: 10-15 yrs, ht: 3-5 m, DBH: 7-10 cm
<i>Pseudotsuga menziesii</i> (Douglas-fir)	20						MC: 60-80 yrs, ht: 25-30 m DBH: 20-65 cm
<i>Thuja plicata</i> (western redcedar)	5	1					MC: 60-80 yrs, ht: 20-25 m, DBH: 45 cm. Fire scars on large cedars SC: 30 yrs, ht: 10-15 m, DBH: 10-15 cm
<i>Tsuga heterophylla</i> (western hemlock) seedlings			T				
<i>Vaccinium parviflorum</i> (red huckleberry)			T				
<i>Polystichum munitum</i> (sword fern)				T			
<i>Pteridium aquilinum</i> (bracken fern)				T			
Moss Layer							Total Moss Layer: 15%
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
Cover by Layer (%)	60	2	1	1	15		Total Canopy Cover: 60%

Ecological Community 6. Douglas-fir - Lodgepole Pine / Oceanspray / Reindeer Lichens (CWHdm/02); Douglas-fir - Western Hemlock / Salal (CWHdm/03)

This ecological community is a mix of Douglas-fir - Lodgepole Pine / Oceanspray / Reindeer Lichens in mid-seral condition, with some components of the Douglas-fir - Western Hemlock / Salal community occurring in more moisture-receiving sites. The community occurs in unlogged areas at high elevations. This zone includes Mount Artaban summit, open rocky bluffs and two unique high-elevation ephemeral wetlands.



Photo 13. Mossy bluffs with Reindeer lichens, shore pine and Douglas-fir forest in Ecological Community 6

Table 15. Description of Ecological Community 6

Polygon ID:	Ecological Community 6
Ecological Community:	Douglas-fir - Lodgepole Pine / Oceanspray / Reindeer Lichens Douglas-fir - Western Hemlock / Salal
Classification:	CWHdm/02 CWHdm/03
Structural Stage:	4-6 (Uneven to 100 years)
Status (BC List):	Red-listed
Photopoint(s):	P13
Ecological Community Description:	Shore pine and Douglas-fir on dry, rocky ridges. Gentle to steep upper slopes and ridges, some cliff bands and rock outcrops. Mostly above 600 m, but occurs down to 200 m elevation. Bare rocky bluffs (30%) and two ephemeral ponds near the summit.
Disturbance Notes:	The polygon includes the summit of Mount Artaban, which is the site of a fire lookout that has since been removed. The old footing and an iron hook remain.
Anticipated Change/Succession:	Deer grazing may restrict recruitment of pine trees and understory species, as there is very little understory vegetation present currently. Dominant vegetation is likely to continue to be shore pines, except in rocky outcrop areas where well-developed moss and lichen cover will continue to dominate.
Wildlife observations:	Visual: Black-tailed deer (<i>Odocoileus hemionus</i>) scat, Black Swift (<i>Cypseloides niger</i>) overhead during surveys (COSEWIC endangered), American Robin (<i>Turdus migratorius</i>), Chestnut-backed Chickadee (<i>Poecile rufescens</i>), and California tortoiseshell (<i>Nymphalis californica</i>) butterfly and unidentified dragonfly species near ephemeral wetland to the east of summit.

Table 16. Vegetation Species in Ecological Community 6

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Pinus contorta</i> (shore pine)	25						MC: uneven-aged, 15-30 yrs, ht: 15-20 m DBH: 12-20 cm
<i>Pseudotsuga menziesii</i> (Douglas-fir)	5						MC: uneven-aged, 15-30 yrs, ht: 15-20 m DBH: 12-20 cm
<i>Gaultheria shallon</i> (salal)			T				
<i>Vaccinium parvifolium</i> (red huckleberry)			T				
<i>Bromus pacificus</i> (pacific brome)				T			
<i>Festuca occidentalis</i> (western fescue)				T			
<i>Pyrola picta</i> (white-veined wintergreen)				T			
Moss Layer							Total Moss Layer: 70%
<i>Cladonia macilenta</i> (lipstick cladonia)							
<i>Cladina portentosa</i> (reindeer lichen)							
<i>Dicranum</i> spp.							
<i>Hylocomium splendens</i> (step moss)							
Cover by Layer (%)	30		1	1	70		Total Canopy Cover: 30%

Ecological Community 7. Mix of Western Hemlock - Douglas-fir / Oregon-beaked Moss (CWHdm/01); Douglas-fir - Western Hemlock / Salal (CWHdm/03)

The young mixed second growth forests in this ecological community include the Western Hemlock - Douglas-fir / Oregon-beaked Moss community and areas of the Douglas-fir - Western Hemlock / Salal site series. The forest is dominated by Douglas-fir with some older veteran trees. The community is found on mostly moderate to steep middle to lower slopes, and some cliff bands and rocky outcrops, from 100 to 500 m elevation. The understory is sparse with sword fern in moisture-receiving sites.



Photo 14. Young maturing Douglas-fir trees with Oregon-beaked moss and Sword Fern understory in Ecological Community 7

Table 17. Description of Ecological Community 7

Polygon ID:	Ecological Community 7
Ecological Community:	Mix of Western Hemlock - Douglas-fir / Oregon-beaked Moss and Douglas-fir - Western Hemlock / Salal.
Classification:	CWHdm/01; CWHdm/03, Transitioning to CWHxm1/01 and CWHxm1/03 at elevations below 200 m.
Structural Stage:	Young forest, with some mature/old forest attributes (veteran trees, large snags, canopy gaps). Regeneration after fire or logging.
Status (BC List):	Blue-listed
Photopoint(s):	P14
Ecological Community Description:	Second growth young mixed forest, with veteran trees, on moderately dry to moist sites. Mostly moderate to steep middle to lower slopes, with some cliff bands and rocky outcrops, from 100 to 500 m elevation. Regeneration after fire (burns on wildlife tree) and logging (stumps). Some woody debris. Mixed tree age class. Large Douglas-fir wildlife tree in polygon.
Disturbance Notes:	Infrequent stand replacement by fire and wind disturbance. Gap dynamics.
Anticipated Change/Succession:	Stand self-thinning due to density-related mortality. Slow development of old forest characteristics through tree growth and creation of gaps by natural mortality and wind.
Wildlife observations:	Visual: Black-tailed deer (<i>Odocoileus hemionus</i>) scat, Douglas' squirrel (<i>Tamiasciurus douglasii</i>) middens

Table 18. Vegetation Species in Ecological Community 7

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy+	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
<i>Pseudotsuga menziesii</i> (Douglas-fir)	48	T					MC: 30-100 yrs, ht: 30-30 m, DBH: 30-70 cm SC: 10-15 yrs, ht: 2-3 m, DBH: 5-10 cm
<i>Tsuga heterophylla</i> (western hemlock)	2	T					MC: 30-40 yrs, ht: 12-25 m, DBH: 25-40 cm SC: 10-25 yrs, ht: 2-15 m, DBH: 8-20 cm
<i>Berberis nervosa</i> (dull Oregon-grape)			5				
<i>Tsuga heterophylla</i> (western hemlock) – young trees and seedlings			T				
<i>Vaccinium membranaceum</i> (black huckleberry)			T				
<i>Vaccinium parvifolium</i> (red huckleberry)			T				
<i>Polystichum munitum</i> (sword fern)				3			
<i>Festuca occidentalis</i> (western fescue)				T			
<i>Goodyera oblongifolia</i> (rattlesnake plantain)				T			
<i>Linnaea borealis</i> (twinsflower)				T			
<i>Pteridium aquilinum</i> (bracken fern)				T			
<i>Trientalis borealis</i> (broad-leaved starflower)				T			
Moss Layer							Total Moss Layer: 80%
<i>Eurynchium oregonum</i> (Oregon-beaked moss)							
<i>Hylocomium splendens</i> (step moss)							
<i>Plagiothecium undulatum</i> (flat moss)							
<i>Rhytidiadelphus loreus</i> (lanky moss)							
<i>Rhytidiopsis</i> spp.							
Cover by Layer (%)	50	1	6	4	80		Total Canopy Cover: 50%

3.8 Wildlife Species

The reserve contains a large number of wildlife trees of many different species. These trees provide important cavity nesting sites for many bird species, as well as potential roost sites for bats. Decaying wood also provides a food source for woodpeckers, as well as habitat for invertebrates, amphibians, reptiles and other wildlife.

The wetland sites are an important source of foraging and potential breeding habitat, as well as drinking water for diversity of wildlife.

Table 19 lists the species that were noted in the reserve during surveys in August 2018. An unidentified dragonfly was also noted around the pond near the summit.



Photo 15. Wildlife tree on right and woody debris in foreground in Ecological Community 3

Table 19. Wildlife Species found in MANR

Common Name	Latin Name
Mammals	
Black-tailed deer	<i>Odocoileus hemionus</i>
Invertebrates	
Beaded lancetooth	<i>Ancotrema sportella</i>
Lorquin's admiral	<i>Limenitis lorquini</i>
Pacific bananaslug	<i>Ariolimax columbianus</i>
Pacific sideband	<i>Monadenia fidelis</i>
Pine white	<i>Neophasia menapia</i>
Robust lancetooth	<i>Haplotrema vancouverense</i>
Reptiles	
Gartersnake sp.	<i>Thamnophis sp.</i>
Birds	
Black Swift	<i>Cypseloides niger</i>
Cassin's Vireo	<i>Vireo cassinii</i>
Chestnut-backed Chickadee	<i>Poecile rufescens</i>
Dark-eyed Junco	<i>Junco hyemalis</i>

Pileated Woodpecker	<i>Dryocopus pileatus</i>
Red-breasted Nuthatch	<i>Sitta canadensis</i>
Red-breasted Sapsucker	<i>Sphyrapicus ruber</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Swainson's Thrush	<i>Catharus ustulatus</i>

3.9 Expected Change Over Time

The upland forests will continue to mature and diversify over time. In areas with early seral stands of red alder, the deciduous trees will die, providing more light for understory conifers to grow. In areas with heavy deer browsing, conifer establishment may be impeded and an open-canopy stand or gap may result. There will be slow development of old forest characteristics as trees mature and gaps are created through natural mortality and wind. In areas with dense growth, there will be self-thinning due to density-related mortality.

4.0 Threats

Table 20. Threats to Mount Artaban Nature Reserve

Threats (examples below)	Mixed Forest	Wetlands & Creeks	Overall Threat Rank
Recreational Activities: Hiking can impact conservation objectives through wildlife disturbance, soil disturbance, vegetation trampling, and erosion. With potential for population growth and development near the protected area, pressure from this threat is expected to increase over time.	Low	Low	Low
Fire (catastrophic wildfire): Fire suppression results in a change of fire regime to lower-frequency and higher-intensity fires. Higher-intensity fires are also generally larger in size. A less frequent, more intense fire would potentially replace the mixed forests. Stand-replacing fires will also have potential impacts on wetlands and riparian areas due to soil erosion. Vegetation recovery post-catastrophic fire is slow and invasive terrestrial species are likely to invade into areas with bare soil.	Medium	Low	Low-Medium
Invasive Non-Native Species: A significant threat to biodiversity, second only to habitat loss (IUCN 2018). The impact on native ecosystems, habitats and species can be severe and often irreversible. MANR is in good condition with few invasive species	Low	Low	Low

(scattered English holly, wall lettuce). Monitoring will help ensure control of introductions.			
Problematic Native Species: Hyper-abundant black-tailed deer (<i>Odocoileus hemionus</i>) can be problematic, dramatically altering understory vegetation structure and composition and adversely affecting songbird populations (Martin et al. 2010). Overgrazing can also impact stand dynamics by limiting regeneration of new trees.	Medium	Low	Low-Medium
Human Disturbance: Increased human activity on adjacent privately managed properties (e.g. Brigade Bay subdivision) may increase the potential of unauthorized human activities, such as camping, firewood removal, land clearing, trail building, construction or other incursions within the Nature Reserve boundaries (Carey et. al. 2000 in Hopwood 2009).	Low	Low	Low
Climate Changes: The trend towards longer, drier summers and droughts in the region may have effects on the vegetation and hydrology of the site in the long term (Erwin 2009).	Unknown	Unknown	Unknown
Overall Threat Status for Protected Area	Low-Medium	Low	Low-Medium

Very High: The threat is likely to destroy or eliminate the biodiversity target.

High: The threat is likely to seriously degrade the biodiversity target.

Medium: The threat is likely to moderately degrade the biodiversity target.

Low: The threat is likely to only slightly impair the biodiversity target

4.1 Expected Change to Threats Over Time

Recreational activities and unauthorized human disturbance and infractions in the reserve are likely to increase over time given the increased development pressure on Gambier Island and spread of human population from the Greater Vancouver region.

The threat of catastrophic, high-intensity wildfire remains high in the region as fire suppression continues and as the climate shifts to increasingly drier summers.

Invasive species spread (predominantly English holly) will likely increase unless actively controlled.

5.0 Community Engagement

5.1 Adjacent Landholders

In preparation for the development of the Management Plan, letters were sent to all landholders and neighbours within a 100 m radius of the reserve. A total of 113 letters were

sent by email on November 23rd, 2018 (Appendix D). The letters contained information about Brigade Bay Bluffs, Long Bay Wetland and Mount Artaban Nature Reserves, an invitation to a web conference and a link to an online questionnaire (see Appendix E).

5.2 First Nations

ITC has engaged with the Musqueam, Squamish, and Tsleil-Waututh First Nations regarding management planning on Gambier Island and this communication will continue.

5.3 Conservation Partners and Community Members

The Islands Trust Conservancy held a public web conference on December 14th, 2018. People attending the online conference were asked to provide input on the draft Management Plan and management planning for the reserve. Maps and photographs were presented during a brief slideshow presentation and residents were asked for their input at that time. There were six members of the public who attended online. Notice of the online questionnaire was provided to the public by ITC and partners through social media.

5.4 Engagement Results

The questionnaire was completed by nine people (four online and five mail-in responses). The nine respondents were primarily non-residents, with 78% living in Vancouver and 3 respondents had a second residence on Gambier Island. Most respondents (44%) have visited the reserve a few times and all who have visited the reserve engage in hiking/walking; many visitors brought their dogs (88%). The most important values for respondents were protection of habitat for at-risk species (89%), conservation for the sake of the intrinsic value of nature (78%), ecosystem services (67%), and low-impact recreational opportunities (67%).

6.0 Management Recommendations

The general management direction of the MANR is to allow natural successional processes to continue while allowing low impact recreational use. With the exception of fire, natural disturbances due to wind (windthrow), pest infestation, disease, and wildlife use should proceed without intervention. Only the removal of invasive plant species throughout the reserve and of hazard trees that pose an unacceptable risk to trail users are permitted. Further trail development is not recommended in order to limit fragmentation and reduce the potential future impacts to the reserve associated with additional access points.

6.1 Management Roles

The Islands Trust Conservancy is the sole landholder of the MANR but will rely on its partnership with the Gambier Island Conservancy and Sunshine Coast Conservation Association to assist with on-the-ground management (Table 21). Since 2009, Islands Trust Conservancy has held a management agreement with the Gambier Island Conservancy (Islands Trust Fund 2009). It specifies that the Reserve should be managed by Gambier Island Conservancy in a manner consistent with the Reserve Purposes, the Management Plan, and the policies of the Board. The Islands Trust Conservancy will monitor the property annually to detect any management issues.

