



PLANNING AND COMMUNITY DEVELOPMENT COMMITTEE

Thursday, November 14, 2019
SCRD Boardroom, 1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

2. David Reed, Coastal Workforce Housing Society Verbal
Regarding Affordable Workforce Housing

REPORTS

3. Senior Planner – Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 (Jacobs – 2723 Toni Rd) Consideration of Second Reading
Electoral Area D (Rural Planning) (Voting – A, B, D, E, F) Annex A
pp 1 - 8
4. Senior Planner – Application for Subdivision in the Agricultural Land Reserve (ALR00011, ALC 59614) for Part of Elphinstone Crossing Estate Phase Two
Electoral Area F (Rural Planning) (Voting – A, B, D, E, F) Annex B
pp 9 - 12
5. Senior Planner – Development Variance Permit DVP00050 (Cappadocia)
Electoral Area A (Rural Planning) (Voting – A, B, D, E, F) Annex C
pp 13 - 21
6. Planner – Provincial Referral CRN00088 for Log Handling, Storage (A & A Trading Ltd)
Electoral Area A (Rural Planning) (Voting – A, B, D, E, F) Annex D
pp 22 - 95
7. Planner – Provincial Referral CRN00095 for Log Handling, Storage (Interfor)
Electoral Area F (Rural Planning) (Voting – A, B, D, E, F) Annex E
pp 96 - 109
8. Parks Planning Coordinator – Provincial License No. 241525 Dan Bosch Park
Community Parks (Voting – A, B, D, E, F) Annex F
pp 110 - 113
9. General Manager, Planning and Community Development – Sechelt Aquatic Centre – Pool Shutdown Timing Update
Community Recreation Facilities (Voting – B, D, E, F, DoS, ToG, SIGD) Annex G
pp 114 - 116
10. General Manager, Planning and Community Development – Potential Partnership with the Dead Boat Disposal Society
Regional Planning (Voting – All) Annex H
pp 117 - 123
11. Manager of Protective Services – Community Resiliency Investment Program Grant Application
Sunshine Coast Emergency Planning (Voting – All) Annex I
pp 124 - 125

- | | |
|--|-------------------------|
| 12. Policing and Public Safety Committee Minutes of October 17, 2019
Voting - All | Annex J
pp 126 - 128 |
| 13. Agricultural Advisory Committee Minutes of October 22, 2019
Regional Planning (Voting - All) | Annex K
pp 129 - 131 |
| 14. Electoral Area A (Egmont/Pender Harbour) APC Minutes of October 30, 2019
Electoral Area A (Rural Planning) (Voting – A, B, D, E, F) | Annex L
pp 132 - 133 |
| 15. Electoral Area B (Halfmoon Bay) APC Minutes of October 22, 2019
Electoral Area B (Rural Planning) (Voting – A, B, D, E, F) | Annex M
pp 134 - 135 |
| 16. Electoral Area E (Elphinstone) APC Minutes of October 23, 2019
Electoral Area E (Rural Planning) (Voting – A, B, D, E, F) | Annex N
pp 136 - 139 |

COMMUNICATIONS

NEW BUSINESS

IN CAMERA

That the public be excluded from attendance at the meeting in accordance with Section 90 (1) (a) of the Community Charter – “personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality...”.

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Yuli Siao, Senior Planner

SUBJECT: Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 (Jacobs – 2723 Toni Rd) Consideration of Second Reading – Electoral Area D

RECOMMENDATIONS

1. THAT the report titled Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 (Jacobs – 2723 Toni Rd) Consideration of Second Reading – Electoral Area D be received;
 2. AND THAT Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment No. 310.185, 2019 be forwarded to the Board for Second Reading;
 3. AND THAT Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 is considered consistent with the SCRD's 2019 - 2023 Financial Plan and 2011 Solid Waste Management Plan;
 4. AND THAT a Public Hearing to consider the Bylaws be scheduled for January 14, 2020 at 7:00 p.m. at Roberts Creek Community Hall, located at 1309 Roberts Creek Road, Roberts Creek, BC;
 5. AND FURTHER THAT Director McMahon be delegated as the Chair and Director Tize be delegated as the Alternate Chair for the Public Hearing.
-

BACKGROUND

On October 10, 2019, the SCRD Board adopted the following recommendation:

243/19 **Recommendation No. 3** *Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019*

THAT the report titled Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 (Jacobs – 2723 Toni Rd) Consideration of Second Reading – Electoral Area D be received;

AND THAT Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and Sunshine Coast Regional District Zoning Amendment No. 310.185, 2019 be referred to the October 10, 2019 Planning and Community Development Committee meeting in order to allow for further discussion between the applicant and staff;

AND THAT a Public Hearing to consider Amendment Bylaws No. 641.12 and 310.185 be postponed to a later date to be confirmed;

AND THAT Director McMahon be delegated as the Chair and Director Tize be delegated as the Alternate Chair for the Public Hearing;

AND FURTHER THAT the staff report be forwarded to the Roberts Creek Official Community Plan Committee for discussion.

The purpose of this report is to provide further analysis of a proposed revision to the zoning amendment bylaw, and recommends Second Reading of the revised Bylaws and holding of a Public Hearing.

DISCUSSION

Through further discussion with staff, the applicant proposes a modification to the zoning amendment bylaw to include a site-specific provision that restricts residential development on each proposed new parcel to one principle single family dwelling plus one second dwelling with a gross floor area not exceeding 90 m². This modification is reflected in the revised bylaw (Attachment B).

The intent of the applicant is to reduce the scale of development on the proposed parcels in effort to retain more of the existing trees on the rear of the property, reduce perceived impacts to neighbouring properties, and maintain the rural character of the surrounding neighbourhood. The R2 Zone permits a maximum density of two single family dwellings per parcel where the parcel area exceeds 3500 m². The proposed revision represents a reduction in the scale of density on the proposed parcels.

From a land use planning perspective, the reduction does not have a significant effect on spatial density, utility requirements or housing affordability for these parcels. Maximum building coverage on each parcel must remain the same (35%). According to engineering assessment for the property, the proposed parcels have sufficient utility capacity to support full development potential (2 SFDs) as permitted by the R2 zone. Analysis in previous staff reports indicates that from a land use planning perspective full development potential can be supported.

Existing parcels to the west of the subject property are approximately half the area of the proposed parcels. Each of the adjacent parcels is permitted to have one single family dwelling and one auxiliary dwelling unit. Based on land area the proposed development will result in less density than the parcels to the west. Despite land area, the proposed development is consistent with the scale and form of housing in the surrounding neighbourhood.

Timeline for Next Steps

If the Board gives the Bylaws Second Reading, a public hearing will be held. Comments received from the public hearing as well as recommendations for any conditions will be incorporated into a staff report to the Planning and Community Development Committee for consideration of Third Reading and Adoption of the Bylaws.

Communications Strategy

Information on this application will be posted on the SCRD website. The public hearing will be advertised in the local newspaper and notices will be sent to property owners within 100 metres of the site.

STRATEGIC PLAN AND RELATED POLICIES

The OCP and bylaw amendment process supports the SCRD's strategy for community collaboration.

