Islands Trust Conservancy
Regular Meeting Agenda

Date: Tuesday, October 1, 2019
Time: 10:00 am
Location: Islands Trust - Victoria
200 - 1627 Fort Street, Victoria, BC

			Pages
1.	CALL TO ORDER		
	1.1	Election of Vice Chair	
2.	APPROVAL OF AGENDA		
3.	CLOSED MEETING		
4.	RISE AND REPORT		
5.	MINUTES/COORDINATION		
	5.1	Minutes of Meetings/Resolutions without Meetings	
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6.4.6 Board Appointment and Staff Updates (Verbal)

7. NEW BUSINESS

8. NEXT MEETING

9. ADJOURNMENT

Islands Trust Conservancy

DRAFT Minutes of Regular Meeting

Date: Tuesday, July 16, 2019
Time: 10:04 am
Location: Islands Trust - Victoria
200 - 1627 Fort Street, Victoria, BC

Board Members Present: Kate-Louise Stamford, Chair
Linda Adams
Sue Ellen Fast
Doug Fenton (by teleconference till 10:21 am)
Robin Williams

Board Members On Leave: Hoops Harrison

Staff Present: Kate Emmings, Acting Islands Trust Conservancy (ITC) Manager
Clare Frater, Director, Trust Area Services
David Marlor, Director, Local Planning Services
Jemma Green, Covenant Management and Outreach Specialist
Wayne Bourque, Acting Ecosystems Protection Specialist
Lisa Wilcox, Senior Intergovernmental Policy Advisor
Alexandra Trifonidis, Acting Administrative Assistant

Guests Present: Leonora Lee, Audit Partner, KPMG (arrived at 10:45 am for item 6.1.1)

1. CALL TO ORDER

Chair Stamford called the meeting to order at 10:04 am and acknowledged the Lekwungen and Wsanec Saanich peoples on whose traditional territory Islands Trust is situated.

2. APPROVAL OF AGENDA

The following addition to the agenda was presented for consideration:

- 6.2.4 Forest Practices Code Consultation

By general consent, the agenda was approved as amended.

3. CLOSED MEETING

ITC-2019-019
It was MOVED and SECONDED,
that the meeting be closed to the public pursuant in accordance with the Community Charter, Part 4, Division 3, section 90(1)(i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and section (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; and that Kate Emmings, Clare Frater, Jemma Green, Wayne Bourque and Alexandra Trifonidis be invited to remain in the meeting.

CARRIED

The Islands Trust Conservancy Board convened the closed portion of the meeting at 10:06 am and resumed in open meeting at 10:26 am to Rise and Report.

4. RISE AND REPORT

The Islands Trust Conservancy Board reported on the following item:

- The Islands Trust Conservancy Board appointed Trustee Fast to the Islands Trust Conservancy Fund Development Advisory Committee.

5. MINUTES/COORDINATION

5.1 Minutes of Meetings/Resolutions without Meetings

5.1.1 Approval of May 21, 2019 Meeting Minutes

The following amendment to the minutes were presented for consideration:

- 6.2.2 Draft Reconciliation Action Plan

  Change title for Lisa Wilcox to Senior Intergovernmental Policy Advisor.

By general consent, the Islands Trust Conservancy board minutes of May 21, 2019 were adopted as amended.

5.2 Follow-up Action List

The ITC Acting Manager provided an overview of the Follow-up Action List. Discussion ensued on two specific action items in the FUAL report. Director of Trust Area Services gave more information on action item Mar 31, 2015 *Staff to prepare possible revisions to the Trust Council Procedure 2.1.xxi Administration of the Crown Land Acquisition Initiative.* The ITC Acting Manager gave an update on action item Sep 24, 2010 *Staff to work with landowners to clarify wording of Cunningham Covenant regarding vegetation removal, while maintaining conservation as a priority.*

6. BUSINESS

6.1 Items for Approval

6.1.1 Approval of Financial Statements

Leonora Lee, KPMG Audit Partner was invited in to the meeting at 10:45 am.

Leonora Lee presented and reviewed the Financial Statements noting the following:

- addition of land on Denman Island
- fundraising for Salish View on Lasqueti Island

- information regarding the cash donations received, the GIC with Bank of Montreal, the fund held with the Victoria Foundation and the investment with the Municipal Finance Authority noting that the large discrepancy in donations from 2018 to 2019 is due to the Fairyslipper Forest acquisition which occurred in 2018.
- the Opportunity Fund had a deficit about $1,000
- restricted Funds increased largely due investment income
- Notes to the statements
    - accounting standards used are same as those for Non-profit organizations
    - land values are recorded as value at time of acquisition
    - note 10 is a new item related to fundraising for Salish View property.

Board members asked about actual value of land and staff noted that the statements record value at ~$14 million, BC Assessment values show land at ~$17 million.

Ms. Lee moved on to Audit Findings report. The auditors reviewed bank records and property transactions. No concerns regarding accounting practices were noted.

Ms. Lee noted that there has been discussion with Islands Trust about the valuation of 'eco-assets.' Eco-assets are not a current accounting standard but could be added into future statements. It was suggested that this might be a topic of discussion for a future meeting.

The Board noted that we have created the Fund Development Advisory Committee and this may be something to note in other financial statements.

ITC-2019-020
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board approve the Audited Financial Statements for the 2018-2019 fiscal year, and refer the statements to Islands Trust Council for information.

CARRIED

Leonora Lee, KPMG Audit Partner left the meeting at 11:15 am.

Lisa Wilcox, Senior Intergovernmental Policy Advisor joined the meeting at 11:15 am.

6.1.2 Reconciliation Declaration

Senior Intergovernmental Policy Advisor presented both drafted reconciliation declaration options and opened discussion to the board for comment. Discussion and brainstorming ensued with an outcome of combining parts of each option.

ITC-2019-021
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board adopt a reconciliation declaration as follows:

The Islands Trust Conservancy acknowledges that the lands and waters that encompass the Salish Sea have been home to Indigenous Peoples since time immemorial. We recognize that we are all intertwined in the ecosystems that are the lands, waters, culture, and ecology that embody this place.

The Islands Trust Conservancy will strive to create opportunities for knowledge-sharing, understanding and collaboration as people come together to preserve and protect the special nature of the islands within the Salish Sea.

The Islands Trust Conservancy is committed to the protection and preservation of this place through processes that respect and honour reconciliation and mutually respectful relationships with Coast Salish Indigenous Peoples. We express our recognition for the past, present, and future stewardship and knowledge that has been shared by Indigenous Peoples and are humbled and grateful.

CARRIED

ITC-2019-022
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board request that staff write to First Nations in the Islands Trust Area to provide Islands Trust Conservancy Reconciliation Declaration to those First Nations.

CARRIED

Lisa Wilcox, Senior Intergovernmental Policy Advisor left the meeting at 11:30 am.

6.1.3 Bylaw 2 - A Bylaw to Regulate Meetings

As per bylaw procedure ITC Acting Manager presented Bylaw 2 for a final time to the Board for adoption.

ITC-2019-023
It was MOVED and SECONDED,
that Islands Trust Conservancy Bylaw No. 2, cited as "Islands Trust Conservancy Meeting Procedures Bylaw, 2019", be adopted.

CARRIED

6.1.4 Conservation Proposal, 200 Collins Road

ITC Acting Ecosystems Protection Specialist presented the conservation proposal to the Board. The highlight of the proposed covenant is its protection of land adjacent to the Mt. Erskine Nature Reserve. Discussion ensued on the following:

- Abandoned vehicles and potential for contaminated soils on the northern boundary
- monitoring effort
- Trails (no trails on this property)
- Terrain (steep slope, shale rock)
- Whether the proposal was voluntary or part of a development proposal
- Covenant vs Nature Reserve (pros and cons)

ITC-2019-024
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board approve the conservation proposal submitted by Jordan Litke on behalf of Manuel and Cynthia Batista for approximately 0.85 ha on Collins Road, Salt Spring Island, PID 009-595-694, Section 3, Range 2 West, North Salt Spring Island, Cowichan District, Except part in Plan 3955, subject to the removal of any vehicles or equipment that are located in the covenant area.

CARRIED

6.2 Items for Discussion/Direction

6.2.1 ITC/EC Board Liaison Meeting

ITC Board members reviewed the ITC/EC liaison meeting agenda. The Board discussed who would speak to certain items. Discussion ensued on the following:

- Provincial government communication
- ITC evolution and growth (meeting our mandate)
- Effectiveness of reporting out to LTC's after board meetings (benefits vs. staff time)
- LTC input after report? (action to be taken)(effectiveness of report)

David Marlor, Director, Local Planning Services joined the meeting at 12:05 pm.

6.2.2 Climate Change Emergency Strategies

The ITC Board reviewed for information. Director of Trust Area Services presented and explained timeline for ITC to produce requested feedback to Trust Council. Discussion ensued on the following:

- Biggest role - natural solutions
- Are we (ITC) bound by the declaration?
- ITC as the face of climate change emergency
- Add to management plans (another category in template)

ITC-2019-025
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board hold a special meeting to discuss climate actions that the Board could undertake alongside the RCP and request staff to provide a report and recommendations.

CARRIED

6.2.3 Regional Conservation Plan Reporting

Reviewed.

6.2.4 Forest Practices Code Consultation

Deferred to a future meeting due to time constraints.

6.3 Correspondence

6.3.1 ITC Letter to TELUS re: Thetis Telecommunications Tower

The Islands Trust Conservancy Board received correspondence for information.

6.3.2 CDFCP Members Update

The Islands Trust Conservancy Board received correspondence for information.

6.3.3 G. Steeves correspondence re: Gardom Pond - June 18th EC meeting

The Islands Trust Conservancy Board received correspondence for information.

ITC Acting Manager gave an update on the relationship between the lowering of the Gardom Pond water level and the ITC Steils' Woods NAPTEP covenant. Director of Local Planning Services also gave an update noting the involvement of the North Pender LTC.

6.4 Updates for Information

6.4.1 Public Acquisitions Report

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

6.4.2 Public Covenants Report

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

6.4.3 Regional Conservation Plan Progress Report

Refer to item 6.2.1 Regional Conservation Plan Reporting

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

6.4.4 Budget Report

The Islands Trust Conservancy Board reviewed the Budget Report for information.

7. NEW BUSINESS

There was no new business.

8. NEXT MEETING

The next meeting will take place on October 1st at 10:00 am.

9. ADJOURNMENT

By general consent, the meeting adjourned at 12:41 pm.

_____

Chair

Certified Correct:

_____

Recorder

DRAFT

Islands Trust Conservancy - Executive Committee

Liaison Meeting

DRAFT Regular Meeting Minutes

Date:	**Tuesday, July 16, 2019**
Time:	**1:08 pm**
Location:	**Islands Trust Victoria Boardroom** **200-1627 Fort Street, Victoria, BC**

Islands Trust Conservancy (ITC) Board Members Present:	**Kate-Louise Stamford, Chair** **Linda Adams** **Sue Ellen Fast (ITC and EC)** **Doug Fenton (joined by teleconference at 1:21 pm)** **Robin Williams**
ITC Board Member On Leave:	**Hoops Harrison**
Executive Committee (EC) Members Present:	**Peter Luckham, EC Chair** **Laura Patrick** **Dan Rogers (joined by teleconference at 1:23 pm)**
Staff Present:	**Kate Emmings, ITC Acting Manager** **Russ Hotsenpiller, Chief Administrative Officer** **Clare Frater, Director, Trust Area Services** **David Marlor, Director, Local Planning Services** **Julia Mobbs, Director, Administrative Services** **Alexandra Trifonidis, Acting Administrative Assistant**

1. CALL TO ORDER

The meeting was called to order at 1:08 pm. Chair Stamford acknowledged with respect the Lekwungen and Wsanec Saanich peoples on whose traditional territory the meeting was taking place.

1.1 Introductions and Context for Annual Meeting

Chair Stamford welcomed the Executive Committee guests and initiated introductions.

Chair Luckham stated that ITC/EC meetings are important for the effective communications with Islands Trust and that the ITC and the Islands Trust work in parallel.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- Item 4.2.1 Working with the Province
    - Amendments to the Forest Practices Code – Trustee Fast

By **general consent** the agenda was approved as amended.

3. MINUTES/COORDINATION

3.1 Review of the July 17, 2018 Meeting Minutes

The Islands Trust Conservancy Board received the July 17, 2018 meeting minutes for information.

4. BUSINESS

4.1 Items for Information

4.1.1 Introductions

Both the ITC and the EC acknowledged that many of the attendees today have worked together several times over the years.

Review of ITC/EC roles

Discussion ensued regarding:

- Evolution of relationship between ITC and EC
- Cooperative independence between the ITC and EC and the role of that in future relations with the province
- Communication with Islands Trust trustees to add clarity for budget discussions and to build relationship building between elected trustees and appointed members of ITC
- Possible misconception regarding the role of the conservancy plays
- Ways for ITC to communicate the integral role it plays in the Islands Trust

4.2 Items for Discussion/Direction

4.2.1 Working with the Province

Coordination of advocacy

Discussion ensued on the following:

- Should there be a standing item on both EC/ITC agendas?
- ITC board is positioning itself as a more active and engaged body.
- ITC soon to have a new manager and new board member

Actions/recommendations:

That staff add a standing item to the agendas of the ITC/EC regarding consulting with each other for mutual interest.

Amendments to the Forest Practices Code

Trustee Fast brought to everyone's attention that there have been amendments to the BC Forest Practices Code and recommended that they be reviewed from a Trust perspective.

4.2.2 Working with Trust Council

Fund Development Advisory Committee (FDAC)

- FDAC activities to date

The ITC and EC received the provided materials about the work of the FDAC. Discussion ensued over:

- Potential provincial funding request and related process, including timing, amount, use, and the need to collaborate with EC to coordinate provincial funding request
- EC support for ITC to research more funding options
- Consider UBCM as a forum to raise ITC profile with elected officials and other government staff
- request the Conservancy be highlighted or profiled at the Islands Trust UBCM breakfast meeting

Climate Change Emergency Declaration

The ITC and EC members discussed the following:

- ITC input to Trust Council on climate emergency declaration and whether or not the Islands Trust Climate Change Emergency Declaration applies to the ITC
- Role of FireSmart in Climate Change Emergency Declaration, including messaging and communicating to island communities
- Regional Vegetation Management Strategy (as provided in agenda materials)
- Role of Climate Emergency Strategy in the Strategic Plan

Referrals and communication

The overall consensus is communication between the groups is working well.

Discussion ensued around the possibility of future annual Island Planner training with specific mention of including topics to support LTC's. ITC staff are currently doing annual training with planners.

Budget

- Covenant Management and Outreach Position

  ITC Acting Manager gave EC an early heads up that ITC will be asking for a budget request for an extension of the new position. ITC does not have an evaluation yet but will be providing one for its budget submission.

- Property Management Formula

  ITC Manager provided early information about the ITC intention to create a new Property Management Budget Formula for consideration.

Canada Nature Fund

ITC Acting Manager gave EC background information about this program.

Regional Conservation Plan Reporting

ITC and EC reviewed the Regional Conservation Plan Report provided by staff.

4.2.3 Working with Local Trust Committees (LTCs)

Communicating with LTCs

ITC board members and EC members discussed the following to help mitigate an overall low profile of the Islands Trust Conservancy at the Local Trust Committee level:

- Meetings streamed live
- ITC highlights shared on all islands
- ITC to make a point of coming to the LTCs when feasible

Coastal Douglas-fir (CDF) Tool Kit

- Very informative – LTCs encouraged to use the Tool Kit
- CDF mapping project to begin soon through ITC/LPS staff collaboration
- Legislative powers a concern for some LTCs in protection of CDF forest

Local Trust Area Profiles

Provided to EC for information.

4.2.4 Working with First Nations

Reconciliation Declaration and Action Plan

ITC Reconciliation Declaration provided to EC for information. ITC working on Reconciliation Action Plan.

Crown Land Policy

ITC has not been resourced to do adequate First Nations collaborations for Trust Council's Crown Land acquisition program. With resourcing in the form of a new Senior Intergovernmental Policy Analyst, ITC may be able to move forward on First Nations engagement in the future.

4.2.5 Working with the Public

Website updates

ITC will be updating its website and merging it with the Islands Trust site as part of the website redevelopment project. It is anticipated that the ITC will maintain

much of its visual identity, while merging some webpages with the Islands Trust where there is overlapping content or mutually beneficial content.

5. NEXT MEETING

To be determined in late 2019; in Victoria

6. ADJOURNMENT

By general consent, the meeting was adjourned at 3:03 pm.

_____

Chair

Certified Correct:

_____

Recorder

DRAFT

Islands Trust Conservancy

DRAFT Minutes of Special Meeting

Date: Wednesday, August 7, 2019
Time: 1:35 pm
Location: Teleconference
Islands Trust Victoria Boardroom
200-1627 Fort Street, Victoria, BC

Board Members Present by Teleconference:
Kate-Louise Stamford, Chair
Linda Adams (joined teleconference at 1:37 pm)
Sue Ellen Fast
Doug Fenton
Robin Williams

Staff Present:
Kate Emmings, Islands Trust Conservancy Acting Manager
Crystal Oberg, Communications & Fundraising Specialist
Jemma Green, Covenant Management & Outreach Specialist
Wayne Bourque, Acting Ecosystems Protection Specialist
Russ Hotsenpiller, Islands Trust CAO
Alexandra Trifonidis, Acting Administrative Assistant

1. CALL TO ORDER

Chair Stamford called the meeting to order at 1:35 pm and acknowledged that the meeting was being held in Coast Salish First Nations territory, specifically Lekwungen and Wsanec Saanich peoples.

2. APPROVAL OF AGENDA

By general consent, the Islands Trust Conservancy Board approved the agenda as presented.

3. BUSINESS

3.1 Items for Discussion/Direction

3.1.1 Islands Trust Conservancy strategies to address the Islands Trust climate change emergency

The Islands Trust Conservancy (ITC) Acting Manager reviewed the purpose and background of the briefing to the Board. She also gave an overview of the six potential actions ITC could do to address the climate change crisis.

Discussion ensued on the following:

- Insuring communications to Trust Council around ITC climate change activities

- Potential need for outside expertise (staff position?) to focus on climate change work
- Increasing property tax exemptions for property owners; NAPTEP
- Climate change action is the nature of ITC work already and ITC is already addressing climate change in its core work.
- Emphasizing ITC Climate Change work in communications and contact with landowners
- Focus on future land acquisition priorities; mature old growth forest, wetlands, and aquifer recharge areas
- Restoration areas – Broadening restoration to include ecosystems other than trees, i.e. coastal and wetland restoration
- Research – What species will grow better on the islands in the future? Where will ecosystems and species move to in a future climate?
- Working with First Nations and their ability to steward land
- Literature on maintaining forest ground cover; fire protection and water levels
- Great opportunity to showcase ITC work with the general public
- Document climate change impacts in the Trust Area as they occur; list of what damage is happening as well as the identified part of it
- Drought and uphill properties in terms of acquisitions and land use planning
- Connectivity of protected properties for species to be able to move and migrate
- Signage – Think of adaption and mitigation when creating new signage for covenants and Nature Reserves

ITC A/Manager provided the Board a prioritization of the potential actions to address the climate change crisis, noting that many activities are already underway and that more complex items requiring outside resources include:

- Obtain a literature review synthesizing available climate change impact information specific to the Pacific Northwest region and identifying information gaps
- Expand mapping to include:
    - Identification of movement of ecosystems and species using climate change predictions and modelling
    - Identification of areas vulnerable to climate change impacts (e.g. sea level rise, increased storm events, fire)
- Evaluate fuel loads in existing ITC protected areas and consider fuel load reduction measures (e.g. controlled burns)

ITC-2019-026
It was MOVED and SECONDED,
That the Islands Trust Conservancy Board direct 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.

CARRIED

ITC-2019-027
It was MOVED and SECONDED,
that 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

CARRIED

ITC-2019-028
It was MOVED and SECONDED,
that the 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.

CARRIED

4. NEXT MEETING

The next meeting will take place on October 1st at 10:00 am.

5. ADJOURNMENT

By general consent, the meeting adjourned at 3:09 pm.

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Kate-Louise Stamford, Chair

Certified Correct:

_____

Alexandra Trifonidis, Recorder

ISLANDS TRUST CONSERVANCY

SPECIAL VOTE ON URGENT MATTER (BC Reg. 189/92)

ISSUE TITLE: Islands Trust Conservancy Chair Attendance at Union of BC Municipalities 2019 Convention

The ITC Chair has expressed a desire to attend the Union of BC Municipalities 2019 Convention to represent the Islands Trust Conservancy and participate in an Islands Trust hosted breakfast with Ministers and ministerial staff. Registration is required by August 23 to receive the early bird rate and the convention will be held from September 23-27, 2019. Information available at https://www.ubcm.ca/EN/main/convention/2019-convention.html. ITC Board approval is required to authorize the expenditure to attend.

Therefore, 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.**

THE CHAIR DECLARED THE ABOVE NOTED RESOLUTION PASSED IN ACCORDANCE WITH THE ISLANDS TRUST SPECIAL VOTING REGULATION THIS 21st DAY OF AUGUST, 2019.

RESOLUTION NUMBER: ITC-2019-029

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

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

20-Jun-2017

	Activity	Responsibility	Dates	Status
1	TC-2017-029 - Investigate options for increased use of federal or provincial stewardship agreements for species at risk in the Islands Trust Area.	Clare Frater Kate Emmings	Target: 18-Jun-2019	Completed

25-Sep-2018

	Activity	Responsibility	Dates	Status
1	Staff to issue an Opportunity Fund for the purchase of Salish View on Lasqueti Island up to $4,500, amount dependent on matching funds received.	Kate Emmings	Target: 29-Mar-2019	Completed

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

Follow Up Action Report

Trust Conservancy Board

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;	Crystal Oberg	Target: 01-Oct-2019	In Progress
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

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

Follow Up Action Report

Trust Conservancy Board

27-Nov-2018

Activity	Responsibility	Dates	Status
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
5 Staff to coordinate signing of Salish View agreements.	Kate Emmings Kate-Louise Stamford	Target: 06-Jun-2019	Completed

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

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

Follow Up Action Report

Trust Conservancy Board

21-May-2019

Activity	Responsibility	Dates	Status
1 Staff to develop a specific draft reconciliation declaration and action plan for the Islands Trust Conservancy.	Kate Emmings Lisa Wilcox	Target: 31-Dec-2019	Completed
2 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.	Kate Emmings Wayne Bourque	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
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

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

Follow Up Action Report

Trust Conservancy Board

16-Jul-2019

Activity	Responsibility	Dates	Status
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	In Progress

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
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

ISLANDS TRUST CONSERVANCY

Print Date: September 12, 2019

Follow Up Action Report

Trust Conservancy Board

07-Aug-2019

Activity	Responsibility	Dates	Status
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

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	ITC Board	**For the Meeting of:**	October 1, 2019
From:	Staff	**Date Prepared:**	September 22, 2019

SUBJECT: Integration of ITC Reconciliation Action Plan into Islands Trust Reconciliation Action Plan

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RECOMMENDATION: 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."

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.

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.

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1 **PURPOSE:** To integrate Islands Trust Conservancy (ITC) reconciliation actions into actions planned for the whole of the Islands Trust.

BACKGROUND: The Islands Trust Council adopted a reconciliation declaration in March 2019 and a Reconciliation Action Plan (RAP) in June 2019. The actions currently noted in the Trust Council RAP are not intended to direct the work of the ITC although ITC staff and board members will be included in education and training initiatives.

At its May 2019 meeting, the ITC Board considered a briefing from staff requesting direction regarding reconciliation actions. The ITC Board passed the following resolution:

ITC-2019-018
It was MOVED and SECONDED, that the Islands Trust Conservancy Board direct staff to develop a specific draft reconciliation declaration and action plan for the Islands Trust Conservancy.

At its July 2019 meeting, the ITC Board considered optional language for a reconciliation declaration and passed the following resolution:

ITC-2019-021
It was MOVED and SECONDED, that the Islands Trust Conservancy Board adopt a reconciliation declaration as follows:

The Islands Trust Conservancy acknowledges that the lands and waters that encompass the Salish Sea have been home to Indigenous Peoples since time immemorial. We recognize that we are all intertwined in the ecosystems that are the lands, waters, culture, and ecology that embody this place.

The Islands Trust Conservancy will strive to create opportunities for knowledge sharing, understanding and collaboration as people come together to preserve and protect the special nature of the islands within the Salish Sea.

The Islands Trust Conservancy is committed to the protection and preservation of this place through processes that respect and honour reconciliation and mutually respectful relationships with Coast Salish Indigenous Peoples. We express our recognition for the past, present, and future stewardship and knowledge that has been shared by Indigenous Peoples and are humbled and grateful.

Following the July ITC Board meeting, staff began work on an ITC Reconciliation Action Plan. During the development of the plan, it became apparent to staff that a better approach might be to incorporate ITC reconciliation actions into Trust Council's RAP as many of the required actions are overlapping. In considering the incorporation of ITC actions into the Trust Council RAP, staff have determined that the most effective approach is to allow Trust Council to carry out the initial stages of its RAP and use the 2020 ITC/Executive Committee Liaison meeting as a venue to discuss integration of the ITC into the Trust Council RAP. In the interim, the ITC Board can use its Reconciliation Declaration and the goals and objectives of the Regional Conservation Plan to guide its reconciliation work and approve participation of ITC staff and board in training and development opportunities offered through the Trust Council Reconciliation Action Plan. The Islands Trust Conservancy's Regional Conservation Plan includes the following goal and objectives:

GOAL 2: Strengthen relationships with First Nations to identify and collaborate of shared conservation goals.

Objectives:

1) Amend or redraft policies, procedures, plans, document templates and reports to include acknowledgement and consideration of First Nations
2) Include First Nations place names and/or Traditional Ecological Knowledge (TEK) on property signage where appropriate
3) Integrate Traditional Ecological Knowledge (TEK) into existing programs as appropriate
4) In consultation with the Islands Trust, source funds and determine mechanisms to support First Nations collaboration (financial and capacity)
5) Continue to share information and engage with new conservation projects in partnership with First Nations
6) Research options for protection of cultural sites and culturally important species

2 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: Board and staff will continue to make reconciliation with First Nations a priority with interim guidance provided by the Regional Conservation Plan and internal staff resources (e.g. the Senior Intergovernmental Policy Advisor). Staff and board members will participate in training and development offered through the Trust Council Reconciliation Action Plan. Further work on a RAP will be considered prior to the ITC Board/Executive Committee Liaison Meeting in 2020.

FINANCIAL: None.

POLICY: None, although the current Regional Conservation Plan does provide direction to staff to amend and redraft policies, procedures, plans, document templates and reports to include acknowledgement and consideration of First Nations.

IMPLEMENTATION/COMMUNICATIONS: Staff will communicate the Board's decision to Trust Council and local trust committees via regular ITC reports. Staff and board members will

participate in training and development offered through the Trust Council Reconciliation Action Plan.

FIRST NATIONS: Staff and ITC Board will continue to work towards reconciliation, guided by the ITC Reconciliation Declaration and the Regional Conservation Plan.

CLIMATE CHANGE: None.

OTHER: The ITC Board Chair has communicated the ITC Reconciliation Declaration to First Nations of the Islands Trust Area by letter.

3 RELEVANT POLICY(S):

Trust Council Policy 6.1.1: First Nations Engagement Principles
Islands Trust Reconciliation Action Plan 2019-2022
Islands Trust Reconciliation Declaration
Islands Trust Conservancy Reconciliation Declaration
2018-2027 Regional Conservation Plan

4 ATTACHMENT(S):

May 21, 2019 – Islands Trust Briefing: Reconciliation Action Plan
July 16, 2019 – Request for Decision: Islands Trust Conservancy Reconciliation Declaration

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RESPONSE OPTIONS

Recommendation: 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."

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.

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.

Alternative: That the Islands Trust Conservancy Board affirm its direction to staff to continue to draft an ITC Reconciliation Action Plan.

Prepared By: Kate Emmings, A/ITC Manager

Reviewed By/Date: Lisa Wilcox, Senior Intergovernmental Policy Analyst / September 24, 2019
Clare Frater, Director, Trust Area Services / September 24, 2019

BRIEFING

To:	Islands Trust Conservancy	**For the Meeting of:**	May 21, 2019
From:	**Lisa Wilcox, Senior Intergovernmental Policy Advisor**	**Date Prepared:**	May 9, 2019
SUBJECT:	**Reconciliation Action Plan**		

PURPOSE:

To seek feedback on the draft Islands Trust Reconciliation Action Plan (RAPlan) prior to it being presented to Trust Council for adoption.

BACKGROUND:

On March 14, 2019, Trust Council unanimously passed the Reconciliation Declaration that outlined the commitment to reconciliation that Trust Council would be undertaking into the future. This historic declaration acknowledged the presence of Indigenous peoples within the Islands Trust Area since time immemorial; committed to the processes and policies of reconciliation; and set the stage for the Islands Trust to strive to reach those goals. The declaration provides a narrative document that underpins the efforts and dialogue for reconciliation into the future, and helps define the intent to support the work that will be undertaken at all levels of the organization, community, and with other agencies toward the work of reconciliation.

In order to reach these goals, the next step is to provide a clear, comprehensive, and measurable path that supports the organization as a whole. A Reconciliation Action Plan provides this outline of how to move forward in a good way. A RAPlan allows objectives to be measured against the principles, calls to action, and articles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Truth and Reconciliation Calls to Action (TRC), and the Draft Principles that Guide the Province of British Columbia Relationship with Indigenous Peoples (Draft Principles). Without a guiding process outlined in a RAPlan an organization can be subject to "best guesses" versus "best practices".

On May 8, Executive Committee reviewed the draft plan and passed the following resolution:

> ***That the Executive Committee endorse the draft Islands Trust Reconciliation Action Plan and refer the plan to Trust Programs Committee, Local Planning Committee and Islands Trust Conservancy Board for review and comment.***

The attached RAPlan is a four-year plan, with specific education and training objectives for the first two years. It is intended to create a foundation for the reconciliation work that staff and trustees will undertake into the future, and provides a framework for implementing reconciliation for the organization as a whole. It is key that staff and trustees strengthen and develop the skills needed to feel confident and supported while initiating and maintaining respectful relationships with First Nations communities. The RAPlan is intended to ensure that Islands Trust's efforts to undertake intergovernmental cooperation are founded in best practices and cultural sensitivity and that improvements are enshrined in policies and procedures. Adhering to best practices when working

collaboratively towards respective community goals with First Nations and the Indigenous community is fundamental to reconciliation and successful outcomes.

The plan's goal is to ensure that all staff and the organization as a whole have a level of competency and cultural safety sufficient to understand elements of reconciliation, Indigenous rights and title, Indigenous law and protocol, and historically oppressive legislation, policies, and processes that lead to the necessity of the Truth and Reconciliation Commission work. As a government entity, Islands Trust can play a leadership role in providing guidance and demonstrate best practices and principles as part of Canadian society's efforts to reach for meaningful reconciliation and recognition.

ATTACHMENT(S):

1. **Draft Reconciliation Action Plan**

FOLLOW-UP: Staff will incorporate edits as requested and forward the draft plan to Executive Committee for review prior to including it in the Trust Council agenda package.

Prepared By: **Lisa Wilcox, Senior Intergovernmental Policy Advisor**

Reviewed By/Date: **Clare Frater, Director, Trust Area Services/May 9, 2019**

REQUEST FOR DECISION

To:	Islands Trust Conservancy Board	**For the Meeting of:**	July 16, 2019
From:	**Lisa Wilcox,** Kwakwemtenaat, Senior Intergovernmental Policy Advisor	**Date Prepared:**	July 8, 2019

SUBJECT: **Islands Trust Conservancy Reconciliation Declaration**

RECOMMENDATION:

1) **That Islands Trust Conservancy Board adopt a reconciliation declaration as follows:**

   [insert chosen language or edited statement]

2) **That the Islands Trust Conservancy Board request that staff write to First Nations in the Islands Trust Area to provide Islands Trust Conservancy Reconciliation Declaration to those First Nations**.

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1 PURPOSE: To provide Islands Trust Conservancy with the opportunity to make a declaration regarding Reconciliation.

2 BACKGROUND: The Islands Trust Conservancy's Regional Conservation Plan includes the following goal and objectives:

GOAL 2: Strengthen relationships with First Nations to identify and collaborate of shared conservation goals.

Objectives:

1) *Amend or redraft policies, procedures, plans, document templates and reports to include acknowledgement and consideration of First Nations*
2) *Include First Nations place names and/or Traditional Ecological Knowledge (TEK) on property signage where appropriate*
3) *Integrate Traditional Ecological Knowledge (TEK) into existing programs as appropriate*
4) *In consultation with the Islands Trust, source funds and determine mechanisms to support First Nations collaboration (financial and capacity)*
5) *Continue to share information and engage with new conservation projects in partnership with First Nations*
6) *Research options for protection of cultural sites and culturally important species*

The Islands Trust Conservancy at this time has made no definitive statement or intention regarding reconciliation. Many other organizations and agencies throughout Canada have made statements

or expressed their intention regarding reconciliation and their continued relationship with First Nations. Given that the Islands Trust Conservancy works within Coast Salish territory and wants to ensure that processes and policies under which it works align with the United Nations Declaration on the Rights of Indigenous Peoples, and with the Truth and Reconciliation Commission Calls to Action, at its May 2019 meeting, the ITC Board passed the following resolution:

ITC-2019-018
It was MOVED and SECONDED,
that the Islands Trust Conservancy Board direct staff to develop a specific draft reconciliation declaration and action plan for the Islands Trust Conservancy.

The proposed declarative statement provides a narrative for the Islands Trust Conservancy with a clear intent regarding Reconciliation. The Declaration is a concise message that functions as a mandate or vision statement. A Declaration underpins the work going forward and provides those using it with a blueprint for successful and mutually beneficial dialogue into the future. (See Appendix A for examples of Declarations). The intent of a declaration is to provide clear messaging to guide reconciliation and relationship building with First Nations and communities in the Islands Trust Conservancy Area.

The purpose of a declaration also aligns carefully with key documents such as the Truth and Reconciliation Commission Calls to Action, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the BC Draft Principles and Islands Trust Reconciliation Declaration.

The declaration is an exploration that sorts through multiple ways of adopting a set of ideals to create continuity of purpose, it can become a foundation piece to build and grow with as a reconciliation framework or action plan grows and develops over time.

Staff have drafted two options for ITC Board review and consideration as follows:

Option 1:

The Islands Trust Conservancy acknowledges that the lands and waters that encompass the Salish Sea have been home to Indigenous Peoples since time immemorial. We recognize that we are all intertwined in the ecosystems that are the lands, waters, culture, and ecology that embody this place.

The Islands Trust Conservancy is committed to the protection and preservation of this place through processes that respect and honour reconciliation and mutually respectful relationships with Coast Salish Indigenous Peoples. We express our recognition for the past, present, and future stewardship and knowledge that has been shared by Indigenous Peoples and are humbled and grateful.

Option 2:

The Islands Trust Conservancy acknowledges that the lands and waters that encompass the Islands Trust Conservancy Area have been home to Indigenous peoples since time immemorial and honours the rich history, stewardship, and cultural heritage that embody this place we all call home.

The Islands Trust Conservancy is committed to establishing and maintaining mutually respectful relationships between Indigenous and non-Indigenous peoples. Islands Trust Conservancy states a commitment to Reconciliation with the understanding that this commitment is a long-term relationship-building and healing process.

The Islands Trust Conservancy will strive to create opportunities for knowledge-sharing and understanding as people come together to preserve and protect the special nature of the islands within the Salish Sea.

3 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: The declaration will provide an organizational narrative that people can draw on in many situations. It allows for a clear narrative for the organization to build on, and allows the organization to present this message to other government agencies, organizations, or advocates to show the commitment and alignment with work being done to uphold the principles of reconciliation.

FINANCIAL: None.

POLICY: The Declaration provides an ability for policy dialogue and policy advancement in areas that may not be familiar to some, and creates an opportunity to develop policy around reconciliation. It is a first step process and provides a framework for developing a Reconciliation Action Plan which will likely inform policy revisions.

IMPLEMENTATION/COMMUNICATIONS: Staff will draft a letter for the Board to First Nations in the Islands Trust Area about the declaration and will send the declaration to other affiliated or interested organizations. The declaration will also be provided to all staff with information about how a declaration such as this can support reconciliation.

FIRST NATIONS: The declaration is expected to advance relationship building with First Nations.

OTHER: Upon approval of the Reconciliation Declaration, staff will begin work on the Reconciliation Action Plan identified in the May 2019 resolution.

4 RELEVANT POLICY(S):

Regional Conservation Plan (2018-2027), Goal 2

Key documents to guide the Islands Trust journey of reconciliation with local First Nations include:

- Truth and Reconciliation Commission (TRC) Calls to Action
  https://nctr.ca/assets/reports/Calls_to_Action_English2.pdf
- United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP);
  https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- Draft Principles that Guide the Province of BC's Relationship with Indigenous Peoples;
  https://www2.gov.bc.ca/assets/gov/careers/about-the-bc-public-service/diversity-inclusion-respect/draft_principles.pdf
- Islands Trust First Nations Engagement Principles Policy:
  http://www.islandstrust.bc.ca/media/342128/firstnationsengagementprinciples.pdf

5 ATTACHMENT(S): Examples of Declarative Statements

RESPONSE OPTIONS

Recommendation:

1) **That Islands Trust Conservancy Board adopt a reconciliation declaration as follows:**

   [insert chosen language or edited statement]

2) **That the Islands Trust Conservancy Board request that staff write to First Nations in the Islands Trust Area to provide Islands Trust Conservancy Reconciliation Declaration to those First Nations**.

Alternative:

1. Request further information
2. Amend the draft declaration
3. Do not pass the proposed declaration

Prepared By: **Lisa Wilcox, Senior Intergovernmental Policy Advisor**

Reviewed By/Date: **Kate Emmings, Manager, Islands Trust Conservancy, July 9, 2019**

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	Islands Trust Conservancy	**For the Meeting of:**	October 1, 2019
From:	Jemma Green	**Date Prepared:**	September 18, 2019

SUBJECT: Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019

RECOMMENDATION: That the Islands Trust Conservancy accept the "Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019."

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1 **PURPOSE:** To review the Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report for 2019.

2 BACKGROUND:

Islands Trust Conservancy (ITC) nature reserves and NAPTEP covenanted areas are monitored annually to assess the character and key features of the sites, evaluate the effectiveness of the management program, identify any new issues that need to be addressed by the ITC and/or the covenant holders, and identify and respond to any breaches to the terms of the conservation covenant. The Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019 provides the monitoring results for 26 of 29 ITC-owned nature reserves and 25 ITC NAPTEP covenants.

This year, for the first time, nature reserve and NAPTEP covenant monitoring was conducted partly in-house by ITC staff and partly by ITC's long-time monitoring contractor, Chris Ferris (with assistance from her partner, Doug Hopwood). The majority of nature reserves (17) were visited by the monitoring contractors independently, four were visited by the monitoring contractors with ITC staff, and four were visited by ITC staff independently. Horton Bayviary Nature Reserve on Mayne Island was monitored by one of the covenant holders under a service contract. An additional service contract for a covenant holder to monitor Trincomali Nature Sanctuary on Galiano Island has not yet been completed out of respect for the peregrine falcon nesting season. Vanilla Leaf Land Nature Reserve on Galiano Island will be monitored later this year by ITC staff. (The new Salish View Nature Reserve, ITC's 29th nature reserve, was acquired in August and will be monitored for the first time in 2020.) This division of labour for nature reserve monitoring was intended to reduce the work load of the monitoring contractors as they transitioned into retirement.

The majority of NAPTEP covenants (16) were monitored by ITC staff independently. Five NAPTEP covenants were monitored by the monitoring contractors independently and four NAPTEP covenants were visited by the monitoring contractors and ITC staff together. This approach was intended to support the transition to in-house monitoring of all NAPTEP covenants by providing opportunities for the monitoring contractors to train ITC staff and orient them to the more complex covenant lands.

The covenant monitors (contractors and ITC staff) were responsible for organizing and conducting site visits, filling out the site monitoring form, following established monitoring route maps, taking photos at monitoring stations, documenting major concerns and/or cases of

trespass and/or breaches, and providing a summary report with recommendations. The monitoring report identifies any breaches, cases of trespass, or other major issues that require immediate attention. The covenant monitors have stated in the report that "no significant issues were identified" when their assessment is that the landowner is in compliance with the terms of the covenant. For nature reserves, a general assessment has been made regarding achievement of management objectives and public safety issues.

Issues identified in this report:

1. **Fairy Fen Nature Reserve, Bowen Island**—A sign has been posted on a tree just outside the Reserve, indicating that Bowen Trail Riders Association (BTRA) is proposing to develop a "Multi-use Trail." The sign is on Crown Land, 5-10 m outside the Reserve, adjacent to a rough trail that connects with a well-used trail that enters the Reserve nearby. This raises a concern that the proposed trail, if developed, could lead to an increase in mountain bike traffic in the Reserve. It is recommended that ITC staff contact BTRA and/or BC Crown Lands to learn more about the proposed trail and to ensure that protection of the Reserve is considered in any decision about trail development.

2. **Singing Woods Nature Reserve, Bowen Island**—There is still a patch of burdock coming up in the restoration area at the foot of the steep logging road, as well as many small English ivy plants. It is recommended that ITC plant 8 to 12 cedar trees in this area to help stabilize the soil, trap sediments coming down the old logging road, and reduce the vigour of invasive non-native plans through shading. It will be necessary to manually control the ivy.

3. **Mount Artaban Nature Reserve, Gambier Island**—There are four areas where the hiking trail crosses short sections of steep rock that may be slippery when wet. It would be possible to avoid these areas with minor re-routing of the trail. It is recommended that ITC staff work with Gambier Island Conservancy to clear some fallen logs from the trail and re-route the trail around these four steep, rocky areas. Some work on trail markers may also be required.

4. **Garry Oaks NAPTEP Covenant, North Pender Island**—Scotch broom is coming up throughout the covenant in clearings, some plants with flowers and/or seeds at the time of the visit. This broom needs managing, particularly along the southern boundary. It is recommended that ITC staff assist the landholders with active broom control in this sensitive Species at Risk habitat.

5. **King Lot 12 (Oscar's Landing) NAPTEP Covenant, North Pender Island**—Neighbours to the south continue to dump organic debris (lawn trimmings, branches, etc.) inside the covenant area, extending about 1.5 m into the property. These neighbours were not contacted last year to remedy the trespass, as recommended, but they will be contacted this year to advise them that dumping is not allowed in the covenant area. There are two small (~2x6 m) patches of compacted bare ground at the point, with no other signs of trespass to indicate what caused the disturbance; it is possible that these were caused by unauthorized camping. Flowering broom plants are present along the south shore and should be removed next spring.

6. **King Lot 16 NAPTEP Covenant, North Pender Island**—There are many flowering broom plants throughout the covenant, which should be managed as soon as possible.

7. **King Lot A NAPTEP Covenant, North Pender Island**—Scotch broom, foxglove, and spurge-laurel are scattered throughout and Himalayan blackberry is spreading into the covenant area from the road edge. The broom and blackberry should receive management attention while they are relatively easy to control.

8. **Steil's Woods NAPTEP Covenant, North Pender Island**—The Gardom Pond water level is being lowered by CRD engineers through the decommissioning of the dam, and this will permanently or seasonally impact the part of the covenant area that has historically been under water. ITC staff will monitor the shoreline for impacts next year and work with CRD staff to ensure that the disturbed area is revegetated with native species.

9. **Wallace Point NAPTEP Covenant, North Pender Island**—There are two large patches of broom at the base of Wallace Point, a few thistle plants scattered throughout, and two large patches of *Hypericum calycinum* (Aaron's beard/creeping St. John's wort) growing at the edge of the covenant boundary (one just below the driveway and another behind the house). These invasions threaten the diversity of the native Garry oak meadow communities on the property. The landholder is supportive of invasive species management by ITC staff and/or contractors.

10. **Woodwinds NAPTEP Covenant, North Pender Island**—Scotch broom, Himalayan blackberry, and periwinkle are tenacious invasive species that are spreading into the covenant area from the exclusion area. Spurge-laurel was also observed scattered throughout the forest. These plants should be removed while still manageable.

11. **Medicine Beach (E,HO,) Nature Sanctuary, North Pender Island**—Members of the public repeatedly move the large driftwood logs out of the way where they provide a natural barrier between the parking area and the beach, presumably to allow boats to be driven down to the water. Members of the public require a permit from the Ministry of Transportation and Infrastructure to use Schooner Way to access the beach. PICA has posted a sign to discourage unauthorized access in the short term. ITC staff should discuss more permanent options with MOTI, such as a locking gate.

    A sailboat beached in spring 2018 remained as of the time of the monitoring visit, awaiting approval from Transport Canada for removal by the Dead Boat Society. This boat was the target of arson in late June; fortunately, the fire did not spread beyond the boat. The beached boat was successfully removed in August by the Dead Boat Society and some scorched driftwood from the fire is the only trace left behind.

    There are some safety concerns. Syringes were recently observed on the main beach and PICA is trying to encourage regular patrols by local police to address this type of activity. The trail to "Shell Beach" is very steep and should be closed to protect public safety. PICA, in consultation with ITC staff, will undertake signage to discourage use.

12. **Owl's Call NAPTEP Covenant, Salt Spring Island**—Trespass in the form of moderate trail use by neighbours to the southeast and particularly the northwest continues. Some of these trails lead down and very close to the stream, with potential threats to water quality due to erosion (softening and slumping of the soil is evident). The landholder will continue to monitor, covering the trails with woody debris and placing "No trespassing" signs as needed. There is broom and thistle in the meadow in the east of the covenant area and reed canary grass in the stream near the eastern boundary. The landholder has agreed to mow the meadow before the thistle goes to seed and may attempt to control reed canary grass. It is recommended that ITC support the landholder in communicating the sensitive nature of the riparian area to neighbours using and establishing the unauthorized trails through the covenant area.

13. **Walter Bay NAPTEP Covenant, Salt Spring Island**—There are many mature and young English holly plants throughout the forest, English ivy is extensive in the riparian area, and

reed canary grass is establishing near the mouth of the creek. These invasive species are tenacious and require immediate attention if they are to become manageable. It is recommended that ITC staff work with the landholder to control these invasions as they are suppressing native vegetation.

3 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: This monitoring report helps set priorities for management activities and identifies work that needs to be done to resolve breaches.