Any issues will be reported to the covenant co-holders, Gambier Island Conservancy and Sunshine Coast Conservation Association.

Table 21. Partners involved in management of MANR.

Partner	Role
Island Trust Conservancy	Landholder
Gambier Island Conservancy	Covenant Holder and Management Group
Sunshine Coast Conservation Association	Covenant Holder

6.2 Permitted and Prohibited Uses

The reserve is open to the public for backcountry recreational hiking and nature appreciation on existing authorized trails. Visitors are requested to keep dogs on a leash.

The following activities by the public are prohibited:

- Hunting
- Use of motorized vehicles
- Bicycling
- Horseback riding
- Camping
- Fires
- Forestry
- Livestock grazing
- Trail development (outside of established authorized trails)
- Tree cutting
- Collection of plants or animals

6.3 Proposed Monitoring Program

Annual monitoring by Islands Trust Conservancy and the covenant holders is important to detect incidences of trespass or breach and identify management issues within the protected area. The focus of monitoring should be on the existing trail system (Figure 1) at the entry point from the south at Halkett Bay Provincial Marine Park and at the northeast corner from Mt. Artaban Road, since these are the primary access points into the reserve. Monitoring should evaluate trail erosion and determine if any prohibited uses are occurring such as tree cutting, unauthorized trails development, or use of motorized vehicles, etc.

Species at risk surveys and monitoring are encouraged during appropriate times of year to assess which species are present. Acoustic bat monitoring and amphibian surveys at the high-elevation wetland sites would provide insightful data. Monitoring of invasive species spread is advisable over time so that control measures can be taken as required.

6.4 Public Access

There is one public access trail through the reserve, which traverses the north and south slopes of Mount Artaban. The north terminus is located off Mt. Artaban Road and enters the reserve via Long Bay

Wetland Nature Reserve. The south terminus is Camp Fircom, via roads in the Fircom Plateau subdivision, or Halkett Bay via Halkett Bay Provincial Marine Park (see Section 2.1 for additional access details). No additional access points or trails should be developed; this will minimize habitat fragmentation and degradation.

Alternative access opportunities for First Nations may be established through a separate Management Plan for Areas of Cultural Heritage and Sacred Significance, which must be in compliance with the conservation covenant on the land.



Photo 16. MANR signage at summit



Photo 17. Trailhead signage for MANR

6.5 Signage

There are nature reserve entrance and boundary signs at the trailhead on Mt. Artaban Road (Photo 17), a sign at the summit (Photo 16), and some directional signage on the trails. Just below the summit at the south end of the trail, there is another decorative wooden nature reserve entrance sign. There are a few places along the trail where red metal markers have been nailed to trees to highlight the trail route. As trees grow, these metal directional finders can grow into the tree bark and be damaging to trees. These should be removed and replaced with painted blazes. Low-toxicity fluorescent paint could be used with a stencil to place trail wayfinders where required. Removing the nails and signs will prevent injury to the trees. Islands Trust Conservancy contact information should be included on all signs so the public knows who to contact with questions and comments about the reserve and its trails.

6.6 Trail Use, Maintenance and Development

The trail through MANR is in good condition as it is periodically maintained by Gambier Island Conservancy members. Ongoing and consistent trail maintenance is necessary to help guide the public and keep them on the designated trails, as well as to minimize the potential for people to become lost.

No other trails should be installed; this will prevent fragmentation within the reserve.

6.7 Protection Initiatives for Sensitive Ecosystems and Species and Ecosystems at Risk

Given the paucity of wetlands throughout the Islands Trust area (ITC 2018), the riparian and wetland habitats within the reserve deserve the highest protection. Wetlands and riparian areas provide important habitat for wildlife and care should be taken to avoid impacts on these sensitive ecosystems. Limiting further trail development and maintaining the existing trail to limit erosion will help protect these sensitive areas.

6.8 Ecological Restoration Options

Minimal ecological restoration is required in the Nature Reserve as there are no current erosion concerns or habitat degradation. The reserve's ecological communities should be allowed to develop into mature forest.

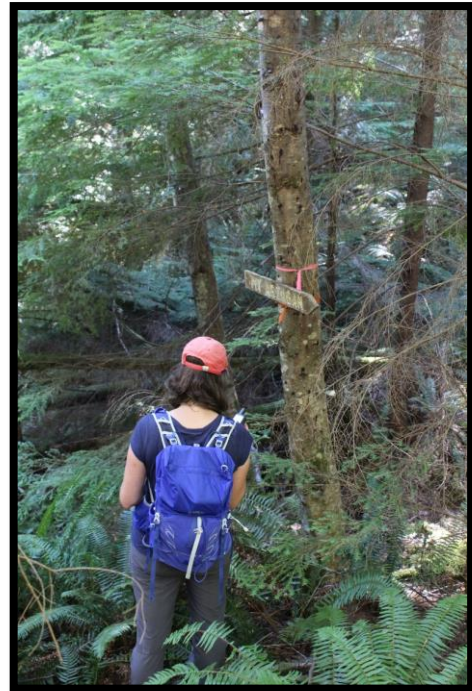


Photo 18. Directional signage along trail on tree

6.9 Scientific Research/Education Opportunities

To date, no scientific research or educational activities have been conducted on the reserve. Future research could include extensive species at risk surveys and monitoring during peak season for a variety of species, such as rare plants, mosses and lichens, bats, birds, gastropods and amphibians.

6.10 Exotic and Invasive Species Management

Invasive English holly (*Ilex aquifolium*) is scattered in places within Ecological Community 3. The plants are small and they are not currently widespread. Efforts should be made to remove these species before they can produce large, long-lasting seedbanks and spread into adjacent habitats.

6.11 Wildfire Risk Management

Wildfire and wildfire suppression can be extremely damaging to sensitive ecosystems. Development of a fire management plan in consultation with the Gambier Fire Equipment Group and BC Wildfire Service to identify optimum suppression techniques is recommended. This information should be provided to the province to be included in their annual fire plan. Salt water and fire retardants should not be used for fire suppression since both can cause ecological damage to sensitive ecosystems. There are two freshwater lakes on Gambier that should be used for bucketing in the event of a wildfire (Gambier Island Community 2018). In addition, road building for fire suppression access and fire breaks needs to be addressed in the fire management plan and avoided.

6.12 Climate Change Impacts and Management

Climate change may alter the distribution of ecosystems across the landscape, vegetation patterns, or hydrology, and may lead to outbreaks of pests. Hotter, drier summers may lead to premature drying of wetlands and altered flow rates in seasonal streams. Trends that may prevail in this region include up-slope migration of the tree line and ecosystem boundaries, and increased fire frequency. Douglas-fir-dominated stands will expand at the cost of Coastal Western Hemlock (CWH) forests, which are expected to shift upslope (Hebda 1997). Ensuring ongoing protection and connectivity between large protected areas will aid the dispersal of species into new habitats and across elevations as vegetation patterns shift with climate change. These protected area matrices will provide potential reservoirs for dispersal into suitable habitats in adjacent areas as climate change shifts the distribution of these ecosystem types (McCloskey et.al. 2009).

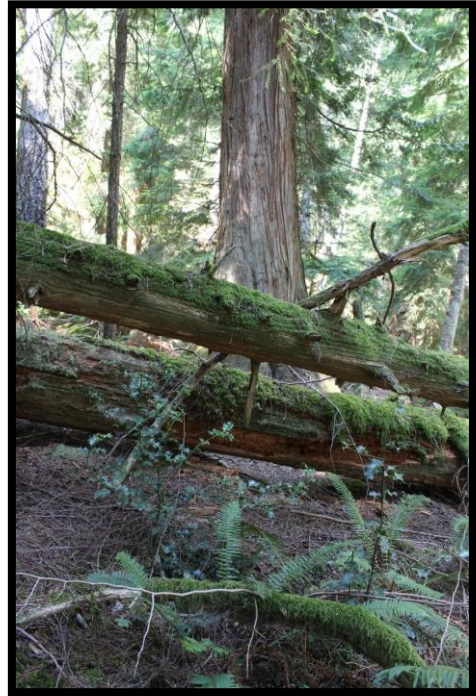


Photo 19. Invasive English holly in foreground (noted in Ecological Community 3)

7.0 Action Items

Management Plan action items are measurable and achievable tasks that the ITC and partners can complete to ensure that the protected area is managed in the best possible way. The following management action items are based on recommendations made in this Management Plan and listed in priority sequence, subject to available funding resources.

7.1 Immediate Actions (1-2 years)

1. Continue to work with the Gambier Island Conservancy and the Sunshine Coast Conservation Association to complete management activities.
2. Identify opportunities for cooperative management with First Nations.

7.2 Short term Actions (3-5 years)

1. Remove metal wayfinder markers along the trail and replace with spray painted markings to avoid long-term damage to trees while ensuring that the trail is well marked for public safety. Consultation with BC Parks staff may be required to ensure consistent marking over the length of the trail.
2. In consultation with the local fire authorities, prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods.
3. Initiate development of parallel Management Plan for Areas of Cultural Heritage and Sacred Significance documents with First Nations.

7.3 Long term Actions (5+ years)

1. Conduct surveys for species at risk and other wildlife (e.g. amphibians, bats) to provide a better understanding of the natural values of the reserve.

7.4 Ongoing or Annual Action Items

1. Conduct annual monitoring to identify management concerns, including impacts from public use (e.g. trail monitoring) and invasive species.
2. Communicate annually with the Gambier Island Conservancy and Sunshine Coast Conservation Association to provide updates on the reserve, seek approvals for stewardship activities as necessary, and maintain compliance with the conservation covenant.
3. Work with First Nations towards cooperative management of the reserve using a Management Plan for Areas of Cultural Heritage and Sacred Significance as a guide.
4. Conduct ongoing maintenance of trails and signs.
5. Continue to inform the public of the natural values of the site, and the permitted and prohibited uses, through information placed in local publications.

8.0 Conclusion

Mount Artaban Nature Reserve is an important landmark and protected area that spans a large elevation range and connects with a wide network of other protected areas and provincially managed forests on Gambier Island. These features are important for climate change adaptability in a region that will likely face imminent climate change impacts.

Islands Trust Conservancy will act on the management action items identified in this plan to achieve the vision, objectives and purpose of the Nature Reserve. Future management issues may lead to further action items that will be identified in work plans and in future revisions of this plan.

9.0 References

Akrigg, G.P.V. and H. B. Akrigg. 1986. One Thousand and One British Columbia Place Names. Sono Nis Press, Victoria, B.C., Canada

Armstrong, J. E. 1965. Geology Vancouver North, British Columbia. Geological Survey of Canada, "A" Series Map. Map #1152. Website:
http://apps1.gdr.nrcan.gc.ca/mirage/full_result_e.php?id=108023

BC Mineral Titles. 2018. Mineral Titles Online. Website:
<https://www.Mountonline.gov.bc.ca/Mountov/home.do>

BC Ministry of Energy and Mines. 2005. Surficial Geology Map Index of BC (GSB Open File 1992-13). Website: http://webmap.em.gov.bc.ca/mapplace/minpot/OF_13map.cfm

BC Ministry of Energy Mines and Petroleum Resources. 2009. MINFILE Detail Report BC.

Carey, C., N. Dudley, and S. Stolton. 2000. Squandering Paradise? The importance and vulnerability of the world's protected areas. WWW-World Wildlife Fund for Nature International, Gland, Switzerland. Pp. 227.

Clague, J. and B. Turner. 2003. Vancouver, City on the Edge. Tricouni Press, Vancouver, BC.

Errico, B., D. Dawson, and E.M. Davies. 2005. Miramar: a History of Gambier Island. Trafford Press, Victoria, BC.

Erwin, K.L. 2009. Wetlands and global climate change: the role of wetland restoration in a changing world. Wetlands Ecological Management 17:71-84.

Fisheries and Oceans Canada (FOC). 2003. Proposed Brigade Bay Development Project; 586329 BC Ltd. Ho-mahmk Cha7elknech (Brigade Bay, Gambier Island, Howe Sound). First Nations Interests. December 2, 2003.

Fisheries and Oceans Canada (FOC). 2004. Authorization for Works or Undertakings Affecting Fish Habitat. Authorization No. 02-HPAC-PA2-000-000006. Brigade Bay Developments. February 25, 2004.

- Gambier Island Community. 2018. Gambier Island Fire District Map. Web site: <http://www.gambierisland.org/Documents/Gambier%20Fire%20District%202016.pdf>
- Geological Survey. Summary of Report on Geology of Gambier Island. Website: <http://minfile.gov.bc.ca/Summary.aspx?minfilno=092GNW025>
- Green, R.N. and K. Klinka. 1994. A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region. BC Ministry of Forests Research Branch Land Management Handbook No. 28. Victoria BC.
- Hebda, R.J. 1997. Chapter 13: Impacts of Climate Change on Biogeoclimatic Zones of British Columbia and Yukon. *In* E. Taylor and B. Taylor (Eds.). Responding to Global Climate Change in British Columbia and Yukon, Volume 1 of the Canada Country Study: Climate Impacts and Adaptations. Pp. 13-1 - 13-15.
- Hopwood, D. 2009. Management Plan for Mount Artaban Nature Reserve. Unpublished Report prepared for the Islands Trust Fund.
- International Union for Conservation of Nature (IUCN). 2018. Invasive Species. Website: <https://www.iucn.org/theme/species/our-work/invasive-species>
- Islands Trust. 2004. Gambier Island Land Use Bylaw #86. Website: <http://www.islandstrust.bc.ca/islands/local-trust-areas/gambier/bylaws/>
- Islands Trust. 2017. Gambier Island Official Community Plan. Bylaw No. 783, 2001. Schedule 1 Development Permit Areas. Website: <http://www.islandstrust.bc.ca/islands/local-trust-areas/gambier/bylaws/>
- Islands Trust. 2018. Islands Trust Object. Website: <http://www.islandstrust.bc.ca/trust-council/islands-trust-act/>
- Islands Trust. 2019. Reconciliation Declaration. Website: <http://www.islandstrust.bc.ca/media/347494/reconciliation-declaration.pdf> Accessed March 2019.
- Islands Trust Conservancy. 2018. Regional Conservation Plan 2018-2027. January 30, 2018. Pp. 146.
- Islands Trust Fund. 2009. Mount Artaban Nature Reserve Management Agreement. Unpublished agreement between the Trust Fund Board and Gambier Island Conservancy.
- Lockwood, M. 2006. Global Protected Area Framework. *In* M. Lockwood, M. Lockwood, G. L. Worboys, and A. Kothari (Eds.). Managing Protected Areas: A Global Guide
- Martin, T.G., P. Arcese, and N. Scheerder. 2011. Browsing down out natural heritage: Deer impacts on vegetation structure and songbird populations across an island archipelago. *Biological Conservation* 144(2011):459-469.
- Mauger, G.S., J.H. Casola, H.A. Morgan, R.L. Strauch, B. Jones, B. Curry, T.M. Busch Isaken, L. Whitely Binder, M.B. Krosby, and A.K. Snover. 2015. State of Knowledge: Climate Change in

Puget Sound. Report prepared for the Puget Sound Partnership and the National Oceanic and Atmospheric Administration. Climate Impacts Group, University of Washington, Seattle.