CONCLUSION

Through the agency referral and public information meeting process, the proposed bylaws have received support from the majority of the participants. Responding to the Board's direction, further discussion with the applicant regarding reducing residential development potential on the proposed parcels has occurred. This report provides further analysis on the proposed revision.

Staff recommend that the revised bylaws proceed to Second Reading and a Public Hearing be held to gather further community input.

Attachments

Attachment A – Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 for Second Reading

Attachment B – Revised Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 for Second Reading

Reviewed by:			
Manager	X – D. Pady	CFO/Finance	
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Solid Waste	

ATTACHMENT A

SUNSHINE COAST REGIONAL DISTRICT BYLAW NO. 641.12

A bylaw to amend the *Roberts Creek Official Community Plan Bylaw No. 641, 2011*

The Board of Directors of the Sunshine Coast Regional District, in open meeting assembled, enacts as follows:

PART A – CITATION

1. This bylaw may be cited as *Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019*.

PART B – AMENDMENT

2. *Roberts Creek Official Community Plan Bylaw No. 641, 2011* is hereby amended as follows:

Map 1: General Land Use is amended by re-designating Lot C, West Part of District Lot 1316, New Westminster District, Plan BCP 30166 from “Residential C” to “Residential B” as depicted on Appendix ‘A’ attached to and forming part of this bylaw.

PART C – ADOPTION

READ A FIRST TIME this	28 TH	DAY OF MARCH ,	2019
PURSUANT TO SECTION 475 OF THE LOCAL GOVERNMENT ACT CONSULTATION REQUIREMENTS CONSIDERED this	28 TH	DAY OF MARCH,	2019
READ A SECOND TIME this	####	DAY OF MONTH,	YEAR
CONSIDERED IN CONJUNCTION WITH THE SUNSHINE COAST REGIONAL DISTRICT FINANCIAL PLAN AND ANY APPLICABLE WASTE MANAGEMENT PLANS PURSUANT TO THE LOCAL GOVERNMENT ACT this	####	DAY OF MONTH,	YEAR
PUBLIC HEARING HELD PURSUANT TO THE LOCAL GOVERNMENT ACT this	####	DAY OF MONTH,	YEAR
READ A THIRD TIME this	####	DAY OF MONTH,	YEAR
ADOPTED this	####	DAY OF MONTH,	YEAR

Corporate Officer

Chair

<h2 style="margin: 0;">Appendix A to</h2> <h2 style="margin: 0;">Roberts Creek Official Community Plan Amendment</h2> <h2 style="margin: 0;">Bylaw No. 641.12, 2019</h2>	
<p>Amend the Land Use Designation of Lot C, West Part of District Lot 1316 New Westminster District, Plan BCP30166 from Residential C to Residential B</p>	
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Subject Property </div>	
	<div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="border-top: 1px solid black; width: 45%; text-align: center;"> _____ Chair </div> <div style="border-top: 1px solid black; width: 45%; text-align: center;"> _____ Corporate Officer </div> </div>

ATTACHMENT B

SUNSHINE COAST REGIONAL DISTRICT BYLAW NO. 310.185

A bylaw to amend the *Sunshine Coast Regional District Zoning Bylaw No. 310, 1987*.

The Board of Directors of the Sunshine Coast Regional District, in open meeting assembled, enacts as follows:

PART A – CITATION

1. This bylaw may be cited as *Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019*.

PART B – AMENDMENT

2. *Sunshine Coast Regional District Zoning Bylaw No. 310, 1987* is hereby amended as follows:

- a. *Schedule B* is amended by rezoning Subdivision District E to Subdivision District D for Lot C, West Part of District Lot 1316, New Westminster District, Plan BCP 30166, as depicted on Appendix 'A', attached to and forming part of this bylaw.

- b. Insert the following subsection immediately following Section 611.4:

611.5 Notwithstanding Section 611.3(1), on any parcels exceeding 3500 m² in area and subsequently created from Lot C, West Part of District Lot 1316, New Westminster District, Plan BCP 30166, a permitted second single family dwelling shall not exceed 90 m² in gross floor area.

PART C – ADOPTION

READ A FIRST TIME this 28TH DAY OF MARCH , 2019

READ A SECOND TIME this #### DAY OF MONTH , YEAR

PUBLIC HEARING HELD PURSUANT TO THE
LOCAL GOVERNMENT ACT this #### DAY OF MONTH , YEAR

READ A THIRD TIME this #### DAY OF MONTH , YEAR

APPROVED PURSUANT TO SECTION 52 OF
THE TRANSPORTATION ACT this #### DAY OF MONTH , YEAR

Staff Report to Planning and Community Development Committee - November 14, 2019
Roberts Creek Official Community Plan Amendment Bylaw No. 641.12, 2019 and
Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019 (Jacobs –
2723 Toni Rd) Consideration of Second Reading – Electoral Area D **Page 7 of 8**

ADOPTED this

DAY OF MONTH, YEAR

Corporate Officer

Chair

<h2 style="margin: 0;">Appendix A to Sunshine Coast Regional District Zoning Amendment Bylaw No. 310.185, 2019</h2>	
<p>Amend the Subdivision District of Lot C, West Part of District Lot 1316 New Westminster District, Plan BCP30166 from E to D</p>	
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Subject Property </div>	
	<div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center; width: 45%;"> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> Chair </div> <div style="text-align: center; width: 45%;"> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> Corporate Officer </div> </div>

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Yuli Siao, Senior Planner

SUBJECT: APPLICATION FOR SUBDIVISION IN THE AGRICULTURAL LAND RESERVE (ALR00011, ALC 59614) FOR PART OF ELPHINSTONE CROSSING ESTATE PHASE TWO

RECOMMENDATIONS

THAT the report titled Application for Subdivision in the Agricultural Land Reserve (ALR00011, ALC 59614) for Part of Elphinstone Crossing Estate Phase Two be received;

AND THAT Application (ALR00011, ALC 59614) be supported and SCRD's support for the application be forwarded to the Agricultural Land Commission.

BACKGROUND

On October 24, 2019, the SCRD Board adopted the following recommendation:

265/19 **Recommendation No. 5** *Subdivision in the Agricultural Land Reserve for Part of Elphinstone Crossing Estate Phase Two*

THAT the report titled Application for Subdivision in the Agricultural Land Reserve (ALR00011, ALC 59614) for Part of Elphinstone Crossing Estate Phase Two be received;

AND THAT staff provide more information regarding the trail network connectivity of the western portion of the subject property District Lot 1354, *as per West Howe Sound Official Community Plan Section 3.6 Williamson's Landing – Recreation-Policies-3*, and the ALR application to a Planning and Community Development Committee meeting. This report provides information with respect to the proposed trail and recommends support for the subdivision application within the ALR.