FINANCIAL: The property management budget is allocated each year depending on available funds and the work that is most needed, balanced between all ITC protected areas.

POLICY: None

IMPLEMENTATION/COMMUNICATIONS: Staff will continue to address the recommendations in the report as part of the regular work plan.

FIRST NATIONS: Staff will review the archaeological sites database before undertaking any trail building restoration that requires digging and will contact First Nations in areas where there may be impacts to archaeological sites.

CLIMATE CHANGE: The property monitoring report provides staff with the most current information on the state of the land, which helps to contextualize information about climate change, allows for site-specific predictions of changes to the land, and supports development of mitigation and adaptation strategies.

OTHER: None

4 **RELEVANT POLICY(S):**
ITC 2.3 Acquisition and Management of Land
ITC 2.4 Conservation Covenants
ITC 2.8 Covenant Enforcement Policy

5 **ATTACHMENT(S):** Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019

RESPONSE OPTIONS

Recommendation:
That the Islands Trust Conservancy accept the "Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019."

Alternative: None

Prepared By: Jemma Green, Covenant Management and Outreach Specialist

Reviewed By/Date: Kate Emmings, A/ITC Manager / September 18, 2019

Islands Trust Conservancy Nature Reserve and NAPTEP Monitoring Report 2019



Prepared By:
Chris Ferris and Doug Hopwood for Islands Trust Conservancy (Part I)
Jemma Green, Islands Trust Conservancy (Part II)

Executive Summary

Islands Trust Conservancy (ITC) is responsible for annually monitoring the 25 NAPTEP covenants across the Islands Trust Area on which it holds an interest. This ensures that the ecological values on which the covenant is based continue to be protected and that any breaches of the covenant agreement are remedied as soon as possible. Compliance monitoring involves contacting the landholder to advise of and coordinate the monitoring visit; walking the land along established monitoring routes, including along accessible property boundaries and any trails; filling out a standard site monitoring form that takes into account the standard land use restrictions under a conservation covenant; taking photos at monitoring stations; documenting major concerns and/or breaches; and providing a summary report with recommendations, which can be followed up on by ITC staff and co-covenant holders as needed. The 29 ITC nature reserves are also monitored each year to ensure that there are no public safety concerns and that the objectives set out in each nature reserve's management plan are being met. This document contains the summary reports from 2019 monitoring activities on NAPTEP covenants held by ITC and ITC nature reserves; note that non-NAPTEP conservation covenants are addressed in a separate report.

In 2019, Islands Trust Conservancy began the process of bringing NAPTEP covenant monitoring activities in-house. Previously, this work has been carried out by individuals under service contract with ITC. For the past two decades, ITC has benefitted from the service of Chris Ferris and her partner Doug Hopwood, who together monitored the ever-growing number of ITC conservation covenants, NAPTEP covenants, and nature reserves. This year, these long-time monitoring contractors transitioned into retirement by monitoring a portion of ITC's conservation lands while providing training, guidance, and property orientations to ITC staff, who were then able to take on a portion of the monitoring activities independently. Part I reports on the monitoring work completed by Chris Ferris and Doug Hopwood. Part II reports on the monitoring work completed by the ITC's Covenant Management and Outreach Specialist. The report on Horton Bayviary Nature Reserve was prepared by the Mayne Island Conservancy, who monitored the Reserve under a service contract with ITC.

ITC is grateful for the years of excellent service provided by Chris Ferris and Doug Hopwood. We wish them happiness in their retirement and many opportunities to enjoy the natural beauty of the Gulf Islands at their leisure.

Part I – Conservation Covenants Monitored by Chris Ferris and Doug Hopwood for Islands Trust Conservancy



Tiger lily, Singing Woods Nature Reserve, Bowen Island

Islands Trust Conservancy Annual Monitoring Report
Nature Reserves and NAPTEP Covenants
Chris Ferris and Doug Hopwood
July 2019

INTRODUCTION

In 2019 some of the Islands Trust Conservancy (ITC) covenant and nature reserve monitoring was done by Chris Ferris and Doug Hopwood (contractors), and some by ITC staff member Jemma Green. Some properties were visited by the contractor alone, some by ITC staff, and some jointly by the contractor and staff as part of a transition to an ITC in-house monitoring program. This report only covers properties done by the contractors alone or with ITC staff.

Observations and comments arising from each visit are reported here. Recommendations have been made in some cases where we think there is a significant issue requiring action by ITC staff, unless the issue is already being addressed. For covenant areas, where we have stated that "no significant issues were identified", this means that in our assessment the landowner is in compliance with the terms of the covenant registered on the land. On ITC-owned properties a general assessment has been made regarding achievement of management objectives and public safety issues.

BOWEN ISLAND

David Otter Nature Reserve was visited on May 24, 2019 by Doug Hopwood, accompanied by Jemma Green and Everhard van Lidth de Jeude. The management objectives for the reserve are generally being met and no public safety issues were identified.

Fairy Fen Nature Reserve was visited on May 26, 2019 by Doug Hopwood, accompanied by Owen Plowman (Bowen Island Conservancy). A sign has been posted on a tree just outside the NR, indicating that Bowen Trail Riders Association (BTRA) is proposing to develop a "Multi-use Trail". The sign is on Crown Land, outside the NR by perhaps five or ten metres, adjacent to a rough trail that connects with a well-used trail that enters the NR nearby. This raises a concern that the proposed trail, if developed, would probably lead to an increase in mountain bike traffic in the NR.

Recommendation: That ITC staff contact BTRA and/or BC Crown Lands to learn more about the proposed trail and to ensure that protection of the NR is considered in any decision about trail development.

The management objectives for the reserve are generally being met and no public safety issues were identified.

Singing Woods Nature Reserve was visited on May 26, 2019 by Doug Hopwood, accompanied by Owen Plowman (Bowen Island Conservancy). There is still a patch of Burdock coming up in the restoration area at the foot of the steep logging road, as well as many small plants of English ivy.

Recommendation: Plant 8 to 12 cedar trees in this area to help stabilize the soil, trap sediments coming down the old logging road, and reduce the vigour of invasive non-native plans by shading. It will be necessary to manually control the ivy.

The management objectives for the reserve are generally being met and no public safety issues were identified.

DENMAN ISLAND

Inner Island Nature Reserve was visited on May 1, 2019 by Chris Ferris, accompanied by J. Balke, Denman Conservancy Association (DCA). There were no public safety issues identified in the reserve and the objectives of the management plan are generally being met.

Lindsay Dickson Nature Reserve was visited on May 1, 2019 by Chris Ferris and J. Thornton of DCA. There were no public safety issues identified in the reserve and the objectives of the management plan are generally being met.

Morrison Marsh Nature Reserve was visited on May 1, 2019 by Doug Hopwood accompanied by Jenny Balke of DCA. There were no public safety issues identified in the reserve and the objectives of the management plan are generally being met.

Valens Brook Nature Reserve was visited on May 1, 2019 by Doug Hopwood accompanied by Jenny Balke (DCA), and Louise Hermanutz and David Innes (neighbours). There were no public safety issues identified in the reserve and the objectives of the management plan are generally being met.

GABRIOLA ISLAND

Bachmann NAPTEP Covenant was visited on April 30, 2019 by Doug Hopwood, accompanied by Jemma Green (ITC), the landholder, and Ann Landry, Rob Brockley, Libby Gunn, Peter Danenhower, Jim Ramsay, and Frank Shoemaker of Gabriola Lands and Trails Trust (GaLTT). There were no significant issues identified in the covenant area.

Burren's Acres Nature Reserve was visited on April 30, 2019 by Chris Ferris accompanied by Margret Taylor (donor) and Lynn Mayes. The management objectives for the reserve are generally being met and no public safety issues were identified.

Coats Millstone Reserve was visited on April 30, 2019 by Doug Hopwood accompanied by Ava Breakwell of the Nanaimo and Area Land Trust (NALT) and Lisa Griffiths of the Gabriola Historical Society. The objectives of the management plan are generally being met. There were no safety issues identified in the reserve other than the existing natural hazards.

Elder Cedar Nature Reserve was visited on April 30, 2019 by Doug Hopwood, accompanied by Jemma Green (ITC), Ava Breakwell (NALT), and Ann Landry, Rob Brockley, Libby Gunn, Peter Danenhower, Jim Ramsay, and Frank Shoemaker (all from GaLTT). The management objectives for the reserve are generally being met. No public safety issues were identified in the reserve.

McRae NAPTEP Covenant was visited on April 30, 2019 by Chris Ferris accompanied by Jemma Green (ITC). There were no significant issues identified in the covenant area.

GAMBIER ISLAND

Brigade Bay Bluffs Nature Reserve was visited on May 26, 2019 by Doug Hopwood, accompanied by Peter Scholefield (Gambier Island Conservancy), Peter Klassen (Brigade Bay owners group) and Peter Snell. The management objectives for the reserve are generally being met and no public safety issues were identified in the reserve.

Long Bay Wetland Nature Reserve was visited on May 26, 2019 by Doug Hopwood, accompanied by Peter Scholefield (Gambier Island Conservancy), Peter Klassen (Brigade Bay owners group) and Peter Snell. The management objectives for the reserve are generally being met and no public safety issues were identified in the reserve.

Mount Artaban Nature Reserve was visited on May 26, 2019 by Doug Hopwood, accompanied by Peter Scholefield (Gambier Island Conservancy) and Peter Klassen (Brigade Bay owners group).

We identified four places where the hiking trail crosses short sections of steep rock that may be slippery when wet. It would be possible to avoid these areas with just minor re-routing of the trail.

Recommendation: Work with Gambier Island Conservancy to clear some fallen logs from the trail and re-route the trail around four steep rocky areas. I think Peter Schofield noted the locations. Some work on trail markers may also be required.

The management objectives for the reserve are generally being met.

HORNBY ISLAND

Myra Powers NAPTEP Covenant was visited on May 1, 2019 by Doug Hopwood accompanied by Jemma Green (ITC), the landowner, and Joanne Wyvil of Conservancy Hornby Island (CHI). There were no significant issues identified in the covenant area.

LASQUETI ISLAND

John Osland Nature Reserve was visited on May 16, 2019 by Doug Hopwood accompanied by Ava Breakwell (NALT) and Wendy Schnieble and Hilary Duinker of Lasqueti Island Nature Conservancy (LINC). The management objectives for the reserve are being met and no public safety issues were identified.

Kwel Nature Sanctuary was visited on May 17, 2019 by Doug Hopwood accompanied by Ava Breakwell (NALT). The management objectives for the reserve are being met and no public safety issues were identified.

Mount Trematon Nature Reserve was visited on May 16, 2019 by Doug Hopwood accompanied by Ava Breakwell (NALT) and Wendy Schnieble and Hilary Duinker (LINC). The management objectives for the reserve are being met and no public safety issues were identified.

SALT SPRING ISLAND

Arthur Lineham NAPTEP Covenant was visited on June 7, 2019 by Doug Hopwood, accompanied by Jemma Green (ITC). There were no significant issues identified in the covenant area.

Cunningham Nature Reserve was visited on June 6, 2019 by Doug Hopwood, accompanied by Jemma Green (ITC). The management objectives for the reserve are being met and no public safety issues were identified.

Frog Haven NAPTEP Covenant was visited on June 6, 2019 by Chris Ferris. The area of trespass has increased slightly. A metal frame from a shelter, with some tarp attached, is now on the covenant area. It likely blew into that area in the wind storm in December 2018.

There were no significant issues identified in the covenant area, although the owners have requested removal of some hazard trees. ITC staff are following up.

Leader NAPTEP Covenant was visited on June 5, 2019 by Chris Ferris. There were no significant issues identified in the covenant area.

Lower Mount Erskine Reserve was visited on June 5, 2019 by Doug Hopwood, accompanied by Jemma Green (ITC). The management objectives for the reserve are being met and no public safety issues were identified.

My Whim NAPTEP Covenant was visited on June 6, 2019 by Chris Ferris, accompanied by Torrey Archer and Karen Iwachow of The Land Conservancy of BC (TLC) and the landholder. There were no significant issues identified in the covenant area.

Old Divide (Appleby) NAPTEP Covenant was visited on June 5, 2019 by Chris Ferris. There were no significant issues identified in the covenant area.

Polden NAPTEP Covenant was visited on June 6, 2019 by Chris Ferris accompanied by the landholder. There were no significant issues identified in the covenant area.

Ruby Alton Nature Reserve was visited on June 5, 2019 by Chris Ferris. The management objectives for the reserve are being met and no public safety issues were identified.

THETIS ISLAND

Fairyslipper Forest Nature Reserve was visited on June 4, 2019 by Doug Hopwood and Chris Ferris, accompanied by Lindsay Curle (Cowichan Community Land Trust) and Ann Eriksson (Thetis Island Nature Conservancy). The management objectives for the reserve are generally being met and no public safety issues were identified in the reserve.

Moore Hill Nature Reserve was visited on June 4, 2019 by Doug Hopwood and Chris Ferris accompanied by Lindsay Curle (Cowichan Community Land Trust). The management objectives for the reserve are generally being met and no public safety issues were identified in the reserve.

SIGNATURES



July 4, 2019

Signature **Date**



July 4, 2019

Signature **Date**

Part II – Conservation Covenants Monitored by Islands Trust Conservancy

Link Island

Swift Family Link Island NAPTEP Covenant was visited on May 27 by Jemma Green (ITC) and Ava Breakwell (Nanaimo and Area Land Trust (NALT)). There is evidence of trespass in the past year: one dead arbutus at the north end has been cut and removed and the remains of a small, shallow fire pit were discovered. Rose campion, thistle spp., tansy ragwort and other invasive herbaceous plants scattered throughout in small numbers are being closely monitored and managed by the landholder and her family. During this first annual monitoring visit nine covenant boundary signs were installed around the island to inform boaters of the conservation value of the island and discourage trespass. No significant issues were identified in the covenant area.

Galiano Island

Barrineau NAPTEP Covenant was visited by Jemma Green (ITC) on September 11. There is a large field of thistle immediately to the southwest of the covenant area and the landholder should be encouraged to mow this field before the flowers go to seed each year, to control their spread along the driveway through the covenant area and into forest clearings. No significant issues were identified in the covenant area.

Westbourne NAPTEP Covenant was visited by Jemma Green (ITC) with Keith Erickson and Adam Huggins (Galiano Conservancy Association) on August 8. No significant issues were identified in the covenant area.

Laughlin Lake Nature Reserve Addition was visited by Jemma Green on September 12. There were no public safety issues identified in the reserve and the objectives of the management plan are generally being met.

Mayne Island

Horton Bayviary Nature Reserve was visited by Michael Dunn (Mayne Island Conservancy) on July 6. Several new leaning trees have been observed since the last monitoring report. All are sloped into the covenant property and do not pose a risk to the adjacent private property. The Bayviary has very little, if any, public use, so the risk to the public is minimal. A large Douglas-fir tree has fallen into the intertidal zone and the nearshore. It is hung up on its base and propped by large branches. As it sits it could be considered a navigation hazard to very nearshore boaters and kayakers; however, it also provides perching habitat for raptors (eagles) and kingfishers. If neighbours express concern, the large overhang could be removed while leaving some of the more stable portions as potential wildlife tree elements.

The new fence alignment revealed that Photopoint #3 is located on the adjacent private property and as such is outside the covenant currently. It is recommended that the location of Station #3 be moved to the covenant side, as near as possible to the existing bearing.

North Pender Island

Garry Oaks NAPTEP Covenant was visited by Jemma Green (ITC) on May 30. Scotch broom is coming up throughout the covenant in clearings, some plants with flowers and/or seeds at the time of the visit. This broom needs managing, particularly along the southern boundary. ITC staff should assist the landholders with active broom control in this sensitive SAR habitat. No significant issues were identified in the covenant area.

King Lot 16 NAPTEP Covenant was visited by Jemma Green (ITC) on May 31. There are many flowering broom plants throughout the covenant, which should be managed as soon as possible. No significant issues were identified in the covenant area.

King Lot A NAPTEP Covenant was visited by Jemma Green (ITC) on May 31. Scotch broom, foxglove, and spurge-laurel are scattered throughout and Himalayan blackberry is spreading into the covenant area from the road edge. The broom and blackberry should receive management attention while they are still relatively easy to control. No significant issues were identified in the covenant area.

Nighthawk Hill NAPTEP Covenant was visited by Jemma Green (ITC) on July 18. No significant issues were identified in the covenant area.

Oscar's Landing (King Lot 12) NAPTEP Covenant was visited by Jemma Green (ITC) on May 31. Neighbours to the south continue to dump organic debris (lawn trimmings, branches, etc.) inside the covenant area, extending about 1.5 m into the property. These neighbours were not contacted last year to remedy the breach, as recommended, but they will be contacted this year to and advise them that dumping is not allowed in the covenant area. There are two small (~2x6 m) patches of compacted bare ground at the point, with no other signs of trespass to indicate what caused the disturbance; it is possible that these were caused by unauthorized camping. Flowering broom plants are present along the south shore and should be removed next spring. No significant issues were identified in the covenant area.

Steil's Woods NAPTEP Covenant was visited by Jemma Green (ITC) on July 19. The Gardom Pond water level is being lowered by CRD engineers through the decommissioning of the dam, and this may permanently or seasonally impact the part of the covenant area that has historically been under water. ITC Staff will monitor the shoreline for impacts next year. No significant issues were identified in the covenant area.

Wallace Point NAPTEP Covenant was visited by Jemma Green (ITC) on July 19. There are two large patches of broom at the base of Wallace Point, a few thistle plants scattered throughout, and two large patches of *Hypericum calycinum* (Aaron's beard/creeping St. John's wort) growing at the edge of the covenant boundary (one just below the driveway and another behind the house). These invasions threaten the diversity of the native Garry oak meadow communities on the property. The landholder is supportive of invasive species management by ITC staff and/or contractors. No significant issues were identified in the covenant area.

Woodwinds NAPTEP Covenant was visited by Jemma Green (ITC) on May 31. Scotch broom, Himalayan blackberry, and periwinkle are tenacious invasive species that are spreading into the covenant area from the exclusion area. Spurge-laurel was also observed scattered throughout the forest. These plants should be removed while still manageable. No significant issues were identified in the covenant area.

Medicine Beach (E,HO,) Nature Sanctuary was visited by Jemma Green (ITC) with Graham Boffey (Pender Island Conservancy Association (PICA)) on July 18. Members of the public repeatedly move the large driftwood logs out of the way where they provide a natural barrier between the parking area and the beach, presumably to allow boats to be driven down to the water. Members of the public require a permit from the Ministry of Transportation and Infrastructure to use Schooner Way to access the beach. PICA has posted a sign to discourage unauthorized access in the short term. ITC staff should discuss more permanent options with MOTI, such as a locking gate.

A sailboat beached in spring 2018 remained as of the time of the monitoring visit, awaiting approval from Transport Canada for removal by the Dead Boat Society. This boat was the target of arson in late June; fortunately, the fire did not spread beyond the boat. The beached boat was successfully removed in August by the Dead Boat Society and some scorched driftwood from the fire is the only trace left behind.

There are some safety concerns. Syringes were recently observed on the main beach and PICA is trying to encourage regular patrols by local police to address this type of activity. The trail to "Shell Beach" is very steep and should be closed to protect public safety. PICA, in consultation with ITC staff, will undertake signage to discourage use.

Little D'Arcy Island

Little D'Arcy Island NAPTEP Covenant was visited by Jemma Green (ITC) on May 13. The battery pile near the dock and the backhoe/trailer/temporary shelter on the trail are all within the covenant area and constitute a breach of the covenant. The landholder was asked in writing to remove trash, including batteries, in the 2018 monitoring letter, but there has not yet been written notice of a breach with a timeline of steps that should be taken to remedy the breach to avoid a rent charge. The backhoe and trailer have been sitting on the trail for at least four years and permitted until now with the expectation that the trail would soon be completed and the equipment removed. As there is no indication that the vehicles have been used in several years, they could be considered abandoned. Removal of the temporary structure and vehicles from the covenant area should also be requested. The covenant is in otherwise good condition with diverse, native flora and fauna in good health.

Salt Spring Island

Owl's Call NAPTEP Covenant was visited by Jemma Green (ITC) on July 29. Trespass in the form of moderate trail use by neighbours to the southeast and particularly the northwest continues. Some of these trails lead down and very close to the stream, with potential threats to water quality due to erosion (softening and slumping of the soil is evident). The landholder will continue to monitor, covering the trails with woody debris and placing "No trespassing" signs as needed. There is broom and thistle in the meadow in the east of the covenant area and reed canary grass in the stream near the eastern boundary. The landholder has agreed to mow the meadow before the thistle goes to seed and may attempt to control reed canary grass. It is recommended that ITC support the landholder in communicating the sensitive nature of the riparian area to neighbours using and establishing the unauthorized trails through the covenant area. No significant issues were identified in the covenant area.

Richardson NAPTEP Covenant was visited by Jemma Green (ITC) with the landholder on July 9. No significant issues were identified in the covenant area.

Walter Bay NAPTEP Covenant was visited by Jemma Green (ITC) on July 29. There is a very large, deep, and hazardous brush pile in the southeast corner of the property (within the covenant area) that constitutes a possible wildlife safety hazard and is preventing growth of understorey vegetation. There are many mature and young English holly plants throughout the forest, English ivy is extensive in the riparian area, and reed canary grass is establishing near the mouth of the creek. These invasive species are tenacious and require immediate attention if they are to become manageable. It is recommended that ITC staff work with the landholder to address the brush pile and control invasive species as they are suppressing native vegetation. No significant issues were identified in the covenant area.

Wennanec NAPTEP Covenant was visited by Jemma Green (ITC) on July 31. There are English holly plants throughout the forest and the landholder has agreed to do a sweep every few years to remove larger individuals. No significant issues were identified in the covenant area.

Deep Ridge Nature Reserve was visited by Jemma Green (ITC) on June 4. There were no public safety issues identified in the Reserve and the objectives of the management plan are generally being met.

McFadden Creek Nature Sanctuary was visited by Jemma Green (ITC) on June 4. It is recommended that "nature reserve boundary" signs be placed along the western boundary near the southwest corner to discourage accidental encroachment of land clearing activities by neighbours. There were no public safety issues identified in the Reserve and the objectives of the management plan are generally being met.

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	**Islands Trust Conservancy Board**	**For the Meeting of:**	**October 1, 2019**
From:	**Staff**	**Date Prepared:**	**September 20, 2019**

SUBJECT: Brigade Bay Bluffs Nature Reserve Management Plan, Gambier Island

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RECOMMENDATION: That the Islands Trust Conservancy Board approve the 2019 update of the Brigade Bay Bluffs Nature Reserve Management Plan dated September 18, 2019

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1 **PURPOSE:** To approve the first 10-year revision of the management plan for Brigade Bay Bluffs Nature Reserve.

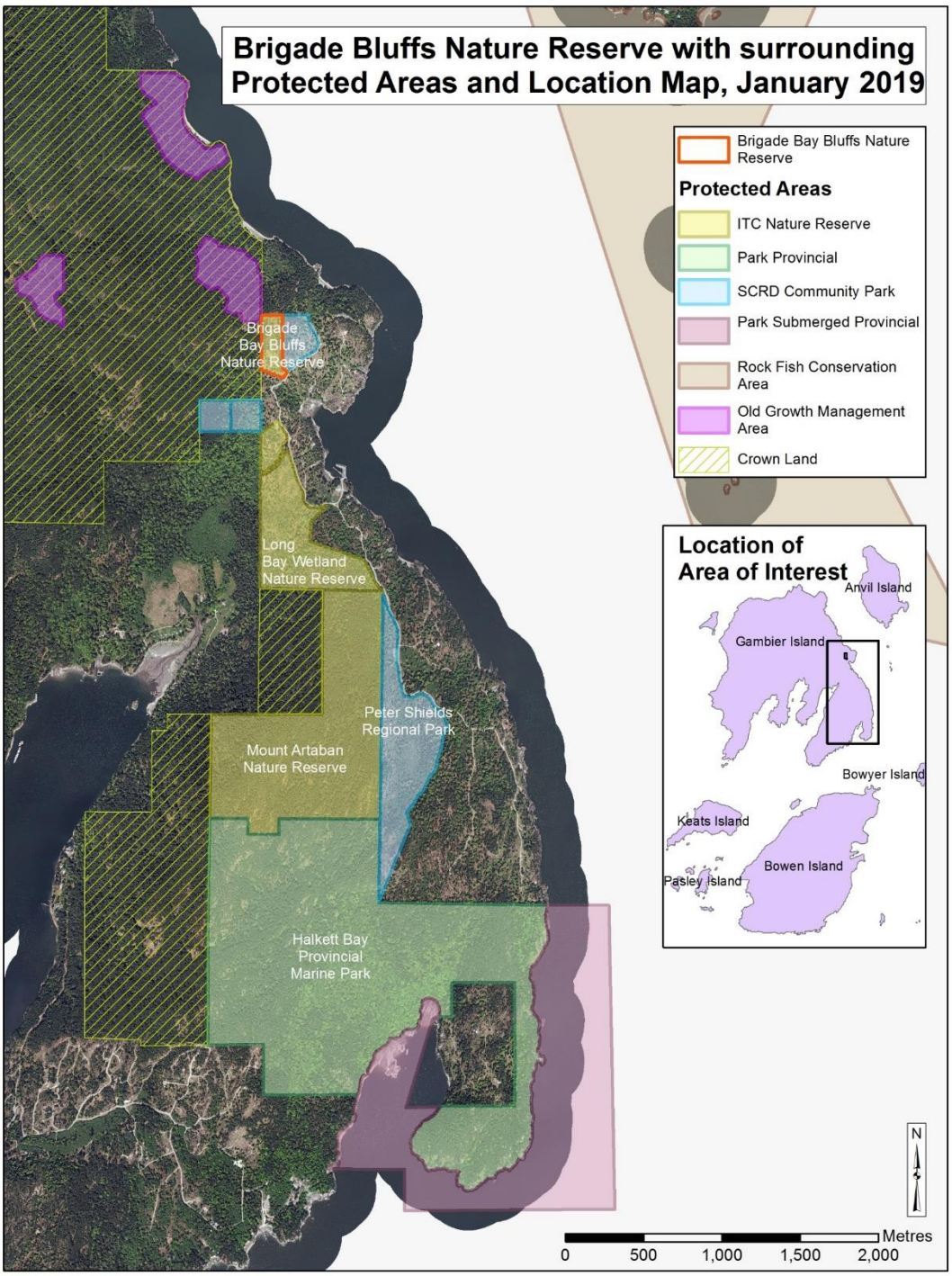
2 **BACKGROUND:**

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. The Board will approve a management plan for its properties 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;
- 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

Brigade Bay Bluffs Nature Reserve protects 5.14 hectares (12.7 acres) of steep forest, rocky outcrops, and fragile mossy bluffs above Brigade Bay on eastern Gambier Island. Along with Long Bay Wetland Nature Reserve, Brigade Bay Bluffs Nature Reserve was established in 2005 when two parcels of land were transferred as part of the Brigade Bay subdivision development. The Reserve is an important part of a large, contiguous natural area within the Coastal Western Hemlock Very Dry Maritime (CWHxm) subzone on Gambier Island.

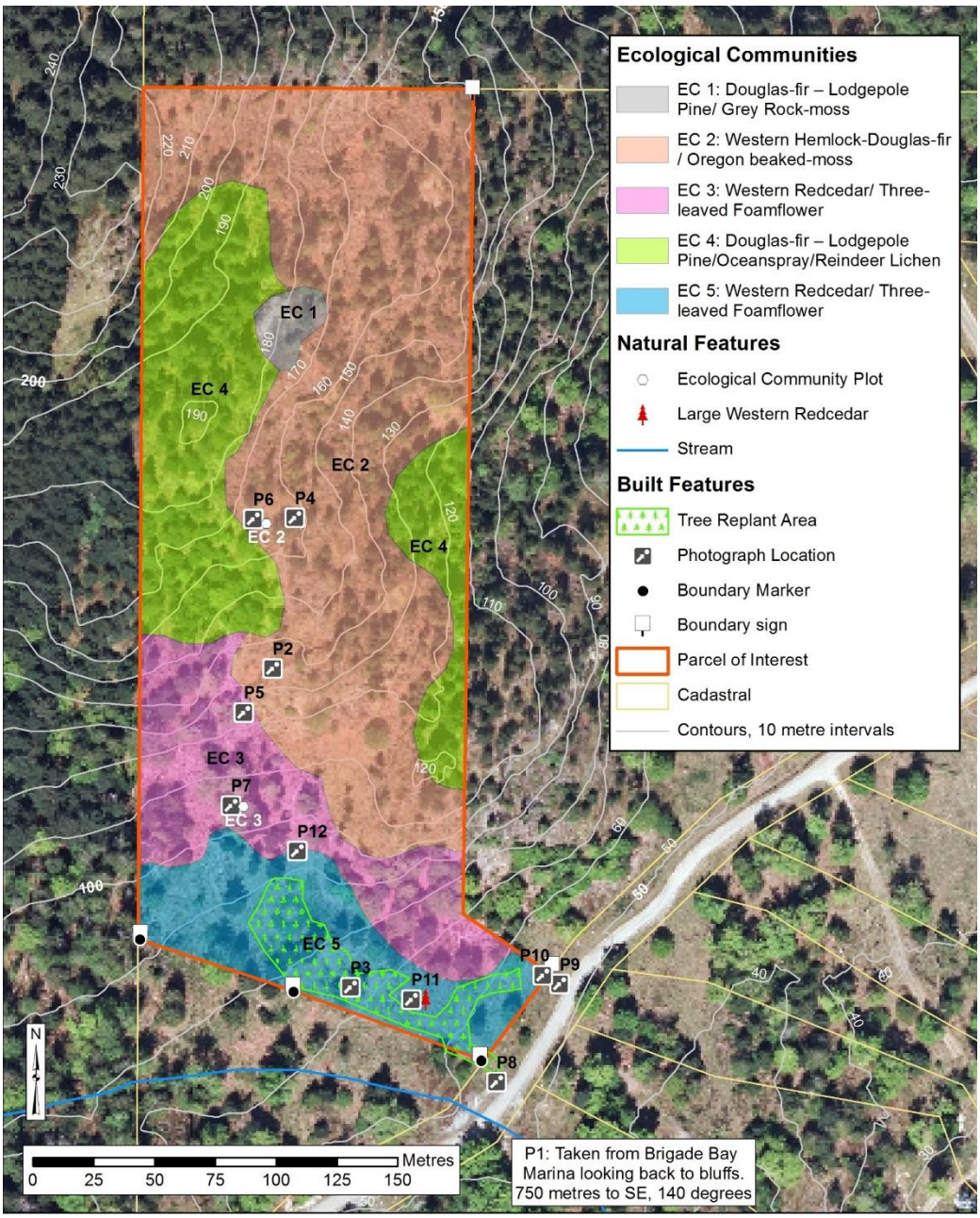
The land was selectively harvested in the past, resulting in a forest of large deciduous species and pole/sapling-sized conifers; however, some large veteran trees (bigleaf maple, western redcedar, Douglas-fir, and western hemlock) remain in areas with steeper terrain. Although the forests are young, they will mature into blue- and red-listed ecological communities. Since acquiring the Reserve, ITC and Gambier Island Conservancy have worked towards restoring the land, including reforestation and seedling protection (from deer browsing) projects.



The open rocky bluffs and outcrops provide excellent habitat for reptiles such as the northern alligator lizard. The Reserve is used by black-tailed deer, and Turkey Vultures likely use the area for basking and may have nest sites in the rocky outcrops. The reserve likely provides habitat for a wide range of birds as well as butterflies.

Table 1 *Ecological communities in Brigade Bay Bluffs Nature Reserve.*

Ecological Community Name		Status		
English	Scientific	Provincial	BC List	Global
Western Hemlock–Douglas-fir/Oregon beaked-moss Very Dry Maritime (CWHxm1/01)	*Tsuga heterophylla–Pseudotsuga menziesii/Eurynchium oreganum*	S2 (2013)	Red	G3G4
Douglas-fir–Lodgepole Pine/Grey Rock-moss Very Dry Maritime (CWHxm1/02)	*Pseudotsuga menziesii–Pinus contorta/Racomitrium canescens*	S2 (2004)	Red	GNR
Douglas-fir–Western Hemlock/Salal Very Dry Maritime (CWHxm1/03)	*Pseudotsuga menziesii–Tsuga heterophylla/Gaultheria shallon*	S2S3 (2013)	Blue	G3G4
Western Redcedar/Sword Fern Very Dry Maritime (CWHxm1/05)	*Thuja plicata/Polystichum munitum*	S2S3 (2009)	Blue	GNR
Western Redcedar/Three-leaved Foamflower Very Dry Maritime (CWHxm1/07)	*Thuja plicata/Tiarella trifoliata*	S2S3 (2013)	Blue	G3



This is the first revision of the management plan since the first plan was written in 2005 (by Cascade Environmental Resource Group Ltd). 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 remove invasive species, continue restoration of areas with slow regeneration, develop a wildfire management plan, and undertake further inventories for species at risk to provide a clearer picture of the ecology of the reserve and guide future management.

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 Brigade Bay Bluffs Nature Reserve are:

- Preserve and protect the representative ecosystems, biological diversity and natural values.
- Restore plant and animal communities and ecological processes where necessary.
- 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.
- Support ongoing inventory, mapping and monitoring to guide management.
- Allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative.
- Remove invasive species throughout the reserve where they compromise natural values.

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. Monitor planted trees for survival and remove cages as necessary.
3. Identify opportunities for cooperative management with First Nations.

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

1. Prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods in consultation with the local fire authorities.
2. Plant and cage native shrubs and trees in areas with poor natural regeneration.
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 off-trail public use 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. Conduct ongoing maintenance of signs.
4. Continue to inform the general public of the natural values of the site and the permitted and prohibited uses through information placed in local publications.
5. 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.

3 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 continuing restoration activities in untreated areas of Ecological Community 5 (blue polygon in map above). Secondary costs will be for removing or controlling invasive species, which have been identified in the plan as threat in most areas of the Reserve. As there are no authorized trails within the Reserve, it is expected to receive low to moderate use by the public. If ecological impacts from hiking are detected, sensitive areas of the Reserve may be closed to public access to allow for recovery, which would require signage and possibly fencing. There is currently minimal signage to be maintained by ITC over the long term.

POLICY: Consistent with policy.

IMPLEMENTATION/COMMUNICATIONS: Staff will provide the final 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: Climate change is predicted to cause upslope migration of tree lines and shifts in ecosystem boundaries. Brigade Bay Bluffs Nature Reserve's elevation range of 60 to 240 m will support the persistence of western hemlock (CWH) forests, which are expected to shift upslope. Increasingly hotter, drier summers are increasing risk of catastrophic wildfire. The management plan proposes the development of a wildfire mitigation and response plan in consultation with local fire authorities. Restoration activities will be challenged by drought; however, if reforestation projects can overcome these challenges, the regenerating forests will contribute to carbon sequestration.

OTHER: None.

4 RELEVANT POLICY(S): ITC 2.3 - Acquisition and Management of Land

5 **ATTACHMENT(S):** Brigade Bay Bluffs Nature Reserve Management Plan

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RESPONSE OPTIONS

Recommendation: That the Islands Trust Conservancy Board approve the 2019 update of the Brigade Bay Bluffs Nature Reserve Management Plan dated September 18.

Alternative: That the Islands Trust Conservancy Board approve the Brigade Bay Bluffs Nature Reserve Management Plan as amended.

Prepared By: Jemma Green, Covenant Management and Outreach Specialist

Reviewed By/Date: Kate Emmings, A/ITC Manager / September 21, 2019

DRAFT

Brigade Bay Bluffs Nature Reserve Management Plan
Gambier Island, BC



PREPARED FOR:

ISLANDS TRUST CONSERVANCY
Protecting Canada's Islands in the Salish Sea

Brigade Bay Bluffs and Long Bay Wetland Nature Reserves
joint management plan prepared: November 30, 2005

REVISED February 2019 by: Carrina Maslovat, R. P. Bio. #1407
and Laura Matthias, Consultant Biologist, Salt Spring Island, BC

APPROVED BY:
Islands Trust Conservancy, Date: ITC-2019-XXX
Gambier Island Conservancy, Date
Sunshine Coast Conservation Association, Date

i. Executive Summary

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.

In January 2005, the Islands Trust Conservancy (then the Islands Trust Fund) protected two parcels of land west of Brigade Bay on eastern Gambier Island. The Brigade Bay Bluffs (5.14 hectares/12.7 acres) and Long Bay Wetland (38 hectares/94 acres) areas were transferred as part of the Brigade Bay subdivision development. Cascade Environmental Resource Group Ltd. prepared the initial joint management plan for the Brigade Bay Bluffs and Long Bay Wetland properties. In 2018, the Management Plans were updated as separate documents for each reserve.

The Brigade Bay Bluffs Nature Reserve (BBNR) is located to the northwest of Brigade Bay. The reserve consists of a steep forested area with rocky bluffs and outcroppings. The elevation ranges from 60 to 240 m. The area has been selectively harvested, resulting in large deciduous species and pole/sapling-sized conifers. Some large veteran trees (bigleaf maple, Douglas-fir, and western hemlock) remain in areas with steeper terrain. Although the forests are young, they will mature into blue- and red-listed ecological communities. Some reforestation and protection of seedlings from deer browsing has been done within the reserve. BBNR is an important part of a large, contiguous natural area within the Coastal Western Hemlock Very Dry Maritime (CWHxm) subzone on Gambier Island.

The management objectives for BBNR are to:

- preserve and protect the natural ecosystems, biological diversity and natural values of the site;
- restore plant and animal communities and ecological process at the site;
- support ongoing inventory, mapping and monitoring to guide management;
- manage invasive plant species throughout the reserve; and
- allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative.

Key management recommendations are to remove invasive species, continue restoration of areas with slow regeneration, and develop a wildfire management plan. Further 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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iii. Acknowledgements

Table 1. The primary author and other contributors to the management plan, and their contributions, affiliations, and professional qualifications.

Name	Position/Affiliation	Professional Accreditation or subject expertise	Contribution
Carrina Maslovat	Botanist/Contractor	R.P. Bio.	Primary author, field data collection
Laura Matthias	Species at Risk Biologist/Subcontractor		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	R.P.F.	Provided background history, prepared the baseline report
Peter Scholefield	Volunteer/Gambier Island Conservancy		Background data, assistance with field logistics, document review
Jason Herz	Conservation Committee Chair/Sunshine Coast Conservation Association		Review of document

Ruth Simons	Volunteer/Gambier Island Conservancy		Background data and assistance with field logistics, facilitated access via Brigade Bay Marina
Cascade Environmental Resource Group Ltd.	Consultant		Prepared the original (2005) management plan

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. The Brigade Bay Bluffs Nature Reserve (BBNR), along with Long Bay Wetland Nature Reserve (38 ha), on Gambier Island was protected by the Islands Trust Conservancy (ITC) in 2005. The properties were transferred by Coastland Wood Industries Ltd. and Mike Jenks as part of the Brigade Bay subdivision development (see survey, Appendix A).

Cascade Environmental Resource Group Ltd. developed the initial Management Plan for both the Brigade Bay Bluffs and Long Bay Wetland Nature Reserves in 2005 (Cascade 2005). In 2018/19, the Management Plans for both properties were updated and written as separate documents for each property.

The Gambier Island Conservancy and the Sunshine Coast Conservation Association co-hold the conservation covenant on the land.

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 2018a)

In 1990, through the enactment of a section of the 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 and since 1990 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. As with this plan, the *Management Plan for Areas of Cultural Heritage and Sacred Significance* must be in accordance with the conservation covenant registered on the land.

1.4 Protected Area Purpose

The purpose of the BBNR is to preserve and protect the representative ecosystems and natural values of the site (including any rare and endangered plant and animal species), 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 objectives of the Islands Trust Conservancy and the Islands Trust.

1.5 Protected Area Objectives

The objectives for the BBNR are:

1. Preserve and protect the representative ecosystems, biological diversity and natural values.
2. Restore plant and animal communities and ecological processes where necessary.
3. 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.
4. Support ongoing inventory, mapping and monitoring to guide management.
5. Allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative.
6. Remove invasive species throughout the reserve where they compromise natural values.

2.0 Property Information

Brigade Bay Bluffs Nature Reserve is 5.14 hectares (12.70 acres) in size.

2.1 Location

Gambier Island can be accessed by a passenger ferry that sails between the BC Ferries Langdale

Terminal in Gibsons and the Government Dock at New Brighton, located on the west side of Gambier Island. There is no road access to BBNR from the Government Dock at New Brighton. There is a Gambier Island trail network but the route to the BBNR from New Brighton is lengthy, not direct, and the trail is not well marked or signed in places.

BBNR is best accessed from the public dock at Camp Artaban, at the head of Long Bay. There is a short public trail through the camp property, then along the Brigade Bay Road easement through the Gambier Island Sea Ranch property to Mt Artaban Road in the Brigade Bay subdivision. This is about a 30 minute hike. It is another 5 minute walk north on Mt Artaban Road to the Nature Reserve. The public dock at Camp Artaban can be reached by regularly scheduled water taxi runs from Horseshoe Bay on weekends and on Wednesday evenings in the summer. There are two nearby private marinas, one at the Sea Ranch and the other at Brigade Bay. For those who are not property owners at either location, permission is required to access the marinas.

There are currently no designated trails within the reserve.

2.2 Legal description

The BBNR is legally described as PID: 015-940-870, District Lot 1257, Group 1, New Westminster District, Except, Firstly Part in Reference Plan 2829, Secondly Part Subdivided by Plan BCP15304.

2.3 Legal Access

Legal access to the BBNR is off Mt. Artaban Road, 1 km north of Brigade Bay Marina, which goes through the Brigade Bay subdivision (Figure 1). There is no trail.

2.4 Landscape Context

Gambier Island is located in Howe Sound, one of the many islands governed by the Islands Trust (see Figure 1 for location and protected area context). The BBNR is located on the east side of Gambier Island, northwest of Brigade Bay, overlooking Howe Sound. Directly to the north is privately-managed land and directly south is the Brigade Bay subdivision with 68 privately managed lots. To the east is a municipal park (38 ha) and to the west is provincially-managed land (3517 ha). Although it is a small parcel, the BBNR plays an important role in enhancing the habitat values of the area through connectivity and proximity to other undeveloped and protected lands on the island.

Approximately 275 m to the south along Mt. Artaban Road, there is another large, contiguous protected area which includes Long Bay Wetland Nature Reserve (ITC), Mt. Artaban Nature Reserve (ITC), Halkett Bay Provincial Marine Park (BC Parks), Pete Shields Park (Sunshine Coast Regional District), and provincially-managed lands (totaling 790.45 ha).



Photo 2. View of Howe Sound from BBNR, looking south to Mt. Artaban and Brigade Bay.

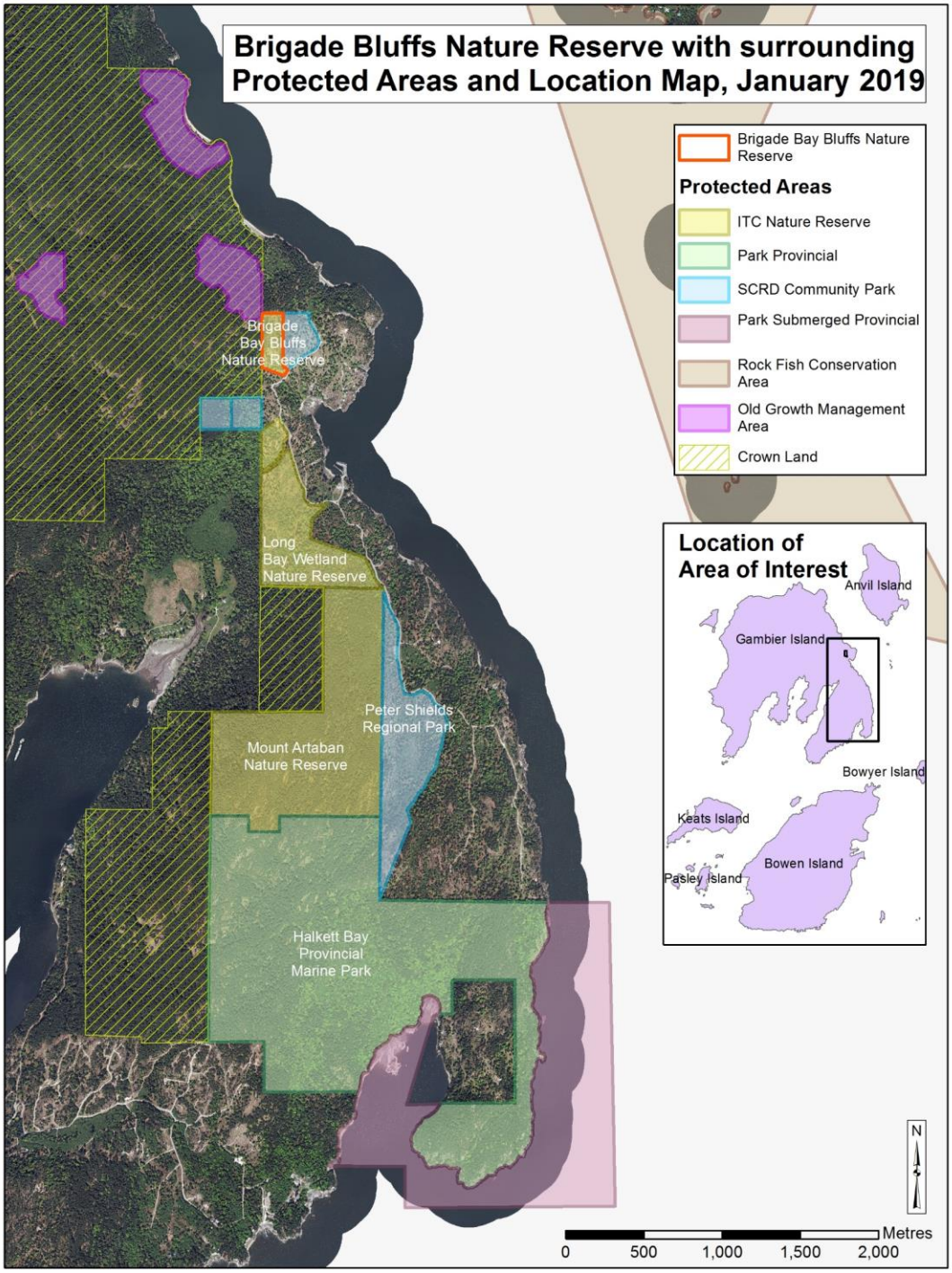


Figure 1. Location of Gambier Island (inset), and protected areas context surrounding the BBNR (reserve boundary outlined in orange). A complimentary map of marine protected area zones is provided in Schedule B of Gambier Island Land Use Bylaw #86 (Islands Trust 2004).