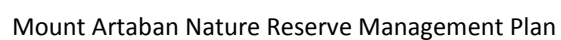
McCloskey, S.P.J., L.D. Daniels and J.A. McLean. 2009. Potential Impacts of Climate Change on Western Hemlock Looper Outbreaks. Northwest Science 83(3):225-238. 2009

Meteoblue. 2018. Climate Gambier Island: Average Temperature and Precipitation. Website: https://www.meteoblue.com/en/weather/forecast/modelclimate/gambier-island_canada_5959241

New Westminster Land Title Office. 2013. Section 219 Conservation Covenant and Section 218 Statutory Right of Way. Mount Artaban Nature Reserve.

The Weather Network. 2018. Bowen Island Average Annual Precipitation. Website: <https://www.theweathernetwork.com/ca/api/sitewrapper/index?b=%2Fstatistics%2F&p=%2Fforecasts%2Fstatistics%2Findex&url=%2Fstatistics%2Fcab0037%2Fbowen-island%2F%2F%2F3F>

Appendix A. Survey Plan for MANR



Appendix B. Vegetation Found in MANR

Common Name	Latin Name	Status
<i>Acer macrophyllum</i>	Bigleaf maple	
<i>Adiantum aleuticum</i>	Maidenhair fern	
<i>Agrostis spp.</i>	Bentgrass	Introduced
<i>Aira praecox</i>	Early hairgrass	Introduced
<i>Alnus rubra</i>	Red alder	
<i>Amelanchier alnifolia</i>	Saskatoon	
<i>Athyrium filix-femina</i>	Lady fern	
<i>Berberis nervosa</i>	Dull Oregon-grape	
<i>Blechnum spicant</i>	Deer fern	
<i>Bromus pacificus</i>	Pacific brome	
<i>Carex exisiccata</i>	Western inflated sedge	
<i>Carex spp.</i>	Sedge	
<i>Cirsium vulgare</i>	Bull thistle	Introduced
<i>Cladonia macilenta</i>	Lipstick cladonia	
<i>Cladonia portentosa</i>	Reindeer lichen	
<i>Dactylis glomerata</i>	Orchard grass	Introduced
<i>Dicentra formosa</i>	Bleeding heart	
<i>Dicranum spp.</i>	Dicranum moss	
<i>Digitalis purpurea</i>	Foxglove	Introduced
<i>Dryopteris expansa</i>	Spiny wood fern	
<i>Epilobium ciliatum</i>	Purple-leaved willowherb	
<i>Epipactis helleborine</i>	Broadleaf helleborine	Introduced
<i>Eurynchium oreganum</i>	Oregon-beaked moss	
<i>Festuca occidentalis</i>	Western fescue	
<i>Galium triflorum</i>	Sweet-scented bedstraw	
<i>Gaultheria shallon</i>	Salal	
<i>Goodyera oblongifolia</i>	Rattlesnake plantain	
<i>Holodiscus discolor</i>	Oceanspray	
<i>Hylocomium splendens</i>	Step moss	
<i>Ilex aquifolium</i>	English holly	Introduced

<i>Juncus effusus</i>	Common rush	
<i>Linnaea borealis</i>	Twinflower	
<i>Mycelis muralis</i>	Wall lettuce	Introduced
<i>Penstemon davidsonii</i>	Davidson's penstemon	
<i>Pinus contorta</i>	Lodgepole pine	
<i>Plagiothecium undulatum</i>	Flat moss	
<i>Plantago major</i>	Common plantain	Introduced
<i>Polypodium glycyrrhiza</i>	Licorice fern	
<i>Polystichum munitum</i>	Sword fern	
<i>Polytrichum juniperinum</i>	Juniper haircap moss	
<i>Prunella vulgaris</i>	Selfheal	
<i>Pseudotsuga menziesii</i>	Douglas-fir	
<i>Pteridium aquilinum</i>	Bracken fern	
<i>Pyrola picta</i>	White-veined wintergreen	
<i>Ranunculus uncinatus</i>	Little buttercup	
<i>Rhytidiadelphus loreus</i>	Lanky moss	
<i>Rhytidiopsis spp.</i>		
<i>Ribes lobbii</i>	Gummy gooseberry	
<i>Rosa gymnocarpa</i>	Baldhip rose	
<i>Rubus spectabilis</i>	Salmonberry	
<i>Rubus ursinus</i>	Trailing blackberry	
<i>Salix scouleriana</i>	Scouler's willow	
<i>Thuja plicata</i>	Western redcedar	
<i>Tiarella trifoliata</i>	Three-leaved foamflower	
<i>Trientalis borealis</i>	Broad-leaved starflower	
<i>Tsuga heterophylla</i>	Western hemlock	
<i>Vaccinium caespitosum</i>	Dwarf blueberry	
<i>Vaccinium membranaceum</i>	Black huckleberry	
<i>Vaccinium parviflorum</i>	Red huckleberry	
<i>Veronica beccabunga</i>	American speedwell	
<i>Veronica serpyllifolia</i>	Thyme-leaved speedwell	Introduced
<i>Viola sempervirens</i>	Evergreen violet	

Appendix C. Photographic Documentation

PHOTO STATION	LOCATION (UTM Coordinates)	DIRECTION	PHOTO-GRAPHER	DATE YYYY-MM-DD	DESCRIPTION
Anthropogenic Features as noted on Figure 1					
P16	476130; 5480906		LM	2018-08-07	Trailhead and boundary signs.
P17	475339; 5479709	90°	LM	2018-08-07	Summit sign to respect the environment. Two iron hooks embedded in rocks by sign.
P18	475776; 5480615		LM	2018-08-07	Directional wooden trail sign on tree with Carrina Maslovat.
Natural Features as noted on Figure 1					
P1	475430; 5482397	180°	LM	2018-08-09	Howe Sound, view of Mount Artaban and Brigade Bay. Note smoky haze from nearby forest fire in Horseshoe Bay.
P2	475339; 5479709	90°	LM	2018-08-07	View from summit looking east towards Coast Mountains across Howe Sound.
P3	475962; 5480335		LM	2018-08-08	Douglas-fir veteran tree with fire scars, sword fern and some English holly in foreground, within Ecological Community 2 plot.
P4	475886; 5480792	178°	LM	2018-08-08	Ecological Community 1 plot centre – Large western redcedar stump.

P5	475839; 5480720		LM	2018-08-07	Creekbed with maidenhair fern, some water still flowing.
P6	475367; 5479483	180°	LM	2018-08-07	Dried ephemeral wetland just below summit on east side of Mount Artaban, approximately 8 x 40 m.
P7	475301; 5479568	180°	LM	2018-08-07	Dried ephemeral wetland below summit on west side of Mount Artaban in forest. Photo from centre of pond, pond about 25 m x 10 m with some sedges throughout.
P8	475886; 5480792	239°	LM	2018-08-08	Ecological Community 1 plot centre – Upslope western redcedar and gully.
P9	475986; 5480674	260°	LM	2018-08-08	Ecological Community 2 plot centre – Upslope with Douglas-fir, western hemlock, Oregon-beaked moss habitat.
P10	475972; 5480319	270°	LM	2018-08-08	Ecological Community 2 plot centre – Large western redcedar, fire scars in foreground on woody debris and in background on Douglas-fir.
P11	476013; 5480440	168°	LM	2018-08-08	Ecological Community 4 (05/03) plot centre – Western redcedar / sword fern habitat.
P12	475271; 5479624	205°	LM	2018-08-07	Ecological Community 5 plot centre – Note minimal understory.

P13	475353; 5479492	180°	LM	2018-08-07	Centre plot Ecological Community 6 with mossy bluffs, shore pine and Douglas-fir.
P14	475862; 5480473	242°	LM	2018-08-08	Ecological Community 4 (01/03) plot centre – Upslope Douglas-fir, Oregon-beaked moss, sword fern.
P15	475972; 5480319	160°	LM	2018-08-08	Ecological Community 2 plot centre – Red alder wildlife tree on right.
P19	475967; 5480323		LM	2018-08-08	Invasive English holly in foreground, western redcedar veteran tree within Ecological Community 2 plot.

* LM=Laura Matthias

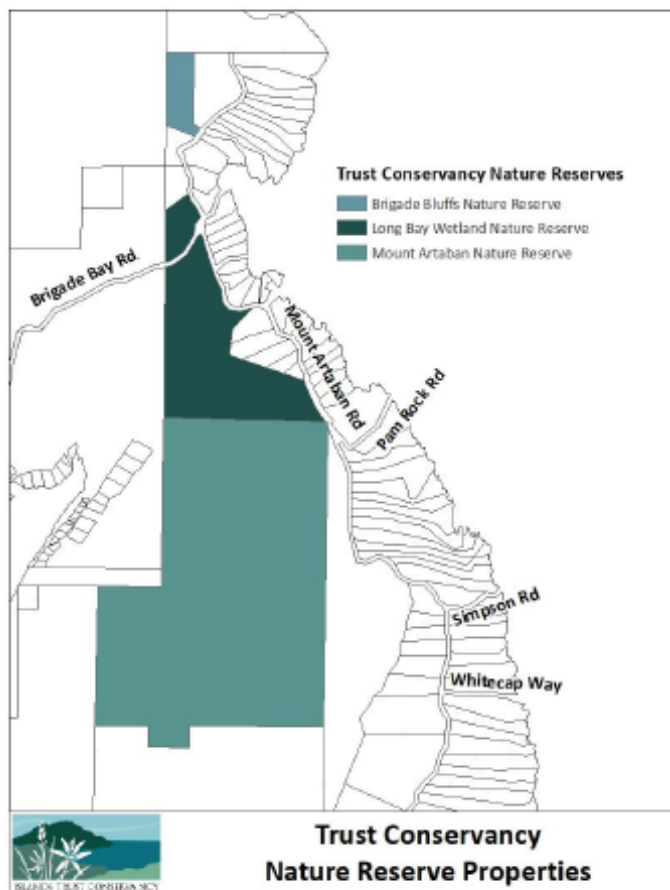
Appendix D. Letter to Neighbours



November 23, 2018

Dear Neighbour,

The Islands Trust Conservancy is updating the management plans for three nature reserves on eastern Gambier Island (see map below) and we want to hear from you.



Brigade Bay Bluffs Nature Reserve is a 5.14 hectare (12.70 acre) parcel located northwest of Brigade Bay marina off Mt. Artaban Road.

Long Bay Wetland Nature Reserve is 38 hectares (91 acres) and is located west of Brigade Bay marina and borders Mt. Artaban Road.

Mount Artaban Nature Reserve is 107 hectares (264 acres) and is south of Brigade Bay marina and can be accessed via a trail through Long Bay Wetland Nature Reserve or from the south through Halkett Bay Provincial Marine Park.

The Islands Trust Conservancy manages

the nature reserves in partnership with the Gambier Island Conservancy and the Sunshine Coast Conservation Association to protect their unique ecological values. The

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properties contain open bluffs, maturing forests, streams, wetlands and the peak of Mount Artaban. The reserves are important for their connections to other undeveloped and protected lands on the island.

There are restrictions on the use of the properties outlined in conservation covenants that are held by the Gambier Island Conservancy and Sunshine Coast Conservation Association. These covenants were put in place to protect the native plants and animals on the reserve. The previous management plans written in 2005 and 2009 can be found on our website as follows

- Management Plan for Mount Artaban:
<http://www.islandstrustconservancy.ca/media/10352/itfmgmtplanartaban.pdf>
- Management Plan for Brigade Bay Bluffs and Long Bay Wetland:
<http://www.islandstrustconservancy.ca/media/10346/itfmgmtplanbbay.pdf>

How to Participate

- 1) Fill in our survey: We would like to hear your ideas and concerns regarding the long-term management of these special places. Please complete a questionnaire on our website: <http://www.islandstrustconservancy.ca/gambier-survey/> or complete the enclosed questionnaire and send it to me by email or mail.
- 2) Join our web conference: To learn more about the management of the nature reserves and to share your questions and ideas, join the conference on your computer, tablet or smartphone:
Gambier Nature Reserves
Wed, Dec 12, 2018 7:00 PM - 8:00 PM PST
<https://global.gotomeeting.com/join/375421301>
If you contact us, we can also send you the link electronically.

Many thanks for taking the time to consider the management of these three nature reserves. For more information, please contact me at the number or email below.

Yours sincerely,



Nuala Murphy
Property Management Specialist, Islands Trust Conservancy
Phone: 250-405-5193
Email: nmurphy@islandstrust.bc.ca

The Islands Trust Fund has changed its legal name to the Islands Trust Conservancy. Please visit us on our updated website at www.islandstrustconservancy.ca



Brigade Bay Bluffs, Long Bay Wetland and Mount Artaban Nature Reserves, Gambier Island Questionnaire

Brigade Bay Bluffs (5.14 hectare/12.70 acre), Long Bay Wetland (38 hectares/91 acres) and Mount Artaban (107 hectares/264 acres) Nature Reserves are protected areas on east Gambier Island. They have significant watershed values and contain rare ecosystems which are listed as either threatened or endangered in British Columbia. They are important because of their connectivity to large areas of contiguous protected lands.

Mount Artaban Nature Reserve was protected in 2008 through the Provincial Free Crown Grant Program. Brigade Bay Bluffs and Long Bay Wetland Nature Reserves were donated in 2005 as part of the Brigade Bay subdivision development. All three properties are protected by conservation covenants held by the Gambier Island Conservancy and the Sunshine Coast Conservation Association.

The Islands Trust Conservancy's primary goal is to protect and nurture the sensitive ecosystems on these lands. To do that, we create a management plan, with revisions approximately every 10 years, to guide the management of the property. We are asking you to help us with the update for these three plans. Please share your thoughts on the protection and long-term management of these nature reserves.

1. Where do you live?

- ☐ Gambier Island
- ☐ Sunshine Coast
- ☐ Vancouver
- ☐ Other

2. Have you ever visited Mount Artaban, Brigade Bay Bluffs or Long Bay Wetland Nature Reserve? If so, how often?

- ☐ No, never
- ☐ Once
- ☐ A few times
- ☐ Once a year or less
- ☐ Once a month or more

3. Which reserve do you visit most frequently?

- ☐ Brigade Bay Bluffs Nature Reserve
- ☐ Long Bay Wetland Nature Reserve
- ☐ Mount Artaban Nature Reserve

4. If you have visited the Nature Reserves on Gambier Island, what did you do there?

- ☐ Hiking/walking
- ☐ Dog walking
- ☐ Wildlife viewing
- ☐ Other (please list)

5. Please list any wildlife and unique plant species you have seen at or near any of these Nature Reserves (please indicate which reserve for each species).