DISCUSSION

Prior to adoption of Zoning Amendment Bylaw 310.177 in November 2018 to support the subdivision of the west portion (lots 14-26, as outlined in Attachment A) of Elphinstone Crossing Estate Phase Two, in accordance with Board resolution, the applicant has satisfied a condition for adoption of the bylaw by providing the SCRD a solicitor's letter of undertaking. The letter states that prior to the final approval of the proposed subdivision, the applicant will enter into a covenant with the Ministry of Transportation and Infrastructure (MOTI) and the SCRD regarding the construction and maintenance of a trail along the north segment of a road right of way within the subdivision to be dedicated as a community amenity according to specification and timing described by the applicant. The applicant's specification for the trail is provided in Attachment B.

The intent of the trail is to connect the north end of the new subdivision road with the existing Creek Road in DL 4451 to the north which could link to logging roads in the adjacent areas and further connect to the foothills of Mt. Elphinstone. This is consistent with West Howe Sound Official Community Plan policy (Section 3.6, Recreation Policy #3) regarding facilitating

pedestrian access through DL 1354 (subject lot) and other district lots to the slopes of Mt. Elphinstone for hiking purpose.

MOTI was agreeable to this approach to the proposed trail. As part of the subdivision, road dedication will extend northward from the cul-de-sac of the proposed new road to connect to the existing road in DL 4451. The trail could then be constructed within this road dedication and a permit from MOTI could be issued to the SCRDC for use and to the applicant for maintenance of the trail. A covenant will be set up to reflect the proposed use and maintenance of the trail prior to final subdivision approval.

CONCLUSION

With the information about the trail provided, staff recommend supporting the subject application for subdivision in the ALR as discussed in detail in the previous staff report.

Attachments

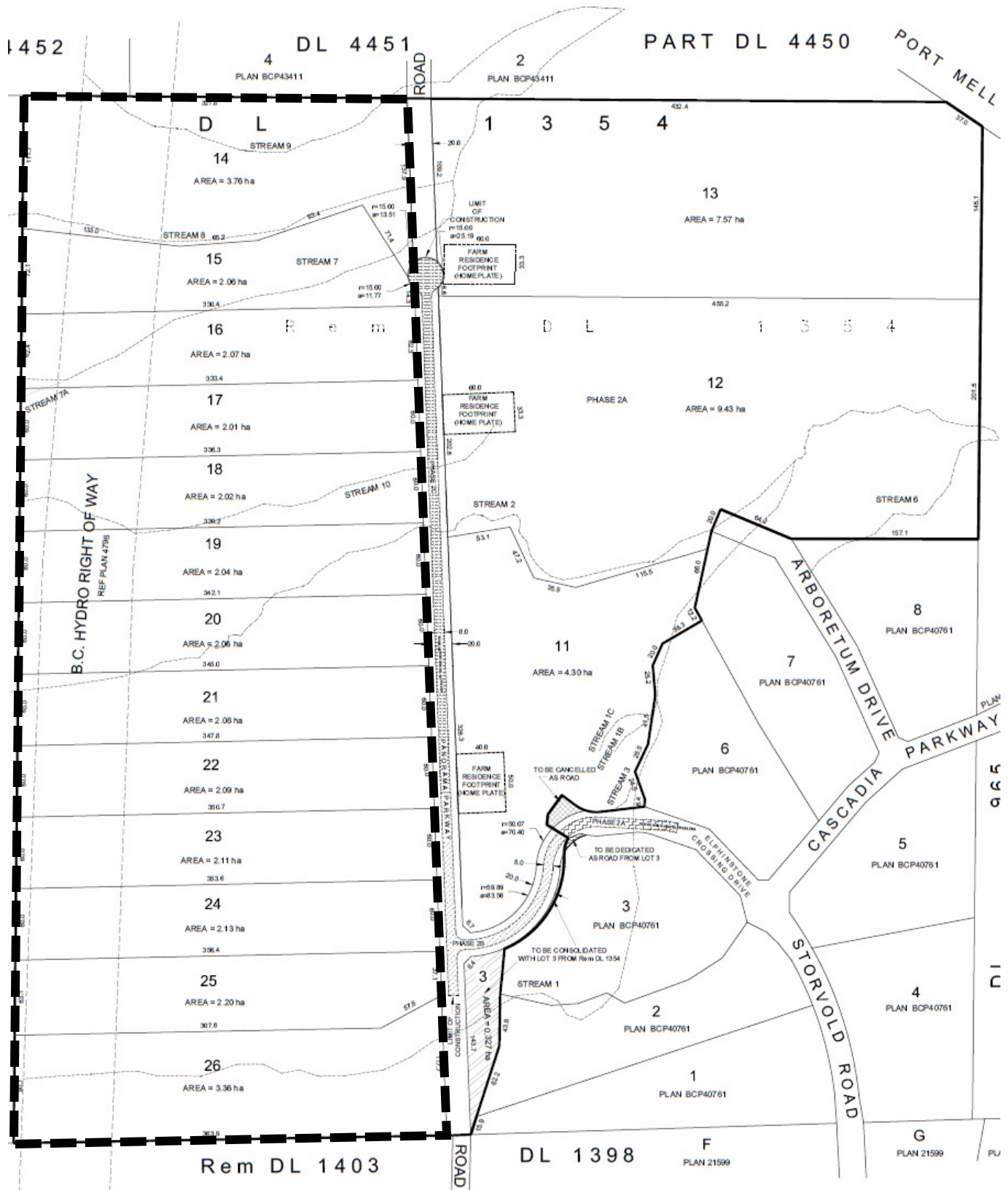
Attachment A – Proposed subdivision plan

Attachment B – Applicant's trail specification and map

Reviewed by:			
Manager	X – D. Pady	Finance	
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Other	

Attachment A

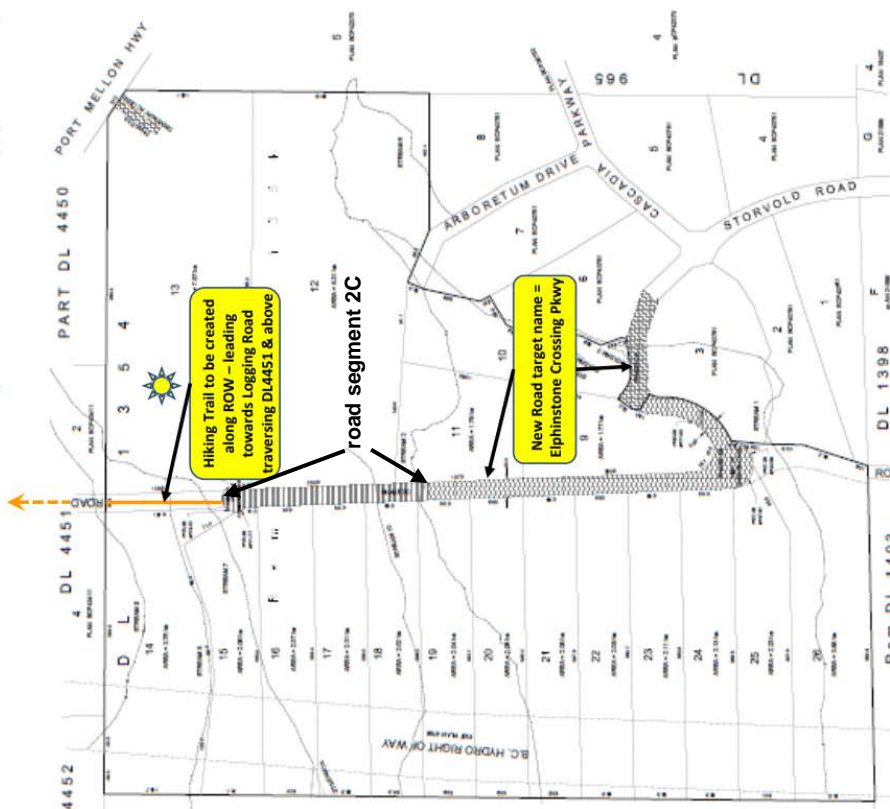
Proposed Subdivision Plan



Attachment B

Applicant's trail specification and map

DL1354 – Elphinstone Crossing (Phase 2): Proposed Hiking Trail (Community Amenity)