2.5 Site History[1]

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 are located on Brigade Bay, which are protected under the *Heritage Conservation Act* (Cascade 2005). The adjacent properties in 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). Consultation between 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, plant collection, and as a camp site and safe haven for members of the Squamish Nation traveling in Howe Sound (FOC, December 2, 2003 in Cascade 2005).

The Brigade Bay area had a settler homestead, probably during the 1920s, and the buildings remained until the 1980s (Hopwood 2013). A questionnaire respondent noted that there may have been a smelting facility in the Brigade Bay area.

The reserve area was burned by a human-caused fire, which ignited on July 9, 1922 (Parminter pers. comm. in Hopwood 2009).

The reserve was logged, probably in the 1920s (shortly before or after the fires), and regrowth was from natural regeneration (Hopwood 2013). A recent selective harvest in most of the reserve occurred in 2000-2001 (Cascade 2005).

An Environmental Assessment was completed in 2001 for the Brigade Bay subdivision (CERG 2001 in Cascade 2005). Planning for the subdivision began in 2000 and residential lots were put on the market in 2004. The Islands Trust Conservancy acquired the Nature Reserve through a transfer in 2005.

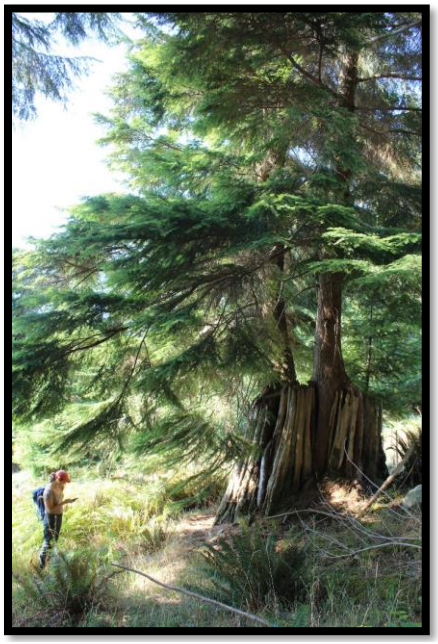


Photo 3. Large stump from logged Western Redcedar with new regrowth.

[1] 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."

2.6 Anthropogenic Features

There are no structures or buildings within the reserve. At this time, no archaeological sites have been identified within BBNR.

Table 2. Anthropogenic features in BBNR.

Anthropogenic Feature	Description	Condition	Photopoint Location
Boundary marker	Small Covenant Boundary sign near Mt. Artaban Road on lower slopes of reserve.	Good	No photo 475522; 5482227
Boundary sign	Boundary sign behind large rock at northern road edge of Nature Reserve.	Good	P9; Figure 3 475548; 5482280
Caging around replanted native trees	Douglas-fir planted and caged during restoration efforts in cleared area below bluffs.	Good	P8, P11; Figure 3 475541; 5482271
Boundary iron pin	Boundary marker along southern boundary of reserve	Good	No photo 475439; 5482267
Corner boundary marker	Iron pin at southwest corner of reserve	Good	No photo 475373; 5482287
Boundary iron pin	Boundary marker along southern boundary of reserve	Good	No photo 475515; 5482236
Corner boundary marker	Boundary marker in northeast corner of reserve	Good	No photo 475502; 5482628

2.7 Undersurface Rights

The title shows no undersurface rights designated for BBNR.

2.8 Notations, Charges, Liens and Interests

A Section 219 Conservation Covenant (Registration Number: CA3219707) and Section 218 Statutory Right of Way (Registration Number: CA3219708) were registered over the lands in 2013 in favour of Gambier Island Conservancy and Sunshine Coast Conservation Association.

The general intent of the covenant 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.

The Statutory Right of Way outlines permitted access and activities for the Covenant Holders.

2.9 Local Planning Designations

BBNR is within Development Permit Area #3 which protects all mapped and unmapped streams on Gambier Island under the Riparian Areas Regulation (Islands Trust 2018b).

The reserve is zoned G2 (Nature Reserve). The purpose of this zone is to maintain and enhance the ecological values, ecosystems and unique areas of nature reserves and sanctuaries. Permitted uses within the zone include ecosystem preservation use, water recharge use, trail use, fish and wildlife habitat protection use, and accessory use including but not limited to fire protection (Islands Trust 2018b).

2.10 Existing Public, First Nations, and Other Use

Brigade Bay Bluffs 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 are no existing public trails in the reserve and public use is minimal. Access to the reserve is from the southeast corner that abuts the Mt. Artaban Road.

3.0 Inventory by Ecological Community

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 BBNR. 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.

3.1 Ecological Significance

The BBNR ranges in elevation from 60-240 m and includes steep rocky outcrops and mossy bluffs. The site has been selectively logged, leaving behind large deciduous trees, a few veteran coniferous trees in steep areas and regenerating pole-sapling conifers in much of the reserve. Most of the reserve is within the Coastal Western Hemlock Very Dry Maritime subzone although at elevations above 200 m the subzone transitions to the dry maritime subzone. There are no significant hydrological features and most surface water flows south to feed Gambier Creek on the adjacent privately-managed property and east to the ocean.

No species at risk have been recorded. Black-tailed deer (*Odocoileus hemionus*) sign was noted throughout the reserve. Turkey Vultures (*Cathartes aura*) were flying over the bluffs and may use the cliff sites for basking or nesting.

Table 3. Ecological Communities in BBNR.

Ecological Community Name		Status		
English	Scientific	Provincial	BC List	Global
Western Hemlock–Douglas-fir/Oregon beaked-moss Very Dry Maritime (CWHxm1/01)	*Tsuga heterophylla–Pseudotsuga menziesii/Eurynchium oreganum*	S2 (2013)	Red	G3G4
Douglas-fir–Lodgepole Pine/Grey Rock-moss Very Dry Maritime (CWHxm1/02)	*Pseudotsuga menziesii–Pinus contorta/Racomitrium canescens*	S2 (2004)	Red	GNR
Douglas-fir–Western Hemlock/Salal Very Dry Maritime (CWHxm1/03)	*Pseudotsuga menziesii–Tsuga heterophylla/Gaultheria shallon*	S2S3 (2013)	Blue	G3G4
Western Redcedar/Sword Fern Very Dry Maritime (CWHxm1/05)	*Thuja plicata/Polystichum munitum*	S2S3 (2009)	Blue	GNR
Western Redcedar/Three-leaved Foamflower Very Dry Maritime (CWHxm1/07)	*Thuja plicata/Tiarella trifoliata*	S2S3 (2013)	Blue	G3

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. The maritime influence moderates the effect of elevation, latitude, and aspect on local temperature and precipitation.

The weather statistics for the adjacent Bowen Island station show the annual precipitation is approximately 1507 mm and most of it comes in the form of rain rather than snow (The Weather Network 2018). On Bowen Island, 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 2). The reverse is true for precipitation, with the winter months from November to January having the highest rainfall (averaging 506-420 mm) and July and August being the driest months (58-78 mm) (Meteoblue 2018).

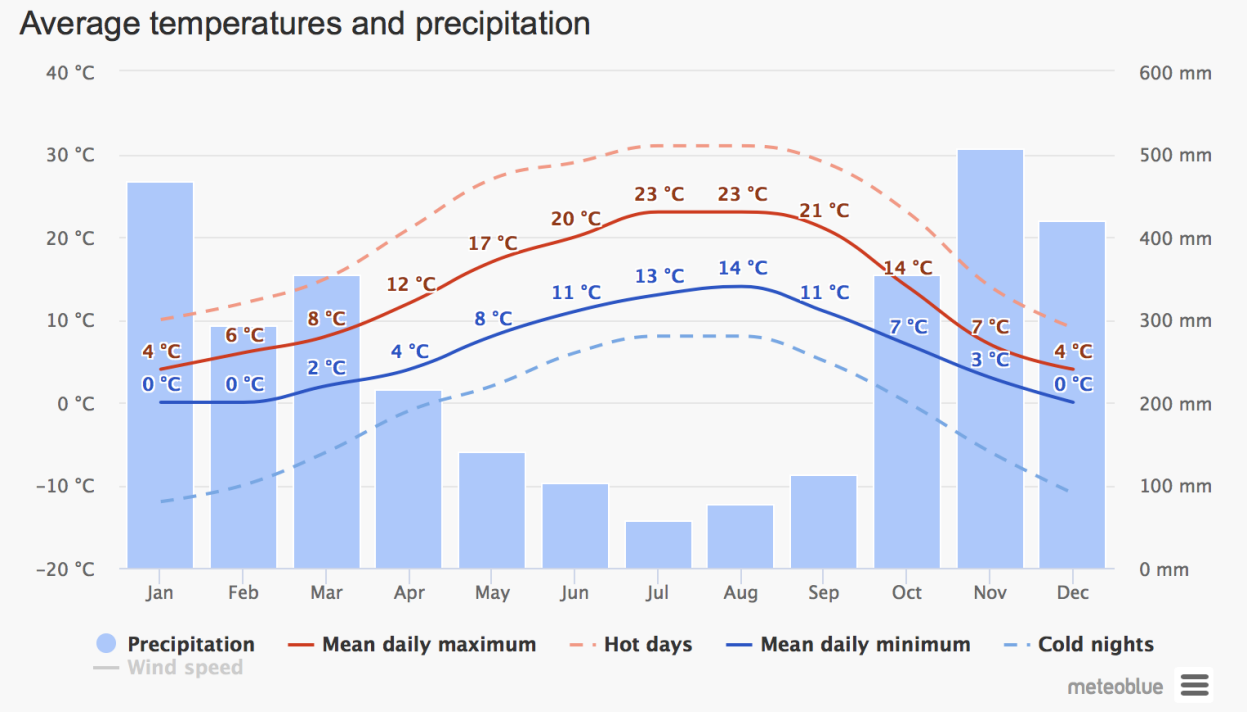


Figure 2. Canadian climate normals for temperature and precipitation at Bowen Island weather station, British Columbia from 1985-2018 (Meteoblue 2018).

The future impacts from climate change are unknown, although a summer drying trend and an increase in storm events are predicted (Mauger et.al. 2015). More powerful storms may cause increasing erosion. Dryer summers may impact the wetlands and riparian hydrology and may shift the vegetation community away from western redcedar (*Thuja plicata*), allowing the spread of Douglas-fir (*Pseudotsuga menziesii*). 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 adapting to climate change stresses.

3.3 Geology and Physiology

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). These stratified rock formations are composed of andesitic to dacitic tuff, breccia agglomerate, andesite, argillite, conglomerate, lesser marble,

greenstone, and phyllite (BC Ministry of Energy and Mines 2005 in Cascade 2005). Intrusive rock of the Coast Plutonic complex, such as quartz diorite and diorite, occur in the vicinity (Cascade 2005). Regional fault systems are predominantly northwest striking.

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).

Within the reserve, the topography is dominated by rocky outcrops and bluffs that are roughly southwest to northeast in direction. Bedrock is overlain by a veneer of colluvium and glacial till, except where glacial processes removed these materials and only a thin organic layer has since accumulated (Cascade 2005).



Photo 5. Rocky bluff habitat in higher elevations of BBNR.



Photo 5. Moisture-shedding steep gully with stumps from previous logging.

3.4 Hydrology

Most of the reserve is upper slope and moisture shedding. There are no wetlands or streams within the reserve. Surface water sheds primarily to the south to Gambier Creek and to the west to the ocean.

3.5 Soils

Humo-Ferric Podzols are the most widely distributed soils of the area, with glacial till overlying bedrock that results in well drained soils. Primary mineral deposits are colluvial and glacial derived. Soil processes that are characteristic of this submaritime forest include Mor humus formation (associated with the accumulation of acid organic matter), leaching, eluviation, and illuviation (Meidinger and Pojar 1991 in Cascade 2005).

3.6 Ecological Classifications

The BBNR area is within the Very Dry Maritime subzone (xm) of the Coastal Western Hemlock Zone (CWH) (Green and Klinka 1994). 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. The Reserve is within the Pacific Maritime Ecozone and the Georgia Puget Basin Ecoregion (Lands Directorate 1986).

3.7 Ecological Communities and Site Series

The previous management plan for BBNR delineated one ecological community based on Terrestrial Ecosystem Mapping (TEM). The baseline inventory for the Reserve identified five units (Hopwood 2013). This updated management plan follows the latter delineation of five types. The ecological descriptions were collected on August 8th, 2018 with supplemental details added from the baseline report (Hopwood 2013).

Site series were identified using *A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region* (Green and Klinka 1994) (Map 3). Structural stage was as defined in "Standards for Terrestrial Ecosystems Mapping in British Columbia" (RIC 1998).

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

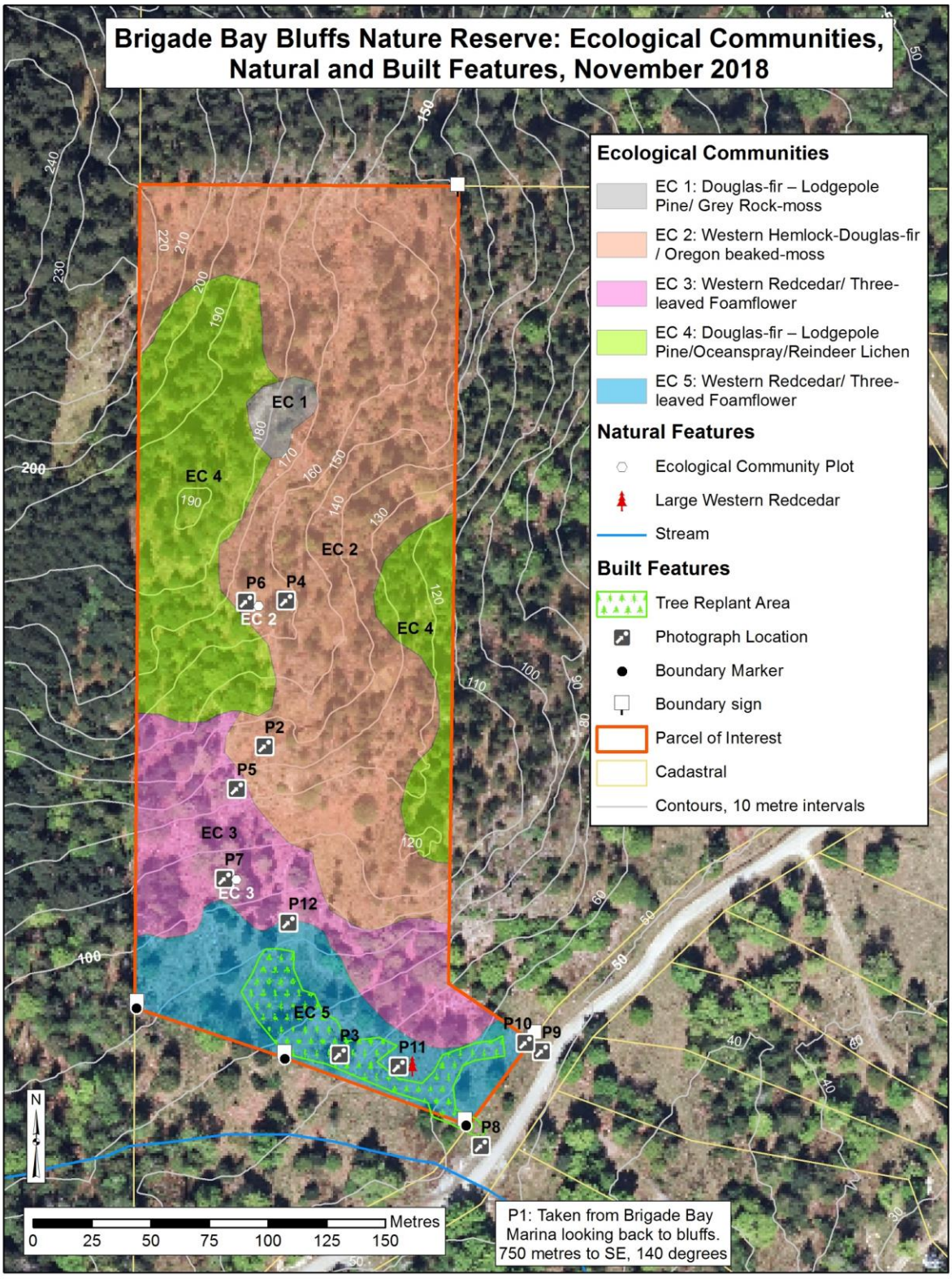


Figure 3. Ecological Communities in BBNR with photopoint locations, vegetation plots, and signage.

Ecological Community 1. Douglas-fir–Lodgepole Pine/Grey Rock Moss

Ecological Community 1 is at the summit of a rocky bluff and is dominated by mosses and lichens. The site is dry and well drained with a small number of shrubs, forbs and grasses growing in small soil pockets. Because of its lack of trees, the community was not disturbed by the logging that occurred in the remainder of the reserve.

Table 4. Description of Ecological Community 1.

Polygon ID:	Ecological Community 1
Ecological Community:	Douglas-fir–Lodgepole Pine/Grey Rock Moss
Classification:	CWHxm1/02
Structural Stage:	Sparse/bryoid
Status (BC List):	Red-list
Photopoint(s):	None
Ecological Community Description:	Dry cliffs and rock outcrops at top of slope. Dominated by moss and lichens with scattered herbs and shrubs in crevices with more soil depth. Tree layer absent due to drought and thin soils. Shrub layer sparse.
Disturbance Notes:	Undisturbed by prior logging since trees are absent. Fires and drought may influence vegetation patterns over time.
Anticipated Change/Succession:	Minor changes expected
Wildlife observations:	Visual: Turkey Vultures soaring over bluffs

Table 5. Vegetation Species in Ecological Community 1.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Amelanchier alnifolia (saskatoon)			1				
Holodiscus discolor (oceanspray)			1				
Dicentra Formosa (Pacific bleeding heart)				T			
Digitalis purpurea (foxglove)				T			
Polypodium glycyrrhiza (licorice fern)				T			
Grasses				20			
Moss and Lichen Layer							**Total Moss Layer: 40-80 %**
Cladina portentosa (maritime reindeer lichen)							
Dicranum species							
Polytrichum juniperinum (juniper haircap moss)							
Racomitrium canescens (grey rock-moss)							
Selaginella wallacei (Wallace's selaginella)							
Cover by Layer (%)	**0**	**0**	**2**	**20**	**40-80**		**Total Canopy Cover: 0%**

Ecological Community 2. Western Hemlock–Douglas-fir/Oregon beaked-moss

Ecological Community 2 represents early seral forest that is slowly recovering after logging in 2000 or 2001. Soils are very dry and thin with some minor tree re-establishment in soil pockets. Aspect is primarily east to south. Vegetation consists of a regenerating secondary canopy of Douglas-fir, western hemlock, western redcedar and bigleaf maple, with variation depending on microsite moisture, generally dry upper slopes, and moist lower slopes. There are a few scattered residual trees that were not logged.

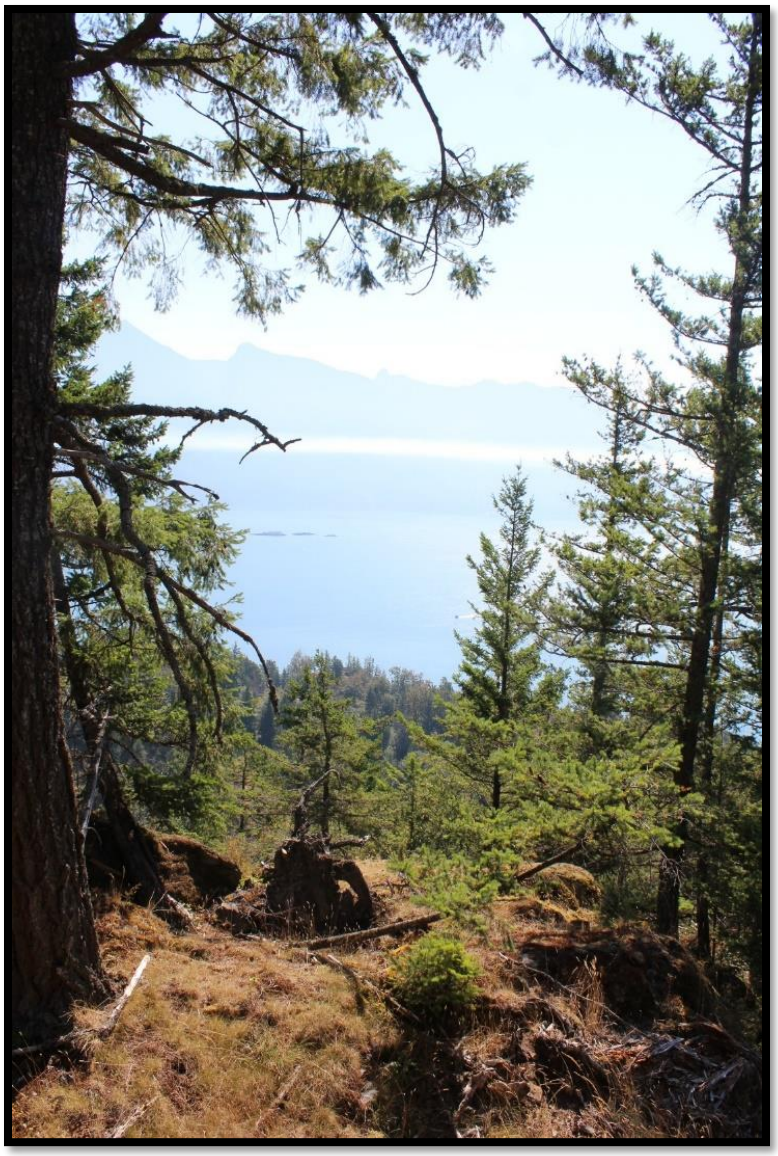


Photo 6. Steeply sloped terrain; note stump in photo from previous logging.

Table 6. Description of Ecological Community 2.

Polygon ID	Ecological Community 2
Ecological Community	Western Hemlock–Douglas-fir/Oregon Beaked-moss; Western Redcedar/ Three-leaved Foamflower; with small portions of Douglas-fir–Western Hemlock/Salal
Classification	CWHxm1/01; CWHxm1/07; (CWHxm1/03)
Structural Stage	Shrub/herb
Status (BC List)	Red-listed/Blue-listed
Photopoint(s)	P6
Ecological Community Description	Shrubs and scattered trees on logged-over dry to moist sites with steep terrain and bluffs. Extremely thin soils with soil pockets in hollows that support sparse regenerating trees and shrubs.
Disturbance Notes	Seventy year-old second growth Douglas-fir stand clear-cut in 2000/2001 with very little subsequent tree regeneration. Fire scars evident on remnant trees. One Douglas-fir stump and one Douglas-fir with fire scar in plot.
Anticipated Change/Succession	Low regeneration due to steep terrain and deer browsing. May be impacted by future wildfire or windthrow. Minor changes expected.
Wildlife observations	Visual: Black-tailed deer (*Odocoileus hemionus*) scat, Turkey Vultures (*Cathartes aura*) flying overhead. There are perching sites for raptors, browse for deer, and seeds for birds and small mammals.

Table 7. Vegetation Species in Ecological Community 2.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Pseudotsuga menziesii (Douglas-fir)	4	2					MC: 30-80yrs, Ht: 7-18m, DBH: 25-80cm. Old Douglas-fir with fire scars in plot. SC: 5-10yrs, Ht: 3-5m, DBH: 5-15cm
Thuja plicata (western redcedar)	1	1					MC: 20-30yrs, Ht: 15-20m, DBH: 30-40cm SC: 10yrs, Ht: 3m, DBH: 8-10cm
Pinus contora (lodgepole pine)		2					SC: 15-20yrs, Ht: 7-8m, DBH: 18cm
Prunus emarginata (bitter cherry)		T					
Achillea millefolium (yarrow)			T				
Berberis nervosa (dull Oregon-grape)			T				
Danthonia spicata (poverty oatgrass)			T				
Gaultheria shallon (salal)			T				
Holodiscus discolor (oceanspray)			T				
Rosa gymnocarpa (baldhip rose)			T				
Rubus ursinus (trailing blackberry)			T				
Salix scouleriana (Scouler's willow)			T				
Elymus glaucus (blue wildrye)				T			
Festuca idahoensis (Idaho fescue)				T			
Goodyera oblongifolia (rattlesnake plantain)				T			
Holcus lanatus (common velvetgrass)				T			
Luzula multiflora (many-flowered wood-rush)				T			
Polystichum munitum (sword fern)				T			
Pteridium aquilinum (bracken fern)				T			

Zigadenus venenosus (death camas)				T			
Digitalis purpurea (foxglove)						T	
Senecio jacobaea (tansy ragwort)						T	
Moss and Lichen Layer							**Total Moss Layer: 80%**
Cladina spp. (reindeer lichen)							
Hylocomium splendens (step moss)							
Rhytidiadelphus triquetrus (electrified cat's-tail moss)							
Cover by Layer (%)	**5**	**4**	**1**	**1**		**1**	**Total Canopy Cover: 5%**

Ecological Community 3. Western Redcedar/Three-leaved Foamflower

This ecological community represents a mixed residual forest on moist mid and lower slopes in the southern portion of the BBNR. The moisture regime supports a relatively dense understory of ferns and other shrubs. There are larger bigleaf maple veteran trees and a mixture of scattered smaller conifer trees. Limited conifer regeneration has occurred due to deer browsing pressure, keeping the forest relatively open.

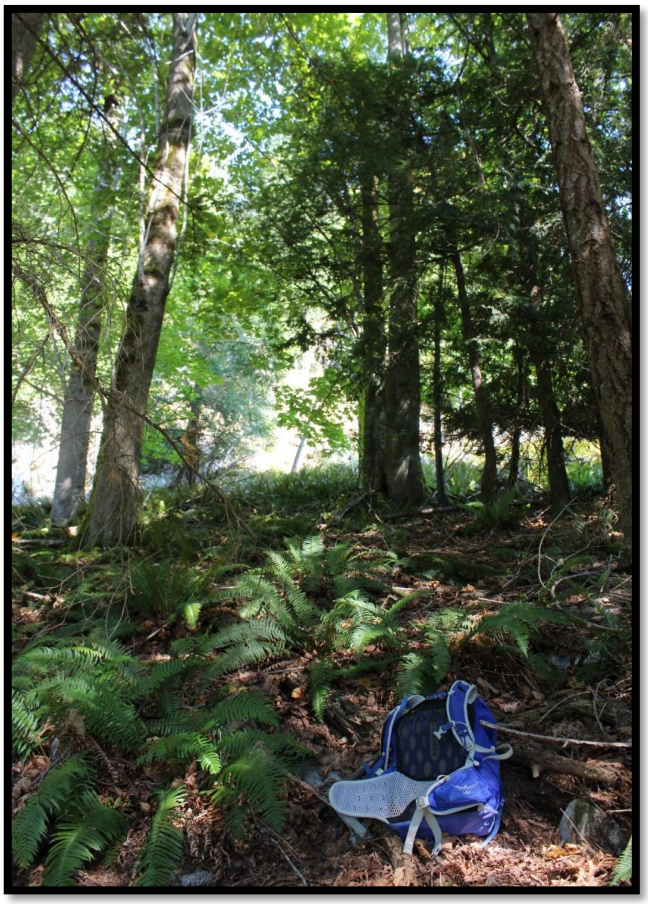


Photo 7. Dense sword fern understory with large bigleaf maple and Douglas-fir trees.

Table 8. Description of Ecological Community 3.

Polygon ID:	Ecological Community 3
Ecological Community:	Western Redcedar/Three-leaved Foamflower; with small portions of Western Redcedar/Sword Fern
Classification:	CWHxm1/07; (CWHSM1/05)
Structural Stage:	Shrub/herb (poor regeneration areas) to Mature Forest (residual deciduous species)
Status (BC List):	Blue-listed
Photopoint(s):	P7
Ecological Community Description:	Disturbed mid-seral mixed residual forest on moist mid and lower slopes. Dominated by residual bigleaf maple with understory composed of sparse vegetation with leaf litter and duff. South-facing, moderate slope at toe of bluffs. Elevation 95 m. One red alder (*Alnus rubra*) snag in plot.
Disturbance Notes:	Small residual patch of forest beside cleared area. Bigleaf maple trees are older but conifers are younger with poor regeneration outside of residual patch.
Anticipated Change/Succession:	Over time, the site will shift to more coniferous species with regeneration and maturing forest.
Wildlife observations:	Aural: Common Raven (*Corvus corax*), Western Tanager (*Piranga ludoviciana*) Visual: Oregon lancetooth (*Ancotrema hybridum*)

Table 9. Vegetation species in Ecological Community 3.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Acer macrophyllum (bigleaf maple)	55						MC: 80-120yrs, Ht: 15-20m, DBH: 50-75cm
Pseudotsuga menziesii (Douglas-fir)	15	1					MC: 20-40yrs, Ht: 10-15m, DBH: 25-35cm. SC: 15-20yrs, Ht: 10-12m, DBH: 10-15cm
Thuja plicata (western redcedar)	5	1					MC: 50-70yrs, Ht: 15-18m, DBH: 45cm SC: 10-15yrs, Ht: 3-5m, DBH: 10-15cm
Tsuga heterophylla (western hemlock)	5						MC: 30-40yrs, Ht: 15m, DBH: 30cm
Vaccinium parvifolium (red huckleberry)			T				
Polystichum munitum (sword fern)				40			
Bromus pacificus (Pacific brome)				T			
Rubus ursinus (trailing blackberry)				T			
Digitalis purpurea (foxglove)						T	
Mycelis muralis (wall lettuce)						T	
Moss and Lichen Layer							**Total Moss Layer: 0%**
Cover by Layer (%)	**80**	**2**	**<1**	**40**		**< 1**	**Total Canopy Cover: 80%**

Ecological Community 4. Douglas-fir – Lodgepole Pine/Oceanspray/Reindeer Lichen

This ecological community is a complex of steep rugged rock outcrops and bluffs interspersed with narrow, moisture-receiving draws. Most residual trees are immature, but a few patches of mature and older trees were left unlogged. The dominant tree canopy is Douglas-fir with shore pine (*Pinus contorta var. contorta*) at higher elevations and small amounts of western redcedar and western hemlock in more moisture-receiving sites. There are scattered veteran Douglas-fir trees. The aspect is primarily to the east.

Table 10. Description of Ecological Community 4.

Polygon ID:	Ecological Community 4
Ecological Community:	Douglas-fir–Lodgepole Pine/Oceanspray/Reindeer Lichen; Douglas-fir–Western Hemlock/Salal; Western Hemlock–Douglas-fir/Oregon beaked-moss; Western Redcedar/Sword Fern
Classification:	CWHxm1/02; CWHxm1/03; CWHxm1/01; CWHxm1/05
Structural Stage:	Young Forest
Status (BC List):	Red-listed/blue-listed
Photopoint(s):	None
Ecological Community Description:	Steep rock outcrop and bluffs interspersed with narrow draws.
Disturbance Notes:	Selective logging has led to variable tree cover and age. Most residual trees are immature but a few patches of mature and old trees were left unlogged.
Anticipated Change/Succession:	Over time the forest will mature and diversify.
Wildlife observations:	Veteran Douglas-fir trees will provide perching and possibly nesting habitat for raptors.

Table 11. Vegetation Species in Ecological Community 4.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Pseudotsuga menziesii (Douglas-fir)	30	5					MC: 60-80yrs, Ht:10-25m, DBH: 15-60cm with vets up to 28 m tall and 120 cm DBH. SC: 1-50 years, Ht: 1-10 m; DBH: 0-15 cm
Pinus contorta var. *contorta* (shore pine)	10						MC: 60-80yrs, Ht:10-25m, DBH: 15-60cm
Thuja plicata (western redcedar)	1						
Tsuga heterophylla (western hemlock)	1						
Cornus nuttallii (Pacific dogwood)							
Gaultheria shallon (salal)			10				
Holodiscus discolor (oceanspray)			5				
Mahonia nervosa (dull Oregon-grape)			5				
Rosa gymnocarpa (baldhip rose			T				
Rubus ursinus (trailing blackberry)			T				
Vaccinium parvifolium (red huckleberry)			T				
Polystichum munitum (sword fern)				40			
Pteridium aquilinum (bracken fern)				10			
Grasses				2			
Digitalis purpurea (foxglove)						T	
Ilex aquifolium (English holly)						T	
Moss and Lichen Layer							**Total Moss Layer: 20%**
Dicranum sp.							
Eurhynchium oregonum (Oregon beaked moss)							
Hylocomium splendens (step moss)							
Polytricum juniperinum (juniper haircap moss)							

Rhytidiadelphus loreus (lanky moss)							
Cover by Layer (%)	**40**	**5**	**20**	**52**		**<1**	**Total Canopy Cover: 40%**

Ecological Community 5: Western Redcedar/Three-leaved Foamflower

Ecological Community 5 consists of dense non-native grasses with scattered trees and shrubs on moist, rich slopes below the bluffs. The 70-year-old second growth forest was clear cut and forest regeneration is slowed by the dense thatch of the invasive grasses. Trees are isolated but restoration efforts, which include planting and caging conifer seedlings, will help re-establish forest canopy over time.



Photo 8. Previously logged area with planted and caged native tree reforestation.

Table 12. Description of Ecological Community 5.

Polygon ID:	Ecological Community 5
Ecological Community:	Western Redcedar/Three-leaved Foamflower
Classification:	CWHxm1/07
Structural Stage:	Herb
Status (BC List):	Blue-list
Photopoint(s):	P8
Ecological Community Description:	Dense non-native grass community with scattered trees and shrubs on moist, rich lower slopes
Disturbance Notes:	Clear cut in 2000/2001, followed by colonization by primarily non-native grass species (either intentionally sown or seeded in from nearby agricultural areas). The site is capable of supporting a western redcedar/ Three-leaved Foamflower community but the clearcut logging and subsequent colonization by grasses has altered the community to the point that development of a natural ecological community may require ongoing restoration actions.
Anticipated Change/Succession:	With successful restoration, over time the forest will mature and develop the characteristics of a maturing forest. Eventually, the non-native grasses and thistles will be shaded out. Infrequent fires may replace the stand.
Wildlife observations:	Pine white (*Neophasia menapia*) and woodland skipper (*Ochlodes sylvanoides*) butterflies observed nectaring on tansy ragwort (*Jacobaea vulgaris*) and thistles (*Cirsium* spp.) just outside of the ecological community plot.

Table 13. Vegetation Species in Ecological Community 5.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer+	Moss, Lichen Layer	Non-natives	
Tsuga heterophylla (western hemlock)		1					SC:50-70 years; Ht: 2-10 m; DBH: 20-50cm
Pseudotsuga menziesii (Douglas-fir)		1					
Alnus rubra (red alder)		1					
Thuja plicata (western redcedar)		1					
Gaultheria shallon (salal)			3				
Ilex aquifolium (English holly)						T	
Mahonia nervosa (dull Oregon-grape)			2				
Sambucus racemosa (red elderberry)			T				
Vaccinium parvifolium (red huckleberry)			T				
Digitalis purpurea (foxglove)						T	
Polystichum munitum (sword fern)				1			
Pteridium aquilinum (bracken fern)				4			
Grasses				80			
Urtica dioica (stinging nettle)				T			
Moss and Lichen Layer							**Total Moss Layer: 5-15%**
Atrichum selwynii							
Eurhynchium oreganum (Oregon beaked-moss)							
Plagiomnium insigne (badge moss)							
Cover by Layer (%)		**4**	**5**	**90**	**5**		**Total Canopy Cover: %**

3.8 Wildlife Species

The open rocky bluffs and outcrops provide excellent habitat for reptiles such as the northern alligator lizard. Black-tailed deer scat was noted in the lower slopes of the reserve. Turkey vultures were soaring over the bluffs and likely use the area for basking and they may have nest sites in the rocky outcrops. The reserve likely provides habitat for a wide range of birds but the field surveys were not done at an ideal time for assessing bird activity. An anonymous questionnaire respondent noted that Bald Eagles (*Haliaeetus leucocephalus*) nest in the reserve. A few butterfly species were noted in the lower open slopes of the reserve.

Table 14. Wildlife Species Observed in BBNR in 2018.

Common Name	**Latin Name**
Mammals	
Black-tailed deer	*Odocoileus hemionus*
Invertebrates	
Lorquin's admiral	*Limenitis lorquini*
Oregon lancetooth	*Ancotrema hybridum*
Pine white	*Neophasia menapia*
Woodland skipper	*Ochlodes sylvanoides*
Reptiles	
Northern alligator lizard	*Elgaria coerulea*
Birds	
Common Raven	*Corvus corax*
Northern Flicker	*Colaptes auratus*
Turkey Vulture	*Cathartes aura*
Western Tanager	*Piranga ludoviciana*

3.9 Expected Change over Time

There may be ongoing regeneration of forest trees over time in areas previously logged, although regeneration is limited by the thick grasses coupled with high herbivory pressure. Additional reforestation efforts and protection of tree seedlings from browse would assist in regeneration. Remnant forested areas and new conifer growth will continue to mature and diversify over time.

4.0 Threats

Table 15. Threats to Natural Values in BBNR.

Threats (examples below)	Mixed Bluff Forest	Rocky Bluffs	Mixed Lower Forests	Overall Threat Rank
Recreational Activities: Hiking can impact conservation targets through wildlife disturbance, soil disturbance, vegetation trampling, and erosion. With potential for increasing population and development near the protected area, this threat to conservation targets is expected to increase in severity over time. There are no hiking trails in the reserve; however, off-trail pedestrian activity is a concern, particularly in sensitive rocky bluff habitat near Mt. Artaban Road.	Low	Medium	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. Vegetation recovery post-catastrophic fire is slow and invasive terrestrial species are likely to invade into areas with bare soil.	Medium	Low	Low	Low
Lack of Tree Regeneration: After logging in 2000-2001, there has been little regeneration of native trees in some areas of the reserve due to deer browsing pressure. The lack of regeneration in Vegetation Types 2, 3 and 4 presents a risk of increasing colonization by invasive non-native plant species, such as English holly (*Ilex aquifolium*), Scotch broom (*Cytisus scoparius*), foxglove (*Digitalis purpurea*) and non-native grasses.	Medium	N/A	Medium	Medium
Invasive Non-Native Species: Invasive non-native species are 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. Invasive non-native English holly is established in Vegetation Types 3, 4 and 5, and foxglove is established in Vegetation Types 1, 2, and 4.	Low	Low	High	Low

Ecological Community 5 is dominated by non-native grasses.				
Problematic Native Species: Hyper-abundant black-tailed deer (*Odocoileus hemionus*) can be problematic, limiting natural regeneration, dramatically altering understory vegetation structure and composition, and adversely affecting songbird populations (Martin et al. 2011).	Medium	Low	Medium	Medium
Human Disturbance: Increased human activity in adjacent private land lots (e.g. Brigade Bay subdivision) may increase the potential risk of unauthorized human activities such as land clearing, trail building, construction, or other incursions into the Nature Reserve boundaries (Carey et. al. 2000).	Low	Low	Low	Low
Climate Changes: The trend towards longer, drier summers and droughts in the region may impact the survival of tree seedlings over time.	Unknown	Unknown	Unknown	Unknown
Overall Threat Status for Protected Area	**Low-Medium**	**Low**	**Low**	**Low**

4.1 Expected Change to Threats over Time

Recreational activities and unauthorized human disturbance and infractions into 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 climate appears to be shifting to increasingly drier summers and fire suppression remains active in the region.

Lack of native tree regeneration will likely remain consistent given the ongoing threat of herbivory and landscape changes from logging in 2000-2001. Ongoing replanting of native trees will help restore areas with poor regeneration and may shade out some invasive species in the long-term.

Invasive species spread will likely increase without a concerted effort at control. Ongoing removal and control efforts will be required because these invasive species form large, persistent seed banks.

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

At this time ITC staff have and will be engaging with Musqueam, Squamish, and Tsleil-waututh First Nations regarding management planning on Gambier Island.

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 given to the general public by ITC and its 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 three respondents having 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 BBNR is to allow natural successional processes. With the exception of fire, natural disturbance factors due to wind (windthrow), pest infestation, disease, and wildlife use should proceed without intervention. Only the removal of invasive plant species is permitted. Trails will not be developed and public use will not be encouraged in order to limit fragmentation and reduce potential future infractions into the reserve from additional access points. The terrain in the reserve makes it impossible to create safe trails that will not jeopardize public safety. Restoration is recommended to help re-establish trees in areas with low recruitment.

6.1 Management Roles

The Islands Trust Conservancy is the sole landholder of the BBNR but will rely on its partnership with the Gambier Island Conservancy and the Sunshine Coast Conservation Association to assist with on-the-ground management (Table 16). 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 16. Conservation Partners in BBNR.

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 hiking and nature appreciation; however, there are no existing trails in the reserve as a strategy to discourage use due to the steep terrain and sensitive rocky bluff habitat.

The following activities by the public are prohibited:

- Hunting
- Use of motorized vehicles
- Bicycling
- Horseback riding
- Camping
- Fires
- Forestry
- Livestock grazing
- Trail development
- Tree cutting
- Collection of plants or animals

6.3 Proposed Monitoring Program

Annual monitoring by the covenant holders and by managers of the Reserve is important to ensure that there are no infractions or management issues occurring within the protected area. The main focus of monitoring should be along Mt. Artaban Road since this is the primary access into the reserve. Monitoring should determine if any prohibited uses are occurring, such as tree

cutting, unauthorized trail development, use of motorized vehicles, etc., and inspect for any damage to sensitive habitats by hikers. The proposed monitoring route (roadside monitoring from Mt. Artaban Road, as there is no trail access and terrain is very challenging) is in agreement with the route used by previous monitors (Figure 3).

Species at risk surveys and monitoring are encouraged during appropriate times of year to assess which species are present. Monitoring of invasive species spread is advisable over time so that control measures can be taken as required. The regrowth of planted trees should be monitored and the protective cones removed as needed.



Photo 9. BBNR boundary signage along Mt Artaban Rd.

6.4 Public Access

There are no existing public trails in the reserve. Access is located off Mt. Artaban Road (see Section 2.1 for additional details).

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.

6.5 Signage

There is one roadside boundary sign. See Map 2 for locations. Signage is sufficient and should be maintained. When signs are updated, it is recommended that general contact information for the Islands Trust Conservancy be included on signs. If more adjacent development occurs bordering the Nature Reserve, additional signage should be considered. Trail counters could be installed in likely high-traffic access areas to determine how many people are accessing the bluffs. If public access becomes a concern, an interpretive sign identifying the sensitivity of the area and directing or discouraging pedestrian use of the rocky bluff habitat could be added at the road access point.

6.6 Trail Use, Maintenance and Development

There are no trails within the Nature Reserve due to the steep terrain and limited access. Development of trails is not recommended; this is to ensure public safety and avoid habitat fragmentation and degradation, particularly in the sensitive rocky bluff areas.

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

Trails should not be developed in the Reserve to avoid impacts or degradation and erosion to sensitive steep rocky bluff habitat.

6.8 Ecological Restoration Options

In 2017, a 0.25-ha area of the lower slopes adjacent to the Mt. Artaban Road access received the following restoration: planting of nursery seedlings (22 Douglas-fir), protecting natural seedlings in situ (3 Douglas-fir, 17 western redcedar), and transplanting and protecting natural seedlings from nearby areas (14 western redcedar) (Hopwood 2017). Trees that have been planted in restoration efforts should be monitored annually and cages removed once the trees have grown to a suitable size to be able to withstand some browsing by deer. Further restoration efforts may be required in other areas with poor regeneration and native shrubs could be planted to increase diversity. Species chosen for restoration should be those currently found within the reserve (Appendix A). Site-specific planting recommendations should be made by a biologist because differences in microsite will support different vegetation.



Photo 11. Uncaged western redcedar seedling heavily browsed by deer.



Photo 11. Caged Douglas-fir seedling.

6.9 Scientific Research/Education Opportunities

No research has been conducted to date on the property. Possible future research could include 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 tansy ragwort has established in Vegetation Types 2 and 5 and foxglove has established in Vegetation Types 2 and 3. Efforts should be made to remove these species because they produce large, long-lasting seedbanks and will continue to spread into adjacent habitats.



Photo 12. Invasive species including Tansy Ragwort, Foxglove, and Bull Thistle in logged area (Ecological Community 5) of BBNR.

6.11 Wildfire Risk Management

Wildfire and wildfire suppression can be extremely damaging to sensitive ecosystems. Developing a fire management plan in consultation with the Gambier Fire Equipment Group and BC Wildfire Service to identify optimum (i.e. least damaging) fire suppression techniques is recommended. This information should be provided to the province to be included in their annual fire plan. If possible, it is preferred that salt water or fire retardants are not 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 case of a wildfire (Gambier Island Community 2018).

6.12 Climate Change Impacts and Management

Climate change may impact the distribution of ecosystems across the landscape, affecting vegetation patterns, hydrology, and 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 upslope migration of tree lines 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 areas of protected ecosystems will aid the dispersal of species into new habitats and across elevations as vegetation patterns shift. 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).

7.0 Action Items

7.1 Immediate Actions (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. Monitor planted trees for survival and remove cages as necessary.

3. Identify opportunities for cooperative management with First Nations.

7.2 Short Term Actions (3-5 years)

1. Prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods in consultation with the local fire authorities.
2. Plant and cage native shrubs and trees in areas with poor natural regeneration.
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 off-trail public use 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. Conduct ongoing maintenance of signs.
4. Continue to inform the general public of the natural values of the site and the permitted and prohibited uses through information placed in local publications.
5. 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.

8.0 Conclusion

Brigade Bay Bluffs Nature Reserve is an important protected area on eastern Gambier Island. Although impacted by logging, over time the land will develop into a young forest and reforestation efforts can help enhance degraded habitats. The Reserve provides important connectivity and wildlife habitat across a large, significant network of protected areas on Gambier Island.