6. What do you believe to be the most important values of nature reserves (choose three)?

- ☐ Protection of habitat for at-risk species
- ☐ Ecosystem services (e.g. clean water and air, erosion control, groundwater recharge, etc.)
- ☐ Low impact recreational opportunities
- ☐ Education and research opportunities
- ☐ Tourism
- ☐ Aesthetic appeal
- ☐ Conservation for the intrinsic value of nature
- ☐ Other (please specify):

7. What activities do you believe are incompatible with the protection of natural features, and should not be allowed within any of these nature reserves?

8. What do you feel could be the greatest threat to each of these nature reserves, and should be the highest management priority for the Islands Trust Conservancy?

Brigade Bay Bluffs:

Long Bay Wetland:

Mount Artaban:

9. Please provide any other relevant information that will help us make the best management decisions for any of these nature reserves.

10. Please share with us any history you know about these properties or any knowledge you have about unique cultural or other special features on the properties or nearby (please indicate which reserve).

11. If you would like to receive periodic updates from the Islands Trust Conservancy on this and other conservation projects on the islands, please provide your name and email address or sign up for our latest news at www.islandstrustconservancy.ca:

Thank you for your time spent helping us plan the future of the Brigade Bay Bluffs, Long Bay Wetland, and Mount Artaban Nature Reserves.



REQUEST FOR DECISION

To: ITC Board **For the Meeting of:** November 26, 2019
From: Vice-Chair Sue-Ellen Fast **Date Prepared:** November 11, 2019
SUBJECT: Reporting on Natural Assets

RECOMMENDATION: That Islands Trust Conservancy board direct staff to consider including note disclosure highlighting the importance of natural assets to the mandate of Islands Trust and the services they provide for island communities, in current fiscal year's annual financial reporting.

DIRECTOR OF ADMINISTRATIVE SERVICES COMMENTS: The topic of Municipal Natural Assets is gaining traction among local governments as both climate change and financial resource pressures grow. Natural assets are typically reported by an entity in year-end reporting when the 'natural service' they provide would otherwise be provided by a human-engineered infrastructure. These human-engineered assets are typically the responsibility of a local government entity to build and maintain in order to provide the services within their area of jurisdiction and responsibility. In most cases within the Trust area, the natural assets managed by the Trust provide services that fall within the responsibility of other government agencies (such as Regional or Improvement Districts). However, reporting on the assets that the Trust manages that provide these services could bring greater understanding of the value of the Trust's work, could foster greater collaboration with other government agencies, and could generally improve the public's understanding of how the work of the Trust impacts their communities in a tangible way.

ITC MANAGER COMMENTS: The ITC does not currently have natural assets reporting as a strategic direction in its five-year plan or its regional conservation plan. Staff time to add general comments about natural assets is anticipated to be minimal; however, quantifying natural assets in a meaningful way and exploring mechanisms for reporting these in financial statements would need additional funding support and a dedication of staff time. Exploring options would divert time from other initiatives. Within the Islands Trust land assets (covenants and nature reserves) are owned and managed by the ITC and are reported in separate financial statements from the Islands Trust Financial Statements. It is unclear how natural assets reporting would be divided between the ITC and Islands Trust financial statements.

- 1 **PURPOSE:** The purpose of a natural asset acknowledgement is to:
 - a) Support the budget consultation process;
 - b) Heighten visibility of climate emergency actions; and,
 - c) Assist in increasing or maintaining current funding levels by demonstrating relevance.

BACKGROUND:

Natural assets, such as wetlands, forests, and creeks, provide many of the same services to communities as engineered assets. A wetland, for example, provides storm water management and flood mitigation services that would have to be replaced by an engineered alternative if the wetland was lost. However,

while natural assets are key to sustainable service delivery, they are generally not accounted for and/or are undervalued in asset management processes.

While land assets (nature reserves and sanctuaries) are reported in the Islands Trust Conservancy's statement of financial position, in presentations and in communications to the public, natural assets such as wetlands, forests, and foreshores protected as reserves, sanctuaries, and covenants are not recognized or reported in the Islands Trust Conservancy financial statements.

Including a brief acknowledgement in next year's financial statement may be a good way to start a more formal process of reporting. It was key for the Town of Gibsons to get started on their focus on natural assets (see attachment 1). In 2014, the Town of Gibson's became the first North American town to recognize natural assets as municipal assets. In 2016, the Municipal Natural Assets Initiative (MNAI) was convened, piloting natural asset management with five Canadian municipalities. Today various communities across BC and Canada are involved, including Nanaimo, West Vancouver, and a watershed-scale initiative launched this year by several communities in the Comox Valley and the K'ómoks First Nation (see <https://mnai.ca>). While these particular approaches may not be ideal for the Islands Trust Conservancy's purposes, Gibson's method of getting started is a simple practical step.

For example, see Gibson's brief paragraph in Notes to the Financial Statements, on page 40 of their 2018 Annual Report (<https://gibsons.ca/wp-content/uploads/2019/07/2018-Annual-Report-June-30-2019.pdf>)

ITC board could request that something similar, such as the following draft acknowledgement, be considered for inclusion in next year's financial statements:

The Islands Trust Conservancy is fortunate to have, and to be mandated to protect, many natural assets that reduce the need for engineered infrastructure that might otherwise be required by other government agencies to provide various services to the islands. This includes wetlands (storm water management, flood mitigation, water storage and filtration services); forests (carbon sequestration); and foreshore areas (natural seawalls). Canadian public sector accounting standards do not allow for the valuation and recording of such assets in the financial statements of the Islands Trust Conservancy. Nevertheless, the ITC acknowledges the importance of these assets and the need to protect and manage them in conjunction with engineered infrastructure that is managed by other government agencies.

DISCUSSION:

- a) Increasing the visibility of the Islands Trust Conservancy's natural asset protection work could assist the budget consultation process. Referring to natural assets in financial statements may lead in future years to some type of statement or balance sheet or inventory to accompany the budget for the consideration of those who choose to, or choose not to, participate in the consultation survey. To some citizens, government expenditure can seem unnecessary and excessive; as if it is consumption spending only, rather than investment.
- b) In an era of climate emergency and the Islands Trust's recent declaration of such, the Island Trust Conservancy will want to be explicit about ongoing contributions towards increasing the Trust Area's natural resilience to climate change. And with the affordable housing crisis, to show how the Trust's natural asset protection efforts help keep costs of drinking water affordable to residents, (e.g., planners are estimating costs of trucking in water from Comox if a proposed affordable housing project runs out of water). And with the biodiversity/extinction crisis, to show how the Trust is protecting and preserving species and functioning ecosystems.
- c) To help the Island Trust Conservancy to increase or maintain current funding levels, demonstrating that the Islands Trust is acting on behalf of BC citizens on the big issues of today will be important:

biodiversity loss, climate change, healthy environment, beauty and recreation, restoration and regeneration, the various UN Sustainable Development Goals, and living within planetary limits.

In a time of energy transformation and climate action, with changing priorities and new funding streams emerging, natural asset reporting may assist in all of the above. A first step is a brief acknowledgement in the next financial statements.

2 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: Staff time required will be negligible for taking this first step

FINANCIAL: None.

POLICY: There is currently no ITC policy that addresses natural assets reporting, but it aligns with Islands Trust mandate.

IMPLEMENTATION/COMMUNICATIONS: None for taking this first step.

FIRST NATIONS: None.

CLIMATE CHANGE: Natural assets have the capacity to help communities adapt to climate change. Conversely, climate change may influence the effectiveness of natural assets as they are vulnerable to its effects.

OTHER: None.

3 RELEVANT POLICY(S):

[Islands Trust Act, Section 46, Annual Report](#) for information on reporting requirements of the ITC

4 ATTACHMENT(S):

- a. [Towards an Eco-Asset Strategy in the Town of Gibson's](#)
- b. Municipal Natural Assets Initiative Primer on Natural Asset Management
- c. [Town of Gibson's 2018 Annual Report](#)

RESPONSE OPTIONS

Recommendation: That Islands Trust Conservancy board direct staff to consider including note disclosure highlighting the importance of natural assets to the mandate of Islands Trust and the services they provide for island communities, in current fiscal year's annual financial reporting.

Alternative: That Islands Trust Conservancy board direct staff to conduct research on the subject matter and report back on the feasibility and benefits of including this information in the annual financial reporting.

Prepared By: Sue Ellen Fast, Vice-Chair Islands Trust Conservancy

Reviewed By/Date: Kate Emmings, A/Manager, Islands Trust Conservancy / November 18, 2019
Julia Mobbs, Director, Administrative Services / November 18, 2019

PRIMER ON NATURAL ASSET MANAGEMENT

This primer will:

- Introduce you to Municipal Natural Asset Management
- Explain why it is important to consider natural assets as part of your overall asset management strategy
- Help you chart your community's course towards implementing Municipal Natural Asset Management

Steps towards effective municipal natural asset management

Identification & Assessment of Natural Assets Phase

STEP 1

Develop an asset management policy, bylaw or financial statement directing the municipality to consider natural assets.

Policy directives are a first step. Over time, expect and enable other steps:

- Development cost charge bylaws that include natural assets;
- References to natural assets in asset management policies;
- Financial plans that cover natural asset maintenance;
- O&M plans that reflect natural asset goals; team approaches; and,
- Notes in your annual financial statements that reflect natural asset value.

STEP 2

Identify key natural assets and the services they provide.

- Inventory natural assets your community relies on –even if you don’t own them.
- Compiling information into an asset register to make them ‘visible’ and increase the likelihood that they will be maintained.
- Registers do not have to be complicated or exhaustive.
- Rows can be adapted to show e.g. relevant natural asset, extent of asset in hectares, significance in terms of storm water services.

STEP 3

Determine the condition of natural assets in your community and do an initial valuation

- Even basic information on natural asset condition can support better decision making.
- Information can often be found in existing studies (e.g. stormwater master plans or drainage studies) and by gathering existing monitoring data(e.g. flow monitoring, surface level monitoring, groundwater monitoring, data on soil types).
- This work requires a broad spectrum of skills and expertise.
- Detailed assessments may require monitoring and indepth analysis but existing material is a great starting point. With this in hand, estimate what engineered infrastructure would perform similar services and at what cost – e.g. costs per cubic meter of stormwater management.
- Precise valuations will require in-depth support and analysis. Ultimately, natural assets should be identified, and their condition assessed, as for any capital asset.

Planning Phase

STEP 4

Determine which assets are highest priority through a basic risk identification analysis.

Consider using a simple assessment such as the one below developed by the Town of Gibsons to determine which assets should be highest priorities, using the following indicative formula and your own judgement about asset importance, $Risk = Impact * Likelihood$.

STEP 5

Determine what scenarios you want to understand

- Asset service levels may differ with climate change, different management strategies, in-fill, land acquisition or other variables. Considering different scenarios will help you to set management objectives.
- Pick a few scenarios to explore (e.g. status quo and climate change) and decide what variables you need to understand (e.g. surface inflows & outflows, groundwater inflows, recharge rates, peak flows, drainage area).
- Then, you are ready to model using a tool such as the Stormwater Management Model (see “Resources” below).
- This may require outside support.

Implementation Phase

STEP 6

Start managing your natural assets

- Operations and maintenance plans are key to municipal natural asset management and can include monitoring, maintenance, acquisition, restoration.
- Plans should focus on service delivery from priority natural assets and be supported by multi department teams.
- Funding for plan implementation must be set aside in financial plans.
- Natural asset service value can be reflected in ‘notes’ sections of financial statements.
- Other steps will emerge from the process.

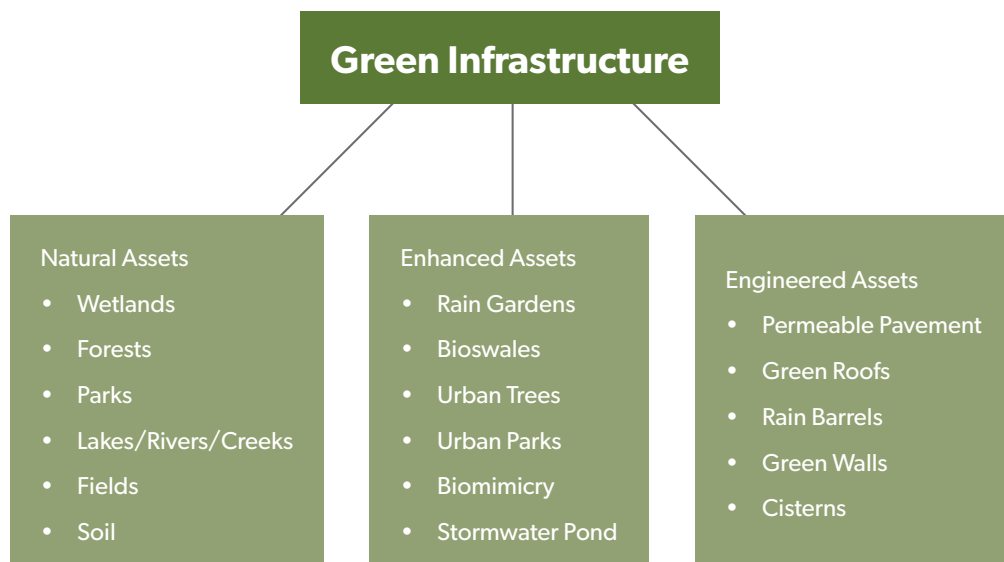
1 = low; 3 = medium and 5 = high

	Municipally - owned				Private, provincial or federal ownership			
	Terrestrial parks	Urban forests	Wetlands	Shoreline/ coastal area	Terrestrial parks	Forests	Bay & waterways	Gardens/ cultural places
Provisioning Services								
Water supply	1	2	2	1	3	3	5	1
Regulating Services								
Water purification	4	4	5	1	3	4	1	1
Flood protection	4	5	5	2	3	4	1	1
Climate regulation	1	2	2	4	2	5	2	1
Soil quality & stability	4	4	4	2	4	5	2	2
Cultural Services								
Landscape and neighbourhood amenity	5	5	1	5	5	5	4	5

Natural asset	Services	Hazards	Impact	Likelihood	Risk
Aquifer	Water provision	Leak from gas storage tank	High	Medium	High
		Spill from transport truck	High	Low	High
Foreshore	Protection of business and residential districts from storms	Storms, development	High	Low	Medium-high
Healthy creek distant from developments	Stormwater absorption, conveyance, and flood protection	Development and overuse	Low	Low	Low
Degraded creek near area with land intensification	Stormwater absorption, conveyance, and flood protection	Development and overuse	Medium	High	High

What are municipal natural assets?

- “Natural assets” are the stock of natural resources and ecosystems that yield a flow of benefits to people.
- “Municipal natural assets” are the stock of natural resources or ecosystems that are relied upon, managed, or could be managed by a municipality, regional district, or other form of local government for the sustainable provision of one or more municipal services.
- “Green infrastructure” is a broad category that includes natural assets *and* designed and engineered elements that have been created to mimic natural functions and processes in the service of human interests, as depicted in the diagram.



Why manage municipal natural assets?