- Location: See Map at Left. This Hiking Trail would go from the northern terminus of the Roadway that we are building to service the upper portion of DL1354 for Phase 2 of Elphinstone Crossing Estates and then extend up to the northern edge of this DL1354 property, where it would then link up with the 'Creeks Road' ROW in the neighboring DL4451 that is roughed in an could serve as an interconnecting Hiking Trail - that then further ties into the Logging Road that runs through DL4451 and then extends further upslope to the flank of Mt. Elphinstone. Specifically this Hiking Trail would be planned for up-front, but not actually creating it until later in the segmented build-out of our Phase 2 expansion of Elphinstone Crossing (segment = 2C), when we get to the point of extending the Roadway to service the Lots in the NW corner of our DL1354 property (the roadway segment labeled 'Phase 2C' on our subdivision layout that we have proposed), because reasonably accessing that Hiking Trail would only be practical once we extend the built Roadway to that northern terminus that we are targeted to build here ('Phase 2C' segment - Limit of Construction), as that Roadway would then provide access to the southern trail-head of this Hiking Trail that I have proposed.
- Width: common Hiking Trail width (~ 1 meter in width)
- Length: approximately 140 meters in length
- Surface Condition: cleared of overgrowth down to natural base soil
- Signage: basic trail markers only (located ~ every 20 meters)
- Level of Maintenance: basic seasonal maintenance of this Hiking Trail within DL1354 will be performed by T&L Rockford Enterprises

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Yuli Siao, Senior Planner

SUBJECT: DEVELOPMENT VARIANCE PERMIT DVP00050 (CAPPADOCIA) - ELECTORAL AREA A

RECOMMENDATIONS

1. THAT the report titled Development Variance Permit DVP00050 (Cappadocia) - Electoral Area A be received;
 2. AND THAT Development Variance Permit DVP00050 to vary Zoning Bylaw No. 337 Section 516(1)(a) for setback distance from the natural boundary of the ocean, from 7.5 m and 1.5 m, be issued subject to:
 - a. The applicant applies for a Development Permit to address coastal flooding and coastal slope issues, and recommendations of the permit support the 1.5m setback from the natural boundary of the ocean;
 - b. Comments received from shíshálh Nation within the 60-day referral period.
-

BACKGROUND

The SCRD received an application for a Development Variance Permit to vary the minimum setback from the natural boundary of the ocean from 7.5m and 1.5m for the proposed new dwelling to be located at 12963A Oyster Bay Road.

The purpose of this report is to provide a land use planning analysis on the application and obtain direction from the Planning and Community Development Committee.

Owner / Applicant:	Doug Cappadocia
Civic Address:	12963A Oyster Bay Road
Legal Description:	Lot A District Lot 4284 Group 1 New Westminster District Plan EPP16737
Electoral Area:	A – Egmont / Pender Harbour
Parcel Area:	2.44 acre in total
OCP Land Use:	Rural Residential A
Land Use Zone:	RU1 - Rural One
Application Intent:	To vary setback from natural boundary of ocean from 7.5m to 1.5m

Table 1 - Application Summary

Figure 1 - Location Map

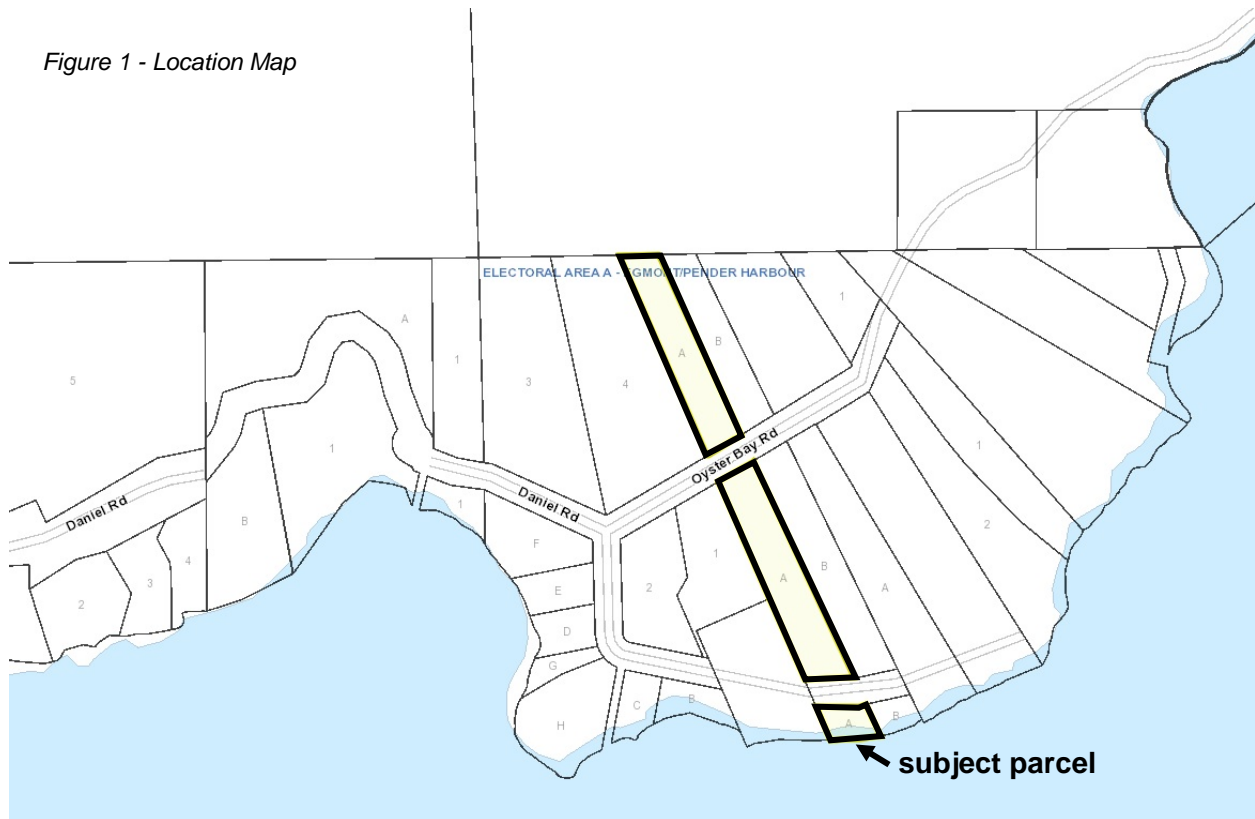


Figure 2 – Aerial photo



DISCUSSION

There is an existing cabin located on the foreshore adjacent to the water-front portion of the subject parcel. According to the applicant, the cabin is under an order by the Province to be removed. The applicant is currently in a legal proceeding disputing the failure of disclosure of the status of said structure during a preceding real estate transaction.