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

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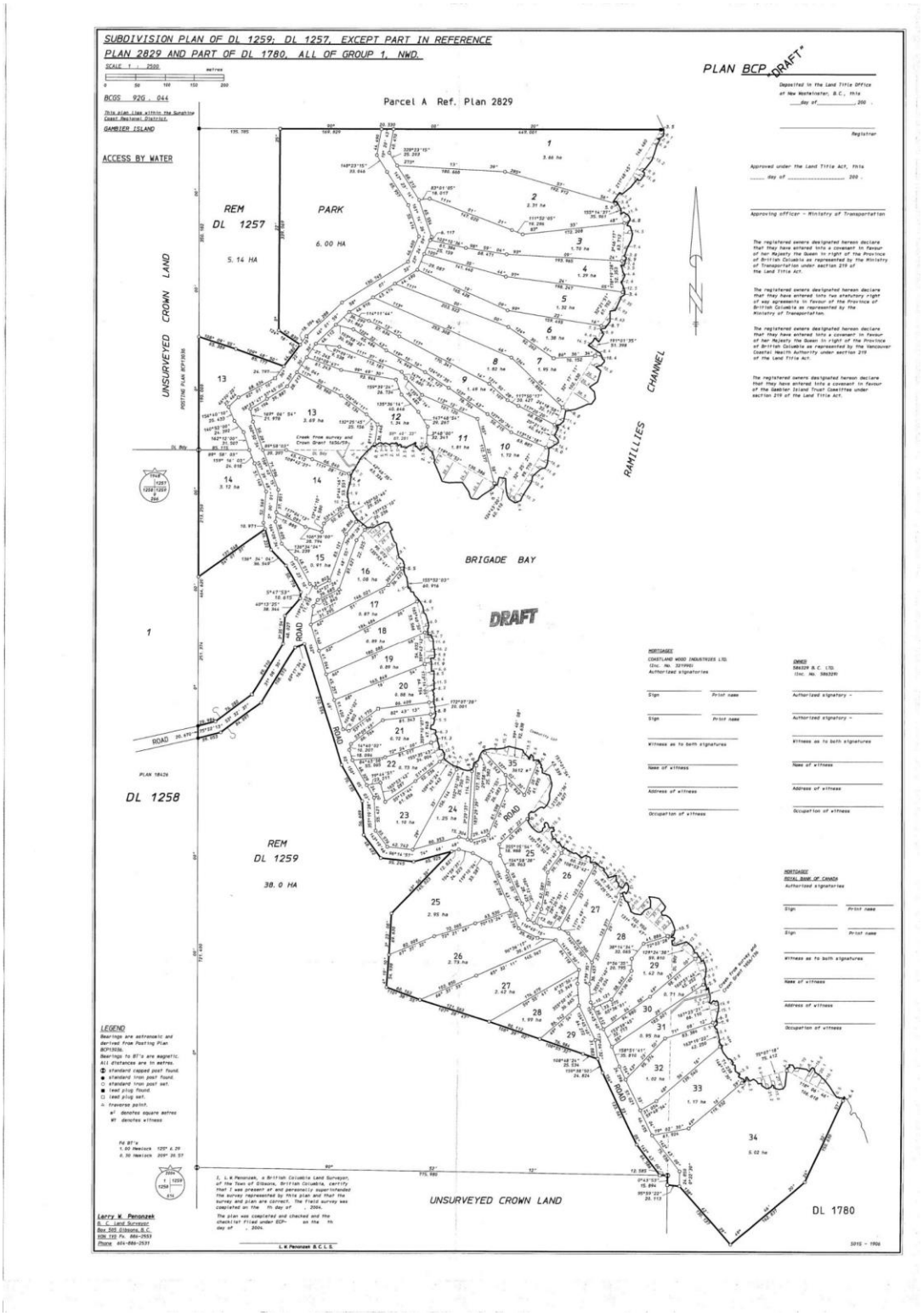
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10.0 Appendices

Appendix A. Subdivision Plan for Brigade Bay Bluffs Nature Reserve.



Appendix B. Vegetation found in Brigade Bay Bluffs Nature Reserve.

Common Name	Latin Name	Status
Acer macrophyllum	Bigleaf maple	
Achillea millefolium	Yarrow	
Agrostis capillaris	Colonial bentgrass	Introduced
Aira praecox	Early hairgrass	Introduced
Amelanchier alnifolia	Saskatoon	
Anaphalis margaritacea	Pearly everlasting	
Anthoxanthum odoratum	Sweet vernalgrass	Introduced
Asplenium trichomanes	Maidenhair spleenwort	
Berberis nervosa	Dull Oregon-grape	
Circium arvense	Canada thistle	Introduced
Circium vulgare	Bull thistle	Introduced
Cladonia portentosa	Reindeer lichen	
Dactylis glomerata	Orchard grass	Introduced
Danthonia spicata	Poverty oatgrass	
Dicranum spp.		
Digitalis purpurea	Foxglove	Introduced
Elymus glaucus	Blue wildrye	
Festuca idahoensis	Idaho fescue	
Gaultheria shallon	Salal	
Goodyera oblongifolia	Rattlesnake plantain	
Hieracium albiflorum	White-flowered hawkweed	
Holcus lanatus	Common velvet-grass	Introduced
Holodiscus discolor	Oceanspray	
Hylocomium splendens	Step moss	
Hypochaeris radicata	Hairy cat's-ear	Introduced
Ilex aquifolium	English holly	Introduced
Juncus effusus	Common rush	
Luzula multiflora	Many-flowered wood-rush	
Mycelis muralis	Wall lettuce	Introduced
Phleum pratense	Timothy	Introduced

Pinus contorta	Lodgepole pine	
Plagiomnium insigne	Badge moss	
Polystichum munitum	Sword fern	
Prunus emarginata	Bitter cherry	
Pseudotsuga menziesii	Douglas-fir	
Pteridium aquilinum	Bracken fern	
Racomitrium spp.		
Rhytidiadelphus triquetrus	Electrified cat's-tail moss	
Ribes lacustre	Black gooseberry	
Rubus leucodermis	Black raspberry	
Rubus spectabilis	Salmonberry	
Rubus ursinus	Trailing blackberry	
Salix scouleriana	Scouler's willow	
Senecio jacobaea	Tansy ragwort	Introduced
Thuja plicata	Western redcedar	
Tsuga heterophylla	Western hemlock	
Urtica dioica	Stinging nettle	
Vaccinium parviflolium	Red huckleberry	
Zigadenus venenosus	Death camas	

Appendix C. Photographic Documentation.

PHOTO STATION	LOCATION (UTM Coordinates)	DIRECTION	PHOTO-GRAPHER	DATE YYYY-MM-DD	DESCRIPTION
Anthropogenic Features as noted on Figure 3					
P8	475522; 5482227	360°	LM	2018-08-09	Looking upslope from road to bluffs in background. Carrina Maslovat in photo with small Covenant Boundary sign in foreground and caged trees from replanting efforts visible.
P9	475548; 5482280	270°	LM	2018-08-09	Boundary sign behind large rock at northern road edge of Nature Reserve.
P10	475541; 5482271		LM	2018-08-09	Douglas-fir planted and caged during restoration efforts in cleared area of lower bluffs.
Natural Features as noted on Figure 3					
P1	475894; 5481513	320°	LM	2018-08-09	Looking from Brigade Bay (marina) towards Brigade Bay Bluffs in the background.
P2	475430; 5482397	140°	LM	2018-08-09	Howe Sound, lower slopes of Mt. Artaban and Brigade Bay. Note smoky haze from nearby forest fire in Horseshoe Bay.
P3	475462; 5482266	270°	LM	2018-08-09	Western Redcedar stump with Douglas-fir and Western Hemlock trees growing out of it. Botanist Carrina Maslovat in photo.
P4	475439; 5482459	0°	LM	2018-08-09	Turkey Vulture flying over bluffs.

P5	475418; 5482379	350°	LM	2018-08-09	Looking upslope onto bluff habitat, small draw/gully with boulders and woody debris.
P6	475428; 5482457	110°	LM	2018-08-09	Centre of Ecological Community 2 plot, with view of Howe Sound in background.
P7	475418; 5482340	350°	LM	2018-08-09	Centre of Bigleaf Maple plot, looking upslope.
P11	475493; 5482261		LM	2018-08-09	Browsed Western Redcedar in cleared area where tree-planting efforts occurred near roadside.
P12	475440; 5482322	135°	LM	2018-08-09	Canada Thistle and Tansy Ragwort

* LM=Laura Matthias

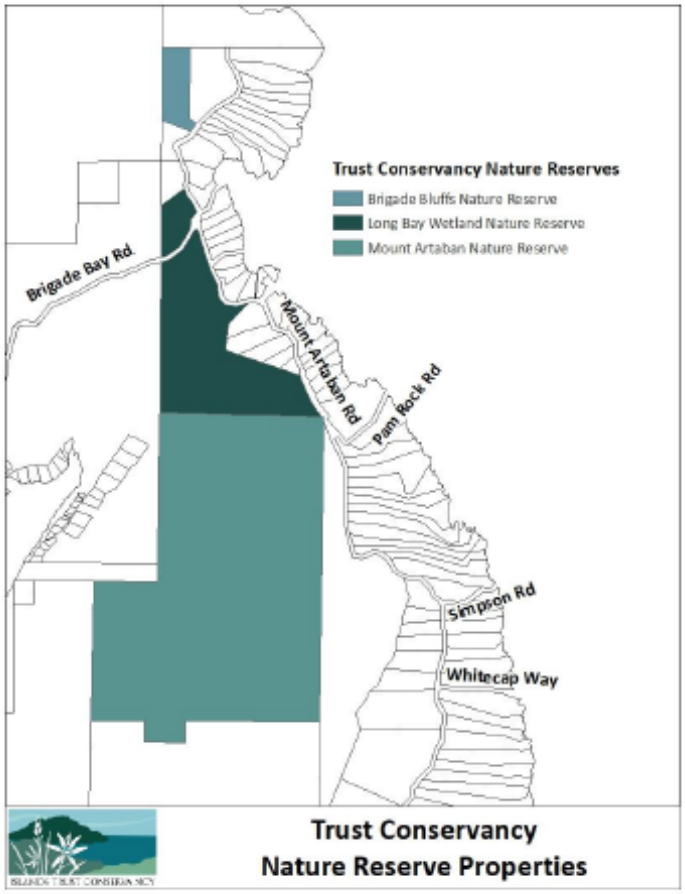
Appendix D. Letter to Neighbours.

ISLANDS TRUST CONSERVANCY
Protecting Canada's Islands in the Salish Sea

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,

N. Murphy

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

...2

Appendix E. Questionnaire sent to Neighbours and Available Online.

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.

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	**Islands Trust Conservancy Board**	**For the Meeting of:**	**October 1, 2019**
From:	**Staff**	**Date Prepared:**	**September 23, 2019**

SUBJECT: Long Bay Wetland Nature Reserve Management Plan, Gambier Island

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RECOMMENDATION: That the Islands Trust Conservancy Board approve the 2019 update of the Long Bay Wetland Nature Reserve Management Plan dated September 20, 2019

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1 **PURPOSE:** To approve the first 10-year revision of the management plan for Long Bay Wetland Nature Reserve.

2 **BACKGROUND:**

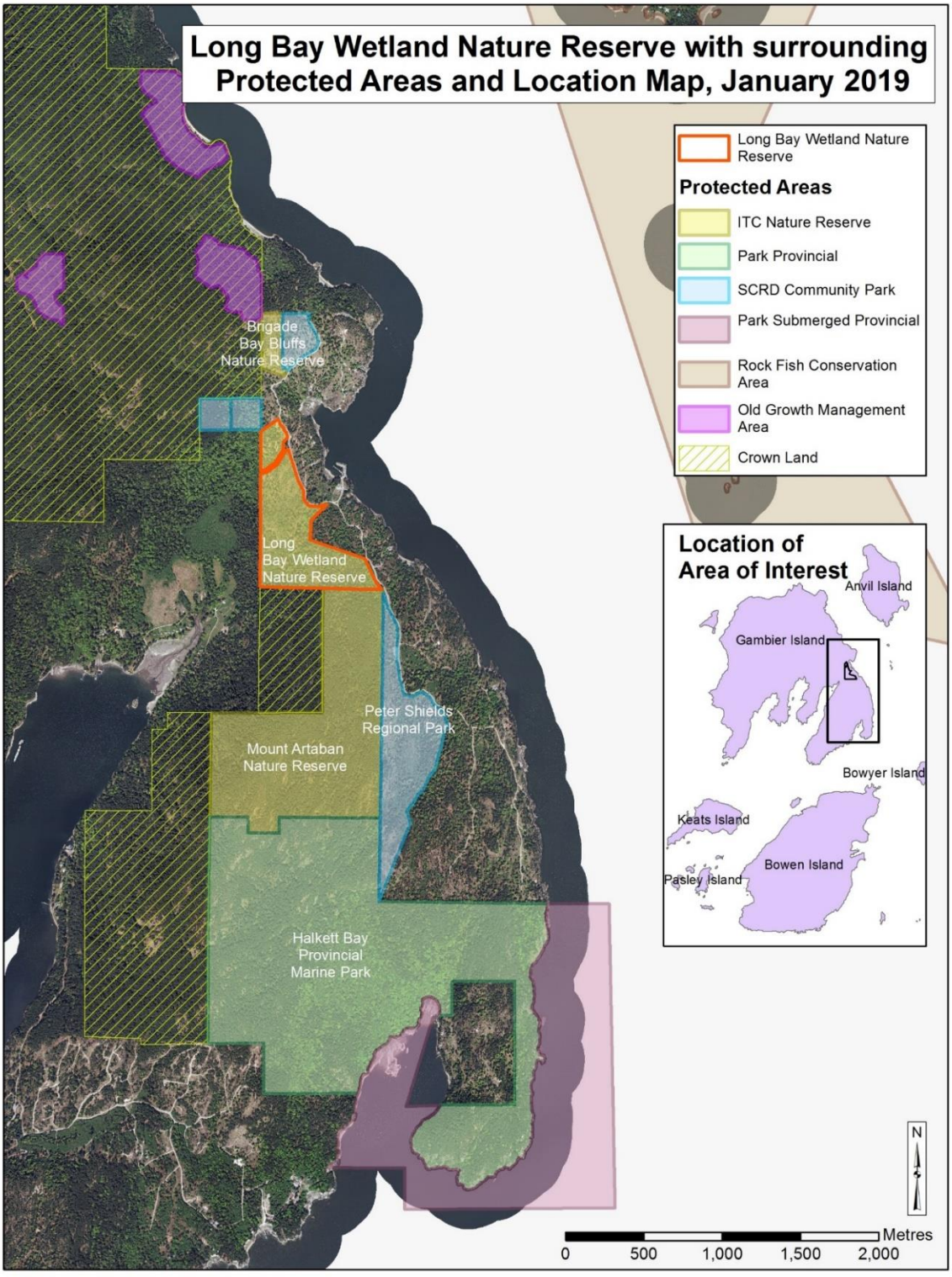
Islands Trust Conservancy Board policy (ITC 2.3) indicates, "The Board will prepare and approve a management plan for each property it acquires as a Nature Reserve. The Board will approve a management plan for its properties within one year of acquisition, and will update each management plan approximately 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;
- 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

Along with Brigade Bay Bluffs Nature Reserve, Long Bay Wetland Nature Reserve was established in 2005 when two parcels of land were transferred as part of the Brigade Bay subdivision development. Long Bay Wetland Nature Reserve protects 38 hectares (94 acres) of recovering wetland, stream, and riparian ecosystems surrounded by regenerating upland forest ecosystems. The wetland and three tributaries are part of the headwaters of the Long Bay watershed and Long Bay Creek, a fish bearing stream. Long Bay Wetland Nature Reserve is the most northern part of 469.12 hectares of a contiguous protected area of parks and nature reserves on Gambier Island. Although a moderately-sized parcel on its own, the Reserve plays an important role in enhancing the habitat values of the area through connectivity and proximity to other undeveloped and protected lands and waters on and around the island.

The upland portions of the Reserve were selectively logged prior to its protection, resulting in a young forest with pole/sapling sized conifers; however, large numbers of mature deciduous species remain. Although the forests are young, they will mature into blue- and red-listed ecological communities. In addition to logging impacts, the north end of the reserve had been used as a quarry borrow pit for sand and gravel for the adjacent Brigade Bay subdivision. Since

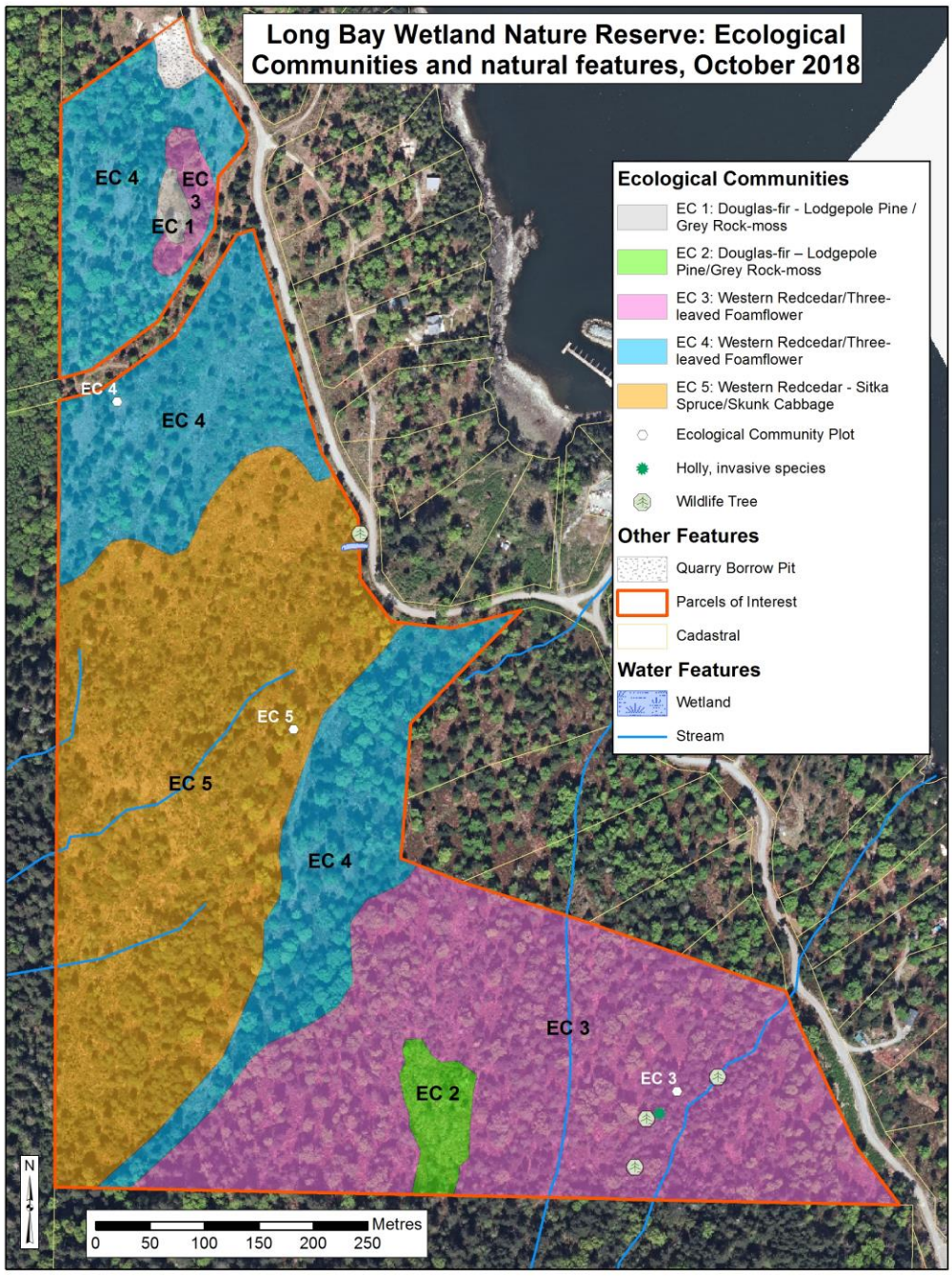
acquiring the Reserve, ITC and Gambier Island Conservancy have worked towards restoring the land, including reforestation and seedling protection (from deer browsing) projects.



One Species at Risk occurrence is known within the Reserve: the northern red-legged frog (blue listed). It is likely that additional Species at Risk will be detected if surveys are completed at appropriate times of the year. The Reserve's wetland habitat likely supports frog and salamander breeding habitats and important foraging habitat for bats and other wildlife. Butterflies and dragonflies have been observed around the wetland. Fish, likely juvenile coho salmon, use at least one of the three small tributaries within the reserve.

Table 1 *Ecological communities in Long Bay Wetland Nature Reserve and their status.*

Ecological Community Name		Status		
English	**Scientific**	**Provincial**	**BC List**	**Global**
Douglas-fir–Lodgepole Pine/Grey Rock-moss Very Dry Maritime	*Pseudotsuga menziesii–Pinus contorta/Racometrium canescens*	S2 (2004)	Red	GNR
Douglas-fir–Western Hemlock/Salal Very Dry Maritime	*Pseudotsuga menziesii–Tsuga heterophylla/Gaultheria shallon*	S2S3 (2013)	Blue	G3G4
Western Redcedar/Three-leaved Foamflower Very Dry Maritime	*Thuja plicata/Tiarella trifoliata*	S2S3 (2013)	Blue	G3
Western Redcedar–Sitka Spruce/Skunk Cabbage Very Dry Maritime	*Thuja plicata–Picea sitchensis/ Lysichiton americanus*	S3S4 (2001)	Yellow	GNR



This is the first revision of the management plan since the first plan was written in 2005 (by Cascade Environmental Resource Group Ltd). 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 maintain trails and signage, remove invasive species, continue restoration of highly degraded sites, and to develop a wildfire management plan. Further inventories for Species at Risk would provide a clearer picture of the ecology of the reserve and guide future management.

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:

- Preserve and protect the ecosystems, biological diversity and other natural values of the site;
- Restore plant and animal communities and ecological processes where necessary;
- Allow low-impact pedestrian access on existing trails while ensuring ecological values are not compromised (further development of the trail system is not recommended);
- Support ongoing inventory, mapping and monitoring to guide management;
- Protect the water quality and flow regimes of all streams and wetlands within the reserve;
- Remove invasive plant species throughout the reserve and hazard trees around the trail system; and
- Allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative. Only the removal of hazard trees around the trail system and invasive plant species is permitted.

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. Monitor planted trees for survival and remove cages as necessary.
3. Identify opportunities for cooperative management with First Nations.

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

1. Prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods in consultation with the local fire authorities.
2. Plant and cage native shrubs and trees in areas with poor natural regeneration.
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.
2. Develop a wetland restoration plan, if the budget allows.

Ongoing or Annual Actions proposed:

1. Conduct annual monitoring to identify management concerns, including 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. Conduct ongoing maintenance of trails and signs.
4. Continue to inform the general public of the natural values of the site and the permitted and prohibited uses through information placed in local publications.
5. 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.

3 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 cost for this nature reserve will be for future restoration projects, as the restoration projects from previous years appear to have been very successful (e.g., all treatable land in the old quarry area has been successfully revegetated). There is potential for a larger, more intensive reforestation project in Vegetation Type 4 and perhaps some of Vegetation Type 5, and wetland restoration is also recommended. External or internal funding for these projects could be sought; in the meantime, annual one-day forest restoration work parties with Gambier Island Conservancy volunteers will continue. A secondary management cost for the Reserve is trail maintenance; however, trail use is light and the trails are currently in good condition. There is currently a small number of signs to be maintained within the Reserve. This management plan recommends additional interpretive signage.

POLICY: Consistent with policy.

IMPLEMENTATION/COMMUNICATIONS: Staff will provide the final 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: Hotter, drier summers may lead to premature drying of the wetland and altered flow rates in seasonal streams, which may challenge wetland restoration efforts. Forest restoration activities will also be challenged by increasing temperatures and drought; however, if reforestation projects can overcome these challenges, the regenerating forests will contribute to carbon sequestration. 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 Long Bay Wetland 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.

4 RELEVANT POLICY(S): ITC 2.3 - Acquisition and Management of Land

5 **ATTACHMENT(S):** Long Bay Wetland Nature Reserve Management Plan

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RESPONSE OPTIONS

Recommendation: That the Islands Trust Conservancy Board approve the 2019 update of the Long Bay Wetland Nature Reserve Management Plan dated September 20, 2019.

Alternative: That the Islands Trust Conservancy Board approve the Long Bay Wetland Nature Reserve Management Plan as amended.

Prepared By: Jemma Green, Covenant Management and Outreach Specialist

Reviewed By/Date: Kate Emmings, A/ITC Manager / September 23, 2019

DRAFT

Long Bay Wetland Nature Reserve Management Plan
Gambier Island, BC



PREPARED FOR:

ISLANDS TRUST CONSERVANCY
Protecting Canada's Islands in the Salish Sea

Brigade Bay Bluffs and Long Bay Wetland Nature Reserves
joint management plan prepared: November 30, 2005

REVISED February 2019 by: Carrina Maslovat, R. P. Bio. #1407
and Laura Matthias, Consultant Biologist, Salt Spring Island, BC

APPROVED BY:
Islands Trust Conservancy, Date: ITC-2019-XXX
Gambier Island Conservancy, Date
Sunshine Coast Conservation Association, Date

i. Executive Summary

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 Long Bay Wetland Nature Reserve is a living document that will evolve as opportunities for knowledge sharing arise and understanding grows.

In January 2005, the Islands Trust Conservancy protected two parcels of land west of Brigade Bay on eastern Gambier Island: Brigade Bay Bluffs Nature Reserve (5.14 hectares/12.7 acres) and Long Bay Wetland Nature Reserve (38 hectares/94 acres). These lands were transferred by Coastland Wood Industries Ltd. and Mike Jenks as part of the Brigade Bay subdivision development. Cascade Environmental Resource Group Ltd. prepared the initial joint management plan for the Brigade Bay Bluffs and Long Bay Wetland Nature Reserves. In 2018, the Management Plans were updated as separate documents for each reserve.

The Long Bay Wetland Nature Reserve (LBWNR) consists of upland areas surrounding a large wetland area. The Nature Reserve includes a wetland and three tributaries that were significantly damaged by logging in 2000 and 2001. Riparian restoration efforts completed in 2002 and 2003 included removal of excessive slash and channel blockages, de-compaction of affected soils and re-vegetation of riparian areas (Cascade 2005). The wetland and tributaries are part of the headwaters of the Long Bay watershed and Long Bay Creek, a fish bearing stream. The upland portions of the reserve were selectively logged prior to reserve establishment, resulting in a young forest with large numbers of mature deciduous species and pole/sapling sized conifers. Although the forests are young, they will mature into blue- and red-listed ecological communities. The adjacent Brigade Bay subdivision used the north end of the reserve area as a quarry borrow pit for sand and gravel. Some reforestation and protection of seedlings from deer browsing has been initiated (2015, 2017) within the reserve. LBWNR is an important part of a large contiguous natural area within the Coastal Western Hemlock Very Dry Maritime (CWHxm) subzone on Gambier Island.

The management objectives for management of the LBWNR are:

- Preserve and protect the ecosystems, biological diversity and other natural values of the site;
- Restore plant and animal communities and ecological processes where necessary;
- Allow low-impact pedestrian access on existing trails while ensuring ecological values are not compromised (further development of the trail system is not recommended);
- Support ongoing inventory, mapping and monitoring to guide management;
- Protect the water quality and flow regimes of all streams and wetlands within

the reserve;

- Remove invasive plant species throughout the reserve and hazard trees around the trail system; and
- Allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative. Only the removal of hazard trees around the trail system and invasive plant species is permitted.

Key management recommendations are to maintain trails and signage, remove invasive species, continue restoration of highly degraded sites and to develop a wildfire management plan. Further inventories for Species at Risk would provide a clearer picture of the ecology of the reserve and guide future management.

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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

Cascade Environmental Resource Group	Consultant		Preparation of previous management plan
Nuala Murphy	Property Management Specialist/Islands Trust Conservancy		Background information and mapping, local contacts
Jemma Green	Property Management Specialist/Islands Trust Conservancy		Review of document
Doug Hopwood	Biologist/Consultant	R.P. Forester	Providing background information, writing baseline report, assisting with access logistics
Peter Scholefield	Volunteer/Gambier Island Conservancy		Background data, assistance with field logistics, document review
Jason Herz	Conservation Committee Chair/Sunshine Coast Conservation Association		Review of document
Ruth Simons	Volunteer/Gambier Island Conservancy		Background data and assistance with field logistics; allowing access via Brigade Bay 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. The Long Bay Wetland Nature Reserve (LBWNR) on Gambier Island was protected by the Islands Trust Fund (now the Islands Trust Conservancy – ITC) in 2005, along with Brigade Bay Bluffs Nature Reserve. The properties were part of a transfer by Coastland Wood Industries Ltd. and Mike Jenks as part of the Brigade Bay subdivision development (survey in Appendix A).

Cascade Environmental Resource Group Ltd. developed the initial Management Plan for both the Brigade Bay Bluffs and LBWNR (Cascade 2005). In 2018, the Management Plans for both properties were scheduled to be updated and written as separate independent documents for each property.

The Gambier Island Conservancy and the South Coast Conservation Association co-hold a conservation covenant on the land.

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 and since 1990 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: a "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; and,
- 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. As with this plan, the *Management Plan for Areas of Cultural Heritage and Sacred Significance* must be in accordance with the conservation covenant registered on the land.

1.4 Protected Area Purpose

The purpose of the LBWNR is to preserve and protect the natural ecosystems and natural values of the site (including any rare and endangered plant and animal species), 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 objectives of the Islands Trust Conservancy and the Islands Trust.

1.5 Protected Area Objectives

The objectives for the LBWNR are as follows:

1. Preserve and protect the natural ecosystems, biological diversity and natural values.
2. Restore plant and animal communities and ecological process.
3. Allow low-impact pedestrian access on existing trails (further development of the trail system is not recommended), while ensuring that significant ecological values are not compromised by recreation use.
4. 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.
5. Support ongoing inventory, mapping and monitoring to guide management.
6. Protect the water quality and flow regimes of all streams and wetlands within the reserve.
7. Remove invasive plant species throughout the reserve and hazard trees around the trail system.
8. Allow natural forest succession and natural ecological processes and functions to proceed unimpeded without human intervention, except in the case of wildfire or other exceptional situations where remediation is considered imperative.

2.0 Property Information

The LBWNR is 38 hectares (91 acres) in size with a degraded low-lying wetland (impacted from logging operations in 2000-2001) measuring 10.7 ha (26.5 acres). The remaining area consists primarily of forested slopes spanning an elevation range from 27 m (90 feet) to 151 m (500 feet) above sea level.

2.1 Location

Gambier Island is approximately 10 km from Horseshoe Bay.

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

LBWNR can be accessed from two 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 through the camp property that continues along the Brigade Bay Road easement, through the Gambier Island Sea Ranch property, and onto Mt. Artaban Road in the Brigade Bay subdivision. This hike takes approximately 30 minutes. Alternatively, the trailhead to the Mt. Artaban trail, which starts off in the LBWNR, can be reached from the public dock in the Halkett Bay Provincial Marine Park by hiking north on a trail through the park, then walking north along Mt. Artaban Road. This route takes about one hour.

To travel to these two public docks, there are regularly scheduled water taxi runs from Horseshoe Bay on weekends and on Wednesday evenings in the summer. There are two nearby private marinas, one at the Sea Ranch and the other at Brigade Bay. For those who are not property owners at either location, permission is required to access the marinas.

2.2 Legal description

The LBWNR is legally described as PID: 015-921-034, District Lot 1259, Group 1, New Westminster District, Except Part Subdivided by Plan BCP15304.

2.3 Legal Access

Legal access to the LBWNR is off of Mt. Artaban Road, which goes through the Brigade Bay subdivision (see Figure 1 for trailhead locations). The reserve is west of the road along much of its length.



Photo 2. Trailhead signs off of Mt. Artaban Road in LBWNR on connector trail to Mt. Artaban Nature Reserve.

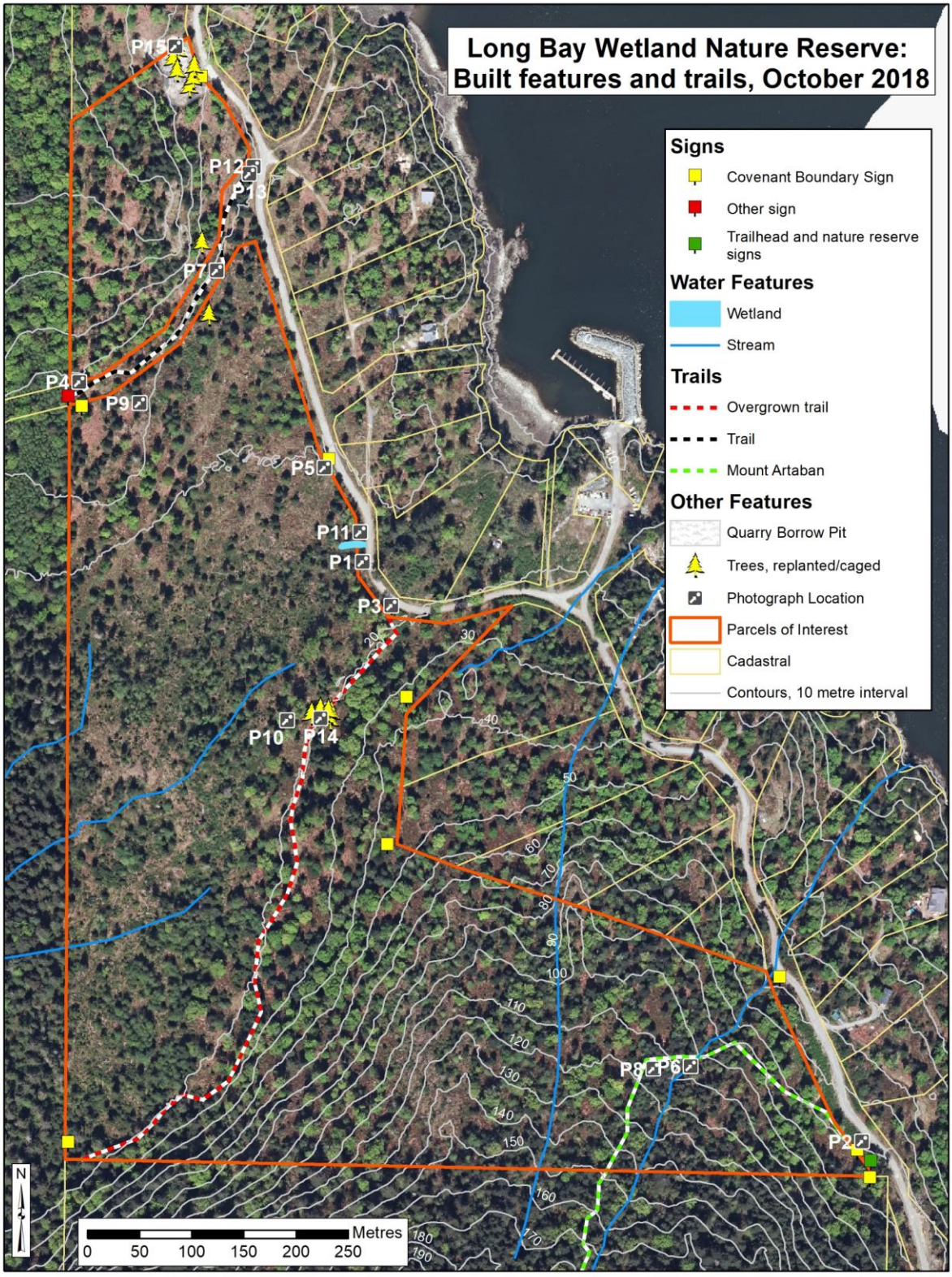


Figure 1. Map of trail access to LBWNR, including photopoint stations (photograph locations).

2.4 Landscape Context

Gambier Island is located in Howe Sound and is one of the many islands governed by the Islands Trust (see Figure 2 for location and protected area context). LBWNR is located on the east side of Gambier Island, west of Brigade Bay. Directly to the north and east are a number of privately-managed lots in the Brigade Bay subdivision. Directly south is the Mt. Artaban Nature Reserve, managed by the Islands Trust Conservancy, and a provincially-managed parcel. To the west is Sea Ranch strata common property.

LBWNR faces threats from the six adjacent, privately-managed properties that are part of a 68-lot, privately-managed Brigade Bay subdivision (map in Appendix A). The reserve also abuts one strata property. All of the privately-managed properties may impact management of the reserve.

LBWNR is the most northern part of a contiguous protected area of parks and nature reserves (469.12 ha) including Mt. Artaban Nature Reserve (ITC), Halkett Bay Provincial Marine Park (BC Parks), Pete Shields Regional Park (Sunshine Coast Regional District), and provincially-managed lands (171.35 ha) for a total 640.47 ha of contiguous protected lands. There is an additional marine portion of the Halkett Bay Provincial Marine Park (149.99 ha).

To the north (275 m) is a matrix of protected areas (30.97 ha) including Brigade Bay Bluffs Nature Reserve (ITC), two small community parks (Sunshine Coast Regional District), and a large network of undeveloped provincially-managed parcels and old-growth management areas (3345.83 ha), totaling 3376.81 ha of contiguous protected areas. Although a moderately-sized parcel on its own, the LBWNR plays an important role in enhancing the habitat values of the area through connectivity and proximity to other undeveloped and protected lands on the island. The wetland and streams provide ecological diversity.

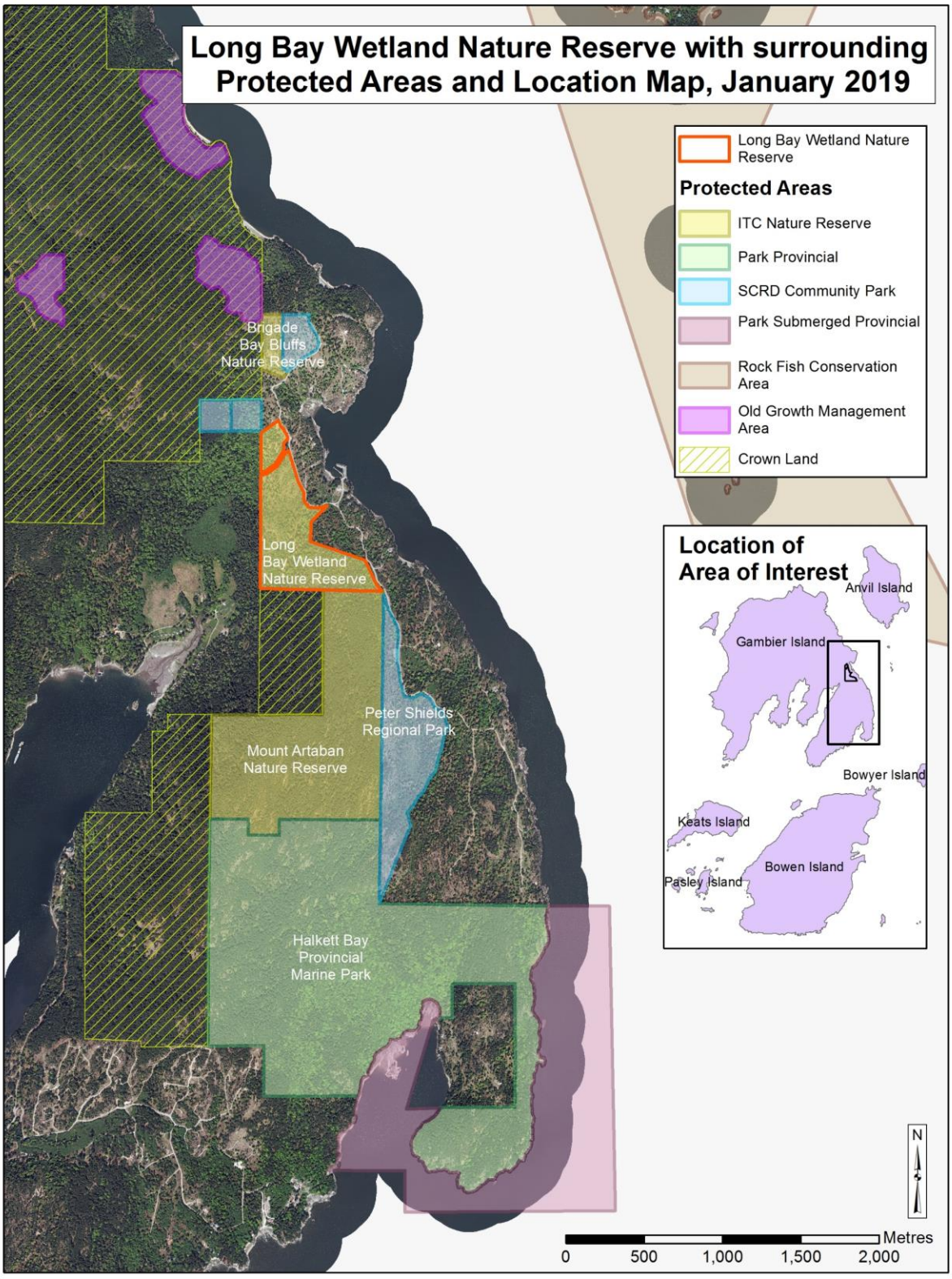


Figure 2. Map showing location of Gambier Island (inset) and protected areas context surrounding LBWNR (reserve boundary outlined in orange).

2.5 Site History[1]

Gambier Island is within the traditional territory of multiple 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.

There are two archaeological sites on Brigade Bay, which are protected under the *Heritage Conservation Act* (Cascade 2005). The adjacent properties in 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). Consultation between 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, plant collection, and as a camp site and safe haven for members of the Squamish Nation traveling in Howe Sound (FOC, December 2, 2003).

The Brigade Bay area had a settler homestead, probably during the 1920s, and the buildings remained until the 1980s (Hopwood 2013). The reserve area was burned by a human-caused fire that ignited on July 9, 1922 (Parminter pers. comm. in Hopwood 2009). The reserve was logged, probably in the 1920s (shortly before or after the fire), and regrowth was from natural regeneration (Hopwood 2013). A recent selective harvest in most of the reserve occurred in 2000-2001 (Cascade 2005). In 2001, an Environmental Assessment was completed for the Brigade Bluffs subdivision (CERG 2001 in Cascade 2005). Planning for the Brigade Bluffs subdivision began in 2000 and residential lots were put on the market in 2004. Islands Trust Conservancy acquired the reserve in 2005.

2.6 Anthropogenic Features

There are no structures or buildings within the reserve. At this time, no archaeological sites have been identified within LBWNR. The following is a table of other anthropogenic features in the reserve.

[1] 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".

Table 2. Anthropogenic features in LBWNR

Anthropogenic Feature	Description	Condition	Photopoint Location (including UTMs)
Trail	There is a trail in the northern portion of the reserve along the Brigade Bay Road easement from Mt. Artaban Road to Sea Ranch strata and another trail in the southeast of the reserve from Mt. Artaban Road to Mt. Artaban Nature Reserve	Good	P4 (photo is of end of trail) 475380; 5481633
Boundary sign	Nature Reserve Boundary Sign on Mt. Artaban Road	Good	P3 475679; 5481419
Boundary sign	Nature Reserve Boundary Sign on Mt. Artaban Road	Good	P13 475543; 5481832
Boundary sign and Private Property sign	Private Property and No Hunting signs at Mt. Artaban Road at northern trailhead at eastern end	Good	P12 475547; 5481839
Caging around replanted trees	Caged western redcedar and Douglas-fir trees in restoration area at old quarry at the north end of the reserve and along the Brigade Bay Road easement.	Caging good, some trees in poor condition	P14 475611; 5481311
Boundary sign, Private Property sign	Trailhead Boundary Sign and Private Property sign for adjacent strata (No Motorized Vehicles); at end of northern trail at western boundary of Nature Reserve	Good	P4 475380; 5481633
Boundary sign	Nature Reserve Boundary sign on Mt. Artaban Road	Good	475621; 5481556
Boundary and trailhead signs	Boundary sign and trailhead sign to Mt. Artaban Nature Reserve trail connector	Good	P2 476130; 5480906
Boundary sign	On corner of eastern boundary of reserve	Good	No photo 475689; 5481309
Boundary sign	On corner of eastern boundary of reserve	Good	No photo 475680; 5481185
Boundary sign	Covenant boundary sign in southwest corner of reserve	Good	No photo 475357; 5480877



Photo 3. Reserve boundary signage roadside on Mt. Artaban Rd.

2.7 Undersurface Rights

The title shows no undersurface rights designated for LBWNR.

2.8 Notations, Charges, Liens and Interests

A Section 219 Conservation Covenant (Registration Number: CA3219709) and Section 218 Statutory Right of Way (Registration Number: CA3219710) 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.

The Statutory Right of Way outlines permitted access and activities for the Covenant Holders.

2.9 Local Planning Designations

LBWNR 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 southeast corner of the reserve is zoned G2 (Nature Reserve). The purpose of this zone is to maintain and enhance the ecological values, ecosystems and unique areas of nature reserves and sanctuaries. Permitted uses within the zone include ecosystem preservation use, water

recharge use, trail use, fish and wildlife habitat protection use, and accessory use including but not limited to fire protection (Islands Trust 2004).

The remainder of the reserve is within the Agricultural Land Reserve (ALR), zoned Agriculture (A) (see Figure 3 for ALR zone). The purpose of the zone is to provide regulations to support the retention of small-scale farming on Gambier Island in areas with agricultural potential and on land in the Provincial Agricultural Land Reserve. According to the Gambier Island Land Use Bylaw No. 86, permitted uses within the Agriculture zone include agriculture use, single family residential use, associated secondary dwelling use, and accessory uses including but not limited to home occupations (Islands Trust 2004).