- Natural assets such as aquifers, forests, streams, riparian areas and foreshores can provide municipalities with vital services equivalent to those from many engineered assets.
- Emerging evidence shows that identifying, measuring and managing natural assets as part of an overall asset management strategy can save capital and operating costs and reduce risk.
- Local governments are finding that natural assets are resilient and adaptable to climate change. With effective monitoring, maintenance and rehabilitation now, natural assets can provide service and add value for decades in ways that many engineered assets cannot match.
- In some communities, development cost charges may be able to support the rehabilitation of natural assets.
- There are external funding sources to support the maintenance/rehabilitation of municipal natural assets.
- Some natural assets serve multiple purposes. For example, parks may reduce flooding risks as well as provide recreational benefits and can be managed to maximize several objectives.

Who can help me?

MNAI is a not-for-profit organization that aims to make municipal natural asset management mainstream across Canada. Reach the MNAI team at info.mnai@gmail.com for more information.

Resources

The MNAI website (mnai.ca) has:

- Tools and resources
- Technical reports and news related to MNAI projects
- Information on getting involved
- The story of how municipal natural asset management began in the Town of Gibson

MEMORANDUM

File No.: NP-TUP-2019.4 (Burdett)

DATE OF MEETING: November 26, 2019
TO: Islands Trust Conservancy Board
FROM: Phil Testemale
Southern Team
COPY: Kate Emmings, A/Manager of Islands Trust Conservancy
SUBJECT: Referral of Renewal Application NP-TUP-2019.4 (Burdett)

PURPOSE

Referral for comment of renewal application NP-TUP-2019.4 (Burdett) as per the **Islands Trust Conservancy and Local Planning Services Coordination Policy Number 3.1**

BACKGROUND

The application is for the renewal of an existing TUP (NP-TUP-2015.2) issued on August 17, 2015 which allows for household waste collection (a garbage drop-off facility) on a portion of the subject property. The permit lapsed on August 17, 2018 and application for renewal was pending the waste management review project of the LTC. Bylaws did not proceed and the current LTC has opted to address other priorities.

The use has been allowed continuously on the site since 2010 under TUPs. As a renewal application, there are no changes to the uses, buildings or structures.

The staff report for the current renewal application will be available by the end of the business day Thursday, November 21, 2019 on the Islands Trust on the North Pender LTA website here:

<http://www.islandstrust.bc.ca/islands/local-trust-areas/north-pender/meeting-calendar-agendas-minutes/>

The use is for a specified area in the south western corner of the subject property (Medicine Beach Market). Specifically the use is for the *“transfer, storage and shipping of discarded goods and materials”*.

The renewal permit for consideration of issuance for a three (3) year term is Attachment 1.

Initially, the applicants were issued a TUP in May 2010 and that permit was renewed once and expired on June 1, 2015. A TUP can only be renewed once, therefore, if renewed, a new application will be required once the current TUP expires. The time gap since the TUP expired last year is owing to the LTC waste management project for which this operation was identified as one of four sites to be rezoned.

As the property owners of the Medicine Beach Nature Sanctuary ('ECO' in Figure 2) the Islands Trust Conservancy (ITC then the Trust Fund Board) received notification for the original TUP application in 2010. The primary concerns were for the protection of the marsh as it is considered to be very sensitive and ecologically fragile, and the risks associated from any effluent or garbage that could potentially migrate into the area. The ITC responded to the initial notification that they had no objections based on the proposal to build an enclosure structure. Staff also confirmed in 2015 that since the initial TUP was issued no new concerns have been raised.

Upon receipt of a rezoning application (see below), the proposal would be referred to the ITC and that would afford an opportunity to ensure that if the use is permanently established it would not be detrimental to the Medicine Beach Sanctuary. Mechanisms such as requiring baseline environmental assessment of the property and site and potentially managing conditions through a Section 219 covenant are available to the LTC and staff through the Development Approval Information (DAI) bylaw and rezoning process.

NEXT STEPS

Staff is recommending the applicant be requested to make a rezoning application within one (1) year of the date of issuance of the renewal permit

ATTACHMENTS

1. Renewal Permit NP-TUP-2019.4 (Burdett)



Islands Trust

PROPOSED

**NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
TEMPORARY INDUSTRIAL USE PERMIT NP-TUP-2019.4 (Burdett)
RENEWAL OF NP-TUP-2015.2**

TO: GRL Holdings Ltd.

1. This Temporary Industrial Use Permit applies to the land described below:

That portion of the lot legally described as:

That part of Lot 6, Section 7, Pender Island, Cowichan District, Plan 1695, Lying of the East of a boundary parallel to and perpendicularly distant 260 feet from the easterly boundary of said lot.
(PID: 002-885-182)

As indicated on Schedule 'A' attached to and forming part of this permit.

2. This permit is issued for the purpose of allowing the following industrial uses in the subject area:

a) "transfer, storage, and shipping of discarded goods and materials".

3. The uses may be carried on subject to the following conditions:

- a) The use shall be limited to one steel waste collection bin, designed and constructed for that purpose with closing lids and located as specified on Schedule 'A'.
- b) The collection bin shall be contained within a roofed enclosure and placed upon a concrete pad with a sump as specified on Schedule 'B' to a maximum size of 15 feet by 20 feet and maximum height of 11 feet.
- c) The hours of operation for public disposal of discarded goods and materials shall be limited to those hours of operation of the retail store to a maximum of 10:00 am to 10:00 pm daily.
- d) The hours of operation for the emptying of the collection bin shall be limited to between the hours of 8:00 am and noon Monday to Saturday.
- e) The storage of all discarded goods and materials permitted by 2(a) above shall be bagged and contained within the waste collection bin described in 3(a).
- f) The *transfer, storage and shipping of discarded goods and materials* permitted by 2(a) above shall not include any hazardous waste, including household hazardous waste as defined by Capital Regional District Environmental Services, bulk liquids and semi-solid sludges, including septage, black water, and sewage treatment sludge, biomedical waste, dead animals and slaughterhouse and farming wastes.
- g) The *transfer, storage and shipping of discarded goods and materials* permitted by 2(a) above shall not include any demolition, construction or land clearing waste.
- h) The processing of discarded goods and materials is prohibited.
- i) The placement of signage denoting what is and is not accepted at the site and what is accepted at the recycling facility at a separate location, fees, and hours of operation.

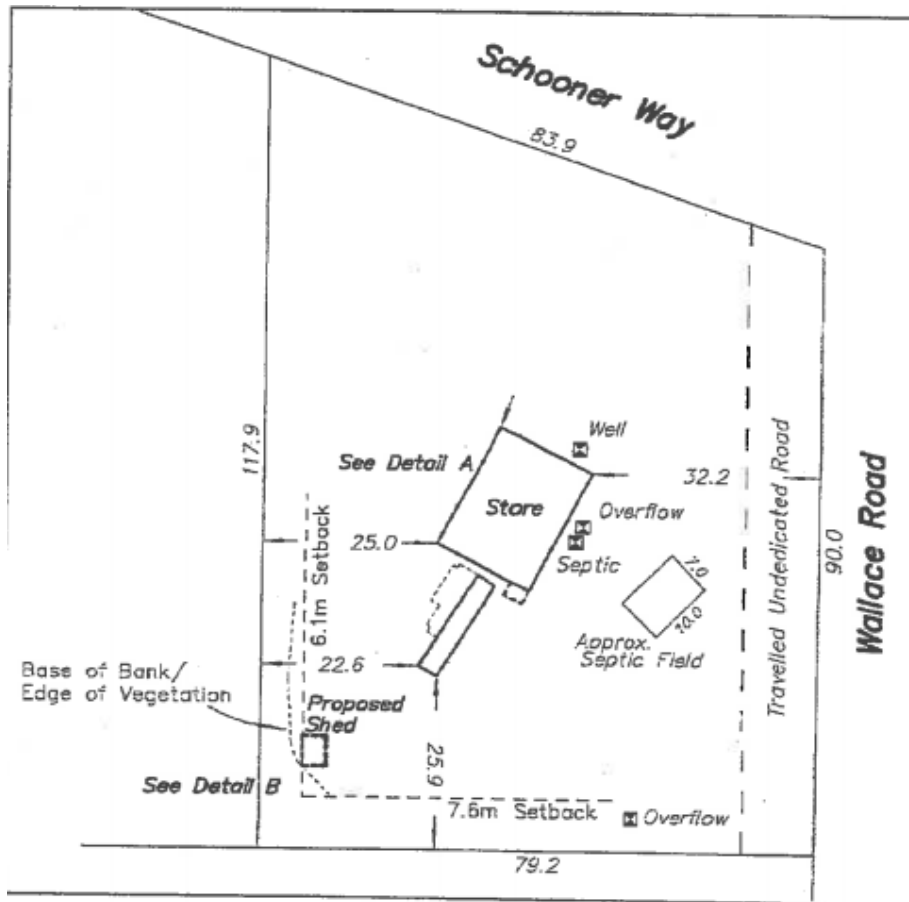
- j) The area in around the site and the waste collection bin are to be maintained clear of litter and safe for general public.
 - k) The waste collection bin is to be emptied on a regular basis and the lids kept closed.
 - l) All existing vegetation is to be maintained along the south and west lot lines in the vicinity of the collection bin and related activities as shown on Schedule A.
 - m) If the use ceases to occur or if this permit is not renewed, the structure shall be removed within 30 days.
4. This permit is valid for three years from date of issuance of the permit and, upon expiry of the permit, the owner of the site shall discontinue the temporary use to the satisfaction of the Islands Trust unless the permit is renewed by resolution of the North Pender Island Local Trust Committee.
5. This permit is not a building permit and does not remove any obligation on the part of the permittee to comply with all other requirements of "North Pender Island Land Use Bylaw No. 103, 1996" and to obtain other approvals necessary for completion of the proposed development, including approvals from the Capital Regional District, Vancouver Island Health Authority and Ministry of Transportation and Infrastructure.

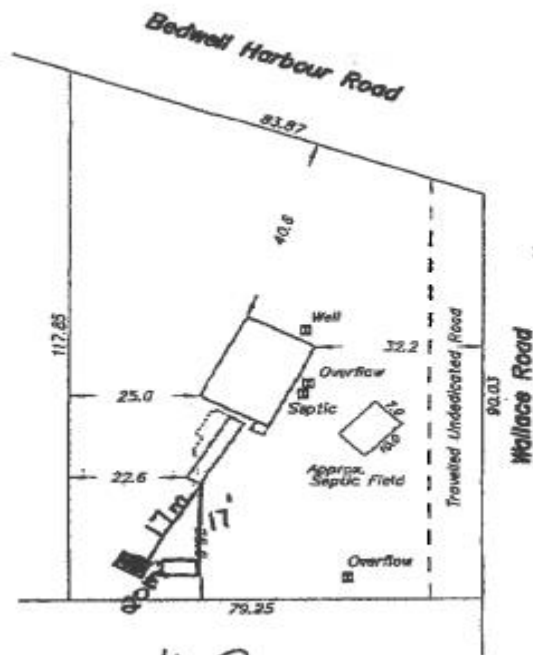
AUTHORIZING RESOLUTION PASSED BY THE NORTH PENDER ISLAND LOCAL TRUST COMMITTEE THIS ## DAY of Month, 20## .

Deputy Secretary, Islands Trust

Date of Issuance

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
NP-TUP-2015.2
SCHEDULE 'A'





4x3m

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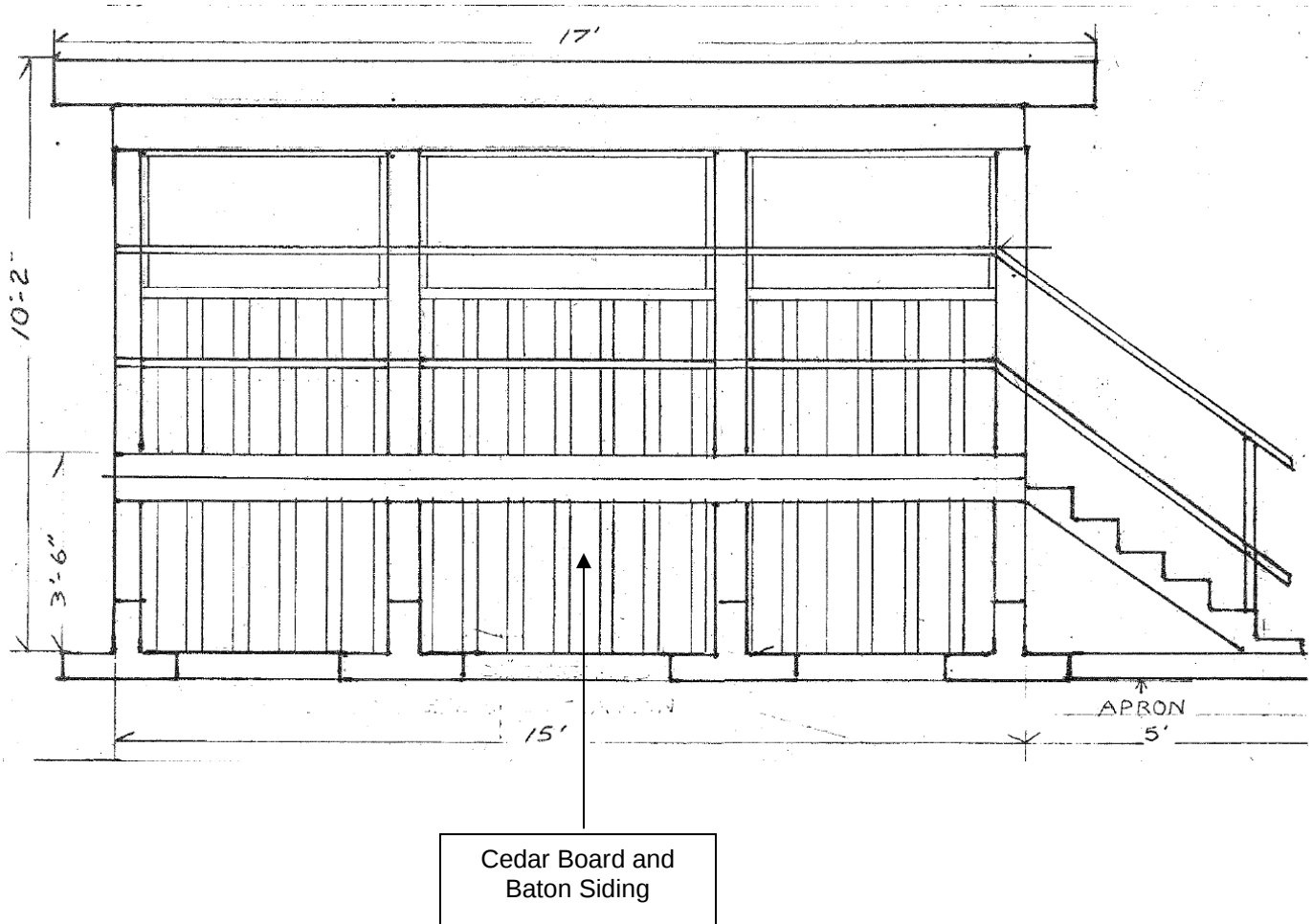
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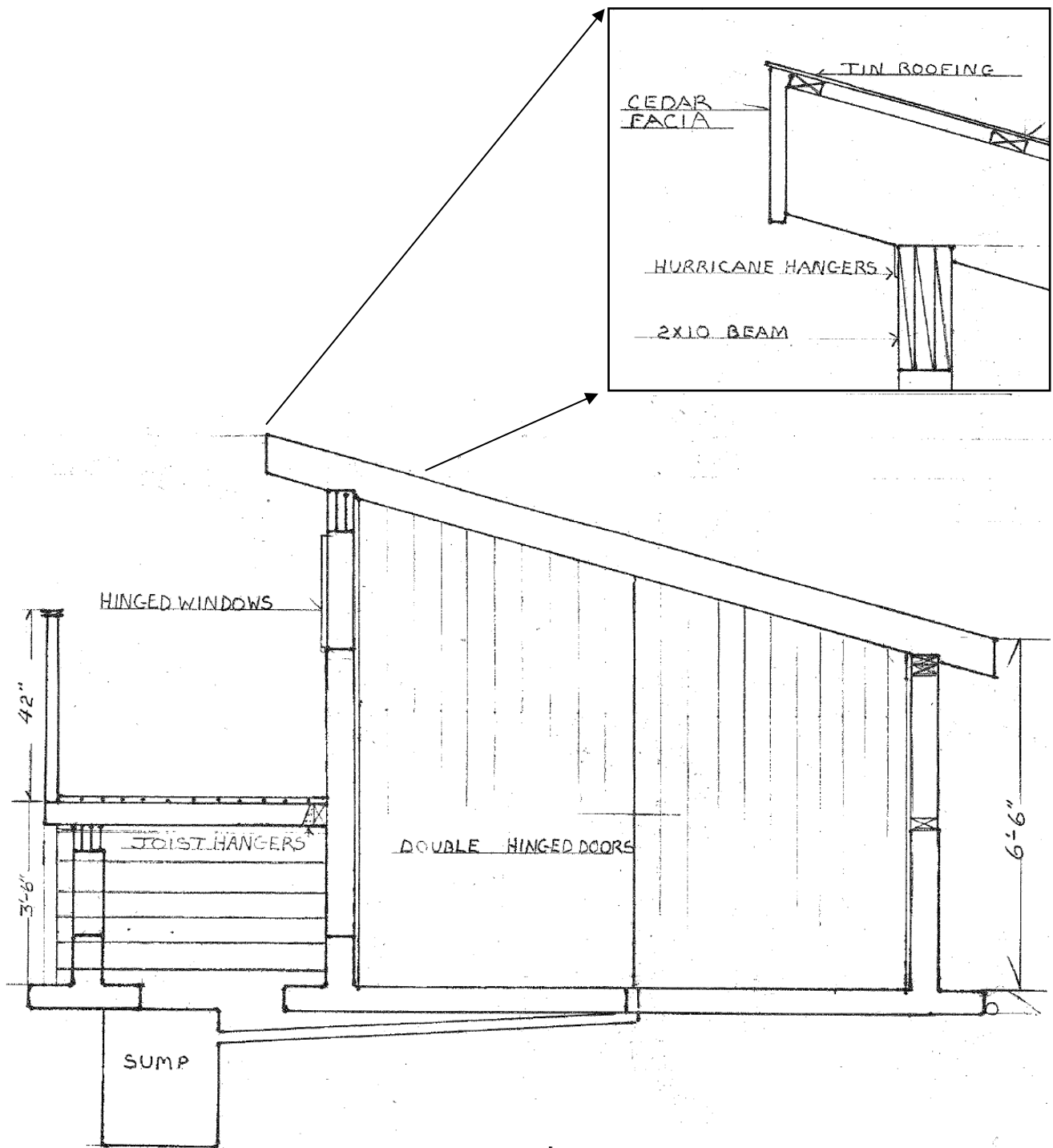
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NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
NP-TUP-2015.2
SCHEDULE 'B'