The applicant intends to remove the structure from the foreshore and build a new house with the same footprint size as the cabin (40'x20') within the boundaries of the water-front setback portion of the parcel. Due to its topography, the applicant considers the upland portions unsuitable to build the house on. Instead, the existing septic system is to be relocated farther away from the water to the upland portion of the parcel. The portion considered buildable by the applicant is the water front portion which has limited space which necessitates a reduction of setback from the ocean. (Attachment A - Site Plan)

The proposed building site is within Development Permit Area 1A – Coastal Flooding and Development Permit Area 1B – Coastal Slope. Construction of the new house is subject to a Development Permit to ensure that flood construction level and proper ocean setback are attained and potential geo-hazard can be mitigated. Geo-technical reports for the Development Permit will determine whether the proposed 1.5 m setback from the natural boundary of the ocean is safe for the construction of the house.

Based on the above analysis, subject to the recommendations of a Development Permit, the proposed variance may meet the criteria for approval of a variance that:

- is consistent with the intent of the Zoning Bylaw and Official Community Plan;
- has no adverse impact on adjacent properties or natural environment, and
- is a reasonable solution for the given circumstances.

Options

Possible options to consider:

Option 1: Issue the permit subject to conditions

This would authorize the applicant to proceed with submission of a Development Permit. If the recommended Development Permit conditions are met, the applicant would be permitted to proceed with construction of the proposed house. Planning staff support this option as the proposal is not anticipated to result in negative impacts.

Planning staff recommend this option.

Option 2: Deny the permit

The existing regulation requiring minimum setback of 7.5 m from the natural boundary of the ocean would continue to apply, and the applicant would have to locate the house at or beyond the setback distance.

Organization and Intergovernmental Implications

The development variance permit has been referred to the following agencies for comment:

Referral Agency	Comments
SCRD Building Division	No concerns with application.
shíshálh Nation	Referred on October 21, 2019.
Egmont / Pender Harbour Advisory Planning Commission	The APC recommends the approval of Development Variance Permit Application provided all SCRD requirements are met.
Neighbouring Property Owners/Occupiers	Notifications were distributed to owners and occupiers of properties within a 100 m radius of the subject property. One neighbouring resident indicated support for the variance.

STRATEGIC PLAN AND RELATED POLICIES

Review of the application for the development variance permit supports the SCRD's strategy for community collaboration. Fulfilling requirements associated with a development permit addresses the need to plan for climate resilience.

CONCLUSION

The proposed development variance permit to reduce setback from the natural boundary of the ocean can facilitate the construction of a new house on the parcel without negative impact on the surrounding areas if a development permit to be applied for supports the proposed setback.

Staff recommend support of this application subject to the conditions as recommended.