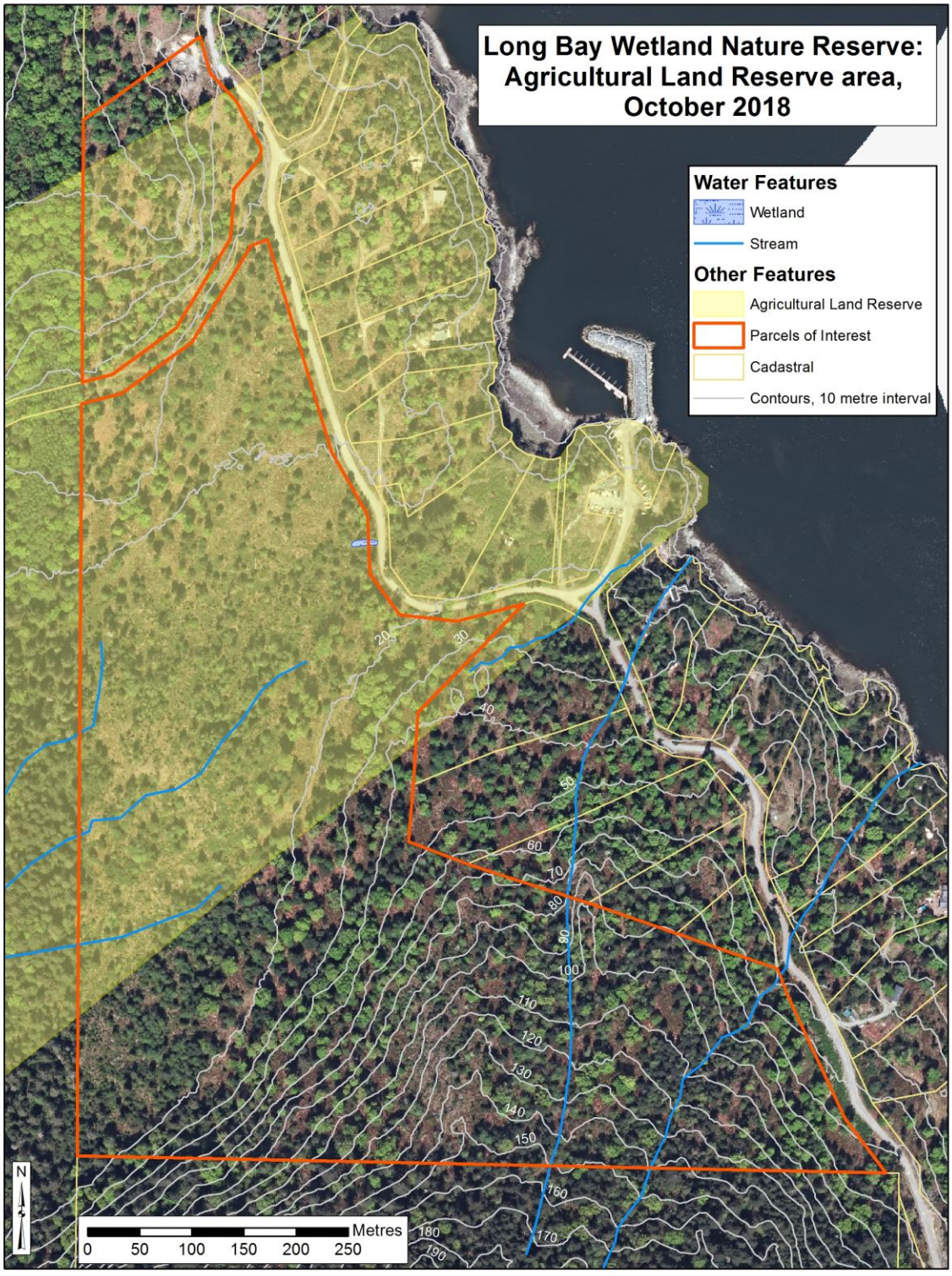


Figure 3. Map of ALR zoned area within the LBWNR (yellow shading)

2.10 Existing Public, First Nations, and Other Use

Long Bay Wetland 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 existing public trails in the reserve. A signed trail follows the Brigade Bay Road dedication that divides the reserve into two portions in the northern portion of the reserve (Figure 1). The trail follows an old logging road, from Mt. Artaban Road to the Sea Ranch strata common property and on to Camp Artaban in Long Bay. A second signed trail is found in the southeast corner of the reserve and provides a connector link into the adjacent Mt. Artaban Nature Reserve to the south. The trail leads over the summit of Mt. Artaban and through Halkett Bay Provincial Marine Park (Figure 2).

A trail that bisected the reserve in the middle of the reserve, west of Brigade Bay Marina, has been decommissioned and is becoming overgrown. Trees have been caged where the decommissioned trail meets the old roadway (Figure 1) (information on restoration provided in

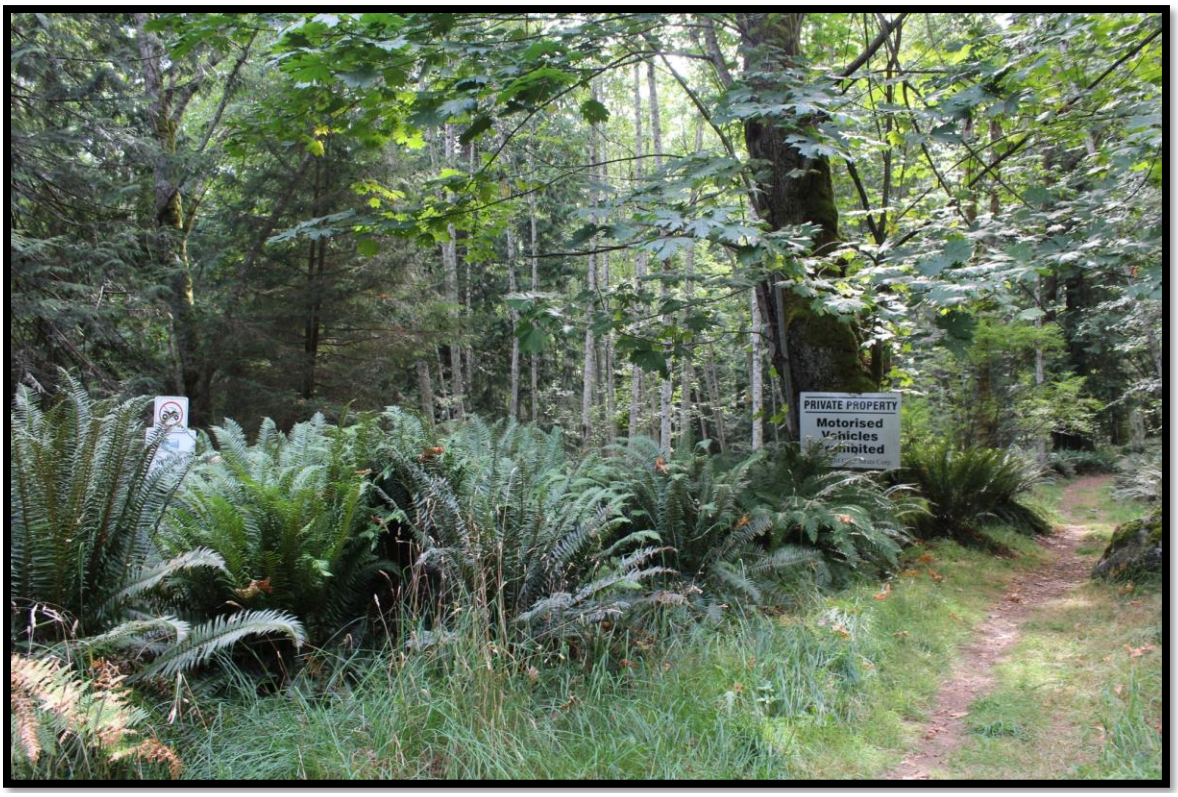


Photo 4. Trail leading west to privately-managed, Sea Ranch Strata, west of LBWNR. Note overgrown ITC trailhead sign in sword ferns, and private property sign below bigleaf maple.

Section 6.8 Ecological Restoration Options).

3.0 Inventory by Ecological Community

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 LBWNR. 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.

3.1 Ecological Significance

The LBWNR includes lowland forests with steep rocky outcrops and mossy bluffs. The upland portions of the reserve were selectively logged prior to reserve establishment, leaving behind large, mature deciduous trees and pole/sapling sized conifers. Although the forests are young, they will mature into blue- and red-listed ecological communities (Table 3). The hydrology of the wetland site, its three small tributaries, and two streams was significantly altered by logging in 2000-2001.

The adjacent Brigade Bay Subdivision utilized the northern portion of the reserve as a borrow pit for sand and gravel. Some reforestation and protection of seedlings from deer browsing has been initiated (2015, 2017) within the reserve.

A search of BC Conservation Data Centre (CDC) data revealed no species at risk occurrences in the reserve and only one blue-listed species on Gambier Island: the northern red-legged frog (*Rana aurora*) (BC CDC 2018). During site visits in August 2018, no rare species were noted within the reserve, though it is likely that some rare species would be detected if surveys were completed at appropriate times of the year. The wetland likely supports frog and salamander breeding habitats and important foraging habitat for bats and other wildlife. Butterflies and dragonflies were noted around the wetland habitat areas. Fish, likely juvenile coho (*Oncorhynchus kisutch*), use at least one of the three small tributaries within the reserve (Hopwood 2013).

Table 3. Ecological communities and their status

Ecological Community Name		Status		
English	**Scientific**	**Provincial**	**BC List**	**Global**
Douglas-fir–Lodgepole Pine/Grey Rock-moss Very Dry Maritime	*Pseudotsuga menziesii–Pinus contorta/Racometrium canescens*	S2 (2004)	Red	GNR
Douglas-fir–Western Hemlock/Salal Very Dry Maritime	*Pseudotsuga menziesii–Tsuga heterophylla/Gaultheria shallon*	S2S3 (2013)	Blue	G3G4
Western Redcedar/Three-leaved Foamflower Very Dry Maritime	*Thuja plicata/Tiarella trifoliata*	S2S3 (2013)	Blue	G3
Western Redcedar–Sitka Spruce/Skunk Cabbage Very Dry Maritime	*Thuja plicata–Picea sitchensis/ Lysichiton americanus*	S3S4 (2001)	Yellow	GNR

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. The maritime influence moderates the effect of elevation, latitude, and aspect on local temperature and precipitation.

The weather statistics for the adjacent Bowen Island station show that annual precipitation is approximately 1507 mm and most of it comes in the form of rain rather than snow (The Weather Network 2018). On Bowen Island, average daily temperatures peak in the summer months at 23°C (July and August) and are lowest in the winter at 0°C (December and January) (Figure 4). Precipitation is highest in the winter months, from November to January (averaging 506-420 mm), and July and August are the driest months (58-78 mm) (Meteoblue 2018).

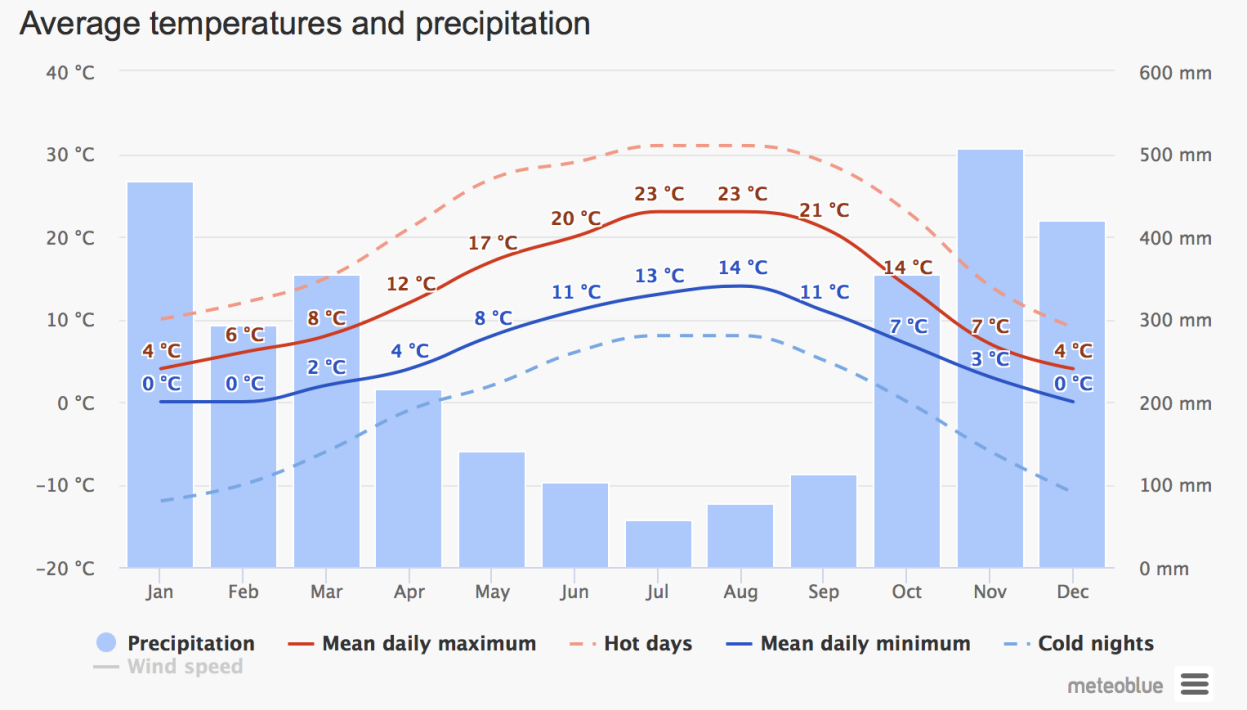


Figure 4. Average temperature and precipitation at Bowen Island weather station from 1985-2018 (Meteoblue 2018)

The future impacts from climate change are unknown, although a summer drying trend and an increase in 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 shits to the vegetation community away from western redcedar (*Thuja plicata*), allowing the spread of Douglas-fir (*Pseudotsuga menziesii*). 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 adapting to climate change stresses.

3.3 Geology and Physiology

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). These stratified rock formations are composed of andesitic to dacitic tuff, breccia agglomerate, andesite, argillite, conglomerate, lesser marble, greenstone, and phyllite (BC Ministry of Energy and Mines, 2005 in Cascade 2005). Intrusive rock of the Coast Plutonic complex, such as quartz diorite and diorite, occur in the vicinity (Cascade 2005).

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).

Within the reserve, the topography is dominated by rocky outcrops and bluffs that are roughly southwest to northeast in direction. In the center of the reserve is a large gently sloping wet area with a smaller more intact wetland as mapped. Bedrock is overlain by a veneer of colluvium and glacial till, except where glacial processes removed these materials and only a thin organic layer has since accumulated (Cascade 2005).

3.4 Hydrology

The reserve includes three stream tributaries of Long Bay Creek, which flow southwest from the wetland into Long Bay. There is also un-channelized flow through the wetland in a southwesterly direction across the western boundary of the covenant area (Hopwood 2013). The runoff from the upland areas and the streams feeds the wetland depression in the center of the reserve (Photo 5), with the wettest portion mapped in Figure 1 and Figure 5.



Photo 5. Wetland vegetation in ecological community 5 (disturbed from logging) shifting towards Horsetail dominated understory.

Two streams flow north from Mt. Artaban Nature Reserve into the southeast corner of the reserve and into the ocean just south of Brigade Bay Marina (Photo 6).

All the streams and the wetland were significantly damaged by streamside logging in 2000 and 2001, to the point that in 2001 pre-existing channels could not be identified (Cascade 2005). Restoration efforts prior to 2004 included removal of excessive slash and channel blockages, de-compaction of affected soils, and revegetation of riparian areas (Cascade 2005).

3.5 Soils

Humo-Ferric Podzols are the most widely distributed soils in the upland areas, with glacial till overlying bedrock that results in well drained soils. Primary mineral deposits are colluvial and glacial derived. Soil processes that are characteristic of this submaritime forest include Mor humus formation (associated with the accumulation of acid organic matter), leaching, eluviation, and illuviation (Meidinger and Pojar 1991 in Cascade 2005).

Deep, organic Folisols are prominent in the wetland and permanent seepage areas. Soil profiles feature an LFH (organic litter) horizon, underlain by a light gray eluviated (Ae and Aej) horizon, followed by a light reddish-brown (becoming yellowish with depth) B horizon containing large, coarse fragments in a silty matrix (Cascade 2005).

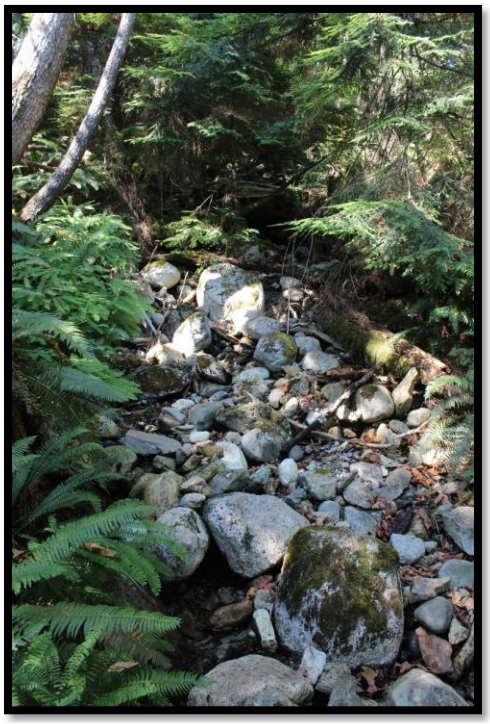


Photo 6. Creek bed that flows north from Mount Artaban Nature Reserve into LBWNR.

3.6 Ecological Classifications

The LBWNR is within the Very Dry Maritime subzone (xm) of the Coastal Western Hemlock biogeoclimatic zone (CWH) (Green and Klinka 1994). 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. The Reserve is within the Pacific Maritime Ecozone and the Georgia Puget Basin Ecoregion (Lands Directorate 1986).

3.7 Ecological Communities and Site Series

The previous Management Plan for the LBWNR (Cascade 2005) delineated three vegetation types based on Terrestrial Ecosystem Mapping (TEM) units. The baseline inventory for the Reserve (Hopwood 2013) delineated six units. 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) (Figure 5). This updated management plan has followed the latter delineation of six vegetation types, with the removal of one vegetation type (6) from the baseline inventory which separated the quarry borrow pit into a separate classification. In this plan, the former quarry has been amalgamated into Vegetation Type 4.

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

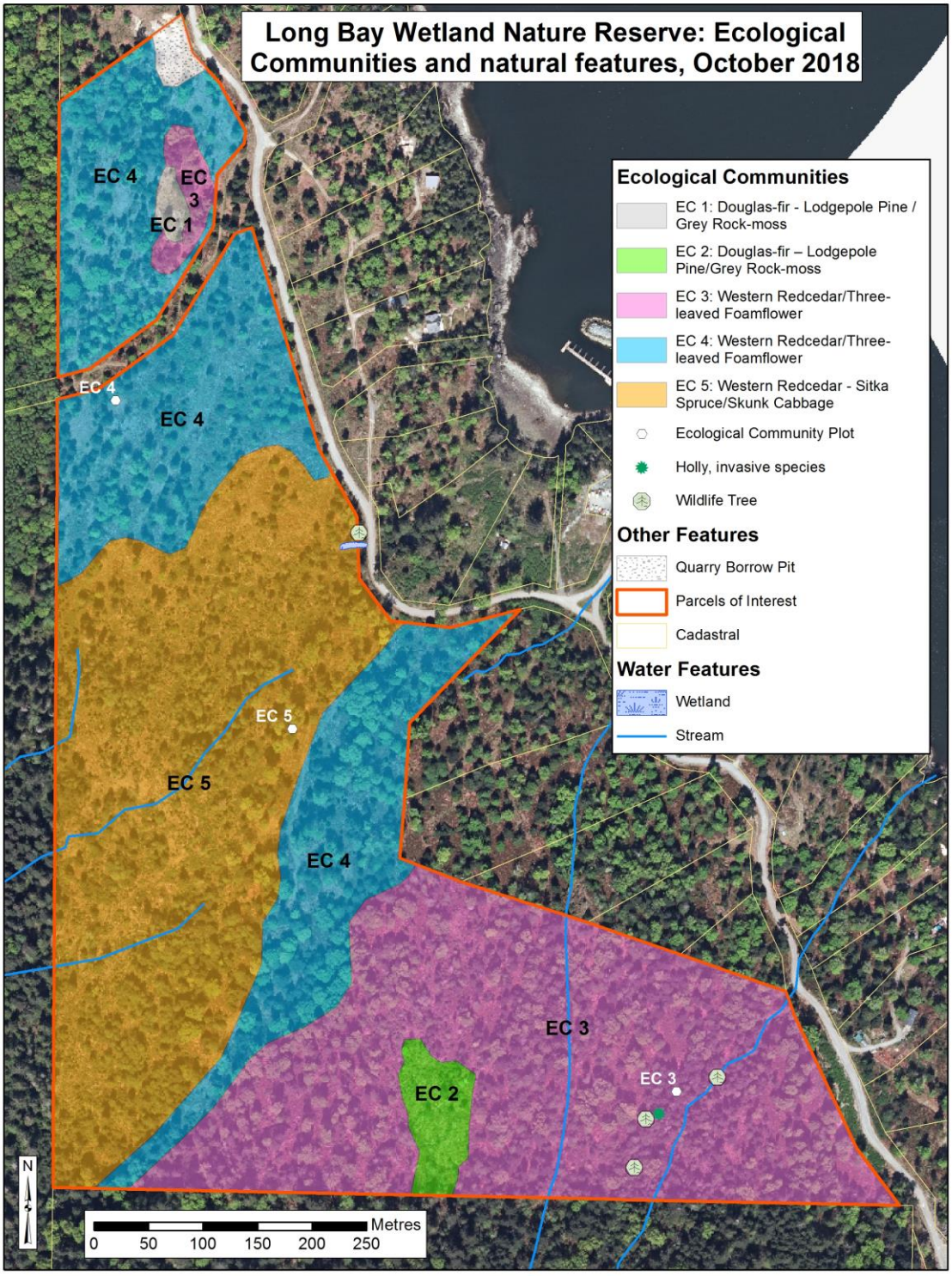


Figure 5. Map showing ecological communities and locations of vegetation plots within LBWNR

Ecological Community 1. Douglas-fir—Lodgepole Pine/Grey Rock-moss (CWHxm1/02)

This ecological community makes up a very small portion of the reserve and is found in the northeastern portion of the reserve, north of the road dedication. It is found at higher elevations on a small hilltop. The site is well-drained, very dry and nutrient poor with thin soils. It is dominated by steep terrain, sparse vegetation and a grey rock-moss community with Reindeer Lichen (*Cladina portentosa*) cover. There are no dominant tree species due to the steep slopes.



Photo 5. Ecological community 1 with rocky bluffs.

Table 4. Description of Ecological Community 1

Polygon ID:	Ecological Community 1
Ecological Community:	Douglas-fir – Lodgepole Pine/Grey Rock-moss
Classification:	CWHxm1/02
Structural Stage:	1-Sparse/bryoid
Status (BC List):	Red-listed
Photopoint(s):	P7
Ecological Community Description:	Hilltop, steep rocky terrain with predominantly moss and Reindeer Lichen cover; dry site with no trees present; lower foot of slope below rocky outcrop has sparse bigleaf maple, western hemlock, western redcedar and Douglas-fir, as well as sparse oceanspray, foxglove, sword fern and sweet vernalgrass in lower crevices.
Disturbance Notes:	Some natural turnover in plant community due to drought years, ground fire.
Anticipated Change/Succession:	No significant changes anticipated.
Wildlife observations:	Observed during site visit: none Habitat: Perching sites for raptors, seeds for birds and small mammals, thermoregulation sites for reptiles.

Table 5. Vegetation in Ecological Community 1.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Amelanchier alnifolia (Saskatoon)			1				
Holodiscus discolor (oceanspray)			1				
Anthoxanthum odoratum (sweet vernalgrass)						20	
Polystichum munitum (sword fern)				2			
Polypodium glycyrrhiza (licorice fern)				T			
Digitalis purpurea (foxglove)						T	
Moss Layer			2	3		20	**Total Moss Layer: 75%**
Cladina portentosa							
Dicranum species							

Polytrichum juniperinum							
Racomitrium canescens							
Selaginella wallacei							
Cover by Layer (%)			**2**	**3**	**75**	**20**	**Total Canopy Cover: 0%**

T stands for Trace or less than 1%

Ecological Community 2. Douglas-fir – Lodgepole Pine/Grey Rock-moss (CWHxm1/02); Douglas-fir – Western Hemlock/Salal (CWHxm1/03)

This ecological community is found along the southern boundary of the reserve. It is a higher elevation site at the crest of the slope. It was logged in 2000 and there has been little tree regeneration. Previously, it was a 70 year-old second growth Douglas-fir (*Pseudotsuga menziesii*) forest. At the highest elevation, it transitions to Douglas-fir – Lodgepole Pine/Grey Rock-moss community in disturbed, early seral condition. At lower elevations, it is more consistent with Douglas-fir – Western Hemlock/Salal community.

Table 6. Description of Ecological Community 2

Polygon ID:	Ecological Community 2
Ecological Community:	Douglas-fir – Lodgepole Pine/Grey Rock-moss Douglas-fir – Western Hemlock/Salal
Classification:	CWHxm1/02; CWHxm1/03
Structural Stage:	2-Shrub/herb
Status (BC List):	Blue-listed/Red-listed
Photopoint(s):	none
Ecological Community Description:	Upland forest in early seral condition due to recent logging; shrubs and scattered small trees on logged-over, very dry ridge crest
Disturbance Notes:	Seventy year-old second growth Douglas-fir stand was clear-cut in 2000, followed by almost no tree regeneration
Anticipated Change/Succession:	No significant changes anticipated; slow conifer regeneration may occur but will be limited by drought conditions
Wildlife observations:	Observed during site visit: none Habitat: Perching sites for raptors, seeds for birds and small mammals, thermoregulation sites for reptiles

Table 7. Vegetation in Ecological Community 2.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Pinus contorta (lodgepole pine)		2					
Pseudotsuga menziesii (Douglas-fir)		2					
Amelanchier alnifolia (saskatoon)			1				
Berberis nervosa (dull Oregon-grape)			6				
Gaultheria shalon (salal)			10				
Holodiscus discolor (oceanspray)			3				
Rubus ursinus (trailing blackberry)			T				
Polystichum munitum (sword fern)				20			
Pteridium aquilinum (bracken fern)				5			
Grasses				20			
Digitalis purpurea (foxglove)						T	
Moss Layer		4	20	45			**Total Moss Layer: 50%**
Dicranum species							
Hylocomium splendens (step moss)							
Polytrichum juniperinum (juniper haircap moss)							
Racomitrium canescens (grey rock-moss)							
Cover by Layer (%)		**4**	**20**	**45**	**50**	**<1**	**Total Canopy Cover: 4%**

Ecological Community 3. Western Redcedar/Three-leaved Foamflower (CWHxm1/07) with small pockets (<5%) of Douglas-fir/Sword Fern (CWHxm1/04) and Western Redcedar/Sword Fern (CWHxm1/05)

This ecological community is found predominantly in the southeast portion of the reserve, with a small patch also occurring in the northeast portion of the reserve, east of Ecological Community 1. In the reserve, it is found on level to moderate slopes with rich mineral soils that are moderate-well to imperfectly drained. The humus forms are thin because of rapid decomposition. The forests are highly productive, although logging in the reserve in 2000 and 2001 removed all merchantable timber. Large bigleaf maple (*Acer macrophyllum*) remain and red alder (*Alnus rubra*) snags are present as wildlife trees in many areas. There are patches of young regenerating western redcedar (*Thuja plicata*), Douglas-fir, western hemlock (*Tsuga heterophylla*), and Sitka spruce (*Picea sitchensis*) in the secondary canopy. There is dense understory of sword fern (*Polystichum munitum*) and grasses in areas where trees could be planted to help restore the site. Invasive English holly (*Ilex aquifolium*) has established in some areas.



Photo 6. Maturing Douglas-fir trees surrounded by dense sword fern understory. Red alder wildlife trees and woody debris provide diverse wildlife habitat.

Table 8. Description of Ecological Community 3

Polygon ID:	Ecological Community 3
Ecological Community:	Western Redcedar/Three-leaved Foamflower with small pockets (<5%) of Douglas-fir/Sword fern (CWHsm1/04) and Western Redcedar/Sword Fern (CWHxm1/05)
Classification:	CWHxm1/07
Structural Stage:	5-Young Forest
Status (BC List):	Blue-listed
Photopoint(s):	P8
Ecological Community Description:	Open mixed residual forest on rocky mid slopes. Several small red alder snags and woody debris. Gently sloping, NE facing. Riparian area (creek) along edge of plot.
Disturbance Notes:	Larger trees within clearcut with much younger trees.
Anticipated Change/Succession:	Conifer regeneration may be limited due to browsing pressure and dense understory. With tree-planting efforts and protection with caging, reforestation would be greatly enhanced. Bigleaf maples will eventually die off or may re-sprout from base. Remaining conifers will mature although understory will likely remain fairly open.
Wildlife observations:	Audio: Spotted Towhee (*Pipilo maculatus*)

Table 9. Vegetation in Ecological Community 3.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Pseudotsuga menziesii (Douglas-fir)	32	T					MC: 20-40yrs, ht: 20m, DBH: 25-40cm SC: 10-15yrs, ht: 10m, DBH: 5-10cm
Tsuga heterophylla (western hemlock)	10	T					MC: 20-30yrs, ht: 15m, DBH: 25-30cm SC: 10-15yrs, ht: 1-2m, DBH: 2-10cm
Thuja plicata (western redcedar)	2	T					MC: 60-80yrs, ht: 20m, DBH: 70cm SC: 10-15yrs, ht: 5m, DBH: 10cm
Alnus rubra (red alder)	1						MC: 30yrs, ht: 15m, DBH: 30cm
Picea sitchensis (Sitka spruce)		T					SC: 5-10yrs, ht: 1-2m, DBH: <5cm
Polystichum munitum (sword fern)			60				
Vaccinium parvifolium (red huckleberry)			1				
Berberis nervosa (dull Oregon-grape)			T				
Dryopteris expansa (spiny wood fern)			T				
Gaultheria shallon (salal)			T				
Ilex aquifolium (English holly)						T	
Moss Layer							**Total Moss Layer: 5%**
Eurynchium oreganum (Oregon-beaked moss)					2		
Hylocomium splendens (step moss)					1		
Plagiothecium undulatum (flat moss)					1		

Rhytidiadelphus loreus (lanky moss)					1		
Cover by Layer (%)	**45**		**61**		**5**	**<1**	**Total Canopy Cover: 45%**

Ecological Community 4. Western Redcedar/Three-leaved Foamflower (CWHxm1/07)

This ecological community is very open, mixed residual forest. In the reserve, it is found on level to moderate lower slopes with rich mineral soils that are moderate-well to imperfectly drained. The humus forms are thin because of rapid decomposition. The forests are highly productive, although logging in the reserve in 2000 and 2001 removed all merchantable timber. Until 2000, these were 70 year-old second-growth Douglas-fir forests. Large bigleaf maple and red alder trees remain. Limited tree regeneration has occurred due to heavy deer browse and there is a dense understory of ferns and grasses in areas. This site would benefit from tree-planting efforts to aid in reforestation. Invasive English holly is established.



Photo 7. Young regenerating forest with western redcedar and bracken fern.

Table 10. Description of Ecological Community 4.

Polygon ID:	Ecological Community 4
Ecological Community:	Western Redcedar/Three-leaved Foamflower
Classification:	CWHxm1/07
Structural Stage:	5-Young Forest
Status (BC List):	Blue-listed
Photopoint(s):	P9
Ecological Community Description:	Open mixed residual and regenerating forest on moist, rich lower slopes with dominant forest cover of large deciduous species and smaller sapling/pole size conifers. Gentle east-facing slope.
Disturbance Notes:	Selectively logged in 2000, resulting in disturbed ground cover and low regeneration. In the northeast corner of the reserve, a 'quarry borrow pit' was used during the subdivision and some replanting of trees has occurred for restoration efforts (see Section 5.8).
Anticipated Change/Succession:	Larger deciduous trees (bigleaf maple, red alder) will likely die off and scattered conifers will replace them. However, the low success rate of regeneration due to dense understory competition (e.g. graminoids, ferns) and black-tailed deer herbivory will likely maintain the relatively open forest structure unless reforestation efforts with protection from herbivory occur.
Wildlife observations:	Visual: Red-breasted Sapsucker holes in bigleaf maple trees, black-tailed deer scat. Audio: Northern Flicker

Table 11. Vegetation in Ecological Community 4.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Alnus rubra (red alder)	5						MC: 40-60yrs, ht: 10-15m, DBH: 40cm
Tsuga heterophylla (western hemlock)	5	T					MC: 50-60yrs, ht: 10-15m, DBH: 30-40cm SC: 15yrs, ht: 4m, DBH: 20cm
Acer macrophyllum (bigleaf maple)	3						MC: 20-30yrs, ht: 10m, DBH: 25-45cm
Thuja plicata (western redcedar)	3						MC: 40-60yrs, ht: 15m, DBH: 70cm
Pseudotsuga menziesii (Douglas-fir)	3						MC: 30-60yrs, ht: 10-15m, DBH: 35-50cm
Abies grandis (grand fir)	1						MC: 30-40yrs, ht: 10-15m, DBH: 30cm
Prunus emarginata (bitter cherry)		T					
Rubus spectabilis (salmonberry)			T				
Sambuca racemosa (red elderberry)			T				
Vaccinium parvifolium (red huckleberry)			T				
Polystichum munitum (sword fern)				30			
Pteridium aquilinum (bracken fern)				10			
Elymus glaucus (blue wildrye)				T			
Juncus effusus (common rush)				T			
Rubus leucodermis (black raspberry)				T			
Rubus ursinus (trailing blackberry)				T			
Agrostis spp. (bentgrass)						20	
Dactylis glomerata (orchard grass)						10	
Ilex aquifolium (English holly)						5	

Anthoxanthum odoratum (sweet vernalgrass)						T	
Circium arvense (Canada thistle)						T	
Digitalis purpurea (foxglove)						T	
Moss Layer							**Total Moss Layer: 0 %**
Eurynchium oreganum (Oregon-beaked moss)							
Hylocomium splendens (step moss)							
Plagiothecium undulatum (flat moss)							
Rhytidiadelphus loreus (lanky moss)							
Cover by Layer (%)	**20**	**<1**	**<1**	**40**		**35**	**Total Canopy Cover: 20 %**



Photo 8. Large bigleaf maple veteran trees with dense sword fern understory.

Ecological Community 5. Western Redcedar – Sitka Spruce/Skunk Cabbage (CWHxm1/12)

This ecological community is found on lower, wet, rich soils. The site is moisture receiving and the topography is predominantly level. Three tributaries of Long Bay Creek start in this area and

flow to the southwest. The site had very large western redcedar trees (logged in the 1920s) and the remaining 70 year-old second-growth Douglas-fir were logged in 2000. There is little natural regeneration at this site, and the area would benefit from additional planting of native trees using caging to protect the trees from browse. There is a small wetland (as mapped) with standing water and wetland vegetation. Much of the rest of the vegetation type has wetland-characteristic species, including small-flowered bulrush (*Scirpus microcarpus*), which has been overgrown by non-native grasses and horsetail (*Equisetum* sp.), possibly due to hydrology changes associated with logging.

Table 12. Description of Ecological Community 5.

Polygon ID:	Ecological Community 5
Ecological Community:	Western Redcedar – Sitka Spruce/Skunk Cabbage
Classification:	CWHxm1/12
Structural Stage:	4-Pole/sapling
Status (BC List):	Red-listed Western Redcedar/Three-leaved Foamflower Very Dry Maritime community in disturbed mid seral condition
Photopoint(s):	P10
Ecological Community Description:	Shrubs, herbs and patchy young mixed forest on wet, rich site; forested wetlands occurring in a slight depression with poor drainage that collects water from runoff, groundwater and precipitation; deep organic soils and level slopes. Vegetation within the polygon is typical of both stand initiating and young forest stages.
Disturbance Notes:	The forest cover has recently been selectively harvested, and piles of slash have been left. Seventy year-old second growth mixed forest was heavily logged in 2000, leaving bigleaf maple “veterans” and scattered alders and smaller conifers, followed by limited tree regeneration. Indication of infrequent stand-replacing fires and windthrow.
Anticipated Change/Succession:	Older bigleaf maples will die off over next 50 years or so, possibly re-sprouting from the base. Scattered conifers will grow larger, but stand will remain very open with lush understory due to the moisture regime. Minor conifer regeneration may occur but is likely to be impeded by competition from ferns, grasses and shrubs.
Wildlife observations:	No wildlife observed

Table 13. Vegetation in Ecological Community 5.

VEGETATION SPECIES	PERCENT COVER (%)						NOTES
	Main Canopy	Secondary Canopy	Shrub Layer	Herb Layer	Moss, Lichen Layer	Non-natives	
Picea sitchensis (Sitka spruce)	5						MC: 40-60yrs, ht: 20-25m, DBH: 55cm
Acer macrophyllum (bigleaf maple)	15						MC: 100-150yrs, ht: 15-20m, DBH: 150cm
Thuja plicata (western redcedar)	3						MC: 30-40yrs, ht: 15-20m, DBH: 30cm
Alnus rubra (red alder)	1						MC: 30-40yrs, ht: 15m, DBH: 30cm
Tsuga heterophylla (western hemlock)	1	T					MC: 60-80yrs, ht: 25m, DBH: 70cm SC: 15-20yrs, ht: 3-4m, DBH: 17cm
Abies amabilis (amabilis fir)		T					SC: 10-15yrs, ht: 3m, DBH: 7-10cm
Pseudotsuga menziesii (Douglas-fir)		T					SC: 10yrs, ht: 2m, DBH: 5cm
Rubus spectabilis (salmonberry)			T				
Rubus ursinus (trailing blackberry)			T				
Sambuca racemosa (red elderberry)			T				
Vaccinium parvifolium (red huckleberry)			T				
Polystichum munitum (sword fern)				60			
Festuca campestris (rough fescue)				T			
Dactylis glomerata (orchard grass)						10	
Arctium minus (common burdock)						T	
Ilex aquifolium (English holly)						T	
Mycelis muralis (wall lettuce)						T	
Poa pratensis (Kentucky bluegrass)						T	
Rubus laciniatus (cutleaf evergreen blackberry)						T	

Moss Layer							Total Moss Layer: 0 %
Cover by Layer (%)	25	<1	<1	60		10	Total Canopy Cover: 25%

3.8 Wildlife Species

The wetland habitat likely provides important foraging habitat for a variety of local native bat species, breeding habitat for amphibians, and important sources of drinking water for other wildlife. Black-tailed deer (*Odocoileus hemionus*) scat and Douglas's squirrel (*Tamiasciurus douglasii*) caches were noted in the reserve. The reserve likely provides habitat for a wide range of birds, but the late-summer field season was not ideal timing for assessing bird life. A few butterfly and dragonfly species were noted in the open upland and wetland habitats. Juvenile coho salmon (*Oncorhynchus kisutch*) are known to inhabit small streams and wetlands in the reserve (Hopwood 2013).

Table 14. Wildlife species observed in LBWNR in 2018

Common Name	Latin Name
Mammals	
Black-tailed deer	*Odocoileus hemionus*
Douglas's squirrel	*Tamiasciurus douglasii*
River otter (scat)	*Lontra canadensis*
Invertebrates	
Lorquin's admiral	*Limenitis lorquini*
Pine white	*Neophasia menapia*
Woodland skipper	*Ochlodes sylvanoides*
Reptiles	
Common gartersnake	*Thamnophis sirtalis*
Gartersnake (dead on road)	*Thamnophis sp.*
Northern alligator lizard	*Elgaria coerulea*
Birds	
American Goldfinch	*Spinus tristis*
American Robin	*Turdus migratorius*
Cedar Waxwing	*Bombycilla cedrorum*
Chestnut-backed Chickadee	*Poecile rufescens*
Common Raven	*Corvus corax*

Downy Woodpecker	*Dryobates pubescens*
Hairy Woodpecker	*Dryobates villosus*
Northern Flicker	*Colaptes auratus*
Pileated Woodpecker	*Dryocopus pileatus*
Red-breasted Sapsucker	*Sphyrapicus ruber*
Red Crossbill	*Loxia curvirostra*
Spotted Towhee	*Pipilo maculatus*
Turkey Vulture	*Cathartes aura*
Western Tanager	*Piranga ludoviciana*
White-crowned Sparrow	*Zonotrichia leucophrys*
Willow Flycatcher	*Empidonax traillii*
Fish	
Coho salmon	*Oncorhynchus kisutch*

3.9 Expected Change Over Time

There may be ongoing regeneration of forests overtime in areas previously logged, although regeneration has been minimal to date due to dense understory vegetation, compaction, and high herbivory pressure. Additional reforestation efforts and protection of tree seedlings from browse would assist in regeneration. Remnant forested areas and new conifer growth will continue to mature and diversify over time. In areas with older bigleaf maple and red alder, the older trees may die opening up the understory for coniferous species.

The wetland areas are unlikely to experience significant changes. Dense grasses and forbs will limit tree establishment and without further restoration, hydrology patters are unlikely to change.

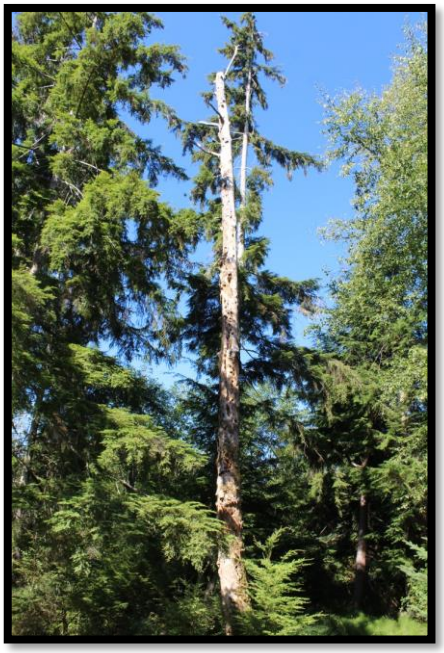


Photo 9. Wildlife trees provide important habitat for a variety of wildlife.

4.0 Threats

Table 15. Summary of threats

Threats	Mixed Forests	Rocky Bluffs	Wetlands & Creeks	Overall Threat Rank
Recreational Activities: Hiking can impact conservation targets through wildlife disturbance, soil disturbance, vegetation trampling, and erosion. With potential for increasing population and development nearby the protected area, pressure from this threat to conservation targets is expected to increase over time. Off-trail use is expected to be minimal in the reserve.	Low	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 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 species are likely to invade into areas with bare soil.	Medium	Low	Low	Low
Lack of Tree Regeneration: After logging in 2000-2001, there has been little regeneration of native trees in some areas of the reserve. A lack of regeneration limits successional processes and increases the risk on non-native species.	Medium	N/A	Medium	Medium
Invasive Non-Native Species: According to the International Union for the Conservation of Nature (IUCN 2018), invasive non-native species are a significant threat to biodiversity, second only to habitat loss. The impact on native ecosystems, habitats and species can be severe and often irreversible. The lack of regeneration in Ecological Communities 2, 3 and 4 presents a risk of increasing colonization by invasive non-native plant species. Invasive non-native English holly *(Ilex aquifolium)* is established in Ecological Communities 3, 4 and 5, and foxglove *(Digitalis purpurea*) is established in Ecological Communities 1, 2, and 4.	Medium	Medium	Medium	Medium
Problematic Native Species: Hyperabundant black-tailed deer (*Odocoileus hemionus*) can be	Medium	Medium	Medium	Medium

problematic, limiting natural regeneration, dramatically altering understory vegetation structure and composition, and adversely affecting songbird populations (Martin et al. 2010).				
Human Disturbance: Increased human activity in adjacent privately-managed lots (e.g. Brigade Bay subdivision) may increase the potential risk of unauthorized human activities such as firewood removal, land clearing, trail building, construction, camping or other incursions into the Nature Reserve boundaries (Carey et. al. 2000).	Low	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	Unknown
Overall Threat Status for Protected Area	**Low-Medium**	**Low**	**Low**	**Low**

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 from the Greater Vancouver region and surrounding areas.

The threat of catastrophic, high-intensity wildfire remains high in the region as the climate appears to be shifting to increasingly drier summers and fire suppression remains active.

Lack of native tree regeneration will likely remain constant given the ongoing herbivory, dense understory, and disturbance associated with former logging. Additional replanting of native trees will help restore logged areas and control invasive species through shading.

Invasive species spread will likely increase without a concerted effort at control. Ongoing removal and control efforts will be required because these invasive species form large, persistent seed banks.

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 is 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.

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 powerpoint 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 LBWNR is to allow natural successional processes to continue while allowing low-impact recreational use. With the exception of fire, natural disturbance factors 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 around the trail system are permitted. No further trail development is recommended; this is to limit fragmentation and reduce potential future impacts to the reserve associated with additional access points. Restoration is recommended to help re-establish trees in areas with low recruitment.

6.1 Management Roles

The Islands Trust Conservancy is the sole owner of the LBWNR but will rely on its partnership with the Gambier Island Conservancy and the Sunshine Coast Conservation Association to assist with on-the-ground management (Table 16). 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 16. Partners involved in management of LBWNR.

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 recreational hiking and nature appreciation on existing 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 trails)
- Tree cutting
- Collection of plants or animals

6.3 Proposed Monitoring Program

Annual monitoring by the covenant holders and by managers of the Reserve is important to ensure that there are no covenant breaches or management issues occurring within the protected area. The main focus of monitoring should be on the existing trail system and the boundary along Mt. Artaban Road since these are the primary access routes into the reserve (Figure 1). Monitoring should assess usage intensity of authorized trails and evaluate trail condition (e.g., levels of erosion and root exposure/damage), and determine if any prohibited uses are occurring, such as tree cutting, unauthorized trails development, 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 wetland sites would provide insightful data. Monitoring of invasive species spread is advisable over time so that control measures can be taken as required.

Monitor regrowth of trees replanted in the borrow pit and other areas of the reserve and remove protective cones as needed.

6.4 Public Access

There are two existing public access trails located off Mt. Artaban Road: one in the northern part of the reserve in the road right of way and a second in the southeast corner of the reserve that provides a linkage to Mt. Artaban Nature Reserve (see Section 2.1 for additional details). No additional access sites or trails will be developed in order to minimize habitat fragmentation and degradation.



Photo 10. Private property sign at trailhead off Mt. Artaban Road leading into Brigade Bay subdivision at north end of LBWNR.

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.

6.5 Signage

There are six boundary signs, six "Covenant Boundary" signs, one trailhead sign (on the trail that leads to Mt. Artaban Nature Reserve) and two other private property signs at access points to the reserve (Figure 1 and Table 2). When signs are updated, it is recommended that general contact information for the Islands Trust Conservancy be included on signs. Installing interpretive signage explaining why dogs must be on leash is recommended. Additional signage should be considered if further development occurs on adjacent properties, as this will increase public use of the reserve.



Photo 11. Trailhead sign leading into north end of LBWNR from Brigade Bay subdivision on Mt. Artaban Rd.