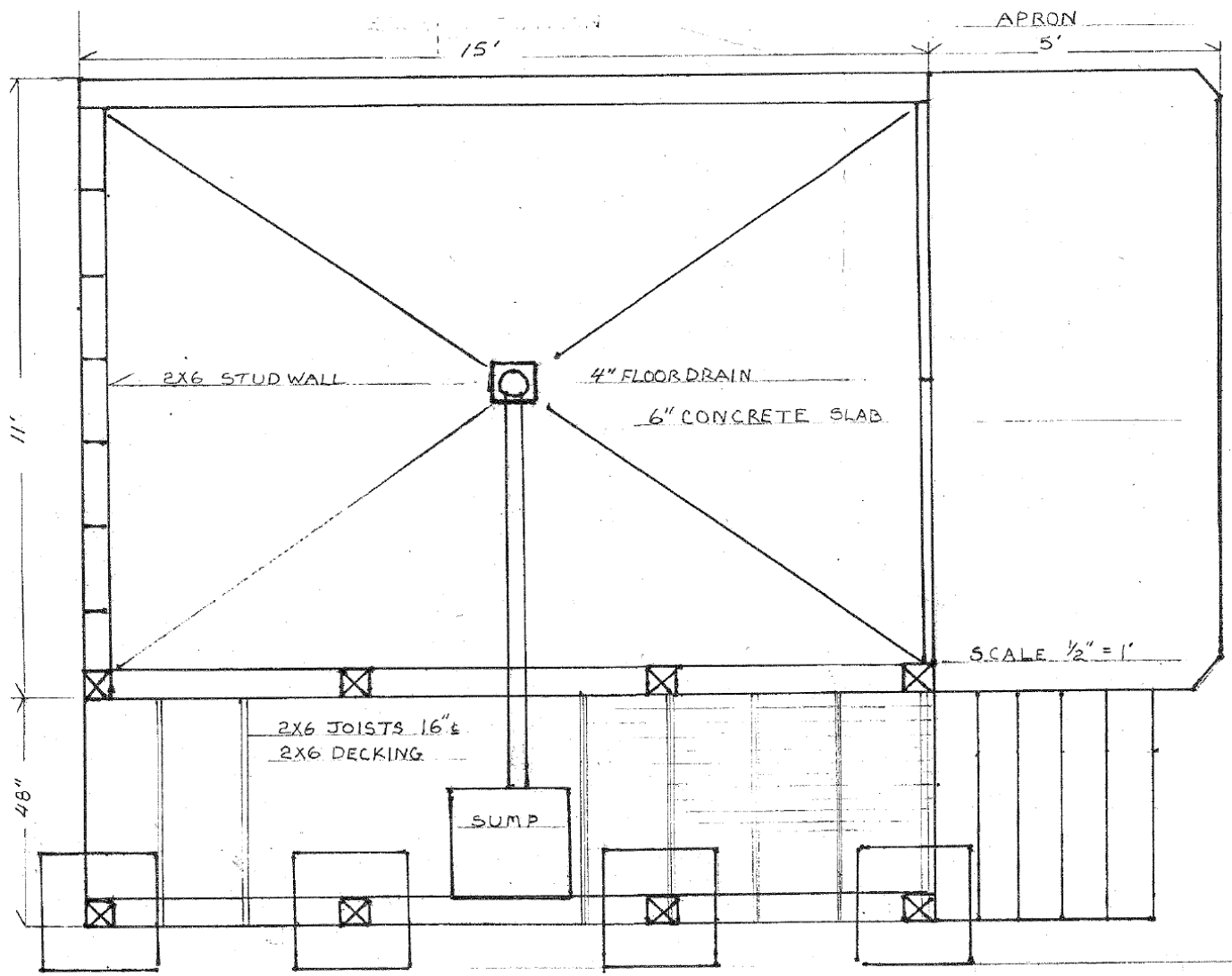
West (Front) Elevation

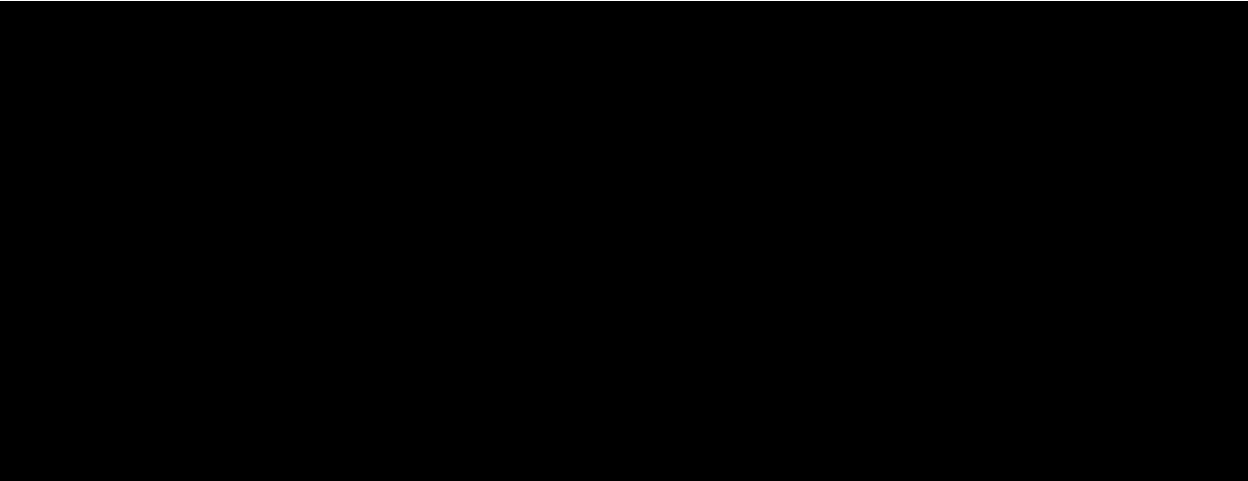


South (Side) Elevation



Floor Plan





From: Laura Pope [REDACTED]
Sent: Tuesday, November 12, 2019 4:11 PM
To: Kate Emmings [REDACTED]
Subject: Re: SROW along East Road in the Lindsay Dickson Nature Reserve for the Denman Cross Island Trail

Hello ITC Board. I would like this and my previous emails on the Corrigan SOW submitted for consideration at your meeting on the 26th of November.

I realize that in this case the DCA and the ITC will not be moving from their position of not wanting an established trail along the border of Lindsay Dickson.

As I said in my previous email I do not believe the science supports the theory of species being introduced by the use of trails. Further in my experience of observing all the species that live both on and use my large acreage trails, the border effect is minimal or does not exist.

In the case of Lindsay Dickson the trail would have been located between existing rural properties and the reserve. The deer and other species would have perhaps even benefited by having an area that would provide a long term buffer to those properties if the trail had been of low impact construction and all the other 66' of the long CVRD SOW had been allowed to naturalize. In no way would this trail have impacted the existing canopy. Given that Lindsay Dickson is bordered by roads on two sides, taking control of the SOW on this side would have provided a buffer over the long term.

You have zero control over what any one of the rural land owners may do in the future, including clearing extensively which would indeed destroy some of the quality of the refuge area.

I know that there is no chance now of CVRD putting a trail along this SOW. I would simply encourage the ITC to start thinking about how working with agencies to increase the buffer effect could in fact provide a better long term refuge. And if the only trade is a low impact trail then that is not the negative thing that is being portrayed.

I strongly feel that the Trust and other conservation agencies are in fact missing an opportunity to preserve the boundaries of their eco reserves by not establishing a long term use for those and thereby limiting the use of those MOTI lands over time.

As was proven on this case a local landowner in fact appropriated a large section for his own use, and there is nothing to prevent anyone from constructing a trail along the MOTI ROW with no possible come back from the ITC.

Laura Pope
Denman Island

On Tue, Nov 12, 2019 at 2:09 PM Laura Pope [REDACTED] wrote:

Hi Kate. Thanks for the alert. I am heading off to my volunteer afternoon at the school/ I will send an email before 4:30 this afternoon.

Laura Pope
Denman Island

[REDACTED]

[REDACTED]

[REDACTED]

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From: Laura Pope [REDACTED]
Sent: Thursday, October 17, 2019 11:50 AM
To: Nuala Murphy [REDACTED]
Cc: Mark Harrison [REDACTED]; David Critchley [REDACTED]; Laura Busheikin [REDACTED]; Alan Danks [REDACTED]; Kate Emmings [REDACTED]
[REDACTED] Denman Conservancy Association Land Manager
[REDACTED]
Subject: Re: SROW along East Road in the Lindsay Dickson Nature Reserve for the Denman Cross Island Trail

Hello Nuala. The concerns that have been raised in relation to Lindsay Dickson are to a possible trail being located on a MOTI ROW that is 66' wide and as you say is **adjacent** to the reserve. It has been stated multiple times by residents resistant to any trail, and by DCA that there would be fragmentation of the forest. I just do not agree that a low impact trail that is placed carefully would have detrimental environmental effect. A low impact trail that did not cause removal of trees and was carefully constructed would not result in any further fragmentation. As I said in my previous email any **damaging** fragmentation has already taken place - and it has been done by private landowners along the ROW corridor during land clearing for dwellings, farm fields, fences and driveways. In fact one landowner moved approximately 800' of farm fence into the ROW after this proposal was first brought up. I believe this was done as a NIMBY measure to make any trail construction difficult.

The risk of invasive species is totally overstated and is used by conservation groups all over North America as a tactic that is not supported by science. Lindsay Dickson is already well populated with introduced species and the stated risk of further introduction would be minimal to nil. In fact any CVRD trail location would be in danger of being populated **from** Lindsay Dickson - not the reverse.

There is a potential risk of fire everywhere on every Gulf Island. There is no greater or lesser risk by having a trail placed along a MOTI ROW than there is along any and every road and trail on Vancouver Island and Gulf Island. There are literally thousands of kms of trails in provincial, municipal, regional and city parks in B.C. You cannot seriously think that the construction of a short trail

along this ROW is a higher risk than all these other trails throughout our region? The risk of fire on this and any Gulf Island is much more likely to be from residential fires or backyard burning. This is supported by statistics.

I am convinced that this route would have been a widely accepted, safe and locally well used trail had we been able to get past the local resistance. Resistance that was largely from one individual. Your reply equally convinces me that you are not really interested in looking at this with a wider perspective. I don't expect there will be any change in the way the ITCB looks at the management of it's own lands. But with respect, the ITCB should not so obviously try to influence local initiatives that **have not been proven to be detrimental to properties managed by you.**

I don't expect that anything I say will influence anything the ITCB does in future. But I am also not required to accept so biased a position from your board.

Laura Pope

Denman Island

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From: Laura Pope [REDACTED]

Sent: Wednesday, October 16, 2019 9:21 AM

To: Nuala Murphy [REDACTED]; Mark Harrison [REDACTED]
David Critchley [REDACTED]; Laura Busheikin [REDACTED]; Alan
Danks [REDACTED]

Subject: Re: SROW along East Road in the Lindsay Dickson Nature Reserve for the Denman Cross Island Trail

Hello Nuala. I am confused and discouraged by the motion carried by the Trust regarding working with DCA and CVRD to work with planners to site the CIT through Lindsay Dickson Reserve. While the Trust may feel at this time that development of the highways ROW adjacent to the reserve could have potentially negative affects to the reserve this has not been proven by any actual studies or environmental assessments of the proposal to locate a low impact trail close to the property line. I worry that by making this motion the Trust is setting a precedent that would affect future decisions regarding the use of the ROW for a public trail.