Attachments

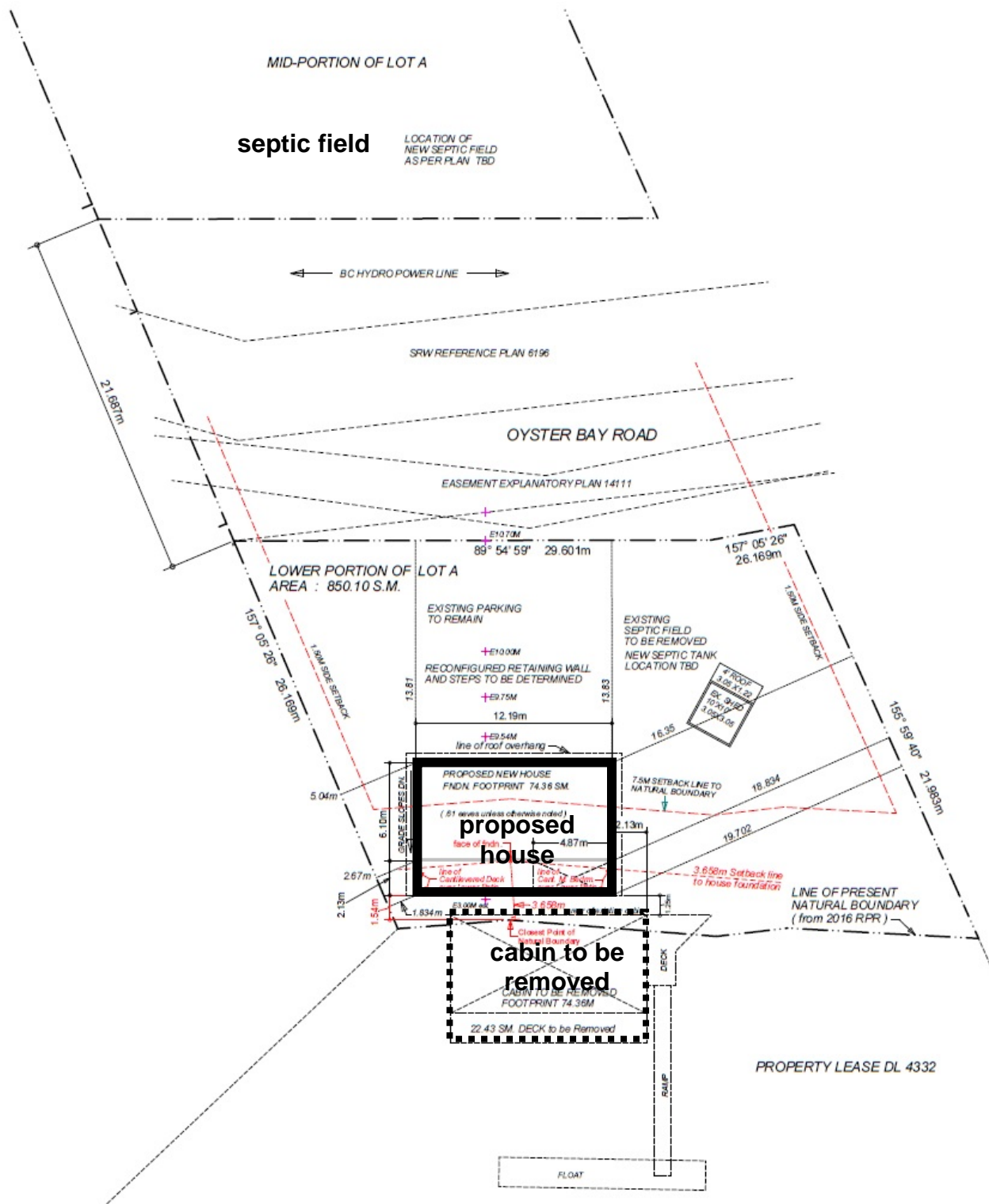
Attachment A – Site plan

Attachment B – Variance criteria provided by applicant

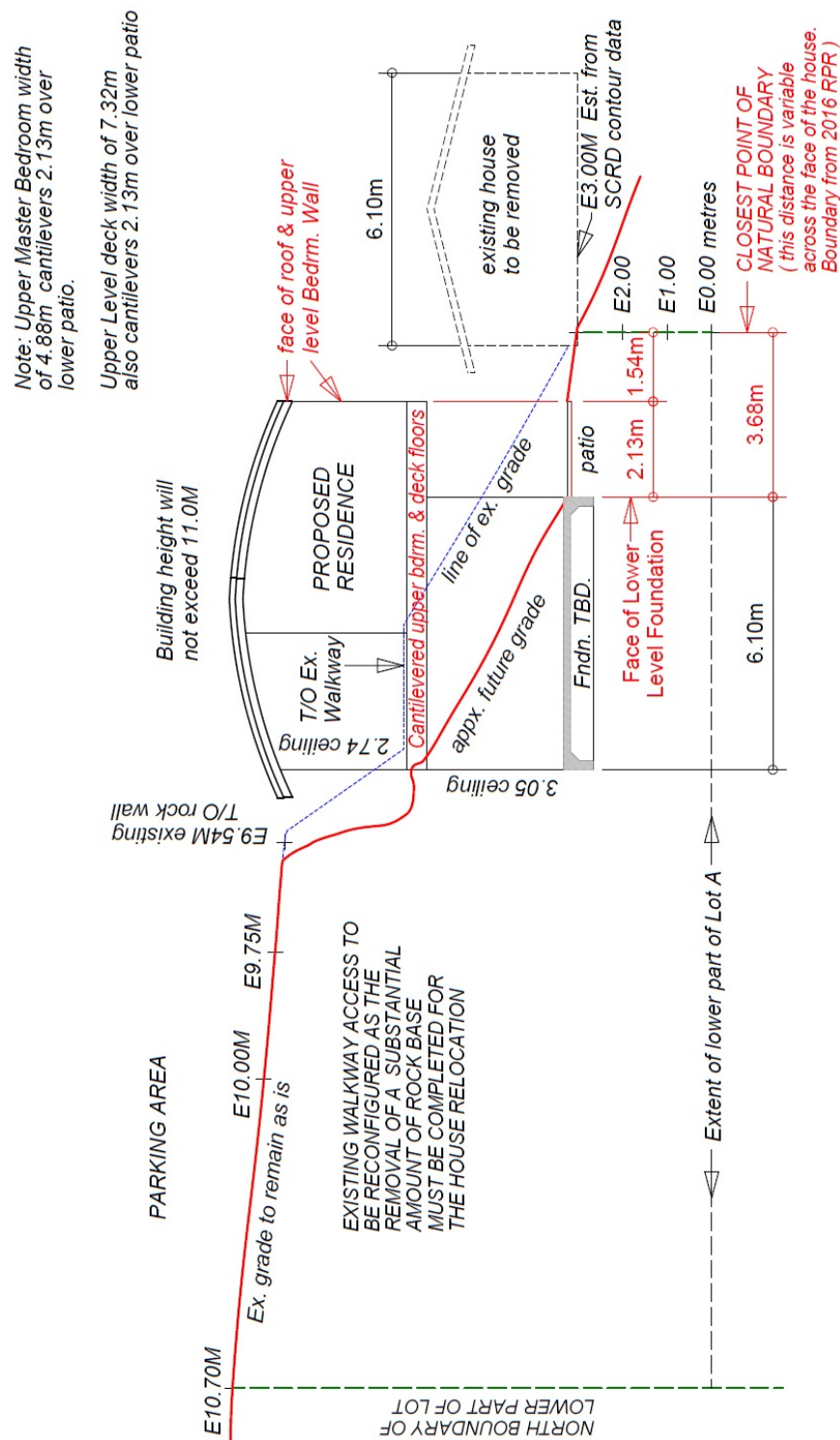
Attachment C – Photo of existing cabin

Reviewed by:			
Manager	X – D. Pady	Finance	
GM	X – I. Hall	Legislative	
I/CAO	X - M. Brown	Other	

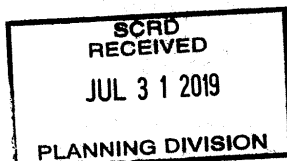
Attachment A Site plan



Elevation



Attachment B Variance criteria provided by applicant



Development Information

Residential property with house declared non-conforming and illegal, sitting partly in the upland property and mostly in the Crown Foreshore. Ordered to be removed by the Crown in 2018. House cannot be moved to the upland property as declared by the SCRDC Building Department after special inspection. Current building is 74.32 sm with a 40 ft by 20 ft - footprint. Twenty percent of the building is within the 7.6 metre setback and the rest is within the Crown Foreshore.

Seeking variance to build new house set back in the upland property within the 7.6 sm setback. The foundation footprint is the same as the existing building 74.36 sm with 3.66 sm set back from the high watermark. The existing septic system to be returned to its natural state and relocated, well up in the upland property within the required setback and away from the water.

Variance Criteria

Question. 1

Seeking permission to build within the 7.6-metre setback as it is the only practicable and suitable building site. The upland property is not suitable to build on.

2. The proposed site plan takes into consideration adjacent properties and will benefit the change moving the septic system further afield from the water's edge to the other side of the road and away from the neighbours.

3. We are pleading extreme hardship based on a legal dispute based on the failure of disclosure that the existing structure was under review with the Crown for the removal of non conforming structures. We are seeking a variance with a condition that the legal dispute is settled and only in our favor to remain on the property with permission to build within the 7.6-metre setback as it is the only practicable and suitable building site. The upland property is not suitable to build on.

4. Exhaustive steps with the Crown and Sechelt Band were taken to have the existing house/cabin remain in its existing location but were denied.

Estimates from Nichol Brothers to move the cabin straight back in the upland property were investigated but after meeting with the Planning Dept. we were advised to discuss the move with the Building Dept.

The Building Dept. requested a special inspection and on completion of the inspection the re-location of the structure was denied to being occupied. A previous owner had done major renovations without permits and permissions from the Crown and the original purpose of the structure was a net shed and not a house.

5. The removal of the structure from the foreshore and its return to its normal state is conditional as part of the outcome of the legal dispute. Our proposed site plan is sensitive to the environment and the change will provide betterment for the environment as all of the structures will be conforming to the Crown and the Dock Management Plan. The existing dock will be considered legal when the structure is removed. Nichol Brothers evaluated relocating the non-conforming cabin/house, but it did not meet their criteria for re-cycling or re-locating so removal of the structure from its current location has been mandated by the Crown. The renovations were done after 1990 so there is no asbestos issues or concerns in the demolition of the structure.