6.6 Trail Use, Maintenance and Development

There is limited recreational use of two trails within the Nature Reserve (see Section 2.10 and Figure 1). The trails are in good condition and have been regularly maintained. There is a decommissioned trail through the center of the reserve that runs approximately east to west and it is largely overgrown. The location of the decommissioned trail should not be shown on maps or other public documents.

No additional trails should be installed; this is to prevent fragmentation within the reserve and limit any potential additional hydrological impacts.

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 numerous wildlife and care should be taken to avoid impact 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

In 2013, a restoration plan was developed for the quarry borrow pit which included roughening and loosening the substrate to address compaction, tree planting, caging of trees and potential hydroseeding. Due to challenges associated with access for heavy equipment, trees were planted and caged but the site was not loosened or hydroseeded. Instead, blown on or 'terraseeded' growth medium and native tree species seeds were added. In 2015, 28 western redcedar trees were caged to protect from deer browse (Scholefield 2015). In 2017, eight 1-gallon nursery Douglas-fir seedlings were planted and caged, and 10 naturally established Douglas-fir seedlings were caged *in situ* (Hopwood 2017). An additional 30 trees were caged in more southern portions of the reserve along the trails (Scholefield 2015), and dense young red alder trees were removed from the trailhead areas. Only a portion of the caged trees in the southern portion of the reserve were mapped (Figure 1).

Monitoring the survivorship of trees is important for gauging restoration success and to determine when the cages should be removed once the trees have grown to a suitable size to withstand some browsing by deer.

Future ecological restoration could include planting of native trees and shrubs with protective caging in areas with poor regeneration to create more diversity in the canopy and understory vegetation. Encouraging more woody vegetation may eventually help shade out invasive species, such as tansy ragwort, that are invading the disturbed site. Species chosen for restoration should be those currently found within the reserve (Appendix B). A biologist should be consulted for site-specific species recommendations because differences in microsite will support different vegetation.

Although some wetland restoration was done to remove excessive slash and channel blockages and address soil compaction prior to 2004, the hydrology has been altered from its original state. A long-term priority, if the budget allows, is to restore the impacted wetland to a more natural state, and to develop a more comprehensive restoration plan for the impacted wetland habitat.



Photo 12. Caged western redcedar and Douglas-fir trees in central portion of reserve along decommissioned trail.

6.9 Scientific Research/Education Opportunities

To date, no research has been conducted on the property. Future research could include species at risk surveys and monitoring during peak season for a variety of species including rare plants, mosses and lichens, bats, birds, gastropods and amphibians.

6.10 Exotic and Invasive Species Management

Invasive English holly (*Ilex aquifolium*) is found in Vegetation Types 3, 4, and 5 and foxglove (*Digitalis purpurea*) is found in Vegetation Types 1, 2, and 4. Efforts should be made to remove these species since they can produce large, long-lasting seedbanks and will continue to spread into adjacent habitats. There is some tansy ragwort present in the former quarry, which should also be controlled.



Photo 13. Invasive tansy ragwort (center foreground) at disturbed quarry site, with young regeneration of red alders along edges of the quarry.

6.11 Wildfire Risk Management

Wildfire and wildfire suppression can be extremely damaging to sensitive ecosystems. Developing a fire management plan in consultation with the Gambier Fire Equipment Group and the BC Wildfire Service to identify optimum fire suppression techniques is recommended. This information should be provided to the province for inclusion in their annual Fire Plan. The use of salt water or fire retardants is not recommended for fire suppression since both can damage 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).

6.12 Climate Change Impacts and Management

Climate change may impact the distribution of ecosystems across the landscape, affecting vegetation patterns, hydrology, and 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).

7.0 Action Items

7.1 Immediate Actions (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. Monitor planted trees for survival and remove cages as necessary.
3. Identify opportunities for cooperative management with First Nations.

7.2 Short term Actions (3-5 years):

1. Prepare a wildfire management plan that considers both forest ecology and prevention of damage to surrounding neighbourhoods in consultation with the local fire authorities.
2. Plant and cage native shrubs and trees in areas with poor natural regeneration.
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.
2. Develop a wetland restoration plan, if the budget allows.

7.4 Ongoing or Annual Action Items

1. Conduct annual monitoring to identify management concerns, including 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. Conduct ongoing maintenance of trails and signs.
4. Continue to inform the general public of the natural values of the site and the permitted and prohibited uses through information placed in local publications.
5. 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.

8.0 Conclusion

Long Bay Wetland Nature Reserve is an important protected area that is surrounded by a combination of privately- and provincially-managed land and other protected areas. Although impacted by past logging, over time the land will develop into a young forest and reforestation efforts can help enhance degraded habitats. The Reserve provides important connectivity and wildlife habitat across a large, significant network of protected areas on Gambier Island.

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.

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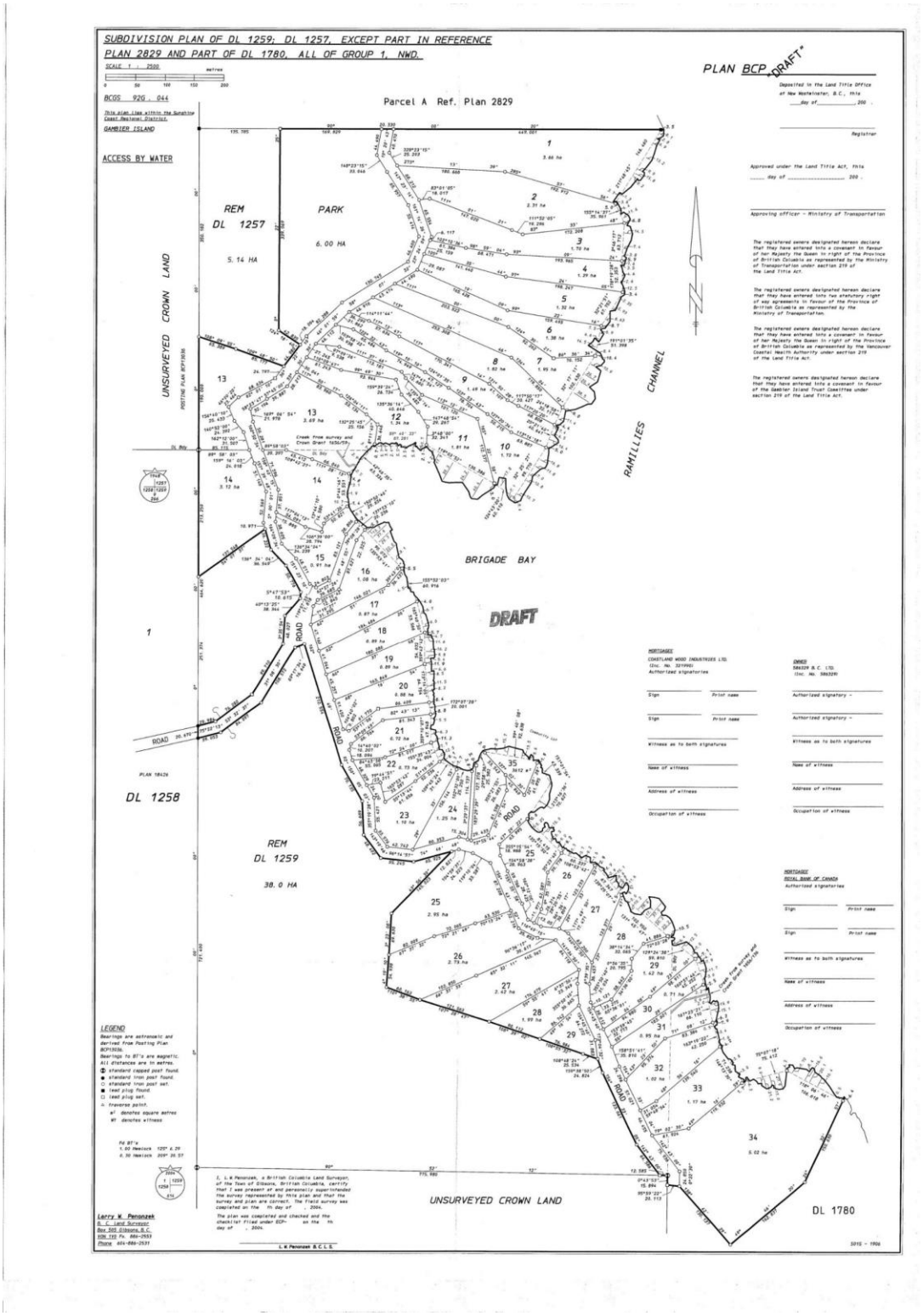
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10.0 Appendices

Appendix A. Survey Plan for LBWNR



Appendix B. Vegetation Found in LBWNR

Common Name	Latin Name	Status
Amabilis fir	*Abies amabilis*	
Bigleaf maple	*Acer macrophyllum*	
Maidenhair fern	*Adiantum aleuticum*	
Bentgrass sp.	*Agrostis sp.*	Introduced
Silver hairgrass	*Aira caryophyllea*	
Red alder	*Alnus rubra*	
Pearly everlasting	*Anaphalis margaritacea*	
Sweet vernalgrass	*Anthoxanthum odoratum*	Introduced
Common burdock	*Arctium minus*	Introduced
Lady fern	*Athyrium filix-femina*	
Dull Oregon-grape	*Berberis nervosa*	
Deer fern	*Blechnum spicant*	
Sedge sp.	*Carex sp.*	
Canada thistle	*Circium arvense*	Introduced
Bull thistle	*Circium vulgare*	Introduced
Orchard grass	*Dactylis glomerata*	Introduced
	Dicranum spp.	
Foxglove	*Digitalis purpurea*	Introduced
Spiny wood fern	*Dryopteris expansa*	
Swamp horsetail	*Equisetum fluviatile*	
	Plagiothecium undulatum	
Slender beaked-moss	*Eurynchium praelongum*	
Rough fescue	*Festuca campestris*	
Western fescue	*Festuca occidentalis*	
Sweet-scented bedstraw	*Galium triflorum*	
Salal	*Gaultheria shallon*	
Common velvet-grass	*Holcus lanatus*	Introduced
Oceanspray	*Holodiscus discolor*	
Step moss	*Hylocomium splendens*	
Hairy cat's ear	*Hypochaeris radicata*	Introduced

English holly	*Ilex aquifolium*	Introduced
Common rush	*Juncus effusus*	
Rush sp.	*Juncus sp.*	
Common nipplewort	*Lapsana communis*	Introduced
Hairy honeysuckle	*Lonicera hispidula*	
Skunk cabbage	*Lysichiton americanus*	
Wall lettuce	*Mycelis muralis*	Introduced
Timothy	*Phleum pratense*	Introduced
Sitka spruce	*Picea sitchensis*	
Spruce sp.	*Picea sp.*	
Flat moss	*Plagiothecium undulatum*	
Kentucky bluegrass	*Poa pratensis*	Introduced
sword fern	*Polystichum munitum*	
Bitter cherry	*Prunus emarginata*	
Douglas-fir	*Pseudotsuga menziesii*	
Bracken fern	*Pteridium aquilinum*	
Creeping buttercup	*Ranunculus repens*	Introduced
Lanky moss	*Rhytidiadelphus loreus*	
Black gooseberry	*Ribes lacustre*	
Cutleaf evergreen blackberry	*Rubus laciniatus*	Introduced
Black raspberry	*Rubus leucodermis*	
Thimbleberry	*Rubus parviflorus*	
Salmonberry	*Rubus spectabilis*	
Trailing blackberry	*Rubus ursinus*	
Red elderberry	*Sambucus racemosa*	
Wool-grass	*Scirpus atrocinctus*	
Small-flowered bulrush	*Scirpus microcarpus*	
Tansy ragwort	*Senecio jacobaea*	Introduced
Long-leaved starwort	*Stellaria longifolia*	
Western redcedar	*Thuja plicata*	
Broad-leaved starflower	*Trientalis borealis*	
Western hemlock	*Tsuga heterophylla*	

Common cattail	*Typha latifolia*	
Red huckleberry	*Vaccinium parvifolium*	

Appendix C. Photographic Documentation

All photo locations are shown in the map in Figure 1.

PHOTO STATION	LOCATION (UTM Coordinates)	DIRECTION	PHOTO-GRAPHER	DATE YYYY-MM-DD	DESCRIPTION
P2	476130; 5480906	270°	LM	2018-08-07	Trailhead and boundary signs.
P3	475679; 5481419	225°	LM*	2018-08-07	Nature Reserve Boundary Sign on Mt. Artaban Road.
P4	475380; 5481633	270°	LM	2018-08-08	Trailhead Boundary Sign and Private Property Sign for adjacent strata (No Motorized Vehicles). At end of northern trail at western boundary of Nature Reserve.
P12	475547; 5481839	270°	LM	2018-08-07	Private Property and No Hunting signs at Mt. Artaban Road northern trailhead at eastern boundary.
P13	475543; 5481832	270°	LM	2018-08-07	Nature Reserve Boundary Sign on Mt. Artaban Road.
P14	475611; 5481311	208°	LM	2018-08-07	Caged western redcedar and Douglas-fir trees on decommissioned trail.
Natural Features as noted in Figure 5					
P1	475653; 5481475	270°	LM	2018-08-08	Small wetland (20 m x 5 m) beside road with skunk cabbage, small-flowered bulrush, cattail, wool-grass, common rush, horsetail and lady fern by road. Carrina Maslovat in centre of wetland. No standing water.

P5	475615; 5481551	280°	LM	2018-08-09	Roadside wetland near boundary sign, seems to have shifted to mostly sword fern, horsetail, orchard grass and timothy.
P6	475966; 5480978	270°	LM	2018-08-07	Creekbed with rocks, some water still flowing.
P7	475511; 5481738	285°	LM	2018-08-08	Looking upslope to steep, rocky bluff with reindeer lichen and mosses. There is some oceanspray, foxglove, sweet vernal-grass, present with sword fern below and sparse bigleaf maple, western hemlock and Douglas-fir. Large western redcedar at bottom of steep outcrop.
P8	475937; 5480977	200°	LM	2018-08-08	Centre Plot of Vegetation Type 3. Sword fern understory.
P9	475424; 5481610	128°	LM	2018-08-08	Centre of Vegetation Type 4 showing cleared area with browsed English holly, sword fern understory.
P10	475586; 5481309	324°	LM	2018-08-07	Centre plot of Vegetation Type 5, large older bigleaf maple trees and dense sword fern cover.
P11	475647; 5481489		LM	2018-08-07	Red alder wildlife tree.
P15	475472; 5481954	225°	LM	2018-08-09	Quarry borrow pit showing tansy ragwort and replanted trees.

* LM=Laura Matthias

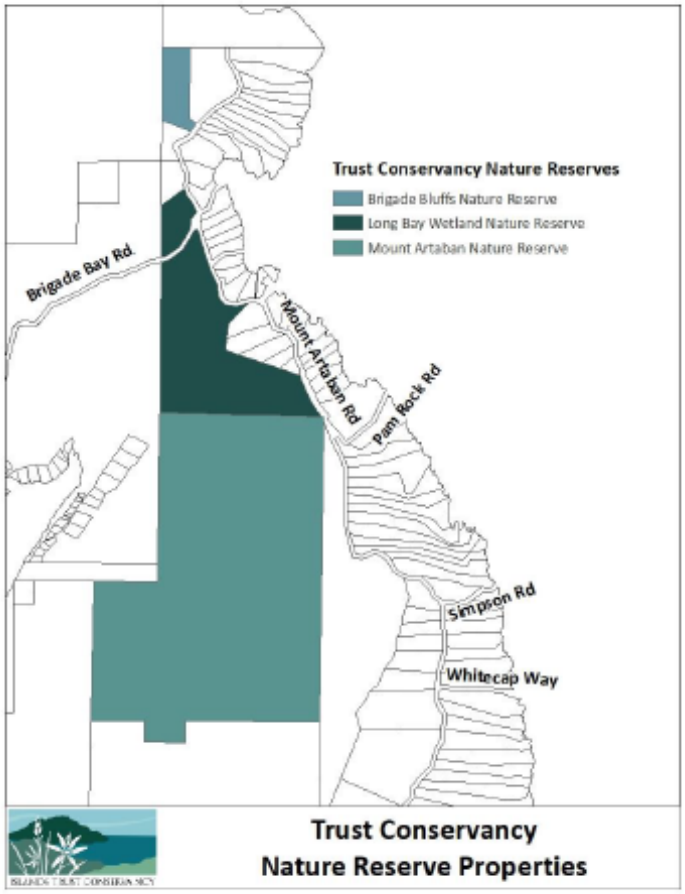
Appendix D. Letter to Neighbours

ISLANDS TRUST CONSERVANCY
Protecting Canada's Islands in the Salish Sea

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

...2

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Appendix E. Questionnaire sent to Neighbours and Available Online

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.

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	**Islands Trust Conservancy Board**	**For the Meeting of:**	**October 1, 2019**
From:	**Alexandra Trifonidis, Acting Administrative Assistant**	**Date Prepared:**	**September 16, 2019**

SUBJECT: Live Streaming of Islands Trust Conservancy Board and Committee Meetings

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RECOMMENDATION:
That Islands Trust Conservancy Board communicate to Trust Council its interest (or lack thereof) in filming and streaming its public meetings.

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1 **PURPOSE:**
To determine the level of interest in streaming Islands Trust Conservancy Board (ITC) meetings, and ITC Committee meetings.

BACKGROUND:
At its June 19, 2019 meeting Trust Council made the following resolutions:

That Trust Council request that each local trust committee and Trust Council committees indicate whether it has an interest in filming and streaming its public meetings.

And,

That Trust Council request staff to prepare a report about the costs and feasibility of filming and streaming videos of public meetings through the new Islands Trust website and social media.

The report requested in the latter resolution was considered at the September 2019 Trust Council meeting, along with the challenges and opportunities that streaming of public meetings could provide. Islands Trust staff will investigate streaming and filming of meetings further and report back to Trust Council. The September report to Trust Council is attached for information.

Forming part of the Trust Council discussion will be the level of interest of Council committees and local trust committees in pursuing live streaming and recording of meetings. As such, a decision is required for communication to Trust Council to inform dialogue and appropriate resource allocation. In August, the Financial Planning Committee has passed the following resolution:

That Financial Planning Committee communicate to Trust Council its interest in videoing and streaming its public meetings.

No other Trust Council committees or local trust committees have responded to Council's request.

2 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: None.

FINANCIAL: None.

POLICY: None.

IMPLEMENTATION/COMMUNICATIONS:
The interest or lack thereof of the Islands Trust Conservancy Board will be communicated to Trust Council as requested.

FIRST NATIONS: None.

CLIMATE CHANGE: None.

OTHER: Other factors to take into consideration are as follows:

- Conversation content in streamed or recorded meetings will differ substantially from the detail in meeting minutes
- Camera presence – there may be nervousness, at least initially, from staff and board members as streaming and recording is introduced and this may affect conversation flow and content
- Streaming of meetings may help to raise the profile of the ITC in island communities
- Streaming and recording of meetings will make it easier for members of the public to attend meetings if they have good connectivity

3 **RELEVANT POLICY(S):** None.

4 **ATTACHMENT(S):**
ATT 1 - Streaming Committee Meetings – IT Considerations (including Meeting Streaming Decision Support Matrix)

RESPONSE OPTIONS

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

OR

That the Islands Trust Conservancy communicate to Trust Council that it is not interested in filming and streaming its public meetings.

Prepared By: Alexandra Trifonidis, A/Administrative Assistant

Reviewed By/Date: Kate Emmings, A/ITC Manager /September 21, 2019

BRIEFING

To:	Trust Council	**For the Meeting of:**	September 18, 2019
From:	Information Services	**Date Prepared:**	August 29, 2019

SUBJECT: **Streaming Committee Meetings: Information Technology Considerations**

PURPOSE:

To discuss the information technology (IT) options available to Islands Trust for potential public meeting streaming, and present a preliminary cost impact of the IT requirements to the annual budget to pursue this initiative.

BACKGROUND:

At its June 19, 2019 meeting Trust Council passed the following resolution:

> *"That Trust Council request staff to prepare a report about the costs and feasibility of filming and streaming videos of public meetings through the new Islands Trust website and social media."*

Research into this initiative is not yet complete, but is very much underway. Considerations to explore in order to present a fulsome and conclusive report on this initiative include the following:

- Opportunities: What opportunities does this initiative present to Islands Trust?
- Risk: What is the legal risk to Islands Trust when meetings are filmed and posted online? Do we open ourselves up to greater risk of lawsuits? Can we remove or mitigate legal risk to an acceptable level?
- Privacy Concerns: Does this initiative conform to FOIPPA legislation? How can we ensure appropriate levels of privacy are maintained for members of the public?
- Staff Resourcing: How much staff time will this work require on an ongoing basis? Will Islands Trust need to hire new staff and if so, how many hours will be required at what skill level/pay grade?
- Financial Resourcing: What is the total cost of this initiative? How will this initiative be funded, in start-up and on an ongoing basis?
- Information Technology (IT): What are the technology requirements of this undertaking? Are these requirements affordable and feasible for meetings held at more remote island locations?
- Cost-Benefit: Will the opportunity for greater transparency of Trust work and enhanced engagement with communities outweigh the costs and risks associated with the project? Is this the best way to realise the opportunities the project intends to realise?

This report to Trust Council (TC) explores the IT options that have been reviewed and considered to date, but it is not a full consideration or analysis of the other important factors listed above. Further work on these topics will be explored and presented in future reports to Trust Council, such that an appropriately informed decision may be made about whether this initiative should be pursued, and if so, in what manner.

Islands Trust Current Practices

Streaming live and on-demand content is becoming a standard tool for local governments of all sizes, allowing them to increase civic engagement and improve communication with local communities. Islands Trust has not yet formally made use of this new method of engagement. North Pender Local Trust Committee (LTC) has recently been exploring low-tech streaming options in advance of a formal IS recommendation, using an iPhone and Facebook page to live stream and record meetings. Significant public support for these streams is noted in the number of views, which range from 750 to 1000 live and on-demand views per committee meeting. Although this low-tech approach represents a simple and inexpensive way to 'get the job done', there are a number of challenges and issues to consider as we explore a more formal process of streaming public meetings, including hardware and other IT infrastructure requirements associated with a standardized, government-body appropriate, and supportable Trust-wide approach to meeting streaming.

Information Services (IS) has conducted preliminary research into available options for live and on-demand streaming of LTC and TC public meetings. The findings and details from this research are documented in the Meeting Streaming Decision Matrix (see attachment to this report).

In addition, IS undertook a canvas of local government approaches to online streaming of public meetings, explored current industry technology solutions and trends, and interviewed Islands Trust staff who regularly attend LTC and TC meetings to determine Islands Trust meeting processes and procedures, meeting venue configuration and internet connectivity options and challenges (i.e. Wi-Fi and/or cellular availability) and incorporated this information into the assessment of feasibility of the various technology options on the market.

Industry Practices and Feedback

A preliminary review of local government approaches revealed that the vast majority of those streaming their meetings rely on custom or private on-demand services (i.e. Escribe), or private live-streaming services (i.e. Escribe or Vimeo). See Table 1. Of the 22 local governments reviewed, four (18%) are using the free social media streaming service YouTube, and none (0%) are using Facebook.

Table 1: Local Government Review

Jurisdiction	Local Government	Population	Live Stream	On-Demand Stream	Platform\Service
Alberta	Calgary	1239220	private	custom	NA
	Sedmonton	90000	private	private	Sire Public Access
	Spruce Grove	34,066	NA	NA	NA
	Medicine Hat	63260	private	private	NA
	Red Deer	100418	private	private	Sire Public Access
British Columbia	Vancouver	631486	private	custom	Harmony
	Kelowna	127380	private	private	Castanet
	Saanich	114148	private	private	Granicus
	Nanaimo	90504	private	private	Escribe
	North Cowichan	29676	NA	custom	NA
Nova Scotia	Halifax	403131	private	private	iSi Live
	Cape Breton	94285	private	private	iSi Live
	Colchester	36091	private	private	iSi Live
Ontario	Toronto	2930000	Social	custom	YouTube
	Waterloo	535154	Social	Social	YouTube
	Muskoka	60391	Social	Social	YouTube
	Perth	38066	NA	NA	NA
	Stratford	31465	NA	NA	NA
Washington State	Seattle	744955	private	private	NA
	Bellingham	90665	Social	custom	YouTube
	Olympia	52555	private	private	Granicus
	Bainbridge Island	24846	NA	custom	NA

IS reached out directly to the City of Nanaimo and the City of Vancouver for additional information on how their practice of streaming Council meetings functions behind the scenes. Key recommendations from these discussions centred on the qualitative considerations of this project rather than IT considerations or quantitative factors. Both cities stressed their view that full ownership and control of any live and on-demand video content be maintained in-house, and that recordings be stored in the event that changes to the content be required for redaction or privacy reasons.

The City of Vancouver provided insight into the potential costs of streaming meetings from remote locations (i.e. not in a boardroom or Council chamber), as they do currently undertake this form of mobile meeting streaming from time to time. Based on their current setup, they have indicated that the hardware components for their mobile setup cost $50,000, which does not include the cost of setting up a dedicated high-speed internet connection, post processing software, and a significant staffing contribution – potentially the largest source of expense for such meetings. This amount falls within the higher end range of cost estimate for Islands Trust, explored later in this report.

Although staffing considerations are not explored in this report, it is worth noting that both the City of Nanaimo and the City of Vancouver mentioned the considerable staff requirements associated with public meeting streaming. Nanaimo currently has three full-time staff members who manage content streaming and Vancouver has an entire department dedicated to the function (number of staff unknown).

Streaming Services

Social Media Platforms

Social media platforms are easy to use and provide little expense to Islands Trust to employ. However, as these platforms are housed and maintained outside of Canada, storing Islands Trust government content on these sites is not in compliance with FOIPPA. Additionally, storage of video content remains in the platform site and not with Islands Trust which makes complying with FOI requests difficult. Although it is possible to download video content from the social media site for local storage, it does not remove the content from becoming property of the platform outside of Canada.

Although these platforms may be free to use, the risk of potential legal costs associated with the use of these tools is unknown and could be significant. In addition, although platforms such as YouTube are free for use at the entry level, users with higher storage requirements and higher number of views will be charged a subscription fee. Islands Trust would most certainly fall into this category. In addition, any free service provided on these platforms require advertisements play during the video, which Islands Trust may not be in favour of. Removing ads also incurs a fee.

Private Streaming Services

Private streaming service subscriptions are available in Canada and thus comply with FOIPPA. Most of these services allow for custom configuration of the streaming site, which translates to simplicity and consistency in user experience at the meeting administrator level. Key factors such as meeting notifications links and meeting setup are tailored and simplified for Islands Trust user needs.

Private streaming subscriptions range in cost from $1,000 - $5,000 per year depending on the size of the video content, as well as the number of views the video generates. This latter factor is outside of Islands Trust control and thus it would be recommended to plan for an expense at the higher end of the range instead of the lower.

Recommendation

Recognizing the importance of maintaining full control and ownership of all content to confirm with current legislation and mitigate risk to Islands Trust, IS recommends avoiding the use of social media platforms and opting for a private streaming service subscription. Option #4 is the only option in the Decision Support Matrix the conforms with FOIPPA and thus is the option recommended by IS.

Hardware, Software, and Storage Costs

Hardware

After reviewing a variety of industry standard hardware options it is recommended that the optimal hardware configuration for LTC and TC meetings would include both an audio/visual (AV) capture device as well as an encoder.

The AV capture device functions to film the meeting. All AV device options with a single fixed-position camera and microphone, are priced in the order of $1,000 per unit.

An encoder is a device that compresses data in preparation for streaming. In the case of the low-tech streaming option explored by the North Pender LTC, the iPhone functioned as both the encoder and the AV capture device, which excludes the ability to record content or add auxiliary devices to the system configuration. It is recommended that any encoder purchased have the capability to accept AV input from the AV capture device (such as a webcam or DSLR camera) or audio input from a Public Address (PA) sound system, as well as the ability to record the meeting and live stream it. Encoders with these capabilities range in price from $1,500 to $5,000 depending on the number and variety of available inputs.

Given the geographic span of LTC meeting locations, it would not be feasible to have only one set of hardware to serve all meetings. IS recommends at minimum having one set of hardware for each staff office location. An additional AV capture device would also be required for Trust Council meetings, in order to have adequate viewing of the larger meeting space and number of trustees and staff. This is reflected in the cost estimate table further in this report.

Software

Software requirements and costs are minimal. Content editing, including redaction and agenda hyperlinking (greatly improving content access) requires a post-production software package, which range in price from $250 to $1,000. In addition to this one-time purchase price, the industry standard for annual support and maintenance is approximately 30% of purchase; in this case ranging from $ 75 to $ 300 per year.

Storage

Regardless of the chosen streaming service, Islands Trust is required to retain video content locally (in Canada) in accordance with FOIPPA requirements. The cost of this storage represents the single largest cost associated with meeting streaming given the amount of storage space required to retain the volumes of video content Islands Trust would generate. The current Islands Trust storage configuration was not designed to accommodate the greatly expanded disk space and associated backup requirements that would result from storage of this volume of video content, and as such, purchase of additional storage space would be required.

The amount of additional storage required will be dependent on how many months or years of meetings Islands Trust chooses to retain. Currently there are no legislated requirements governing record retention as it relates to video content, given that meeting minutes are deemed to be the official record by legislation definition. If Islands Trust were to apply its current internal policy related to meeting audio recordings, video content would be retained internally for two years, with one year available online. This would lead to storage expansion costs of approximately $22,000. This is a one-time cost to purchase the

space required. The hardware components of this storage would be integrated into a five year renewal cycle at an estimated cost of $3,000 - $5,000 every five years.

Recommendation

IS recommends that a hardware package consisting of an AV capture device plus encoder be purchased for each staff office, plus one additional AV capture device for use at Trust Council meetings. A control unit may also be required for Trust Council meetings depending on what level of encoder is included in the chosen solution, and what quality of streaming for TC meetings is desired by Council. This option is reflected in Option #4 in the attached Decision Support Matrix.

Cost Estimate for Recommended IT Solution

Based on the IS-recommended approach to Islands Trust meeting streaming, a preliminary cost of $35,750 - $52,000 is estimated for the upfront purchase of hardware, software, and storage space for this work. A breakdown of this estimate is as follows:

ITEM	Units Required	Estimate Cost per Unit		Estimated Total Cost	
		Low End	High End	Low End	High End
Audio/Visual Capture Device	4	$ 1,000	$ 1,000	$ 4,000	$ 4,000
Encoder	3	1,500	5,000	4,500	15,000
Control Unit (TC meetings only)*	1	4,000	5,000	4,000	5,000
Private Streaming Service Subscription	1	1,000	5,000	1,000	5,000
Post-Processing Software	1	250	1,000	250	1,000
Network Storage Space	1	22,000	22,000	22,000	22,000
TOTAL				**$ 35,750**	**$ 52,000**

**It is possible this piece of hardware could be forgone if an Encoder at the higher end of the cost range is purchased, as some of the higher end devices have the ability to also control the audio/visual.*

This cost estimate is based solely on the inquiries made of other local governments, as well as some known costs of less expensive devices on the market – however it not based on official quotes from vendors. As such, these costs truly are estimates and could be subject to changes up to an estimated 20% in either direction.

It is expected that the cost of IT requirements, along with potential staffing costs, will represent the largest portion of cost associated with the streaming of public meetings.

ATTACHMENT(S):

1. **Meeting Streaming Decision Support Matrix**

FOLLOW-UP:

Staff will receive Council feedback on this preliminary IT report. Staff will move forward assessing the other factors important to this decision and report back to Trust Council on findings at a later date.

Prepared By: David Beeston, Information Services Coordinator
Mark van Bakel, Information Services Manager

Reviewed By/Date: Julia Mobbs, Director, Administrative Services
Russ Hotsenpiller, Chief Administrative Officer
Executive Committee/September 4, 2019

Islands Trust
Streaming Public Meetings
Meeting Streaming Decision Support Matrix

LEGEND:	
	Negative
	Neutral
	Positive

		OPTION #1	OPTION #2	OPTION #3	OPTION #4
Criteria	**Comments**	**Hardware:** Cellphone **Live Streaming Service:** Social Media **On-Demand Streaming:** Social Media **Storage:** Social Media	**Hardware:** Cellphone **Live Streaming Service:** Social Media **On-Demand Streaming:** Islands Trust Website **Storage**: Islands Trust Network	**Hardware:** AV Capture device + Encoder **Live Streaming Service:** Social Media **On-Demand Streaming:** Islands Trust Website **Storage**: Islands Trust Network	**Hardware:** AV Capture device + Encoder **Live Streaming Service:** Private **On-Demand Streaming:** Islands Trust Website **Storage:** Islands Trust Network
Legal Requirements					
Compliance with FOIPPA (privacy and security of information)	*Division 1 - Collection, Protection and Retention of Personal Information by Public Bodies, states that:* *- storage and access must be in Canada, unless full consent has been acquired.* *- the public has the right to request edit/removal of personal information from the record.* *- published content must be locally maintained to facilittae FOI requests.*	Not Compliant. Content owned by social media platform in the USA and subject to US Patriot Act, potentially breaching privacy. No local archives in case of FOI request. No post processing (i.e. redaction) of published content.	Not Compliant. Content owned by social media platforms in the USA and subject to US Patriot Act, potentially breaching privacy.	Not Compliant. Content owned by social media platform in the USA and subject to US Patriot Act, potentially breaching privacy.	Compliant.
Hardware & Software Requirements					
Storage Requirements		Not Required. Stored on Social Media platform.	Expanded Storage. Purchase of storage space required to house video content.	Expanded Storage. Purchase of storage space required to house video content.	Expanded Storage. Purchase of storage space required to house video content.
Audio and Video (AV) Capture	*Single fixed camera sufficient for LTC meetings. Trust Council will require additional cameras, along with added staff management requirements.*	Not Required. iPhone functioning as single fixed camera with built in microphone.	Not Required. iPhone functioning as single fixed camera with built in microphone.	Single Fixed Camera. Purchase of single fixed camera with built in microphone (i.e.webcam or DSLR). Optional audio capture via existing LTC and Trust Council Public Address systems.	Single Fixed Camera. Purchase of single fixed camera with built in microphone (i.e.webcam or DSLR). Optional audio capture via existing LTC and Trust Council Public Address systems.
Public Address (PA) system	*Both LTC and Trust Council public address system compatible with many of the available encoders.*	No.	No.	Compatible.	Compatible.
Encoder	*Both LTC and Trust Council public address system compatible with many of the available encoders.*	Not Required. iPhone functioning as encoder.	Not Required. iPhone functioning as encoder.	Required. Purchase independent encoder such as Webcaster X2 designed to stream directly to social media, or Blackmagic or Pearl II which vary in extent of external device integration, and ability to record content.	Required. Purchase independent encoder such as Blackmagic or Pearl II, which vary in extent of external device integration, and abiltiy to record content.
Streaming Service	*Both LTC and Trust Council public address system compatible with many of the available encoders.*	Social Media Platfrom.	Social Media Platfrom.	Social Media Platform.	Private Streaming Service.
Post Processing Software	*Standard implementation would require minute takers to record agenda topic initiation times for later linkage/hyperlinking with digital agenda.*	None.	Purchase post processing software for editing of on-demand streaming content (i.e.Redaction and Agenda Linking).	Purchase post processing software for editing of on-demand streaming content (i.e.Redaction and Agenda Linking).	Purchase post processing software for editing of on-demand streaming content (i.e.Redaction and Agenda Linking).
Financial Resource Requirements					
Estimated Cost	*All costs are estimates based on industry enquiries, rather than real quoted values. Expected Islands Trust actual costs could swing +/-20%.*	Low. $Nil Note that social media streaming services such as YouTube include charges based on number of views and storage requirements. Total cost yet to be determined.	Medium **$23,000** **N**etwork Storage: $22,000. Post Processing Software: $500 to $1,000.	Medium **$34,750 to $47,000** Network Storage: $22,000. Post Processing Software: $250 to $1,000. AV Hardware: $4000 AV Control Unit (TC): $4,000 - $15,000 Encoder: $4,500 to $5000.	Highest **$35,750 to $52,000** Network Storage: $22,000. Post Processing Software: $250 to $1,000. AV Hardware: $4000. AV Control Unit (TC): $4,000 - $5,000. Encoder: $4,500 to $15,000. Private Streaming Service: $1000 to $5000 (annually).

		OPTION #1	OPTION #2	OPTION #3	OPTION #4
Criteria	**Comments**	**Hardware:** Cellphone **Live Streaming Service:** Social Media **On-Demand Streaming:** Social Media **Storage:** Social Media	**Hardware:** Cellphone **Live Streaming Service:** Social Media **On-Demand Streaming:** Islands Trust Website **Storage**: Islands Trust Network	**Hardware:** AV Capture device + Encoder **Live Streaming Service:** Social Media **On-Demand Streaming:** Islands Trust Website **Storage**: Islands Trust Network	**Hardware:** AV Capture device + Encoder **Live Streaming Service:** Private **On-Demand Streaming:** Islands Trust Website **Storage:** Islands Trust Network
Attributes					
Time to Implement	*Time to implement highly dependent on budget cycle, unless other funding sources identified.*	Implemented/Demonstrated by North Pender LTC.	Dependent on hardware purchases (i.e. Expanded Network Storage and software) and budget cycle.	Dependent on hardware purchases (i.e. Expanded Network Storage, encoder, software) and budget cycle.	Dependent on hardware purchases (i.e. Expanded Network Storage, encoder, software) and budget cycle.
Accessiblity	*Fair and equitable civic engagement requires removal of any access limitations or restrictions.*	Low. Social media platforms can present a barrier to access (i.e. account requirements). Without on-demand streaming content is only accessible to those who can connect to the scheduled live stream. Archived content difficult to locate via social media platforms (i.e. Facebook news feed).	Medium. Social media platforms can present a barrier to access (i.e. account requirements). On-demand streaming greatly expands public access. Post processing agenda linkages greatly expands ease of content access.	Medium. Social media platforms can present a barrier to access (i.e. account requirements). On-demand streaming greatly expands public access. Post processing agenda linkages greatly expands ease of content access.	High. Unrestricted access.
Quality	*Fair and equitable civic engagement requires removal of any access limitations or restrictions.*	Low. iPhone AV capture/encoding poor. Streaming quality limited by social media platform. No potential for value added post processing.	Low. iPhone AV capture/encoding poor. Streaming quality limited by social media platform.	Medium. Improved AV capture, but streaming quality still limited by social media platform.	Highest. Full quality control.
Feasibility	*The North Pender LTC has demonstrated low cost feasibility, while risking legal feasibility and delivering lower overall quality.*	Low. Implemented/Demonstrated by North Pender LTC. Other LTCs dependent on staff training and internet access.	Medium. Dependent on financial and staff resourcing and internet access.	Medium. Dependent on financial and staff resourcing and internet access.	Medium. Dependent on financial and staff resourcing and internet access.
Reliability	*Internet connectivity will for the foreseeable future be the primary driver of reliability for any option.*	Low.	Low.	Low.	Low.
Supportability	*Free services represent a supportability risk. Facebook or YouTube are under no obligation to maintain their free services as currently defined. A dedicated encoder represents the higher quality and easier to maintain hardware. Personal cellphones are prone to issues relating to storage and system settings.*	Low. Short term dependent on staff training. Long term dependent on social media platforms and their evolving service model.	Low. Short term dependent on staff training. Long term dependent on social media platforms and their evolving service model.	Low. Short term dependent on staff training. Long term dependent on social media platforms and their evolving service model.	High. All components integrating into Islands Trust Information Systems Operations Plan. Similar to other options, staff training weakest link.
Control	*It is far easier to maintain quality standards when all aspects of production are under the control of staff.*	Low. Limited involvement of IS in capture and distribution of content.	Medium. Limited involvement of IS in capture and distribution of live content. On-demand streaming and archive in full control of IS.	Medium. Limited involvement of IS in capture and distribution of live content. On-demand streaming and archive in full control of IS.	High. Limited involvement of IS in content capture. Full control of distribution and archive of live and on-demand content.
Key Risks	*Estimate at least half of LTC and Trust Council meetings will lack adequate internet connectivity.*	High. Contravention of BC Gov FOIPP Act. Internet connectivity. Staff management (training).	High. Contravention of BC Gov FOIPP Act. Internet connectivity. Staff management (training).	High. Contravention of BC Gov FOIPP Act. Internet connectivity. Staff management (training).	Medium. Internet connectivity. Staff management (training).
Key Benefit	*As with any technology implementation, you get what you pay for.*	Low Cost.	On-demand streaming access. Archived records.	On-demand streaming access. Archived records. Improved AV quality.	On-demand streaming access. Archived records. Improved AV quality. Private live streaming service in accordance to FOIPPA.

ISLANDS TRUST CONSERVANCY

REQUEST FOR DECISION

To:	ITC Board	**For the Meeting of:**	October 1, 2019
From:	Staff	**Date Prepared:**	September 24, 2019

SUBJECT: Attendance of Board Members at UBCM and LTABC Seminar Series

---

RECOMMENDATION: 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.

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."

---

1 PURPOSE: To provide training and networking opportunities to the Islands Trust Conservancy board members.

BACKGROUND:

Land Trust Alliance of BC Seminar Series: The Islands Trust Conservancy belongs to the Land Trust Alliance of BC (LTABC) and LTABC offers a Seminar Series every two years. The seminar series provides training on land trust related topics and is an excellent opportunity to network with other land trusts from within BC.

Union of BC Municipalities (UBCM) Convention: The UBCM holds an annual convention for local governments. The convention provides training and opportunities for networking, including and Islands Trust hosted breakfast for elected officials of the Islands Trust Area. The Islands Trust offered to profile the work of the Islands Trust Conservancy at this year's breakfast.

2 IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL: Both training events provide good opportunities to raise the ITC profile and to increase the knowledge of ITC Board members.

FINANCIAL: Total cost for both events is up to $3,000. The training budget for the ITC Board is currently set at $4,000 and $242 has been spent on Chair training with Eli Mina.

POLICY: None

IMPLEMENTATION/COMMUNICATIONS: Staff will complete registrations and will assist with travel arrangements.

FIRST NATIONS: None

CLIMATE CHANGE: Attendance at both the UBCM Convention and the LTABC Seminar Series will require travel and emit greenhouse gasses.

OTHER: Members of ITC Staff will likely attend the LTABC Seminar Series.

3 RELEVANT POLICY(S):

1.3 ITC Board Roles and Responsibilities
3.3 Relationships with External Groups Policy

4 ATTACHMENT(S):

- LTABC Seminar Series Program
- UBCM Program

RESPONSE OPTIONS

Recommendation: 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.

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.”

Alternative: None recommended

Prepared By: Kate Emmings, A/ITC Manager

2019 SEMINAR SERIES: MAKING AN IMPACT

*November 4 & 5 2019 VICTORIA (**registration form below**)*

Speakers and details coming soon!