The highways easement is 66' wide and CVRD indicated from the beginning that a trail through this ROW would likely not involve any tree removal and could be constructed in a way to create very low impact to the reserve. At the public meeting with CVRD planner some local residents objected to the trail. What was not made clear was that there was also land owners that did not object to the trail and that in fact they supported it and would have welcomed a local trail along this ROW to access a loop walk from their homes.

At a time when many local communities are working to improve trail networks and allow for foot, bike and other means of transport it seems that wider public benefit has potentially been subsumed by a small group that may not have looked at the longer term public good.

In looking at satellite images of the overall forest of which Lindsay Dickson is a part, the most damage to the overall ecosystem has been done by the local residents in canopy destruction to build their houses, driveways and clearings for fields etc. I would be happy to provide the Trust with the images used for this opinion. The construction of a low impact trail would represent little to no change in this overall ecosystem, and I feel it is hasty of the Trust to make a motion of this type. In including only DCA in the motion for planning of this trail the Trust is also overlooking the input of the local DIRA Trails and Parks committees that have been integral to the planning of the Cross Island Trail from the beginning of the project, and have worked in full cooperation with the CVRD which has funded the project. The DIRA committees should have been included in the plan to work with CVRD in planning this trail. While the CVRD will include these committees it still disturbs me that the Trust is overlooking the role of these important DIRA committees in planning. Both these committees worked with DCA in planning the CIT through the trail area adjacent to Central Park.

The location of the proposed trail that was floated by CVRD Planners, the DIRA Parks Committee and the DIRA Trails Committee may well have had less impact on the ecosystem of Lindsay Dickson by being able to use an existing trail through Lindsay Dickson and locating the rest of the trail on the ROW.

Cheers,

Laura Pope

Denman Island

Chair DIRA Park Committee

Member of the Board of Central Park Committee

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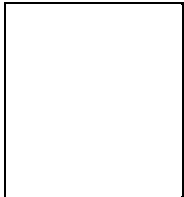
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Lyackson First Nation

***7973A Chemainus Road
Chemainus BC V0R 1K5***

Telephone: (250) 246-5019

Fax: (250) 246-5049

Tuesday, November 19, 2019

Lyackson First Nation is in receipt of the referral for:

File #:

Dated: August 15, 2019

Proponent: Jemma Green

Location: Lasqueti Island

Proposed Activity: Salish View Nature Reserve

Lyackson First Nation recognizes this referral as being in the Hul'qumi'num Treaty Group's Marine Statement of Intent area. Lyackson First Nation had primary and secondary, fishing and marine harvesting rights/practices in this area, but not necessarily title and governing authority.

As this referral is in close proximity to other First Nations' territorial lands and marine areas, Lyackson First Nation defers to those First Nations' whose title and governing authorities are directly affected. By deferring this referral to another First Nation, Lyackson First Nation in no way surrenders its current rights and title claims.

This decision is based on knowledge available at this time. Should Lyackson First Nation identify greater interests in the future we retain the right to revise this assessment.

Huy ch q'a,

This email has been sent to you on behalf and under direction of,

Anna (Sam) Hudson

Consultations and Accommodation Manager
Lyackson First Nation

October 9, 2019

Tallina McRae, District Operations Technician & Area Manager, Roads
Ministry of Transportation and Infrastructure
Vancouver Island District - SA03

Re: Trees cut along East Rd in Denman Island nature reserve

Dear Tallina McRae,

Thank you for investigating the circumstances of the cutting of five trees along an ungazetted section of East Road within Lindsay Dickson Nature Reserve on Denman Island this past winter. From correspondence between you and our A/Property Management Specialist, Jemma Green, we understand that tree cutting was authorized by the Ministry of Transportation and Infrastructure's (MOTI) road maintenance contractor (Mainroad North Island LP) and that their subcontractor (HD Tree Services) cut the trees. Although we had a conversation with your office about the planned tree work, the Islands Trust Conservancy (ITC) did not permit or authorize this activity and we are extremely disappointed by this trespass. **We would like to advise you that all future tree work in the Lindsay Dickson Nature Reserve will require prior written approval from our office.** We hope that by clarifying required communications, we can move forward with more meaningful consultation on tree management along roads within Islands Trust Conservancy's nature reserves.

The intent of ITC nature reserves is to protect all trees and vegetation from cutting or alteration of any kind. To hold us to this commitment, the Lindsay Dickson Nature Reserve is encumbered by a conservation covenant, in favour of the Denman Conservancy Association, that also protects trees and vegetation. Large, decaying trees (also known as wildlife trees, or snags) are of particularly high biodiversity value because they offer foraging opportunities for woodpeckers and much-needed nesting cavities for birds and small mammals. In circumstances where a tree poses a safety risk to people and property, ITC endeavors to retain as much of the tree as possible while mitigating risk. Furthermore, should trees require cutting, the ITC works to leave any downed wood on the forest floor as this woody debris is important for habitat and for nutrient cycling.

We are heartened by your stated commitment to a more thorough consultation with ITC before the brushing program enters our nature reserves. ITC requests that MOTI ensure that each of its contractors and subcontractors:

- i) is aware of the boundaries of ITC's nature reserves and roads with special Scenic/Heritage designation so that they know when to stop routine work (see attached map and in future consult mapit.islandtrust.bc.ca for the most up-to-date information about our nature reserve locations);
- ii) consults with ITC or its representatives prior to undertaking any tree work within or adjacent to its nature reserves; and,

- iii) waits for written authorization from ITC before undertaking any tree work within its nature reserves.

Please notify our Property Management Specialist, Nuala Murphy, at nmurphy@islandstrust.bc.ca or 250-405-5193 if your office has any questions or wishes to discuss this letter or the process it describes further.

ITC looks forward to improved communication with MOTI as we each work to uphold our respective mandates for nature protection and safe roadways for British Columbians.

Sincerely,



Kate Emmings
A/ Manager
Islands Trust Conservancy
250-405-5191
kemmings@islandstrust.bc.ca

Cc: Islands Trust Executive Committee
ITC Board
Denman Conservancy Association
Shawn Haley, Area Manager, Roads, Vancouver Island District
Michael Pearson, District Manager, Transportation, Vancouver Island District



Public Acquisitions Update November 26, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
PUBLICLY CONSIDERED PRIVATE LAND ACQUISITIONS		
Crystal Mountain (Galiano) 18.3 ha.	2017/11/21	ITF has previously considered a conservation covenant proposal and land transfer proposal for this property.
	2017/11/21	TFB-2017-031 It was MOVED and SECONDED, that the Trust Fund Board accept the updated Conservation Proposal from the Crystal Mountain Society, agreeing to accept transfer of approximately 18.3 hectares of Lot 9, District Lot 90, Galiano Island, Cowichan District, Plan 31200, (PID 000-851-035) and part of Lot A, District Lots 88 and 89, Galiano Island, Cowichan District, Plan VIP68079, (PID 024-351-041), subject to: 1. The release of the rent charge and related easements on the title of Lot A and any other charges determined, through legal review, to be problematic for the Trust Fund Board; 2. Establishing legal access for the Trust Fund Board to the most eastern part of Lot A; 3. Receipt of \$30,000 upon transfer of the land, with at least \$15,000 to be held in a pooled Nature Reserve Management Fund, and \$10,000 to \$15,000 to be put towards the development of a management plan and management activities for the nature reserve; 4. Staff reaching mutual agreement with the water license holders to limit the impact of accessing and maintaining the permitted water works; 5. Agreement with the Society that the portion of the proposed Emergency Access over the nature reserve would be used only in the case of emergency; 6. Written agreement with the Society about the use and maintenance of the pagoda; 7. Installation of boundary and corner pin markers at the time of survey at the expense of the applicant (locations to be determined in consultation with ITF staff); and 8. Final approval of the Trust Fund Board of the final survey plan, transfer agreement and all other associated agreements.
	2018/03/01	Contacted by CMS re: next steps, and confirmed importance of having preliminary survey completed, and ensuring proposed layout is registrable.
	2019/07/24	Received subdivision proposal plan from the planning department.
Sandy Beach (Area E) (Keats) 3.3 ha.	2014/09/18	It was MOVED and SECONDED, that the Trust Fund Board approve the conservation proposal submitted by the Convention of Baptist Churches of British Columbia to transfer Area E (Sandy Beach), approximately 3.3 hectares of DL 696, Group 1 NWD, Keats Island (PID: 014-385-694) to the Trust Fund Board for protection as a nature reserve.



Public Acquisitions Update November 26, 2019

	2015/03/02	Consultant has indicated that the landowners would like a covenant registered on the land at the time of transfer. ITC has approached Gambier Island Conservancy (GIC) and Sunshine Coast Conservation Association (SCCA). GIC has declined, but SCCA is potentially interested.
	2015/05/07	SCCA agrees to hold covenant; suggests TLC as a co-holder as they have worked together before.
	2015/08/18	Draft conservation covenant provided to ITC staff for review.
	2015/08/26	Edits to covenant provided to applicant and covenant holders for review.
	2015/12/15	Comments on covenant draft received from TLC.
	2015/01/12	Covenant revised with TLC edits and returned to TLC and SCCA for comment. TLC is happy with the draft. SCCA has sent the covenant for legal review, still awaiting SCCA comments.
	2016/02/10	SCCA comments received.
	2016/03/04	ITF responded to SCCA edits. SCCA reviewing with lawyer.
	2016/04/11	Requested that landowner contract development of baseline report for covenant.
	2016/06/05	SCCA comments received for covenant.
	2016/10/05	Draft 3 covenant sent to covenant holders for review. TLC and SCCA have agreed to the draft.
	2016/02/10	Draft Bylaws for DL 696 received.
	2017/03/02	Covenant sent for legal review.
	2017/04/13	Revised covenant draft sent to TLC and SCCA. Comments received from both agencies.
	2017/08/31	Edits made to covenant and reviewed by legal. Draft 5 sent to TLC and SCCA for review. TLC has no further comment; awaiting SCCA comment. Both TLC and SCCA have requested a site visit.
	2017/09/07	Draft baseline report received from the applicant.
	2017/10/24	Feedback on baseline report submitted to applicant and revisions requested.
	2018/03/13	Email from Island Planner indicates that the rezoning application will move to a community information meeting and public hearing for bylaw 143 on April 18, 2018. The Island Planner has requested that the applicant contact ITC staff regarding requirements for land transfer and covenant prior to April 18.
	2018/04/24	Notice received from GM Planner that GM LTC gave third reading to Proposed Bylaw No. 143 and that applicant is now finalizing plans to subdivide/transfer the Sandy Beach Nature Reserve.
	2018/05/28	Site visit with ITC staff, trustees & SCCA
	2018/06/14	Staff requested applicant provide legal access to Sandy Beach through private land from the proposed Sandy Beach Nature Reserve (to utilize existing trail).
	2018/07/19	Next draft of baseline received and provided to covenant holders for feedback.
	2018/08/01	Applicant confirms that they are willing to provide a Statutory Right of Way for Sandy Beach access. ITC to



Public Acquisitions Update November 26, 2019

		draft agreement.
	2018/08/28	Baseline report feedback provided to applicant and biologist for review and revision.
	2018/09/12	ITC lawyer drafting Statutory Right of Way.
	2019/01/04	Applicant's biologist provided revised draft baseline report. Forwarded baseline to covenant holder for review.
	2019/02/22	Statutory Right of Way reviewed by legal council and forwarded to covenant holder for review
	2019/04/08	Applicant advised Statutory Right of Way and Survey are pending review by their legal council
	2019/05/10	Applicant attended the site with TLC staff and subsequently advised there may be an existing trail that provides access to the beach and a Statutory Right of Way may not be required. The applicant indicated the review of the Statutory Right of Way and Survey should be done in the following week.
	2019/05/21	Staff from TLC confirmed the viability of the trail, but could not confirm if the trail is on the proposed nature reserve or on the adjacent hydro right of way.
	2019/06/18	The applicant was requested to confirm the location of the recently identified trail, and if possible to identify the trail on the pending land survey.
	2019/07/05	The applicant has asked the surveyors to include the location of the trail and has provided pictures of the trail.
Salish View Nature Reserve (Lasqueti, 11.47 ha)	2019/11/18	Received survey from the Applicant. Staff will review.
	2019/07/30	Salish View Nature Reserve transferred to ITC.
	2019/08/25	Salish View Nature Reserve celebration and guided hikes. Hosted by LINC, attended by ITC A/Manager.
	2019/08/26	Salish View Nature Reserve Management Plan Open House. Attended by ITC A/Manager, LINC board members and ITC contract biologist.
Current Total ITC Acquisitions:		30



PUBLIC COVENANTS UPDATE October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
NAPTEP COVENANTS		
<i>25 NAPTEP Covenants on title, no current applications.</i>		
REGULAR COVENANTS UPDATE		
<i>(51 regular covenants on title, 1 regular public covenants in progress, 3 in-camera covenants in progress.)</i>		
Brooks Point Covenant South Pender Island (1.17 ha, 6.02 ha if combined with surrounding covenants)	2014/03/23	It was MOVED and SECONDED, that the Trust Fund Board agrees to hold a covenant on the 2010 addition to Brooks Point Regional Park, South Pender Island, subject to agreement on the terms of the covenant and a satisfactory baseline report, and directs staff to continue working with CRD Parks and partners to determine the best way to covenant the three protected areas at Gowlland and Brooks Points.
	2014/04/08	Staff provide CRD staff with a template covenant for review.
	2014/04/15	Staff met with partners to discuss combining covenants for the Brooks Point and Gowlland Point properties.
	2014/05/22	Covenant Draft 1 sent to PICA, Friends of Brooks Point, HAT and CRD.
	2014/08/01	CRD response to Covenant Draft 1 received.
	2014/08/19	ITC/HAT/PICA express concerns to CRD with respect to Management Plan approval and other selected clauses.
	2014/08/20	Baseline Report completed.
	2014/08/22	CRD respond to ITC/HAT/PICA concerns.
	2014/09/17	ITF/HAT/PICA response re draft covenant sent to CRD.
	2014/10/08	Kate Emmings appointed to the Brooks Point Management Plan advisory group by the CRD.
	2014/10/16	ITF staff attended CRD Parks Open House for public review of the Brooks Point Management Plan update.
	2014/12/03	CRD submit revised covenant draft to ITC and HAT.
	2014/12/10	CRD Board approves revised Management Plan.
	2014/12/12	Covenant sent to legal counsel for review.
	2014/12/18	Covenant revisions and comments sent to CRD.
	2015/07/29	Met with the CRD to discuss the covenant. There are several unresolved clauses.
	2015/08/28	Met with PICA and HAT. Agreed that we were at an impasse and required more direction from PICA.
	2015/09/02	CRD returned a covenant draft for review, staff are concerned with several clauses, including the strength of restrictions and the enforcement mechanisms.
	2015/09/09	Staff provided a briefing to PICA requesting info about the type of covenant contemplated. Staff updated the



PUBLIC COVENANTS UPDATE October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
		CRD that a response to the covenant draft would be post-poned until further information is available from PICA.
	2015/09/24	Staff met with HAT, Friends of Brooks Point (Paul Petrie) and the CRD to discuss covenant concerns. CRD staff agreed to revise covenant and circulate.
	2015/10/28	Staff met with HAT and CRD staff to review revised covenant draft and CRD will do further revision and circulate.
	2015/12/18	CRD Staff provided revised covenant.
	2016/01/25	ITF/HAT responded to CRD revisions.
	2016/07/15	CRD Staff provide a revised version of the covenant for further review.
	2016/08/16	HAT/ITF/CRD staff meet to discuss CRD edits. HAT/ITC agree to add definition regarding the permitted activities and will forward legal edits. CRD to re-approach NCC and TLC regarding process for discharge of prior covenants.
	2016/11/28	ITF/HAT forwarded the draft list of restricted and permitted uses for CRD review.
	2016/01/11	CRD response received, ITF/HAT to forward revised covenant draft for CRD review. Conversations ongoing regarding details.
	2017/09/07	Brooks Point covenant revised and reviewed by ITF legal and HAT.
	2017/09/21	Revised Brooks Point covenant sent to CRD Parks for review
	2018/06/14	Revised covenant received from the CRD, currently under review.
	2018/07/06	Legal review of covenant identifies ongoing concerns.
	2018/07/31	CRD notified of ITC covenant concerns and meeting of all parties with legal representatives requested.
	2019/05/01	ITC provided reviewed covenant to CRD with a request to meet with all parties and legal counsel.
ITC NATURE RESERVES WITH COVENANTS OUTSTANDING		
<i>(22 Nature Reserves have covenants, 6 Nature Reserves are without covenants, 2 ITC Nature Reserve covenants in progress (1 is under negotiation)).</i>		
Sandy Beach Nature Reserve (Proposed) Keats Island (3.3 ha.)	2017/01/10	ITC staff are currently negotiating a conservation covenant concurrently with the Sandy Beach Conservation Proposal (see Public Acquisitions Updates).