Attachment C Photo of existing cabin



SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Julie Clark, Planner

SUBJECT: PROVINCIAL REFERRAL CRN00088 FOR LOG HANDLING, STORAGE (A & A TRADING LTD)

RECOMMENDATIONS

1. **THAT** the report titled Provincial Referral CRN00088 for Log Handling, Storage (A & A Trading Ltd) be received;
2. **AND THAT** the following comments be forwarded to Pacificus Biological Services Ltd for A & A Trading Ltd:

Subject to the following conditions, the Sunshine Coast Regional District has no objection to the proposed log handling facility located at East Glacial Creek, Provincial Referral Number 2412101:

- a. SCRD will require a building permit if any structures are to be constructed to access the moorage facility.
- b. Implement *shíshálh* Nation Best Management Practices for building and maintaining moorage facilities to protect the foreshore ecosystems.
- c. An environmental monitor be on-site during the construction, operation and decommissioning of the site.
- d. Any Species at Risk, regionally significant species and their Critical Habitat in or near the tenure area should be identified and protected.
- e. Water quality should not be impacted by log handling, maintenance or construction activities, materials or fuel storage.
- f. Update the management plan to include:
 - Ongoing collection and removal of floating debris
 - Measures to address potential navigational concerns resulting from escaped logs or related wood debris and the collection of any lost wood debris in the project management plan.
 - Measures to protect recreational and visual values
 - A bio-inventory of the unnamed creeks and Riparian Areas within proximity of the project area
 - The timing window for nesting birds

- g. Complete restoration of the tenure area should be undertaken upon closure of the log booming sites, including the removal of all infrastructure, industrial equipment and potential contaminants to be disposed of in accordance with all provincial and SCRD regulations at the time.
 - h. Conduct consultation with nearby tenure holders to seek and address concerns.
 - i. Ensure that *shíshálh* Nation's comments are addressed and that any work undertaken complies with the *Heritage Conservation Act*.
3. AND THAT Comments from the SCRD Natural Resources Advisory Committee and the Egmont / Pender Harbour Advisory Planning Commission be provided to the Ministry;
4. AND FURTHER THAT the recommendations be forwarded to the Regular Board meeting of November 14, 2019.
-

BACKGROUND

The SCRD received a referral for a Provincial License of Occupation for a log handling and storage facility near East Glacial Creek in Jervis Inlet, approximately 33 km north of Egmont and 8 km south of Deserter Bay.

Applications to make use of Provincial lands are typically referred to SCRD from FLNRORD, who has historically coordinated and received referral responses from agencies in advance of the Provincial decision-maker's process. This referral was received directly from the proponent, A & A Trading Ltd. The referral request noted that the Province has implemented a new streamlined process for log-handling and storage facilities in which the proponent is now responsible for referring their application to the relevant agencies, compiling and submitting the responses to FLNRORD. Staff have since confirmed with FLNRORD that the new streamlined process applies only to log handling and storage facilities at this time and may expand to other types of applications in the future.

The purpose of this report is to provide analysis of the referred application and recommend a response to A & A Trading Ltd. The referral package can be found in Attachment A.