Main Speakers



TIM ENNIS, COMOX VALLEY LAND TRUST
CONSERVATION PLANNING



REGGIE HALL & CAITLYN GUTHRIE
CONSERVATION FINANCE NETWORK
WHEN TO SAY NO
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Monday, September 23

7:00 AM – 5:00 PM	Registration
	Study Sessions & Tours:
8:30 AM – 4:30 PM	Agricultural Study Tour
9:00 AM – 4:30 PM	Financing Reconciliation: Supporting Inclusive Governance in BC – "That We May Be Good People Together"
9:00 AM – 12:00 PM	Tour of Supportive Modular Housing
	Prioritizing Emergency Management
	Disrupting Money Laundering
1:30 PM – 4:30 PM	Tools, Funding & Resources for Local Governments
	Towards Parity: Breaking Down Barriers, Building Momentum
1:30 PM – 4:30 PM	BC Mayors' Caucus
4:45 PM – 5:45 PM	New Delegates' Orientation
7:00 PM – 8:00 PM	Electoral Area Directors' Meet & Greet

Tuesday, September 24

7:00 AM – 8:30 AM	Continental Breakfast for Clinic Attendees
7:00 AM – 5:00 PM	Registration
7:30 AM – 8:30 AM	**Clinics:**
	Emergency Health Services: Developing Municipal Agreements
	Hydrogen 101
	Moose Hide Campaign: Taking a Stand for Safety
	Championing Earthquake Safety and Risk Reduction
	Remuneration for Elected Officials: A Best Practices Approach
9:00 AM – 12:00 PM	**Forums:**
	Electoral Area Directors' Forum
	Small Talk Forum
	Mid-Sized Communities Forum
	Large Urban Communities Forum
12:00 PM – 1:30 PM	**Forum Lunches:**
	Electoral Area Directors' Lunch
	Small Talk Lunch
	Mid-Sized Communities Lunch
	Large Urban Communities Lunch
1:45 PM – 2:45 PM	**Plenary Session:** BC's Energy Futures
2:45 PM – 3:00 PM	Address by the FCM President
3:15 PM – 4:45 PM	**Provincial Policy Sessions:**
	Connected Communities BC: Enhancing Resiliency through Connectivity
	Ride-Hailing: What can Local Governments Expect
	Resiliency and Change in BC Forests
	Tourism by Design: Planning for Resilient Communities
	CleanBC & Provincial Adaptation Strategy
4:00 PM – 4:30 PM	Municipal Insurance Association of BC Member Orientation
4:00 PM – 5:00 PM	Municipal Finance Authority Semi–Annual Meeting
4:30 PM – 6:00 PM	Municipal Insurance Association of BC AGM
5:00 PM – 6:00 PM	Community Excellence Awards Ceremony
6:30 PM – 8:30 PM	**Welcome Reception**

Wednesday, September 25

7:00 AM – 5:00 PM	Registration
7:00 AM – 8:30 AM	Delegates' Continental Breakfast
7:30 AM – 8:15 AM	**Clinics:**
	Be Fair: Responding Effectively to Complaints
	Elected Officials Must Themselves be Resilient
	UBCM Convention Finance and Sponsorship Review
	Revitalized Legislative Framework for the ALR
	Ship-source Oil Pollution: Compensation 101
8:30 AM	**CONVENTION OPENING SESSION**
	O Canada
	Welcome from Squamish Nation, Tsleil-Waututh First Nation, and Musqueam Indian Band
	Welcome from the Host Municipality
	Address by the UBCM President
9:00 AM	**ANNUAL MEETING**
	Adoption of Conference Rules and Procedures
	Adoption of Minutes of 2018 Convention
	Annual Report
	Question-and-Answer Period
	Adoption of Financial Statements
	Appointment of Auditors
9:20 AM	First Report of the Nominating Committee for the Positions of Table Officers
9:25 AM – 10:25 AM	**Keynote Address:** Peter Mansbridge
10:25 AM – 10:45 AM	UBCM Convention Finance & Sponsorship Review Survey
10:30 AM – 5:00 PM	Trade Show Open
10:45 AM – 11:00 AM	**Address by the Leader of the Green Party:** Dr. Andrew Weaver
11:00 AM – 11:55 AM	**Principal Policy Session:** Resolutions
11:55 AM – 12:00 PM	Nominations from the Floor for Table Officer positions
12:00 PM – 1:30 PM	**Area Association Lunches:**
	AKBLG Lunch
	AVICC Lunch
	LMLGA Lunch
	NCLGA Lunch
	SILGA Lunch
2:00 PM – 2:30 PM	**Address by the Minister of Municipal Affairs and Housing:** Honourable Selina Robinson
2:30 PM – 2:45 PM	Candidate speeches
2:45 PM – 5:00 PM	Election of Table Officers
3:00 PM – 4:15 PM	**Cabinet Town Halls:**
	Strong Community Infrastructure
	Good Jobs and Training Opportunities
	A Place Worth Protecting
	Reconciliation: Moving Forward, Together
4:00 PM – 5:00 PM	**Trade Show Reception**
4:15 PM – 4:30 PM	Presentation of 2019 Energy & Climate Action Awards
5:00 PM – 6:30 PM	BC Government Reception
6:30 PM – 8:00 PM	Consulate-General of the People's Republic of China Reception
8:00 PM – 12:00 AM	CUPE BC Reception

Thursday, September 26

8:00 AM – 4:00 PM	Registration
7:00 AM – 8:30 AM	Delegates' Continental Breakfast
7:30 AM – 8:15 AM	**Clinics:**
	Getting Older Adults Active and Connected
	Libraries Support Resilient Communities
	Modernizing BC's Emergency Program Act (EPA)
	Protective Services: Changing the Negotiating Landscape
	Provincial Poverty and Homelessness Community Grants
8:00 AM – 9:00 AM	Election of Table Officers
8:30 AM – 8:35 AM	Second Report of the Nominating Committee for Executive positions
8:35 AM – 8:55 AM	**Address by Leader of the Opposition:** Mr. Andrew Wilkinson, Q.C.
8:55 AM – 11:30 AM	**Resolutions Session Continues**
10:00 AM – 3:00 PM	Trade Show Open
11:30 AM – 11:35 AM	Nominations from the Floor for Executive Positions
11:35 AM – 12:00 PM	Candidate Speeches
12:00 PM – 1:30 PM	Delegates' Lunch
1:30 PM – 3:15 PM	Port of Vancouver Harbour Study Tour
2:00 PM – 4:30 PM	UBC Campus Sustainability Tour
2:00 PM – 5:00 PM	Election of Remaining Executive Positions
2:30 PM – 4:30 PM	**Workshops:**
	Let's Not WASTE Time!
	Building Child Care, Building Strong Communities
	Tackling the Housing Crisis through Leadership & Co-Creation
	CityStudio Vancouver: A Model for Civic Innovation and Experimentation
6:30 PM – 7:30 PM	**UBCM Reception**
7:30 PM – 11:30 PM	**UBCM Annual Banquet**
	Presentation of Long-Service Awards and Life Memberships

Friday, September 27

7:00 AM – 8:30 AM	Delegates' Continental Breakfast
7:30 AM – 8:30 AM	Election of Remaining Executive Positions
8:00 AM – 10:45 AM	**Resolutions Session Continues**
	Consideration of:
	Resolutions Received after the Deadline
	Remaining Section "B" Resolutions
10:45 AM – 11:00 AM	Installation of President Elect
	Port of Vancouver Prize Draw*
11:00 AM – 12:00 PM	**Address by the Premier:** Premier John Horgan
12:00 PM	Adjourn

*Only UBCM voting delegates are eligible and must be present to win.
*Please note program is subject to change

ISLANDS TRUST CONSERVANCY

BRIEFING

To:	Islands Trust Conservancy Board	**For the Meeting of:**	October 1, 2019
From:	Staff	**Date Prepared:**	September 18, 2019

SUBJECT: Ruby Alton History

PURPOSE: Provide a background for discussion of the history of the Ruby Alton Nature Reserve donation and subsequent use and management.

BACKGROUND:

The Ruby Alton Nature Reserve (RANR) is 1.6 hectares (4 acres) and includes the former home of the late Ruby Alton, who left her house, gardens and a wooded portion of land with an $88,000 endowment to the Islands Trust Conservancy (ITC), with the proviso as quoted from her last will and testament:

> *"that the said property be held, managed and preserved for its ecological environment and scenic features, and without restricting the generality of the foregoing specifically not as a recreational park, and upon the express condition that (the) residence thereon and the immediate surrounding radius of gardens and the existing driveway, shall be preserved and managed for non-profit purposes including meetings, gathering and functions".*

The wording of the will leaves several important aspects unclear with respect to Ms. Alton's intentions for the property and residence. A Right of Entry was granted to the Executors of her will, which would allow them to reacquire the property on behalf of the estate in the event that the ITC breached a condition of ownership. For many years, this created great uncertainty as to what uses may be acceptable for the property. However, in 2007 an agreement was reached with the one remaining Executrix to release the Right of Entry and to place a conservation covenant, held by The Land Conservancy of BC, on the entire property.

There have been multiple legal reviews of the will to try to clarify the obligations of the ITC. It was determined that ITC has a trustee interest, which is administrative or managerial in nature and as such is not entitled to financial benefit from the property. The property could be leased or transferred to another community organization but the same restrictions (exclusive use as a "park conservancy") would apply to any future owner. The property cannot be managed for any purpose that does not support or further the park conservancy use, and any funds generated through the rent or lease of the property must be used exclusively for the maintenance of the "park conservancy". Legal opinion has been that the use of the house for affordable housing is not within the scope of a park conservancy use, and therefore would not be a legally viable option. If the ITC wishes to pursue an alternative use of the property, it must make a court application for a variation of trust terms.

The endowment funds are also bound by an implied trust. The will states that the funds are for the "express purpose" of investing the principle sum in perpetuity and using the interest to preserve, maintain and enhance the property and residence. ITC cannot access the capital, use the funds for any other purpose or transfer the funds to another group without a court application. The endowment fund is held by the Victoria Foundation and pays out interest each year. The ITC may apply to the court to request that the trust terms on the use of the endowment funds be altered to allow for the ITC to access some of the capital for repairs. However, by drawing down on the capital, the annual income for the property would be reduced.

Due to site constraints, such as a lack of parking and of potable water, it was determined that the house was not suitable for community meetings or gatherings. The ITC decided that an appropriate use of the property would be to renovate and rent the house. ITC has rented the house to a caretaker from 2002 to the present. The current tenants have been renting the house since 2010 and have a month-to-month tenancy agreement. Rental income is $10,200 per year and, with the funds from the annual disbursement of the endowment fund, has offset most of the maintenance costs. There is a healthy account available for management of the property of $83,019.42 at this time.

As the tenants also act as caretakers for the property, and since the living conditions of the house result in high heating costs and high levels of maintenance, the rent has been held below what is believed to be market value. The tenancy agreement includes mandatory caretaker services as follows:

- Keeping the interior and exterior of the house and grounds clean and safe
- Maintaining the grounds and gardens, including mowing, weed-whacking, occasional watering and weeding of gardens.
- Maintaining the public path to the beach
- Maintaining the moving parts of the rainwater catchment system
- Keeping all tools in good working order and protecting them from theft

Optional caretaker services that may be billable on a contract basis to ITC when agreed in advance include:

- Cleaning gutters and water tanks associated with rainwater collection
- Maintaining the fence and gate
- Minor repairs to interior or exterior of house
- Carpentry
- Repairs to tools and appliances
- Major landscaping projects

A rental increase of 2.5% will take place on November 1, 2019, as allowed under the Residential Tenancy Act, raising the annual rental income to $10,455.

The Ruby Alton Nature Reserve demands a large amount of staff time due to the maintenance of the over 80 year old house and is our most expensive nature reserve to manage, by far. The ITC has invested a total of $235,834.74 in RANR management costs from October 2001 – October 2019.

October 2001 – February 2005 $39,649.63
March 2005 – March 2006 $61,044.65 rainwater system $56,098.32 funded through donations/grants
March 2006 – March 2007 $11,512.60
March 2007 – March 2008 $11,850.00
March 2008 – March 2009 $ 4,149.77
March 2009 – March 2010 $10,536.89
March 2010 – March 2011 $8,277.90
March 2011 – March 2012 $21,454.59 new septic system
March 2012 – March 2013 $41,553.09 new septic system
March 2013 – March 2014 $126.28
March 2014 – March 2015 $4,435.96
March 2015 – March 2016 $12,770.59 steps rebuilt to the water access to make them safe
March 2016 – March 2017 $1,276.60
March 2017 – March 2018 $2,100.41
March 2018 – March 2019 $2,674.28
March 2018 – March 2019 $2,421.50 so far this fiscal
Total: $235,834.74

A management plan was completed in 2002 and needs to be revised when resources allow. The management plan is based on Ruby's vision for the property in her will and through community consultation. The overall goals of the management plan are:

1. That the property be held, managed and preserved for its ecological environment and scenic features, but not as a recreational park.
2. The residence, gardens and existing driveway, shall be preserved and managed for non-profit purposes.

The management objectives are:

1. To allow natural processes to occur in the wooded portions of the site with little or no intervention;
2. To maintain the scenic character of the site; and
3. To allow the site and/or house to be used for non-profit purposes consistent with the Overall Goals as set out above and at the discretion of the [Islands Trust Conservancy Board].

The house will need a new roof and there are a long list of needs associated with it that make future plans difficult as one large expenditure leads to many years required to build up the maintenance fund again. A suggestion given for a time when the house can no longer be maintained is to build a covered area or gazebo-type structure that would still allow for a community public space but without the high maintenance costs. This would make the protected area more in keeping with ITC's other nature reserves and allow for management funds to go towards maintaining the ecological diversity of the protected area.

ATTACHMENT(S):

1. Ruby Alton Nature Reserve Management Plan - http://www.islandstrustconservancy.ca/media/9460/itfmgmtplanralton.pdf

FOLLOW-UP: None recommended.

Prepared By: **Nuala Murphy, Property Management Specialist**

Reviewed By/Date: **Kate Emmings, A/ITC Manager / September 18, 2019**

Management Plan
for the Ruby Alton Nature Reserve
Isabella Point
Salt Spring Island, BC



Ruby's Gate

November 21, 2002

Approved by the Trust Fund Board
(Resolution # TFB 02/529)

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A TRIBUTE TO RUBY ALTON

Ruby Alton was one of the daughters of the Lacy family who settled on Isabella Point at the start of the Depression. The Lacy farm stretched along Isabella from Hamilton[1]s homestead to Roland Road and Ruby grew up digging clams, fishing and raising sheep and vegetables to supplement the family income. She was a quintessential islander and had that rare gift of being able to look backwards and forwards at the same time. She cherished the thrifty pragmatic values that had come out of the Depression and she was an ardent environmentalist who recognized the importance of conserving resources and protecting habitat. One of her legacies was to start the Trail and Nature Club and latterly support the starting up of the local Salt Spring conservancy.

Witnessing the loss of richness from the sea and land that had fed people on the coast for millennium was deeply distressing to her. We all thought it probably led to her illness. As a parting gift back to the earth and to the community for which she was a fierce and tenacious mother and mentor, she left 33 acres of forest, with her house, garden and sheep pastures. Her forest protects what many of us on Isabella Point call Ruby's Creek, her source of water and the water that fed the ample clam and eelgrass beds in front of her house. The garden and pastures were wonderfully productive, full of both wild and rare species from camas to King William pears that both fed her and delighted her. She also left us 26 of Saltspring[1]s oldest trees that she saved on her family's property (now Falcon Farm) through a restrictive covenant before it was sold.

She was one of the first people in British Columbia to use covenants to save things for ecological reasons and Ruby in her own way pushed the law just that little bit more towards the sophisticated legal tools we have today. As I spent the last weeks with Ruby, she talked about her vision of what she wanted done with her land when she died. The most important thing was to keep the land wild. Her house and garden she envisioned providing the community with produce and a place to meet informally like it always had been. Whenever people visited Ruby, they swapped stories about the old times, which current campaigns to save land they were working on, the state of the water in the creek and whether to gather duck eggs or chicken eggs today. That is the kind of conversation Ruby would like to see continuing over her front door step, because as she knew those were the things that mattered most in life.

Briony Penn

EXECUTIVE SUMMARY

The Islands Trust Fund (ITF) took title to a 1.6 hectare (4 acre) property on Isabella Point Road on Salt Spring Island in March 2002. This property consists of the former home of the late Ruby Alton, who left her house and gardens and a wooded portion of land to the ITF, with the proviso as quoted from her last will and testament: "that the said property be held, managed and preserved for its ecological environment and scenic features, and without restricting the generality of the foregoing specifically not as a recreational park, and upon the express condition that (the) residence thereon and the immediate surrounding radius of gardens and the existing driveway, shall be preserved and managed for non-profit purposes including meetings, gathering and functions".

The purpose of this plan is to:

- provide an assessment of the current conditions of the property's buildings, gardens and natural areas;
- recommend how the repair and maintenance requirements of the house and grounds could be implemented;
- explore various options for non-profit and community use which were brought up through the public consultation process; and
- recommend immediate, mid- and long-terms plans of action for ITF.

The Management Plan was compiled by Annschild, Anderson & Oak Environmental Services in association with the Salt Spring Island Conservancy through site visits, consultations and public consultation meetings.

The recommendations address the following management issues:

- Management group involvement
- Garden restoration and maintenance
- Building Maintenance
- Management of native ecosystems
- Financial considerations
- Options for long-term use
- Community and non-profit use of the property
- Safety issues
- Acceptable/Unacceptable Activities
- Signage
- Fire management



Figure 1. Ruby Alton's House

1.0 INTRODUCTION

"The objective of the Islands Trust is to preserve and protect the Trust Area and its unique amenities and environment for the benefit of the Trust area and of British Columbia generally, in co-operation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia." The role of the Islands Trust Fund (ITF) is to assist in implementing this objective by establishing nature reserves and nature sanctuaries and by working with interested landowners to protect special features and values on their lands through voluntary conservations initiatives such as conservation covenants.

The ITF took title to a 1.6 hectare (4 acre) property on Isabella Point Road on Salt Spring Island on February 15, 2002. This property consists of the former home of the late Ruby Alton, who left her house and gardens and a wooded portion of land to the ITF, with the proviso as quoted from her last will and testament: "that the said property be held, managed and preserved for its ecological environment and scenic features, and without restricting the generality of the foregoing specifically not as a recreational park, and upon the express condition that (the) residence thereon and the immediate surrounding radius of

gardens and the existing driveway, shall be preserved and managed for non-profit purposes including meetings, gathering and functions".

This property is the first ITF reserve to include buildings, representing a new management challenge for the organization. The ITF has named the property the Ruby Alton Nature Reserve (RANR).

1.1 Purpose

The purpose of this plan is to:

- provide an assessment of the current conditions of the site's buildings, gardens and natural areas;
- recommend how the repair and maintenance requirements of the house and grounds could be implemented;
- explore various options for non-profit and community use which were brought up through the public consultation process; and
- recommend immediate, mid- and long-terms plans of action for ITF.



Figure 2. Rhododendrons along east side of house

1.2 Methods

This plan is the result of continuous and ongoing consultation between Annschild, Anderson & Oak Environmental Services, the Alton Committee of the Salt Spring Island Conservancy (SSIC), and the Islands Trust Fund. The Conservancy's ad-hoc committee currently consists of two members of the SSIC Board and two other SSIC members, three of whom were close friends of Ruby Alton's and all of whom have considerable expertise in the fields of community development and land conservation. Meetings between this committee and the consultant were held throughout the summer.

The development of this management plan took place in three phases: assessment, public consultation and recommendations.

1.2.1 Assessment

The assessment phase was carried out through on-site meetings between the consultant and various professionals and contractors as well as numerous other visits to the property between June and October 2002 (Table 1). This thorough evaluation of the condition of the buildings, forest and gardens provided the information required to involve interested groups and individuals in a public consultation process.

Table 1 List of meetings held with consultant

DATE	PARTICIPANTS
June 27th	Alton Committee Meeting
Aug. 9th	Alton Committee Meeting
Aug. 20th	Briony Penn, friend and neighbour.
Aug. 21th	Architect.
Aug. 21th	Fulford Hall manager
Aug. 22nd	Jonathan Yardley, Architect.
Aug. 28th	Dick Stubbs, CRD building inspector.
Sept. 10th	Alton Committee Meeting
Sept. 13th	Plumber.
Sept. 13th	Garden Club Historian.
Sept. 13th	Friend of Ruby's.
Sept. 16th	Alton Committee Meeting
Sept. 16th	Alton Committee of SSIC and Ardice Neudorf, ITF
Sept. 22nd	Philip Grange, Eng., Tony Meek, building contractor.
Sept. 22nd	Garden Club Executive
Sept. 22nd	Jonathan Yardley, Architect.
Sept. 19th	Public Consultation planning meeting.
Sept. 25th	1st Public Consultation Meeting – Stakeholder meeting
Sept. 30th	Alton Committee Meeting
Oct. 2nd	2nd Public Consultation Meeting - General Public
Oct. 10th	Salt Spring Archivist
Oct. 12th	Alton Committee Meeting.
Oct. 16th	Carpenter.
Oct. 22nd	Gulf Islands Centre for Environmental Learning

1.2.2 Public Consultation

Public consultation took place continuously and informally throughout the summer of 2002 through phone conversations and walkabouts of the house and gardens. A list of 19 close friends of Ruby was provided to the consultant by Briony Penn and each one of these individuals was telephoned and invited to the first public consultation meeting held on September 25, 2002. These conversations yielded a further 11 friends and neighbours who were also individually phoned and invited to this first meeting which was otherwise unadvertised. It was attended by 23 members of the community and by Ardice Neudorf, representing ITF.

All the persons attending this first meeting had relatively detailed knowledge of the property, and have watched it fall into disrepair in the four years since Ruby's death. Considerable frustration was expressed, as well as appreciation for the magnitude of the task involved in restoring the house and gardens. A good portion of the evening was spent providing information about what had caused the four year delay.



Figure 3. Public Consultation Meeting, October 2, 2002

In planning the public consultation, the Alton Committee and the consultant felt that an initial small informal meeting of friends, neighbours and relatives might

yield information which could be brought to a larger open public meeting. Thus an "official" public meeting took place the following week on October 2, 2002. It was widely advertised, through flyers posted in prominent locations throughout Ganges, Fulford and on several mailboxes along Isabella Point road, as well as in the local newspaper, the Driftwood. While fewer people attended this meeting than the previous meeting, the 11 people who came, spent a good deal of time in a brainstorming session exploring future uses of the property and what community use of the property could look like in the short term. Several individuals expressed an interest in participating in long-term planning for the property.

1.2.3 Recommendations

The recommendations are based on information gathered in the assessment and public consultation phases and were developed by the Alton Committee in conjunction with the consultant.

2.0 BACKGROUND

This property was in probate for the four year period which elapsed between Ruby Alton's death and the ITF taking title to the property in March 2002. Throughout this period, ITF had no legal access to the property, and though some minimal maintenance was carried out by the Estate (see Appendix A, Previous Expenditures) the house and gardens have fallen into disrepair.

Because little information was publicly available through this period, frustration and anger has built up in the community about the condition of the property. Both ITF and the SSIC have been targets of this frustration, as various individuals in the community believe these organizations to be in a position to do something about the condition of the property. This however was not the case.

The SSIC has been in dialogue with the ITF throughout the process of settling Ruby Alton's estate. Several active members of the SSIC were closely connected to Ruby throughout her life, and there is great interest on the part of the SSIC to ensure that Ruby's vision is carried out.

Familiarity with both the history and current situation of the Alton property, including acting as interim property managers, combined with years of involvement with island communities placed the SSIC in a good position to develop a management plan for this property. In June 2002, ITF retained Robin Annschild, of Annschild, Anderson & Oak Ecological Services to prepare this management plan in partnership with SSIC.

2.1 Overall Goals

As indicated in the last will and testament of Ruby Alton, the overall goals for the property are as follows:

1. That the property be held, managed and preserved for its ecological environment and scenic features, but not as a recreational park.
2. The residence, gardens and existing driveway, shall be preserved and managed for non-profit purposes.

2.2 Management Objectives

To achieve the overall goals, the following management objectives have been established by ITF:

1. To allow natural processes to occur in the wooded portions of the site with little or no intervention;
2. To maintain the scenic character of the site; and
3. To allow the site and/or house to be used for non-profit purposes consistent with the Overall Goals as set out above and at the discretion of the Trust Fund Board.

2.3 General Site Description

The property consists of a 1.6 hectare (4 acre) farm on Fulford Harbour, located at 661 Isabella Point Road, 2.9km south of the junction of Isabella Point Road and the Fulford-Ganges Road. The northern part of the property is a small sheep pasture, giving way to the gardens, outbuildings and orchard surrounding Ruby Alton's 1½ storey house. A creek runs through the southern end of the property, which is forested and relatively undisturbed. The east and west boundaries of the property consist of Fulford Harbour and Isabella Point Road, and the property is fenced along the north and south boundaries.

2.4 Legal Description

The property is legally described as follows:
That part of the NW ¼ Section of Section 41, South Salt Spring Island, Cowichan District, as shown on Plan DD18480F except Parcel A (1934491). The parcel identifier (PID) is 009-742-883. The local address is 661 Isabella Point Road, Salt Spring Island.

2.5 Zoning

According to the current Official Community Plan, the property is zoned rural (R). This zoning permits agriculture, residential single-family dwellings, community halls and schools.

2.6 History of the Property

The house is approximately 70 years old. Mr. Alton and his first wife purchased the property with the existing house on it. Ruby Lacy originally came to the property to nurse the first Mrs. Alton, who was bedridden. Ruby eventually married Mr. Alton after his first wife's death. The Alton's built a 10 foot addition onto the north side of the house sometime in the 1960's, increasing the size of the north bedroom and creating the existing kitchen and breakfast nook.

Mary Davidson, archivist for the Salt Spring Historical Society is currently cataloguing Ruby Alton's archives which were left to the society. The Historical Society has offered to put together a display of selected items in the house as a tribute to Ruby Alton. Further details of the history of the property will be available from the archives in the future.

2.7 Regional and Local Context

The Ruby Alton Nature Reserve is situated in a rural area of Salt Spring Island which consists of houses and farms dotted along winding Isabella Point Road. The property has both ecological and cultural value. Protection of the forested area helps assure continued protection for the creek whose upstream course flows through the 13.3 hectare (33 acre) parcel left by Ruby to the Nature Conservancy of Canada. Given the possibility of long-term protection of the house and gardens, the cultural value of this site can be maintained for generations to come.

3.0 OVERVIEW OF ECOLOGICAL ASSESSMENT

This assessment focuses on those parts of the property which have remained in a relatively natural state: the portion of the property on the south side of the creek, a 10m buffer strip which runs along Isabella Point Road from the creek north towards the garden gate, and the vegetation on the bank above the beach. An old domestic garbage dump was located in the forested area south of the creek, consisting of a collection of bottles and cans spanning many years.

3.1 Topography

The property slopes at 10% to the East from Isabella Point Road to the top of the bank. The bank slopes steeply (53%) to the beach of Fulford Harbour below. Elevation ranges for this property are from sea level to approximately 25m.

3.2 Soils

According to Report N°43 of the British Columbia Soil Survey, the property is dominated by the Mexicana/Trincomali map unit. A narrow band of the property to the east of Isabella point road falls within the St-Mary/Mexicana map unit which consists of 50-75% imperfectly drained St. Mary soils and 25-50% moderately well-drained Mexicana soils. The Mexicana-Trincomali map unit is

dominated by moderately well-drained Mexicana soils (50-65%) with inclusions of Trincomali soils (35-50%).

Mexicana soils:
Mexicana soils have developed on gravelly sandy loam to gravelly loam morainal deposits over deep, compact, unweathered till within 100cm of the surface. Coarse fragments make up 15 to 20%. Parent material generally consists of less than 20% clay and usually occurs at a depth of 80cm. Moderately well drained, these soils often support perched water conditions on the compact till during the wet months.

Trincomali soils:
Trincomali soils have developed on shallow deposits of gravelly sandy loam to gravelly loamy sand textured marine, fluvial, or glaciofluvial materials
Parent material for Trincomali soils is compact, unweathered till (within 100cm) whose texture consists of gravelly sandy loam to gravelly loam. The soils are developed on shallow deposits of gravelly sandy loam to gravelly loamy sand textured marine, fluvial, or glaciofluvial materials consisting of 15 to 20% gravels. In these moderately well-drained soils, perched water table conditions can exist on top of the compact till for short periods of time. However during the dry season these soils are very droughty. Trincomali soils are strongly acidic (pH 4.6-5.5) and have a low inherent fertility.

St. Mary soils:
The imperfectly drained St. Mary soils consist of 3 layers: a 30-70cm cap of marine deposits of loamy-sand to sandy-loam over a 20 to 50cm deep marine and usually stone free sandy clay loam to silty clay loam marine deposit over gravelly sandy loam to gravelly loam compact unweathered till within 100cm. Downward water movement may be restricted by the fine texture subsoil, creating perched water table conditions. Most of the St.Mary's soils of Salt Spring island have been cleared of their original vegetation for agricultural uses.

3.3 Hydrology

A creek known locally as Ruby's Creek but formally described as Forsen Brook, crosses the southern portion of the property and flows east towards Fulford Harbour. Though its flow is significantly reduced during the dry season, it flows year round, and supplies water to both Ruby Alton's house and to the immediate neighbour to the north.

While part of the watershed is forested and protected with a conservation covenant (this is the 13.3 hectare (33 acre) parcel Ruby Alton willed to the Nature Conservancy of Canada), there has been considerable development in the watershed upstream from this in recent years.



Figure 4. Bridge over Ruby's Creek (Forsen Brook)

3.4 Vegetation Communities

Salt Spring Island lies within the Southern Gulf Islands Ecosection and this lower elevation site is within the moist maritime sub zone of the Coastal Douglas-Fir Biogeoclimatic Zone (CDFmm).

The RANR consists of a rich moist east facing slope dominated by 45% Big-leaf maple (*Acer macrophyllum*), interspersed with Douglas fir (*Pseudotsuga menziesii* 20%), Western red cedar (*Thuja plicata* 15%), 10% Red alder (*Alnus rubra*) and occasional arbutus (*Arbutus menziesii*). The shrub layer is dominated by 10% trailing blackberry (*Rubus ursinus*), with 5% red elder (*Sambucus*

racemosa), 2% English holly (*Ilex aquifolium*), 2% dull Oregon grape (*Mahonia nervosa*), 2% Indian plum (*Oemleria cerasiformis*) and Western redcedar (*Thuja plicata* 2%). The herb layer is dominated by luxuriant sword fern (*Polystichum munitum* 60%), with 10% vanilla leaf (*Achlys triphylla*), 10% stinging nettles (*Urtica dioica*) and some mosses. A spring time vegetation inventory will reveal a number of spring ephemerals, some of which may have been introduced to the site by Ruby Alton. There are small localized infestations of holly in the forested portion of the property. Various varieties of ivy are climbing the walls of the main residence and there is a significant but localized infestation of ivy at the base of the southernmost trail to the beach. Vegetation data was collected on September 5, 2002.

3.5 Wildlife and Wildlife Habitat

The property provides habitat for moisture loving amphibians such as roughskin newts (*Taricha granulosa*), pacific treefrogs (*Hyla regilla*) and many species of birds. A red-legged frog (*Rana aurora*) was observed on the property. The red-legged frog is considered a species at risk, and has been Blue-listed by the Conservation Data Center of British Columbia. The property is also extensively used by black tailed deer.

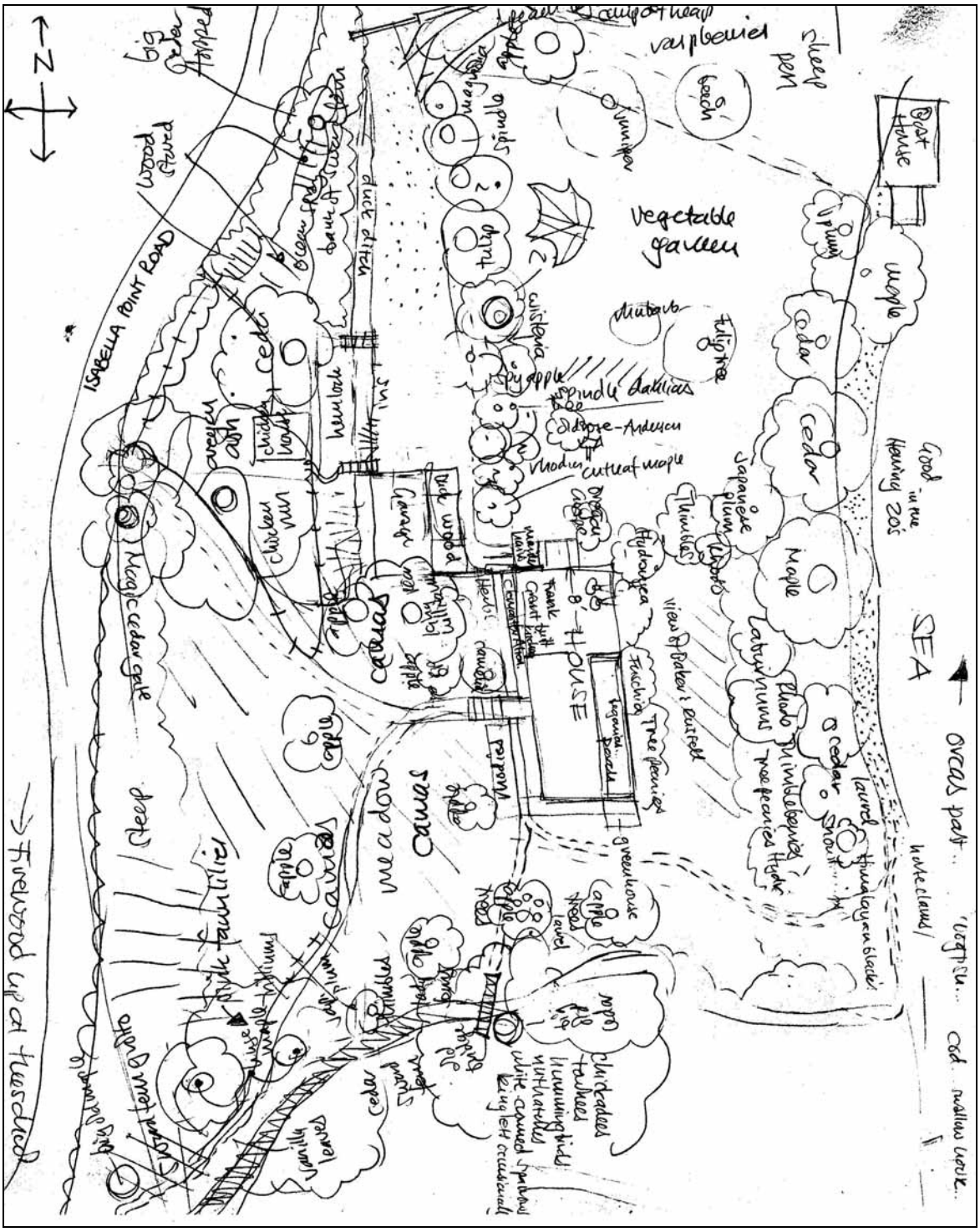
Low tides expose the rich mud flats of Fulford Harbour and the ample clam and eelgrass beds supported by the creek. The lush vegetation along the high tide mark provides cover and connectivity between the marine and forest habitats.

3.6 Fish and Fish Habitat

Anecdotal evidence from Ruby Alton suggests that there was at one time an annual run of 30 to 40 salmon in the creek. No recent evidence of this exists.

4.0 GARDENS ASSESSMENT

Ruby dearly loved her gardens and many members of the community consider the gardens to have an unusual collection of specimens. They contain one of the few Oregon white ash (*Fraxinus latifolia)* growing on the island, an historic King William pear, planted in 1890, and numerous other interesting plants as described on Briony's map (Figure 5).


ISABELLA POINT ROAD
Vegetable garden
HOUSE
SEA
Boat House
sheep pen
raspberries
Japanese plum
Magnolia
Rhododendrons
Hydrangea
Fuchsia
Tree peonies
Ingenui peach
Frank Lutt
Grant Lutt
Heron
Chicken wire
Chicken house
Meadows
Meadows
Apple
Pear
Plum
Cedar
Maple
Laburnum
Laurel
Rhododendrons
Tree peonies
Hydrangea
Viburnum
Weigela
Dahlias
Clematis
Wisteria
Cutleaf maple
Vanilla leaved
Fuchsia
Rhododendrons
Rhododendrons
Rhododendrons

4.1 Inventory of historic garden features

Because Ruby Alton's garden is considered to be primarily a spring garden, a thorough evaluation must be conducted next season to document spring ephemerals. Mary Davidson of the Salt Spring Archives has provided an album of photos of the garden taken over several years by Ruby. These photos provide invaluable reference material for any garden restoration.

4.2 Rare and unique varieties

The garden could be classified as a "country woman's garden", created through Ruby's friendships with other island gardeners and her participation as president of the Chrysanthemum Society in 1965 and as first president of the Garden Club in 1966. Friends of Ruby's have said of her that they don't believe she ever went to a nursery, rather, she took cuttings and slips from friends' gardens when she saw something she liked. While the garden represents a snapshot of island gardens during the latter half of the 20th century, Garden Club members do not consider it a highly significant island garden from a heritage point of view.



Figure 6. Ruby's house and garden in the mid-90's

4.3 Restoration and maintenance needs

Although friends and neighbours maintain that the charm of Ruby's garden was always a wild one, the garden is obviously suffering from neglect, and significant inputs of labour and amendments will be required for it to thrive again. Possibilities for collaboration with the Garden Club and community volunteers have been discussed. Briony Penn has volunteered to spend some time with a garden volunteer coordinator or caretaker to pass on additional information about the way Ruby managed the gardens.

5.0 BUILDINGS ASSESSMENT

The building assessment is based on multiple site visits and on-site meetings, as well as the building inspection report produced by Grange Engineering Associates at the request of ITF in September of 1999. Figure 7 indicates the location of the buildings on the property and the major vegetation types.

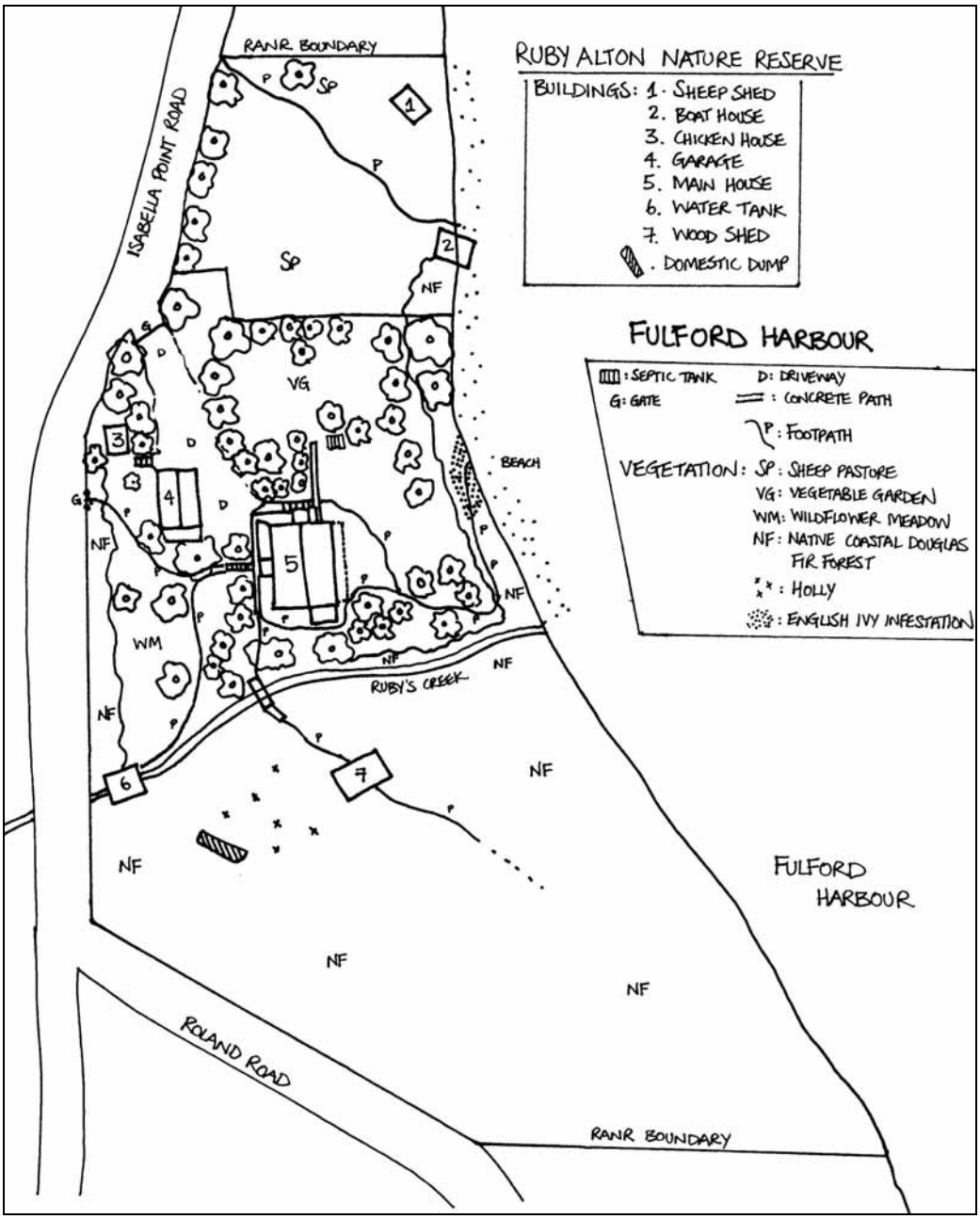


Figure 7. Map of Vegetation and Building Locations

5.1 Cultural Heritage Value

Jonathan Yardley, a local architect with considerable expertise in the care and restoration of heritage structures, volunteered his time to inspect the house and outbuildings. He prepared the attached Heritage Character Statement (see Appendix 1), from which the following Statement of Significance and Character Defining Elements are extracted.



Figure 8. Ruby's house before the addition was added in the 1960s. (Salt Spring Archives)

5.1.1 Statement of Significance

"The significance of this property is based on the integrity of all its elements. That is to say, the originality of the house, the existence of the structures used for the running of the property and the development of the land into a working garden and orchard. Because of the existence of all these elements an historic picture is provided of how Ruby Alton lived and worked on her property. The whole presents a significant cultural and heritage landscape."

"The house presents itself as a typical single cell gable roofed building of the 1930s. The 1960s addition was carried out in sympathy to the original."

"The range of outbuildings and development of the grounds is very consistent with a property of this period."

Character Defining Elements

- An intact rural house and garden developed from the 1930s to the 1960s by one owner.
- A typical 1930s 1½ storey house.
- A collection of original outbuildings for the use of the property.
- A complete cultural and historic landscape.

5.2 Main Residence

The single family residence is a 1½ storey building with a partial basement. It has a simple gabled roof with relatively new asphalt shingles. It is of wood frame construction clad with 1"x 10" painted bevel siding. The main floor is supported with a post and beam structure with a perimeter wall of concrete and concrete block.

The majority of the original wood vertical sliding sash windows have been replaced with aluminum between 1989 and 1992. In approximately 1960 a 10' wide addition was added to the north side of the building to provide a larger kitchen, breakfast area, side entry and access to the partial basement. To the east side there is a wide covered veranda, which is glassed in at the north and south ends. It appears that the main structure of the building dates from the 1930s.

A thorough building inspection was completed by Grange Engineering Associates in September 1999 at the request of the ITF (see Appendix 2). Building contractor Tony Meek further prepared an itemized list of estimated prices for the completion of the work (see Appendix 2). Both of these professionals were invited to revisit the property in fall of 2002 to assess any changes in the building's condition over the 3 year interval. No major differences were identified from the original assessment, which describes the building as being in "generally in good condition with some areas of deterioration requiring attention to extend building life". It should be noted however that evidence of both rats and mice was seen in the house during the 2002 inspections.

5.2.1 Foundation

The main floor is supported by a post and beam system to which hollow, ungrouted concrete block perimeter walls have been added. These walls are not based on a concrete footing. Only slight evidence of movement was found on the south side of the building. Friends have reported that otters have been residents of the basement and crawlspace in years past. No evidence of their presence was seen, but access points for animals need to be addressed.

The engineer's building inspection revealed the presence of powder post beetle in some of the posts, and it is recommended that they be replaced, although they are not structurally weak. Controlling the existing high level of humidity in the crawlspace (see 5.2.3) will help break the life cycle of the powder post beetles, thus reducing further damage.

5.2.2 Roof

The roof on the house and garage are of asphalt shingles, installed in the 90's. On the house, they were installed over existing wooden cedar shingles. The rafters are two by fours, with no insulation. The roof is considered to be in good shape with a remaining life span of at least 10-15 years.

5.2.3 Drainage

Significant surface and/or subsurface drainage occurs on this slope throughout the year. Friends of Ruby's report a stream flowing through the crawlspace in the winter time. Lowering groundwater level by an external upslope French drain, connecting all downspouts into solid pipes and sealing the crawlspace against moisture are priorities for building stabilization and for alleviating the winter flow under the house.

5.2.4 Main Floor

Poor drainage and downspout discharge has caused some rot in the floor support beam in the southwest corner of the house and some joists show signs of crushing in some places.

5.2.5 Insulation

The roof is completely un-insulated and a thin layer of perlite in the loft floor provides a very low standard of insulation to the house. Not all windows are double-glazed, which will contribute to significant heat loss.

5.2.6 Heat

Ruby heated the house as a whole very minimally using the oil furnace, and kept the kitchen warm with her cook stove. The house has been kept above freezing for the last four years using the oil furnace. The oil tank is currently lying on its side on the earth in the crawlspace under the north bedroom and thus at risk of corrosion and eventually leaking. John Cottrell, who has maintained the oil furnace over the past four years estimates it to be approximately 40 years old, with a life expectancy of 5 to 8 more years.

5.2.7 Electricity

BC Hydro disconnected power to the house at the end of July 2002. At the consultant's request, power was reconnected so that an electrical inspection could be carried out. The inspection was carried out on September 19th, 2002 by S.S. Island Electric, detailing the existing deficiencies to the current electrical code as could be visually determined (see Appendix 3). This report indicated that there is some exposed wiring, there are insufficient circuits in both the kitchen and bedroom, and that the polarity will need to be reversed in those circuits that do exist. All receptacles in the older section of the house will need to be replaced and grounded. This report went on to conclude that the general condition of wiring in the house is unsafe

5.2.8 Fresh water

Both the Alton house and the neighbour to the north, use surface water from the stream that crosses the property. The two houses are fed from a reservoir constructed of concrete with a capacity of approximately 11,000 litres (Figure 9). It has a wooden roof and sides with an access door on the downstream side. Water is gravity fed through ¾" tubing to the Alton and neighbour houses.



Figure 9. Concrete tile on adjacent NCC property, and the water reservoir visible from Isabella Point Road.

The Alton home has de facto precedence on the water supply because the neighbour to the north's inlet is located higher on the tank than is the Alton inlet. Distance from the reservoir to the Alton home is approximately 60m.

The reservoir is filled from a point west of Isabella Point Road, on the land now owned by Nature Conservancy of Canada. A 1.2m diameter concrete tile (capped, with access port) sits in a silted-in pool dammed with stacked cinder blocks. There is an access point to this site from Isabella Point Road directly opposite Roland Road. The tile is located 20m from Isabella Point Road. The first 10m of the rough road surface appears solid, whereas the last 10m are on soft, black organic soils. The tile itself is filled from a point 1.5m' upstream through black plastic ¾" I.D. semi-flexible tubing. This intake must be monitored regularly as it tends to clog. On October 17th, 2002, the intake was sucking air and water from the surface of a very shallow pool over black organic sediment. Water is distributed by gravity generally along the stream through ¾" tubing beneath the Isabella Point Road through a culvert and into the reservoir below.

5.2.9 Septic System

Mr. Philip Grange of Grange Engineering and Associates volunteered his time to investigate the septic field, which appears to be functioning adequately. The tank

was last pumped by Gulf Island Septic in 1996 and would have had little or no use since then.

5.2.10 Greenhouse

The greenhouse is attached to the east end of the south wall and is currently completely covered with an evergreen clematis. The sills are rotten.

5.3 Out Buildings

5.3.1 Garage

The garage is approximately 15 feet x 7 feet of simple stud construction resting either directly on the ground or on concrete blocks. It is clad with 1" x 12" horizontal boards and roofed with asphalt shingles. The windows are wood and appear to have been re-used from a previous building. The sill plate and bottom of the studs on the East side are rotten but the building is in relatively good condition overall.



Figure 10. The garage

5.3.2 Chicken House

The chicken house is approximately 10 feet by 8 feet of simple frame construction. It has an exterior accessed nesting box and two opening wood windows. This building could readily be made functional again.

5.3.3 Sheep Shed

The two part sheep shed uses a large fir tree as a major support.



Figure 11. Sheep Shed (October, 2002)

5.3.4 Wood Shed

There is a woodshed on the south side of the creek, where Ruby used to slaughter sheep. It is of simple construction, and contains some firewood.

5.3.5 Boat House

The 16'x 24' boat house is a simple frame building clad with galvanized corrugated iron on the walls and aluminum on the roof (Figure 12). The windows are re-used vertical sash units. It faces onto a concrete and rock slipway down below the high water mark. Adjacent to the slipway is a concrete and rock terrace with steps up the side of the boat house. The sills of this building are rotten, as is the floor.



Figure 12. Boat House (October 2002)

6.0 PUBLIC INPUT

Public input was sought from individuals as well as from non-profit societies who might have a particular interest in the property or desire to take on or assist in a management role for the property.