PUBLIC COVENANTS UPDATE October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
Fairyslipper Forest Nature Reserve Thetis Island (16.6 ha)	2018/03/20	ThINC Board approves resolution to hold a covenant on Fairyslipper Forest.
	2018/03/21	CCLT Board approves resolution to hold a covenant on Fairyslipper Forest.
	2018/04/03	TFB approves negotiation of conservation covenant in favour of ThINC and CCLT.
	2018/04/06	First draft of ITC template covenant sent to partners. Trail relocation is needed before finalizing baseline report.
	2018/05/04	Contract issued for baseline report and management plan. Anticipated completion date is March 1, 2019.
	2018/10/13	Hosted Management Plan Open House on Thetis Island.
	2018/12/18	Draft management plan and baseline report received.
	2019/02/19	Draft management plan and baseline report review completed by ITC staff, sent to contractor for revisions.
	2019/02/22	Revised draft management plan and baseline report sent to ThINC and CCLT staff for review.
	2019/03/07	Draft management plan and baseline report reviewed by ThINC and CCLT, requested revisions sent to contractor.
	2019/03/11	Contractor and ITC complete ThINC and CCLT's requested revisions to management plan and baseline report. The baseline report will be finalized once the trail is relocated.
	2019/03/19	ITC consults with Islands Trust's Senior Intergovernmental Policy Advisor on opportunities to introduce First Nations content throughout management plan.
	2019/03/20	Additional details to be added to the management plan requested by ThINC.
	2019/03/20	Further revisions completed by ITC and contractor to address request from ThINC.
	2019/05/08	ITC completes addition of First Nations content throughout management plan and content is reviewed by Islands Trust's Senior Intergovernmental Policy Advisor.
	2019/05/12	Contractor approves First Nations content added to management plan by ITC.
	2019/05/21	ITC Board approves management plan with minor revisions.
	2019/05/28	Revisions requested by the ITC Board are addressed and submitted to ThINC and CCLT Boards for approval.
	2019/06/12	ThINC Board approves management plan.
	2019/09/26	CCLT Board approves management plan. Staff posted Management Plan to the website.
200 Collins Rd Covenant	2019/07/16	It was moved and seconded that the Islands Trust Conservancy Board approve the conservation proposal submitted by Jordan Litke on behalf of Manuel and Cythia Batista, approximately 0.85 ha on Collins Road, Salt



PUBLIC COVENANTS UPDATE October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
Salt Spring Island Property size: (0.85 Ha)		Spring Island: PID 009-595-694, Section 3, Range 2 West, North Salt Spring Island, Cowichan District, Except part in plan 3985, subject to the removal of any vehicles or equipment that are located in the covenant area.
	2019/07/25	Staff provided Jordan Litke with a covenant template for review.
	2019/08/27	Development Variance Permit approved by Salt Spring Local Trust Committee
	2019/10/01	Comments received on Draft 1 of the covenant.
	2019/10/04	Draft 2 of the covenant sent to Applicant for review.
	2019/11/05	Baseline Report received. Comments provided Nov. 7, 2019.
Total	76 covenants registered	

Regional Conservation Plan (2018-2027)	
2018-2020 Workplan Progress Highlights - November 26, 2019	
Goal 1. Identify, investigate and communicate about important natural areas to generate action on conservation priorities	
Mapping, Data and Analysis	
Complete	Forage fish mapping completed for James and Sidney Islands
Ongoing	Annual updates for Species and Ecosystems at Risk Data and Critical Habitat designations
	Annual protected areas updates
	Maintain information on priority conservation lands
In Progress	Working with LPS and the Coastal Douglas-fir Conservation Partnership to obtaining mapping for contiguous Coastal Douglas-fir forests
	Sourcing forage fish mapping for Saturna and Gabriola Islands
Workplan Changes/Notes	Considering mapping expected shift in ecosystems due to climate change for 2050 and 2080 and integrating these predictions into conservation model
	Islands Trust considering eelgrass mapping project as a component of the Strategic Plan
Information Sharing	
Complete	Local Trust Area/Island Municipality Profiles created with data highlights
	Data shared with 12 agencies
	Annual updates to BC Conservation Areas Database, complete for 2018 & 2019
	Updated internal and external mapping system (TAPIS) with 2017 sensitive ecosystem mapping and 2018 James/Sidney Islands Forage Fish Mapping
	Provided training to LPS staff and newly elected trustees and ITC Board members
	Assisted Islands Trust with Islands 2050 information panels
Ongoing	Provide annual information training to LPS staff and Trust Council
	Meet annually with Islands Trust Executive Committee
In progress	Updating Islands Trust website to include information sharing options
	Working on better data in the field tools
Workplan Changes/Notes	Considering adding further data to the open data available on MapIT (e.g. Marine and Terrestrial Ecosystem Mapping)

Goal 2. Strengthen relationships with First Nations to identify and collaborate on shared conservation goals	
Looking internally	
Complete	Updated Conservation Covenant template with language to protect archaeological and cultural sites
	Staff and ITC Board training regarding reconciliation and the Nations in the Islands Trust region
	Budgeted to allow increased First Nations engagement for property management
	Adopted Reconciliation Declaration and wrote to First Nations to share Reconciliation Declaration language
Ongoing	Continued learning for staff and ITC Board
	Updated Management Plan and Baseline Report templates to improve First Nations information
	Drafted template for Management Plan for Areas of Cultural Heritage and Sacred Significance
	First Nations territory acknowledged in news releases
In progress	Contemplating integration of ITC into Islands Trust Reconciliation Action Plan (July 2020)
	Working to increase First Nations engagement in ITC Property Management
	Working to include better language and recognition of First Nations through our website renewal project
Workplan	
Changes/Notes	
Working with First Nations	
Complete	Offered mapping resources to First Nations
	Worked to build relationship with Penelakut Tribe with a focus on management of conservation lands on Thetis Island
Ongoing	Continue to identify and pursue opportunities to share resources with First Nations in areas of mutual interest
In Progress	Participating in Sidney Island Forest Restoration Program with Penelakut, Tsawout, Lyackson and Tsartlip First Nations
	Developing relationship with Penelakut for land management on Thetis Island
Workplan	Continue to seek opportunities to work collaboratively with Islands Trust to build relationships with First Nations
Changes/Notes	Continue to explore tools to protect cultural and archaeological sites where compatible with ITC land conservation work
Goal 3. Continue to secure and manage Islands Trust Conservancy lands and conservation covenants to maximize ecological integrity	
Property Management	
Complete	Updated Baseline Report and Management Plan Templates
	Completed planning for property monitoring transition, including development of a budget case for a new Covenant Management and Outreach Specialist
	Management Plans for four nature reserves completed (Thetis and Gambier), with ongoing work with First Nations
	Reviewed property monitoring transition and evaluated Covenant Management and Outreach Specialist position
	Submitted budget request to permanently continue the Covenant Management and Outreach Specialist position

Ongoing	Work with covenant landowners to manage invasive species Annual monitoring of seventy-six conservation covenants and twenty-nine nature reserves
In progress	Revisions to four management plans (Denman and Salt Spring) and development of three new management plans (Denman, Thetis and Lasqueti)
	Improving TAPIS database for better storage of property management information
	Invasive species management on Denman, Salt Spring, Galiano, and Gambier nature reserves
	Trail and tree management on Denman, Salt Spring, Gabriola and Galiano
	Addressing issues of trespass on three properties
	Trail design and building on Fairyslipper Forest Nature Reserve, Thetis Island
	Wildfire risk management and covenants - conference call series with regional conservancies and land trusts
Workplan Changes/Notes	Develop region-wide wildfire response strategy for conservation lands in consultation with island fire departments and BC Wildfire Service
Land Conservation	
Complete	Valens Brook Nature Reserve addition
	Salish View Nature Reserve acquisition completed in partnership with Lasqueti island Nature Conservancy
	Registered NAPTEP covenant on Link Island
	Issued Opportunity Fund Grants for three projects
	Rare species inventories for Salish View Nature Reserve acquisition project
Ongoing	Meet with landowners interesting in conservation (3 onsite meetings, 2018/2019, 3 onsite meetings 2019/2020 (to date), respond to 10-15 inquiries annually with detailed information)
	Continue to develop relationships with landowners who have expressed interest in conservation
	Steering Committee member for Coastal Douglas-fir and Associated Ecosystems Conservation Program (CDFCP) and member of Securement Working Group
In Progress	Four covenants and two nature reserve acquisitions in negotiation
Workplan Changes/Notes	Plan outreach for 2020 for selected islands
Goal 4. Continue to build internal and shared organizational strength and resilience to ensure long-term nature conservation in the Islands Trust Area	
Strong Finances	
Complete	Created a Fund Development Advisory Committee to work towards external funding supports for large ITC projects
Ongoing	Manage finances and complete annual financial audits
In Progress	Develop an ITC Funding Strategy and Action Plan
	Working on replacement of donor database which is no longer supportable

Workplan Changes/Notes	Contemplate a campaign to replenish the Opportunity Fund
Strong Communication	
Complete	Participated in CDF Tool Kit workshop (Galiano)
	Completed name change for Islands Trust Conservancy, including updated website and communications materials
	Assisted Islands Trust with development of business case and RFP for a new website
	Celebrations for one new covenant and two new nature reserves
	Participated in the Gabriola LTC's "Stories From Home: Exploring Key Themes to Address Gabriola's Housing Needs While Protecting the Environment"
Ongoing	Updating signage to new logo as appropriate
	Develop image bank for communications materials
	Issue Enews regularly and Heron newsletter once each year
In Progress	Participating in website redesign project with Islands Trust, requiring significant staff time for the remainder of 2019 and early 2020
Workplan Changes/Notes	Develop an engagement strategy to pull in new audiences, possibly in collaboration with Islands Trust
Ongoing Learning	
Complete	Board and staff participated in awareness training regarding working with First Nations
	Staff and a board member participated in the Land Trust Alliance of BC Seminar Series
	ITC property and covenant management staff participated in Invasive Alien Species database training
	The ITC Chair participated in the annual Union of BC Municipalities conference
	Staff participated in BC Protected Areas Research Forum
Ongoing	Continue to improve awareness of First Nations and engagement work with First Nations
In Progress	Support Board and staff training related to fundraising and fund development
Workplan Changes/Notes	

Islands Trust Conservancy Budget Tracking 2019-2020								
GL	Description	Budget	Revenue	Total Available	Spent	Remaining	% Remaining	Additional Committed Funds
54500-210	Communications	\$ 13,000		\$ 13,000	\$ 3,909	\$ 9,091	70%	\$ 2,813
61100-210	Board Honoraria	\$ 10,400		\$ 10,400	\$ 4,300	\$ 6,100	59%	
61200-210	Board Meeting Expense	\$ 13,850		\$ 13,850	\$ 6,279	\$ 7,571	55%	
61210-210	Board Training & Conferences	\$ 4,000		\$ 4,000	\$ 2,178	\$ 1,822	46%	\$ 1,000
61300-210	Property Management	\$ 65,000		\$ 65,000	\$ 29,118	\$ 35,882	55%	\$ 21,335
61500-210	Cons Planning / Land Securement	\$ 18,000		\$ 18,000	\$ 533	\$ 17,467	97%	\$ -
63000-210	Legal	\$ 15,000		\$ 15,000	\$ 1,794	\$ 13,206	88%	\$ 2,100
61600-210	Ecosystem Mapping	\$ 15,000		\$ 15,000	\$ -	\$ 15,000	100%	
73001-210-8040	Photo Management	\$ 7,000		\$ 7,000	\$ -	\$ 7,000	100%	\$ 7,000
80300-210	Mobile Devices	\$ 2,450		\$ 2,450	\$ 1,482	\$ 968	40%	
81300-210	Training & Conferences	\$ 6,212		\$ 6,212	\$ 337	\$ 5,875	95%	\$ 1,197
81305-210	Travel for Training	\$ 2,750		\$ 2,750	\$ -	\$ 2,750	100%	
82300-210	Travel	\$ 10,500		\$ 10,500	\$ 7,720	\$ 2,780	26%	
		\$ 183,162	\$ -	\$ 183,162	\$ 57,650	\$ 125,512	69%	\$ 35,445
Restricted Funds		Opening Balance						
	Alton Maintenance Account	\$ 79,615	\$ 8,952	\$ 88,567	\$ 2,422	\$ 86,146		\$ 425
	Ruby Alton Endowment Fund	\$ 128,185	\$ 14,172	\$ 142,357	\$ 3,125	\$ 139,231		
	Opportunity Fund	\$ 27,592	\$ 1,891	\$ 29,484	\$ 7,241	\$ 22,243		
	Covenant Mgmt and Defence Fund	\$ 111,475	\$ 310	\$ 111,786	\$ -	\$ 111,786		
	Lasqueti Island Acq Fund	\$ 57,361	\$ 4,664	\$ 62,025	\$ 26,726	\$ 35,299		\$ 4,286
	Gambier Island Acq Fund	\$ 120,392	\$ 1,850	\$ 122,242		\$ 122,242		
	Morrison Waxler Legacy Fund	\$ 20,140	\$ 88	\$ 20,228		\$ 20,228		
	Thetis Island Acq Fund	\$ 1,288	\$ 3	\$ 1,291		\$ 1,291		
	McFadden Creek	\$ 23,525	\$63.17	\$ 23,588	\$0.00	\$ 23,588		