Figure 13. Public Consultation Meeting, September 25, 2002

6.1 Public Comments

Input from individuals was collected publicly at the two consultation meetings, as well as individually through a great number of phone conversations with friends, neighbours and others who chose to phone to make their views know if they couldn't attend the meetings. Brainstorming sessions yielded a number of interesting points about the possibilities and potential limitations of the property. The comments have been organized into the following categories:

6.1.1 Immediate Issues

- Record Kathleen Rathwell's observations/knowledge of the property and garden
- Property needs caretaker who likes garden, likes people, and is handy
- Water system can easily be overtaxed and requires regular maintenance

6.1.2 Potential Uses on the Long Term

- Interpretive center
- Museum, with heritage furniture, and heritage garden
- Combination museum and interpretive center – how can this be sustained financially?
- Beware of formal heritage designation – many legal restrictions may make things more complex
- Parking will limit use – could field be converted to parking?
- Network with Historical Society to develop long-term vision
- Ruby though the house could be a meeting place for clubs, but it is in a very inconvenient location
- Could be a community garden for a food bank
- Organic gardening
- Organic gardening education center
- Composting demonstration garden
- Library space
- Environmental centre of some kind
- School board partnership – marine biology lab
- Use house for residence and have garden only as public access

6.1.3 Community and Non-Profit Uses

- Property available to the neighbourhood (i.e. bench to sit on, picnics in garden, beach access)
- Develop a path specifically for pedestrian access to beach which is away from house to balance community use with caretaker privacy
- Have access to gardens for local people while respecting privacy of house and inhabitant

6.1.4 Inappropriate Uses

- Drunken parties on the beach – this can be controlled by not allowing car access, or having no parking
- Property should not appear on tourist maps

6.1.5 Opinions

- The house and buildings should be raised because the site is so wet
- This is not a house that anyone would want to live in
- Ruby would have liked to have someone to live there and care for the property

6.1.6 Fundraising Ideas

- Use Ruby's historical photos for postcards/cards to sell
- Make a calendar

- Contact location manager for Victoria or Vancouver about using the property for films. BC Film Commission would have further information, or Mort Ransen.
- Partnership with school board which is seeking an environmental education center
- Establish a “Friend of Ruby Alton’s House” society to manage property and do fundraising

6.2 Non-Profit Societies’ Comments

The Alton Committee and the consultant sought the input of organizations and groups on the island who might be willing to participate in or take on a “management group” role for the property.

6.2.3 Isabella Point Residents Association

Spokespersons for the Isabella Point Residents Association were unable to attend either of the public meetings. They explained that the Isabella Point Residents Association was originally formed to address a specific situation which has been resolved. The Association is not active at the present time.

6.2.4 Salmon Enhancement Society

Kathy Reimer, biologist, has expressed an interest in hiking the creek to assess its habitat suitability for fish once her schedule permits. She had also heard anecdotal evidence from Ruby about fish in the stream, but has no corroborating evidence. A friend of Ruby’s has related that Ruby said she used to see 30 to 40 salmon running in the creek.

6.2.5 Abbeyfield Seniors Society

Representative of the Abbeyfield Society were invited to attend the public meetings, to explore the possibility of Ruby’s House being used as an Abbeyfield residence. The location, size of the house and topography are not suitable for an Abbeyfield residence.

6.2.6 Waldorf School Society

The Waldorf School Society expressed interest in the property for several reasons. They are currently looking for a long-term space to house their expanding school. In addition, they have a hands-on, participatory learning curriculum, and have expressed interest in doing some school projects on the property, which could involve trail building and maintenance, as well as perhaps repairing the bridge over the creek.

6.2.7 SSI Historical Society

As keepers of Ruby Alton’s archives, the Historical Society have suggested the possibility of creating a display about Ruby Alton’s life that could be set up in the house eventually. The Historical Society have offered the use of Ruby’s photographs, and provided a number of historical photographs of the gardens which will provide invaluable reference material for garden restoration.

6.2.8 SSI Garden Club

Ruby Alton had a long association with the Garden Club. Current members have offered expertise in assisting with the continued documentation of the garden, as well as with garden maintenance.

6.2.9 Gulf Island Center for Ecological Learning

The Gulf Island Center for Ecological Learning is associated with the local school district and is seeking to establish environmental education centers on all five of the southern gulf islands. They are currently fundraising towards this goal. They have no intention to build, but rather are looking for existing buildings that could be renovated and retrofitted from an ecological perspective. Representatives from GICEL visited the RANR in October 2002 but no report is currently available indicating if they think RANR would be suitable.

6.2.10 SSI Conservancy

The SSIC “Alton Committee” invested over 250 volunteer hours into the preparation of this management plan. SSIC is currently considering options for future involvement with the RANR and will be in contact with the ITF directly regarding their interest in the property.

7.0 MANAGEMENT PLAN

Management plans are used to provide long-term direction and guidance for the management of values and features of significance on properties owned by the ITF. They also establish priorities for management actions to ensure the goals and objectives of the reserve are being met. Typically, ITF outlines a management plan for its properties, and then works with a local management group to implement the plan. Usually, long-term (25 year) agreements are negotiated with a management group who take on the implementation of the management plan and day to day maintenance issues associated with the property. ITF has a small operating budget to assist with the development of management plans and their implementation. In the case of the RANR, an endowment established by Ruby will provide additional small amount from the interest that is accumulated each year. Beyond this, special fundraising initiatives are required to take on specific management actions.

The Ruby Alton Nature Reserve is unique among the properties owned by ITF in that it contains a number of buildings and gardens, and in having a mandate which is distinct from that of all other properties. This property is to be managed not only for its ecological values, but also for its cultural values. Thus the approach to management of this property is necessarily less straightforward that that which is practiced on other properties. It is necessary for ITF staff to cooperate with various non-profit societies to ensure adequate management. In the case of the RANR, however the challenge posed by the condition of the buildings, coupled with the mandate to maintain both the house and the gardens, represents a huge undertaking for most volunteer organization. In this case, one

or two-year renewable agreements between ITF and a local volunteer organization may be required over the short-term until the house and grounds have been brought to a better level of maintenance and repair.

The management issues identified for the RANR have been laid out as immediate, short term and long-term based on the degree of attention that is required to appropriately manage this site. Note that financial issues are discussed in Section 8.0 as it is an issue that will influence decisions from the immediate to the long-term.

7.1 Management Issues – Immediate

Management issues that need to be addressed immediately include: Management Group; Safety Concerns; House Maintenance; Rodents; Heating and Electrical. These issues should be addressed as soon as possible, preferably within two months of the management plan being approved.

7.1.1 Management Group

Due to the existence of buildings on-site that require maintenance the need for a local management group is high. It is harder for the ITF to oversee on-site work, than it would be for a group or individual based on-island. A Management Group or individual Manager will coordinate the implementation of all necessary management actions. Currently, the Salt Spring Island Conservancy is acting as Interim Management Group. The Management Agreement with SSIC continues for 60 days following approval of the Management Plan.

Several organizations have expressed support and interest in various aspects of the property. However to date, no local groups have expressed a desire to take on a comprehensive responsibility for the property over the long-term without knowing the extent of ITF's financial commitment to the RANR. The SSIC may consider a short term (1-2 years) agreement.

Any group that takes on the management responsibilities will require lots of volunteer or staff time to undertake this role. Assuming a volunteer group is interested, the amount of time that might be spent simply negotiating a suitable management agreement could be extensive. Legal work required around the agreement and implementation of the Plan may be beyond the reach of a small volunteer organization.

It is important that ITF be very clear about what ITF's expectations of the Management Group would be, how much authority it will have, required processes for decision-making and how a management agreement will be negotiated.

Suggested Action: ITF should prepare a Terms of Reference for the Ruby Alton Nature Reserve Management Group (or Manager) that clearly outlines the expectations, roles and responsibilities.

Suggested Action: ITF should meet with SSIC to discuss the option of SSIC acting as the management group for a one or two year term, if an acceptable management agreement can be negotiated.

7.1.2 Safety Concerns

There are a variety of safety issues, both on the property and in the house, that have been noted and require attention. These include:

- The lid to the septic tank currently consists of four heavy 2”x10” loose boards.
- The railings on the bridge over Ruby’s creek are loose.
- The steps in the south trail to the beach are slippery or in some cases have failed and the railing is loose.
- The mossy concrete walkways and steps and the sloping, uneven nature of the land make walking on-site somewhat hazardous.
- The lack of stability and rough construction of the outbuildings are potentially dangerous.
- The north trail to the beach by the boat house needs maintenance if it is to be made a public access trail.
- Electrical issues in the house need immediate attention.
- No smoke detectors exist in the house.

If the house is to be used, upgrading is necessary. Similarly, the ITF should address public safety issues on-site to the best of its ability.

Suggested Actions: ITF and the Management Group should work together immediately to ensure the septic tank lid is secure and obvious, that the bridge is barricaded until its railings and footings can be stabilized, that steps and walkways are improved (leveled and moss removed); that outbuildings are stabilized, removed or clearly marked as hazardous/areas for caution, any trails for public use are identified and adequately cleared, and that electrical needs, including smoke detectors, are addressed before use of the house occurs.

7.1.3 House Maintenance

The main issue around building maintenance is the immediate need for capital investment because the house has been vacant for four years. Through the building inspection a clear identification of needs has been established. Critical items include:

- foundation stability and drainage issues
- heating system improvements
- water and plumbing issues
- rodent control
- general interior cleaning

This Plan outlines anticipated costs associated with immediate house maintenance items (and safety issues) considered of an immediate nature (see section 9.1).

Although it is highly probable that the community will contribute to fundraising efforts to support the development of various long-term visions for the property, ITF will likely need to make an initial investment to the immediate maintenance issues.

Suggested Action: ITF and the Management Group should undertake, as soon as possible, those items listed in the budget entitled “Immediate Maintenance”.

Further, in terms of on-going house maintenance and up-keep, the suggestion of a live-in caretaker (Manager). The caretaker could be in addition to or instead of a Management Group for the site. Options exist in terms of arrangements that might be set up with a Caretaker/Manager, such as reduced rent in exchange for management responsibilities. An on-site care/taker/manager would have an additional vested interest in maintaining the house and grounds. However, the requirement for non-profit uses to occur at the Nature Reserve would need to be made clear to any potential Manager and agreement as to how such uses would occur would be needed.

Suggested Action: ITF should clarify its abilities and responsibilities regarding leasing or renting the house for a live-in Caretaker/Manager.

Suggested Action: The Management Group, in conjunction with Islands Trust Fund, should develop a general “Caretaker Job Description” and prepare a more detailed Five Year Terms of Reference for Management Responsibilities at the Ruby Alton Nature Reserve and subsequently seek out interested individuals in the community for consideration.

Suggested Action: Based on personal recommendations, the job description and Terms of Reference, the Management Group will recommend a caretaker and the Islands Trust Fund will undertake the legal requirements to contract the live-in Caretaker/Manager.

7.1.4 Rodents

During the management planning process, Gulf Islands Pest Control Services (PCS) visited the house and identified the presence of both rats and mice in the building. They indicated that fumigation is not a viable option for rodent control. Although fumigation may kill the rodents that are present at the time (and leave them dead in the walls) it does nothing to address new rodents. PCS’s standard treatment is to begin by requesting that all access points be blocked, at which point they will place bait in the crawlspace. They will monitor the bait for several

months, but do not remove dead rodents. It generally takes two or three months to address the problem.

This issue needs to be addressed as soon as possible or the infestation could increase over the winter months.

7.1.5 Heating

It has been noted that there is little insulation in the house. It is envisioned that a live-in caretaker/manager will be found as soon as possible and heating must be addressed before a caretaker moves in. The house has been heated by oil and wood in the past, however, at present the heating system is non-functioning and the oil tank is a potential hazard. Options assessed during the planning process included oil heating, electric heating, woodstove heating and combinations of these. Oil heating is the least costly from a structural perspective (oil costs could be bourn by the caretaker/manager as a living expense). Electric heating is less desirable on the islands because of regular winter power outages. It is also the most costly option. Woodstove heating is in between cost-wise and is often considered by islands in combination with oil heating. Appendix 4 outlines the detailed costs associated with these options.

Suggested action: The ITF should organize immediate removal of the old oil tank and purchase and installation of a new oil tank outside the house. In addition, annual maintenance should be done on the furnace (including cleaning or replacement as a precaution against the Hantavirus).

Suggested action: As a second heating option, subject to available funds, the installation of a wood heating device, either as a stand alone airtight wood stove installed in the dining area, an insert into the livingroom fireplace, or a small wood stove in the kitchen should be considered. The later option would involve repairing the chimney in the kitchen.

7.1.6 Electrical

Electrical safety is often of concern in older homes. A visual inspection of the premises and the electrical panel and subpanels was conducted to provide a general overview of the quality of the electrical system. Approximately 90% of the electrical system is not visible but some obvious deficiencies were noted. There is a need to provide 100 amp, overhead service and grounding to code. Appendix 3 details the needed improvements.

7.2 Management Issues – Short Term (years 1-2)

7.2.1 House Maintenance

Over the next two years, additional significant repairs and maintenance are needed on the house to ensure its long-term stability and up-keep. These include: curtain drain around the house, replacing necessary joists and beams, and removal or repair of chimneys. The drainage and structural repairs are needed for stability and improved long-term safety of the house. The issues can be dealt with by digging around the house foundation and laying appropriate drain pipes, replacing decayed studs, beams, and joists in the crawlspace/basement area and removing the top of one chimney and strapping the chimney to the wall to ensure safety. Detailed costs are outlined in the proposed five year maintenance budget in Appendix 4.

Suggested Action: ITF and the Management Group should organize who will take the lead in contracting the additional repairs to the house, once funds have been secured for the work.

7.2.1 Fresh Water System

Ruby and her neighbour to the north used to clean the cistern system every year. However, the neighbour has had no access to the reservoir for the last four years, while the estate has been dealt with. In order to accurately assess water quality and contamination levels, the cistern requires draining and cleaning.

Agricultural uses of the watershed and test results from nearby surface wells, indicate a high likelihood of coliform bacteria contamination and elevated background bacterial counts in the water. If this is found to be the situation at the RANR a coarse filter and UV light point of entry system could be installed to address it. The potential for mineral contamination or heavy metal contamination from run-off from the road surface is also present and the situation is currently unknown. If, after cleaning this type of contamination is found an activated carbon filter would be necessary in order to bring the water to drinking-water standards. Depending on the outcome of the testing, another option would be to consider the water unfit for drinking and import bottled water to the property.

First, the water system should be shocked with chlorine and flushed to allow a more representative sample of water quality to be taken. Initially, it was suggested that this shocking take place in the fall of 2002, however the neighbour indicated that this cleaning should be conducted during the rainy season when the tank will fill up rapidly after being drained. Thus the test is recommended to be done in the winter 2002, or in a worst case, before major cleaning and improvement of the tank is undertaken.

As noted in section 5.2.8, the reservoir fills from a tile on the property west of the RANR now owned by Nature Conservancy of Canada. Consultation with Doug Macdonald, Ruby's nephew who has maintained the system for many years, yielded the following suggestions about water supply options:

- A well could be dug with a back-hoe at the edge of the stream, adjacent to the present upstream inlet (land now held by Nature Conservancy of Canada) but on the bank, made 3 tiles deep (each ~30") and draw water from the bank side wet area rather than from the stream proper, which remains wet year-round and would presumably supply the well.
- Water would then be piped down much as it is now, using the same tubing.
- Work to re-dig the well will have to await the appropriate fisheries window which begins in July each year.

With respect to maintenance work on the in-stream reservoir, the Provincial water licensing branch has indicated that any major in-stream work to maintain the reservoir must be done in between mid-July and mid-October, when water levels are naturally low. Further they note that the landowner is responsible to maintain downstream water quality and appropriate measures should be taken to ensure this occurs.

Improvements to the water system could be cost-shared with the neighbour to the north if prior agreement is sought.

Suggested Action: Subject to funding, the Management Group, in consultation with the Islands Trust Fund, should have the water system shocked with chlorine and flushed and appropriate water quality testing should be undertaken by an appropriately qualified individual.

Suggested Action: Based on water quality test results the Trust Fund Board and Management Group should discuss the most practical course of action (identify water as unfit and require use of bottled water only, install a course filter, install a UV filter) and design a necessary action plan.

Suggested Action: The ITF should consult with the Nature Conservancy of Canada regarding the possibility of future work on its property to improve the water supply to the water reservoir on the RANR. If NCC is open to such work, and based on the decision regarding a course of action regarding water quality, water quantity issues should be addressed further by the Islands Trust Fund and Management Group.

7.2.2 Garden Clean Up and Inventory

In recent years, the gardens and shrubs have become quite overgrown, and vegetation close by the house is limiting air circulation and contributing to its decline (Figure 14). In addition, digging on the west side of the house will be necessary to install a curtain drain will impact several garden beds.

Salt Spring Island boasts a wealth of gardening expertise, both among members of the Garden Club and professional gardeners. A number of people have already expressed an interest in assisting with the tasks of inventory and restoration. A combination of garden volunteers and a caretaker could weed the many beds and conduct an inventory of the vegetation in spring.

A preliminary garden plan could be developed by volunteers to identify first year priority needs to bring the gardens into shape and an action plan (e.g., pruning, relocation of shrubs for circulation, bulb to be split, and timing of activities).The main challenge will be to coordinate this process.



Figure 14. West side of the house in 2002 (left) and in mid 90's (right)

Daphne Taylor, professional gardener with expertise in heritage gardens, has volunteered to coordinate a fall 2002 garden clean-up. She is familiar with the garden and has known it over many years. Volunteers are being directed to contact her.

Gillian Kidd, who is an executive member of the garden club, has volunteered to write an article about Ruby's garden for the Grapevine, the Garden Club newsletter in order to seek volunteer support for a garden clean up project.

Suggested Action: The Management Group should support Ms. Taylor's efforts in coordinating a fall garden clean-up and seek her assistance in organizing a spring weeding, garden assessment, and first year priorities plan.

Suggested Action: The Management Group will work with the Garden Club, over time, to organize volunteer opportunities and garden restoration projects.

7.2.3 Management of Native Ecosystems

Many friends of Ruby's have expressed concern about the fate of the forested part of the property and the creek. Ruby tended and perhaps introduced some of the spring wildflowers in that area. It is recommended that this area be protected from trampling, especially during the spring time. As time and energy allows, the Management Group may wish to formalize one of the deer trails running through this section of the property to allow pedestrian access from the Roland Road area.

It is recommended that the ITF place a conservation covenant on at least this portion of the property to reassure the community that this undeveloped area that Ruby loved so much will remain natural and will be protected. Additionally, this would provide a high profile locally covenanted area and an opportunity to provide public education about the values of conservation covenants.

There are invasive exotic species, both ivy and holly, on the property. Removal of these species while they are still manageable is preferable. The ivy infestation at the base of the south trail will require several large work parties, while the holly in the forest, south of the creek is still relatively sparse. It invasive species are not removed they further threaten the native vegetation's survival.

In addition, the domestic dumpsite south of the creek should be removed to allow native vegetation to come back in this location.

Suggested Action: The Management Group should organize volunteer work parties for the removal of invasive species on-site.

Suggested Action: The Management Group will organize work parties for garbage removal from the domestic dump site south of the creek.

Suggested Action: The ITF should place a conservation covenant over the forested section of this property or all of the property, as appropriate.

7.2.4 Signage

ITF has a sign policy that indicates that all Trust Fund Board properties will have a site identification sign with the site name approved by the Board being used on the sign. Additionally, safety signs and management signs will be used as necessary to describe permitted uses, dangerous conditions, and specific information about the property as deemed appropriate. It is a general policy of the Trust Fund Board that public uses of its nature reserves be limited to day use and pedestrian uses only. Further, the restrictions of the Will require that the Ruby Alton Nature Reserve not to be used as a recreational park.

It is recommended that the RANR not be included on tourist maps of the island, in the short term and that efforts be made to ensure it does not become a party

destination with the local population. An on-site caretaker will be the best way to ensure the site is used appropriately.

In the short term, small signs should be installed on the gate and at the trail head to the beach, identifying the Ruby Alton Nature Reserve and stating permitted uses and hours of access. Over the long term, depending on the planned use of the grounds, interpretive and informative signs might be added to describe the history, cultural and ecological importance of the site.

Signage should also reflect use of the site is at ones own risk and appropriate fire regulations for public users of the property.

Suggested actions: The Management Group and the Islands Trust Fund should work together to design a RANR sign for the gate and necessary caution signs for areas of concern on site. Upon agreement of the design, the Management Group should have the signs created on-island out of natural materials and install the signs.

7.2.5 Community and Non-Profit Use of the Property

Feedback from individuals attending public consultation meetings suggests that over the past four years, neighbours and local residents have been made to feel very unwelcome on the property. However, because there is such widespread interest in the property's fate, little that happens or fails to happen on the property goes unnoticed for long. Locals wish to be included in the restoration of the property and need to be made to feel welcome again.

While the mandate of providing non-profit use of the property could be achieved by holding one function there a year, it seems more in keeping with the vision of Ruby Alton to allow the property to become a place where neighbours may walk to the beach, enjoy the gardens, and meet informally. There are two existing trails to the beach, one of which goes through the pasture and down by the boat house. Once repaired, this trail could be designated as a community pedestrian access trail, providing access to the beach while respecting the privacy of a potential caretaker in the house. This trail could eventually be connected to a walkway through the gardens, with a sitting area for garden volunteers and the public.

Through the Will, Patty Barden received grazing rights on the sheep pasture for "as long as she may wish". At the public consultation meeting Ms Barden expressed mild interest in repairing the fence in order to be able to use the pasture to graze her sheep in the spring. Any plans for a trail through the pasture would have to be made in consultation with Patty.

Suggested Action: The Management Group will maintain contact with Ms Barden regarding her potential use of the sheep pasture.

Suggested Action: The Management Group, working with the caretaker/manage, should establish and sign a public pedestrian path through the pasture. In the longer term, the path to the garden will be improved and a seating area will be established for day-time public use (ensuring adequate privacy for the caretaker/manager is maintained).

7.3 Management Issues – Long Term

7.3.1 Long Term Use of the House

The house has been in continuous use as a residence, and therefore it has not been subject to building code changes over time. However, if the use changes from residential to something different, the full force of the current building code will apply.

Options for use of the house for non-profit purposes vary. One option is to rent the house out (tenant) for residential uses and use the rent for property management (so as not to generate profit). Another option is to have a live-in caretaker/manager and require (by lease or other suitable agreement) the caretaker to permit non-profit use of parts of the house (e.g., livingroom, dining room, porch). Further, the house could be used for offices for non-profit societies or as a community hall and rented for public functions. Another would be to establish a partnership with one of the non-profit groups noted in section (e.g., the Waldorf School Society or the Gulf Island Centre for Ecological Studies). Lastly, long term use could be a live-in caretaker/manager and limit public use to the grounds.

The local building inspector made several helpful suggestions regarding building code issues that would be raised if the space was divided between a residential use (caretaker/tenant) and some form of non-profit, public use. Such a divided space would require a one hour fire separation between the residential and non-residential area. This is typically achieved by doubling up on drywall, or by installing a sprinkler system. The potential cost of this is restrictive as a short-term option for non-profit use of the building.

Modifications required to make the house suitable for uses other than residential (office, community hall) would require considerable financial resources, which may be marshaled gradually, over time to achieve such an objective but would not work as a short term solution. In addition, if the house was to be used as office space, zoning changes may be required.

For the first five years the Islands Trust Fund should focus on getting a live-in caretaker, making needed improvements to the house and grounds, establishing public use opportunities (trail to beach, sitting area) on the grounds and making

further contact with the Waldorf School and the Gulf Islands Centre for Ecological Studies to determine their interest in a possible partnership.

Suggested Action: Islands Trust Fund should follow up with the Waldorf School Society and the Gulf Islands Centre for Ecological Studies to determine their interest in a possible partnership at the RANR.

Suggested Action: Once immediate maintenance and management needs are completed, the Trust Fund Board and the Management Group should discuss long term options for use of the house in more detail, including the associated costs of all options and the community benefits that would accrue.

7.3.2 Insulation

The house is practically speaking, un-insulated. While various options for insulating the house exist, it is premature to consider investing in insulating the house while the long-term plans for the building are still unknown.

Blown-in insulation will allow the house walls and ceiling to be insulated at a cost of roughly $1.25/square foot for the walls, and roughly $0.85/square foot for the ceilings. This would total approximately $5000.00 for insulating the first floor of the building only. However should long-term use of the building include use of the upstairs bedrooms as living or office space, additional investment would be required to insulate the roof at that time.

Insulation needs should be considered in discussions regarding the long term use of the house.

7.3.3 Garden Restoration

Although the garden's immediate needs are quite obvious and straightforward, and include weeding, mowing lawns and pruning. There needs to be more thought given to the long-term objective for the garden.

Historical photographs of the house show that the whole slope around it was at one time almost completely bare. It is obvious from the many horticultural magazines that were at the house when Ruby passed away that she had actively worked on the gardens over the years. In recent years, the gardens and shrubs have become quite overgrown.

The Trust Fund Board has indicated that it does not plan to restore the house and property to any one "period" of history. The gardens are recognized as part of Ruby's legacy and as being of importance to Ruby. Based on that, work should be done over the longer term to plan how best to protect and manage the gardens, shrubbery and fruit trees on site.

Suggested Action Item: The Management Group should work with the Garden Club and other horticulturalists to develop a garden plan for the next 5 years. The Plan should be approved by the ITF Board.

7.3.4 Outbuilding Maintenance

The outbuildings represent an important part of the cultural value of the property, as outlined in Jonathan Yardley's Heritage Character Statement (Appendix 1). Though they are all in various conditions of disrepair, they may constitute a valuable resource for the property in the future. The garage can be used as is for storing firewood for the caretaker or tools for garden volunteers where they can access them without entering the house. The boathouse could eventually be repaired and used for storing kayaks or other small watercraft should the property be used for educational purposes in a partnership with the Gulf Island Center for Environmental Learning or the Waldorf School Society.

The ITF is not obligated to maintain the outbuildings based on the terms of the Will, however, unless considerable public safety issues exist with respect to the outbuildings, it would be unfortunate to spend money removing buildings which could later become an asset. Should ITF and the Management Group eventually decide that the outbuildings are not needed, it would be beneficial to donate the buildings to someone in the community willing to tear them apart and take them away for the use of the materials.

If safety risk is a concern, particularly of the boathouse or the sheep shed, which are close to the proposed pedestrian public beach access, these two buildings could be barricaded and signed to warn the public not to enter them.

8.0 Recommended Management Strategy

Management actions for the RANR have been listed in order of priority. The issues addressed in Section 7 may be dealt with in one or more actions. All actions with financial implications will only be undertaken when adequate funds have been secured. The organization of the management strategy below allows for easy implementation of the Management Plan.

Immediate Actions

Action Item 1: The Islands Trust Fund will develop a Terms of Reference for the Management Group for the RANR.

Action Item 2: The Trust Fund Board and its staff will meet with the Salt Spring Island Conservancy Board and its staff to discuss the possibility of SSIC acting as the Management Group for the short term (1-2 years).

Action Item 3: The Islands Trust Fund and the Management Group will work together immediately to ensure adequate measures are taken to identify and/or remove on-site safety concerns, as identified in Section 7.1.2.

Action Item 4: ITF and the Management Group will undertake, as soon as possible, those items identified as “Immediate Maintenance” in Section 7.1.

Action Item 5: ITF will seek professional legal advice regarding its abilities and responsibilities relating to leasing or renting the house for a live-in Caretaker/Manager and will assess the financial viability of having such a Caretaker/Manager.

Action Item 6: The Management Group, in conjunction with Islands Trust Fund, will develop a general “Caretaker Job Description” and prepare a more detailed Five Year Terms of Reference for Management Responsibilities at the Ruby Alton Nature Reserve and, will subsequently, seek out interested individuals in the community for consideration.

Action Item 7: Based on a candidate assessment, the job description and Terms of Reference and personal references, the Management Group will recommend a caretaker and the Islands Trust Fund will undertake the legal requirements to contract the live-in Caretaker/Manager.

Action Item 8: The ITF, or Management Group, will organize immediate removal of the old oil tank and purchase and installation of a new oil tank outside the house. In addition, annual maintenance will be contracted for the furnace (including filter cleaning or replacement).

Action Item 9: As a second heating option, subject to available funds, the installation of a wood heating device, either as a stand alone airtight wood stove installed in the dining area, an insert into the livingroom fireplace, or a small wood stove in the kitchen should be considered. The later option would involve repairing the chimney in the kitchen. This action may be moved to the short or long term actions if funds are not available.

Short Term Actions (Targeted for Years 1-2)

Action Item 10: Islands Trust Fund will follow up with the Waldorf School Society and the Gulf Islands Centre for Ecological Studies to determine their interest in a possible partnership at the RANR.

Action Item 11: ITF and the Management Group will establish who will take the lead in contracting the additional repairs to the house.

Action Item 12: The Management Group, in consultation with the Islands Trust Fund, should have the water system shocked with chlorine and flushed and appropriate water quality testing should be undertaken by an appropriately qualified individual.

Action Item 13: Based on water quality test results the Trust Fund Board and Management Group will discuss the most practical course of action (identify water as unfit and require use of bottled water only, install a course filter, install a UV filter) and design a necessary action plan.

Action Item 14: The ITF will consult with the Nature Conservancy of Canada regarding the possibility of future work on its property to improve the water supply to the water reservoir on the RANR. If NCC is open to such work, and based on the decision regarding a course of action regarding water quality, water quantity issues should be addressed further by the Islands Trust Fund and Management Group.

Action Item 15: The Management Group will support garden clean-ups and will seek assistance in organizing a weeding, garden assessment, and first year priorities plan.

Action Item 16: The Management Group will organize volunteer work parties for the removal of invasive species on-site.

Action Item 17: The Management Group will organize work parties for garbage removal from the domestic dump site south of the creek.

Action Item 18: The ITF will take steps to place a conservation covenant over the forested section of this property or all of the property, as appropriate.

Action Item 19: The Management Group and the Islands Trust Fund will work together to design a RANR sign for the gate and necessary caution signs for areas of concern on site. Upon agreement of the design, the Management Group should have the signs created on-island out of natural materials and install the signs.

Action Item 20: The Management Group will maintain contact with Ms Barden regarding her potential use of the sheep pasture.

Action Item 21: The Management Group, working with the caretaker/manager, will establish and sign a public pedestrian path through the pasture. Later, the path from the beach to the garden will be improved for public use and a seating area will be established for day-time public use (ensuring adequate privacy for the caretaker/manager is maintained) to create a loop trail opportunity.

Long Term Actions (Years 3-5)

Action Item 22: The Management Group will work with the Garden Club and other horticultural professionals to develop a garden plan for the next 5 years. The Plan should be approved by the ITF Board.

Action Item 23: The Management Group will work with the Garden Club, over time, to organize volunteer opportunities and garden restoration projects.

Action Item 24: The Trust Fund Board and the Management Group will discuss long term options for use of the house in more detail, including the associated costs of all options and the community benefits that would accrue.

9.0 Financial Considerations

Financial considerations are a significant management issue for the RANR because of the need to maintain the house and the property.

During the four years that the house was being maintained by the executors the following expenses were incurred and covered by the Estate.

Previous Expenditures (from Nov. 21, 1998 to February 2002	
Heating Oil	$2,715.72
Furnace Repair	$173.00
Hired Cleaners	$1,232.38
Garbage Collection	$1,487.70
Gardens and Yard	$3,821.50
Insurance	$2,429.00
Surveyors	$1,454.90
Property Taxes	$10,513.28
Water License	$77.43
TOTAL	$23,904.91

Ruby Alton provided an endowment of $88,000 to the Islands Trust Fund to support the on-going maintenance of the property. As is standard with endowments, only the annual interest is available for use. In the first year approximately $2,000 was generated. This was reinvested in order to grow the endowment. Additional fundraising will be necessary to continue to build the endowment and grow the available funds. The more ITF can contribute to the endowment and to the capital costs of property over the next five years, the more likely it is that local non-profits will be willing to take on fundraising activities to complement the investment by ITF.

It is unlikely that any local non-profits will be able to take on the Management Group role for the property as the burden would be to great for a local non-profit society unless there is a strong commitment on the part of ITF to cover financial costs associated with the RANR.

Potential sources of funding for the RANR could include:

- partnerships with other organizations, such as the non-profits that have an interest in the property (see section 6.2) that may raise funds,
- grants from foundations, government bodies or philanthropists
- general community and individual fundraising.

9.1 Immediate Maintenance Budget

An immediate budget which addresses the most pressing maintenance issues is itemized below. Further detail, including options that were addressed, is included in Appendix 4.

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Issue	Approximate Cost	Actions Covered in the Cost
Foundation & Drainage	$900.00	Clean gutters, attach downspouts, repair beam and joists in SW corner of basement
Safety Issues	$2,000.00	Rodent control, repair to path to water, repair septic lid, repair bridge, smoke detectors, caution signs
Heating System	$3,550.00	Install new oil tank, inpsect furnace, dispose of old oil tank, insert flue liner in chimney, airtight wood stove (purchase/installation).
Water & Plumbing	$1,000.00	Course filter, replace corroded pipes, pressure pump in kitchen and

		bathroom, septic system improvement to prevent clogging.
Electrical	$2000	Upgrading to ensure adequate and safe electrical system
General Cleaning (house)	$375	Materials & labour
TOTAL	**$9,825.00**	

Other maintenance and upgrading needs as identified in Philip Grange's original house inspection conducted in 1999 and priced in the quote provided by the building contractor Tony Meek are addressed in a proposed five year maintenance budget (see Appendix 4). The long-term budget is based on 1999 estimates plus 15%, and can be considered only as a rough guideline, since many other items requiring attention may surface within this five year period. The costs are estimates, and new quotes will have to be provided when the work is considered, since the costs do not factor inflation over the next five years. However the value of this budget is in illustrating the very minimum expenditures required over this time period. Given the vintage of the house, it is reasonable to add 15 to 20% to the total value of the budget to cover additional, unforeseen expenses. For instance, repairs to the hole in the southwest corner of the building may uncover more rot which is presently invisible.

9.2 Volunteer Contributions

There is potential for significant volunteer involvement in all aspects of the restoration and maintenance of the RANR, which may considerably reduce the costs as outlined in the immediate and 5 year budgets (Appendix B, C). At the public meetings, several people volunteered to help in various aspects of property management. The table below indicates the number of people who volunteered for each area of activity.

Ruby Alton Nature Reserve Volunteering Options	# of volunteers
Participate in long-term management planning	4
Grounds maintenance	9
Garden Inventory	3
Raise Funds	3
Donate Funds	1
Writing	1
House Maintenance	4

The Waldorf School has volunteered to do some trail maintenance and perhaps repair the bridge over the creek, and local gardeners have volunteered to begin a

fall cleanup of the garden. Many others have expressed their interest informally to various members of the Alton Committee of SSIC.

While there is a tremendous potential for volunteer participation in a project such as this, volunteer contributions must be nurtured and coordinated to be effective over the long term.

10.0 CONCLUSIONS

The Ruby Alton Nature Reserve holds a special place in the hearts of many Salt Spring Islanders and Islands Trust Fund will work closely with many islanders and island groups to ensure the long-term upkeep of this property. The Ruby Alton Nature Reserve is unique as an Islands Trust Fund property because it has a number of buildings and gardens on-site, and the bequest requires the Trust Fund Board to use and maintain the house and gardens for non-profit uses such as meetings and gatherings. This represents a more complex management responsibility for both the Islands Trust Fund and the local management group and innovative ways to address these complex responsibilities will need to be developed and implemented from the outset.

Related Maps and Schedules available (hard copy) from Islands Trust Fund.

Islands Trust Conservancy

2020 Meeting Schedule

DRAFT

DATE	TIME	LOCATION
Wednesday, February 12(*DF Thetis LTC day before) or Thursday, February 13th	10:00 am – 2:30 pm	Victoria
Tuesday, April 7th or Thursday, April 16th	10:00 am – 2:30 pm	Victoria
Tuesday, May 26th (*SF BIM the evening before and GM LTC Thursday) or Thursday, June 4th	10:00 am – 2:30 pm	Victoria
Thursday, July 16th **Annual Meeting with the Executive Committee*	10:00 am – 12:30 pm 1:00 pm – 2:30 pm	Victoria
Tuesday, September 29th or Tuesday, October 6th (*SF BW LTC day after)	10:00 am – 2:30 pm	Victoria
Tuesday, November 17th or Tuesday, November 24th	10:00 am – 2:30 pm	Victoria

Meetings are held in the boardroom at:

Islands Trust

Suite 200 – 1627 Fort Street

Victoria, BC V8R 1H8

The proposed meeting agenda is available one week prior to the meeting date and may be obtained through the Islands Trust Conservancy:

Website: **www.islandstrustconservancy.ca**

Email: **itcmail@islandstrust.bc.ca** Phone: **250-405-5186**

ISLANDS TRUST CONSERVANCY
Protecting Canada's Islands in the Salish Sea

September 10, 2019

BOḰEĆEN (Pauquachin) First Nation
Cowichan Tribes
Halalt First Nation
Homalco First Nation
Klahoose First Nation
K'ómoks First Nation
Lake Cowichan First Nation
Lekwungen (Songhees) Nation
Lyackson First Nation
MÁLEXEŁ (Malahat) Nation
Penelakut Tribe
Qualicum First Nation
Scia'new (Beecher Bay) First Nation
SEMYOME (Semiahmoo) First Nation
shíshálh First Nation
Snuneymuxw First Nation
Sḵwx̱wú7mesh (Squamish) Nation Council
Snaw-naw-as (Nanoose) First Nation
SṮÁUTW̱ (Tsawout) First Nation
Stz'uminus First Nation
SXIMEŁEŁ (Esquimalt) Nation
Tla'amin (Sliammon) Nation
Tsawwassen First Nation
Tsleil-Waututh Nation
T'Sou-ke Nation
Wei Wai Kum (Campbell River) First Nation
We Wai Kai (Cape Mudge) First Nation
W̱JOŁEŁP (Tsartlip) First Nation
W̱SIḴEM (Tseycum) First Nation
xʷməθkʷəy̓əm Musqueam

Dear Chief & Councils/Hegus and Legislators:

Re: Islands Trust Conservancy Reconciliation Declaration

On July 16th, 2019, the Islands Trust Conservancy Board unanimously passed a Declaration regarding Reconciliation at our Board meeting in Victoria.

The Islands Trust Conservancy actively works to conserve land. It cares for and manages more than 1,300 hectares of island ecosystems on private properties and Islands Trust Conservancy lands in the Islands Trust Area, which includes islands in the Salish Sea. The Islands Trust Conservancy is part of the Islands Trust family, but has a distinct legislated mandate to hold and manage land for conservation purposes.

In March of this year the Islands Trust adopted a Reconciliation Declaration.

Con't...

In contemplating the Islands Trust Declaration and the Islands Trust Conservancy's role in Reconciliation, the Board had a strong desire to establish its own Reconciliation Declaration that weaves its work on the land with the acknowledgement of the First Nations that have lived here since time immemorial. The Islands Trust Conservancy, as an organization, commits to and acknowledges the important work required toward Reconciliation and will strive through the Declaration to weave the words and intentions into the work that we do.

As we move forward we would like to ensure that Islands Trust Conservancy nature reserve management plans, land management work and policies are reflective of our commitment to Reconciliation. Our staff will be working on policy, processes, training, and education to ensure that cultural values, heritage, and preservation of cultural and spiritual sites is protected. We would like to engage in this important work with you.

I look forward to hearing from you. Please do not hesitate to contact Kate Emmings our A/Manager at kemmings@islandstrust.bc.ca or Lisa Wilcox (kwakwemtenaat), our Senior Intergovernmental Policy Advisor at lwilcox@islandstrust.bc.ca, if you have any questions.

With great respect,



Kate-Louise Stamford
Chair, Islands Trust Conservancy
kstamford@islandstrust.bc.ca

cc: Hul'qumi'num Treaty Group
Laich-kwil-tach Treaty Society
Nanwakolas Council
Naut'sa mawt Tribal
Te'mexw Treaty Association
W̱SÁNEĆ Leadership Council
Min. of Indigenous Relations & Reconciliation
Bowen Island Municipal Council
Minister of Municipal Affairs & Housing
Islands Trust Trustees
Islands Trust webpage

Attachments: 1. ITC Reconciliation Declaration

RECONCILIATION DECLARATION

The Islands Trust Conservancy acknowledges that the lands and waters that encompass the Salish Sea have been home to Indigenous Peoples since time immemorial. We recognize that we are all intertwined in the ecosystems that are the lands, waters, culture, and ecology that embody this place.

The Islands Trust Conservancy will strive to create opportunities for knowledge-sharing, understanding and collaboration as people come together to preserve and protect the special nature of the islands within the Salish Sea.

The Islands Trust Conservancy is committed to the protection and preservation of this place through processes that respect and honour reconciliation and mutually respectful relationships with Coast Salish Indigenous Peoples. We express our recognition for the past, present, and future stewardship and knowledge that has been shared by Indigenous Peoples and are humbled and grateful.

Adopted: July 16, 2019 Islands Trust Conservancy Board in METULIYE (Victoria)

ISLANDS TRUST CONSERVANCY

ISLANDS TRUST CONSERVANCY

Public Acquisitions Update
October 1, 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.
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.
	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 exising 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 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 exisiting 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)	2019/07/30	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**

ISLANDS TRUST CONSERVANCY

PUBLIC COVENANTS UPDATE
October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
NAPTEP COVENANTS		
25 NAPTEP Covenants on title, no current applications.		
REGULAR COVENANTS UPDATE		
(51 regular covenants on title, 1 regular public covenants in progress, 3 in-camera covenants in progress.)		
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

ISLANDS TRUST CONSERVANCY

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 represenatives 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		
(22 Nature Reserves have covenants, 6 Nature Reserves are without covenants, 2 ITC Nature Reserve covenants in progress (1 is under negotiation).		
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).

ISLANDS TRUST CONSERVANCY

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.
200 Collins Rd Covenant Salt Spring	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 Spring Island: PID 009-595-694, Section 3, Range 2 West, North Salt Spring Island, Cowichan District, Except part

ISLANDS TRUST CONSERVANCY

PUBLIC COVENANTS UPDATE
October 1, 2019

Property Name and Island	Date (yyyy/mm/dd)	Notes
Island Property size: (0.85 Ha)		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
Total	**76 covenants registered**	

Regional Conservation Plan (2018-2027)
2018-2020 Workplan Progress Highlights - October 1, 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
	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 10 agencies
	Annual updates to BC Conservation Areas Database, complete for 2018 & 2019
	Updated internal 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
	Updated external mapping resource (MapIT) with 2017 senstive ecosystem mapping and 2018 James/Sidney Islands Forage Fish Mapping
Ongoing	Provide annual information training to LPS staff and Trust Council
	Meet annually with Islands Trust Executive Committee
In progress	Assisting Islands Trust with Islands 2050 information panels
Workplan Changes/Notes	Considering adding further data to the open data available on MapIT (e.g. Marine and Terrestrial Ecosystem Mapping)
	Considering whether pdf Sensitive Ecosystems maps might be helpful to LTCs and BIM

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 Reconciliation Action Plan
Workplan Changes/Notes	Implement Reconciliation Action Plan
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 Changes/Notes	Continue to seek opportunities to work collaboratively with Islands Trust to build relationships with First Nations
	Continue to explore tools to protect cultural and archaelogical 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 three nature reserves completed (Thetis and Gambier), with ongoing work with First Nations

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 five management plans (Denman, Gambier and Salt Spring) and development of three new management plans (Denman, Thetis and Lasqueti)
	Improving TAPIS database for better storage of property management information
	Developing budget formula for property management to submit for 2020-2021 budget
	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
	Review property monitoring transition and evaluate Covenant Management and Outreach Specialist position
Land Conservation	
Complete	Valens Brook Nature Reserve addition
	Salish View Nature Reserve acquistion 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 NAPTEP 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 Communcation	
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
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
Ongoing Learning	
Complete	Board and staff participated in awareness training regarding working with First Nations
	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
	Staff and board members to attend Land Trust Alliance Seminar Series (Nov 2019)
Workplan Changes/Notes	

Islands Trust Conservancy Budget Tracking 2019-2020

GL	Description	Budget	Revenue	Total Available	Spent	Remaining	% Remaining	Additional Commited Funds
54500-210	Communications	$ 13,000		$ 13,000	$ 3,192	$ 9,808	75%	*$ 2,949*
61100-210	Board Honoraria	$ 10,400		$ 10,400	$ 3,350	$ 7,050	68%	
61200-210	Board Meeting Expense	$ 13,850		$ 13,850	$ 4,753	$ 9,097	66%	
61210-210	Board Training & Conferences	$ 4,000		$ 4,000	$ 242	$ 3,758	94%	*$ 1,830*
61300-210	Property Management	$ 65,000		$ 65,000	$ 20,363	$ 44,637	69%	*$ 25,406*
61500-210	Cons Planning / Land Securement	$ 18,000		$ 18,000	$ -	$ 18,000	100%	*$ -*
63000-210	Legal	$ 15,000		$ 15,000	$ 1,085	$ 13,915	93%	*$ 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%	
80300-210	Mobile Devices	$ 2,450		$ 2,450	$ 754	$ 1,696	69%	
81300-210	Training & Conferences	$ 6,212		$ 6,212	$ 337	$ 5,875	95%	
81305-210	Travel for Training	$ 2,750		$ 2,750	$ -	$ 2,750	100%	
82300-210	Travel	$ 10,500		$ 10,500	$ 5,366	$ 5,134	49%	
		$ 183,162	$ -	$ 183,162	$ 39,442	$ 143,720	78%	*$ 32,284*

	Restricted Funds	Opening Balance						
	Alton Maintenance Account	$ 79,615	$ 6,251	$ 85,866	$ 2,422	$ 83,444		*$ 425*
	Ruby Alton Endowment Fund	$ 128,185	$ 10,303	$ 138,488	$ 170	$ 138,318		
	Opportunity Fund	$ 27,592	$ 1,621	$ 29,213	$ 7,241	$ 21,972		
	Covenant Mgmt and Defence Fund	$ 111,475	$ 310	$ 111,785	$ -	$ 111,785		
	Lasqueti Island Acq Fund	$ 57,361	$ 4,637	$ 61,997	$ 26,726	$ 35,271		*$ 4,286*
	Gambier Island Acq Fund	$ 120,392	$ 1,989	$ 122,381		$ 122,381		
	Morrison Waxler Legacy Fund	$ 20,140	$ 72	$ 20,213		$ 20,213		
	Thetis Island Acq Fund	$ 1,288	$ 2	$ 1,290		$ 1,290		
	McFadden Creek	$ 23,525	$ 45	$ 23,570		$ 23,570		