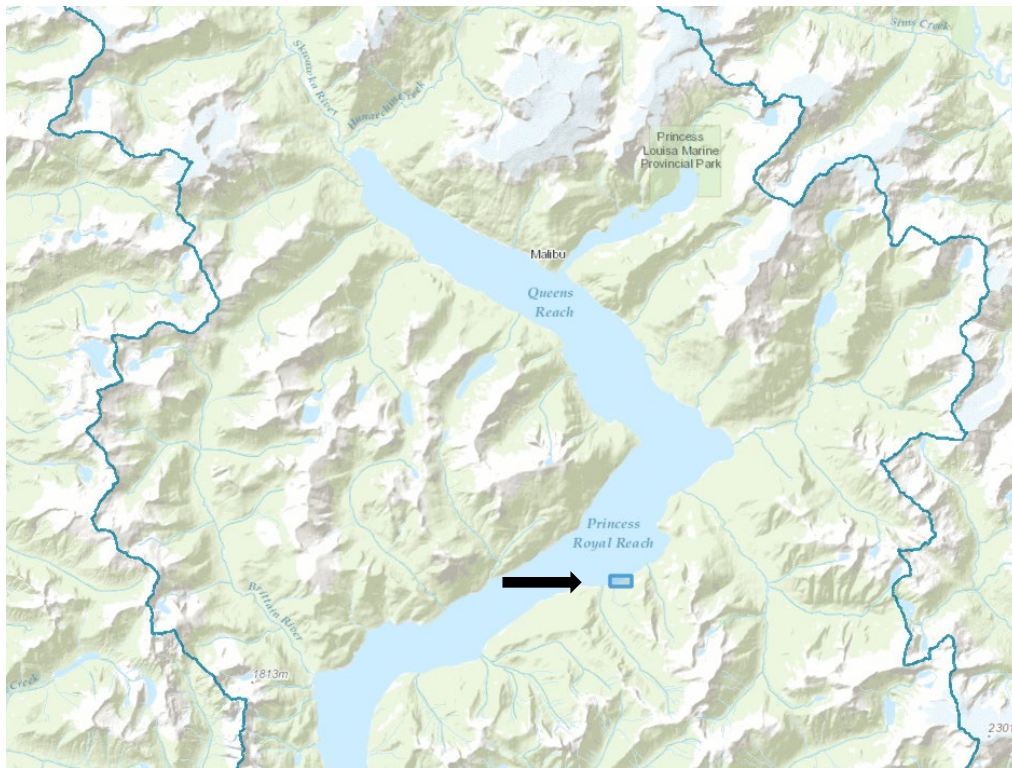


Figure 2 –Facility Plan

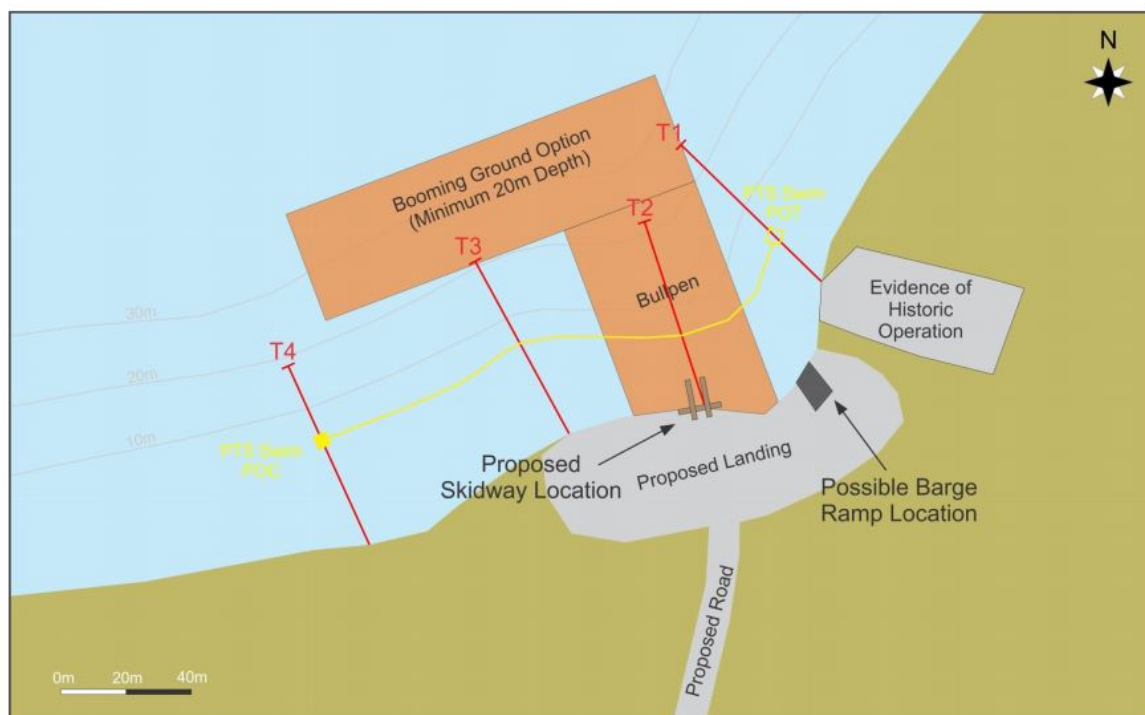


Table 1 - Application Summary

Owner / Applicant:	A & A Trading Ltd, via Pacificus Biological
Purpose:	Log handling, storage,
Tenure Type:	License of Occupation
Size:	24.6 ha
Location:	East Glacial Creek, Jervis Inlet
Legal Description:	N/A
Electoral Area:	A – Egmont / Pender Harbour
OCP Land Use:	N/A
Land Use Zone:	RU2 (Rural Two) for adjacent upland parcels, no zoning on the water
Comment deadline:	October 31, 2019

DISCUSSION

The proposed log handling facility and floating work camp is located at East Glacial Creek, within the *shíshálh* swiya on the east side of the Prince of Wales Reach in Jervis Inlet. The applicant is requesting a License of Occupation on the ocean for 10 - 30 years in relation to a logging operation on upland areas. The proposed log dump is approximately 2.5 hectares in area, to facilitate transfer of logs to market. There is a historic log dump 7.5 km to the south. The application notes that it is not cost effective for A & A to make use of the log dump that exists to the south. A & A expects to make a separate road way use application/referral for the upland area associated with the log dump.

SCRD Official Community Plan and Zoning Analysis

The subject area is in Electoral Area A and does not have a land use designation as it is outside the boundaries of the Official Community Plan (OCP). OCP policies are not applicable in this area.

The surface of water of the subject area is not zoned under Zoning Bylaw No. 337. The adjacent upland areas are zoned RU2 (Rural Resource), which permits a wide range of rural uses including forest management, manufacturing, storage, construction camp and sawmill. Where the water is not zoned, the foreshore use should reflect the upland use. Log handling and storage is part of forest management operation that is a permitted use. This application appears to comply with the upland RU2 zoning.

A dock is proposed as part of this application. Docks / moorage facilities should be built to the standards outlined in the *shíshálh* Nation best management practices for building and maintaining moorage facilities. If any structures are proposed to be constructed to access the moorage, SCRD will require a building permit.

Ecological Impact Analysis

In June 2018, Pacificus Biological Services Ltd was hired by A & A Trading to conduct a Marine Assessment of the proposed area. The analysis included both a desktop analysis and a dive assessment. A management plan for the project is appended to the Marine Assessment.

To reduce cumulative impacts to Jervis Inlet, the reuse of an existing log handling site is the first choice. A & A Trading has said this is cost prohibitive. Staff recommend extra rigour to be applied to use of 'greenfield sites' to prevent additional long term changes to marine habitats. Sinking and settled wood debris causes changes to habitat and water quality by altering the sediment composition.

Staff have the following recommendations in addition to the management plan priorities regarding minimizing risk to the marine and upland ecosystems (before, during and after site decommissioning), and request that A & A consider the following best management practices to be incorporated into their operations:

- Have an environmental monitor on-site for construction, operation and decommissioning to ensure the project meets the obligations of *Fisheries Act*, *Policy for the Management of Fish Habitat*, the *Canadian Environmental Assessment Act*, the *Species at Risk Act*, the *Wildlife Act*, the *Migratory Birds Convention Act* and *Navigable Waters Act*.
- Update the management plan to include the capture and removal of floating debris during log dump and storage operations.
- Design and management of operations should assume that species/habitats of significance such as deep water sponges or corals, eelgrass, herring, rockfish exist in or near the application area. Current publicly available spatial data for these species in Jervis Inlet is extremely limited and species including plants are mobile.
- Upon the closure of the log handling site, complete restoration of the tenure area should be established, including the removal of all equipment and potential contaminants and reassessment of marine environment.

It is not clear how much upland area will be blasted and leveled. This may be included in a separate application, if so, it is unclear when the application will be referred to SCRD. The applicant has prepared a map that shows the general location of the License of Occupation to be at the mouth of East Glacial Creek. It is recommended that:

- A bio inventory of creeks and Riparian Areas proximal upland tenure area is conducted to assess species and habitat and plan for mitigation of impacts.
- The timing window for nesting birds be added to the list of considerations and best management practices for the proposed upland work.

Cultural Impact Analysis

A & A Trading has received a letter of support from shíshálh Nation for this project.

A Preliminary Archeological Field Review (PAFR) was conducted by an archeologist and found there were no high potential archeological sites within the project area and that no further archaeological work is recommended.

Moving forward the applicant should ensure that the *shíshálh* Nation is kept informed and any work undertaken complies with the *Heritage Conservation Act*.

Jervis Inlet is frequented by recreational users and is a tourism destination. The recreational and visual values within the area are important. In addition, there appears to be an existing

Land Tenure in good standing for Commercial Recreation and Wildlife Viewing beginning within 750m of the application area and leading to alpine. It is recommended that A & A conduct:

- Consultation with recreation tenure holders to seek and address concerns

And the management plan be updated to include:

- specific measures to protect recreational and visual values of the site during construction, use and after decommissioning.
- Address potential navigational concerns resulting from escaped logs or related wood debris.

Options

The Province requests SCRD to decide on one of the following options in response to the referral:

1. Interests unaffected
2. No objection to approval of project
3. No objection to approval of project subject to conditions
4. Recommend refusal of project due to reasons

Staff recommend Option 3, subject to comments outlined in the Recommendations.

Consultation

A & A Trading Ltd referred this application to First Nations, SCRD and other agencies it identifies as appropriate. The applicant is responsible for advertising the application in a local paper to enable comments from the public.

If meetings can be arranged within the short available window the proposal may be referred to the Natural Resources Advisory Committee (NRAC) and the Egmont / Pender Harbour Advisory Planning Commission for review. Advisory Committee comments will be forwarded to Pacificus Biological Services Ltd by SCRD.

Timeline for Next Steps

A & A requested a response within 30 days. The deadline was extended in order to obtain an SCRD Board resolution. A & A Trading Ltd will be informed of the November 14, 2019 PCD meeting. The resolutions will be forwarded to A & A Trading Ltd who in turn is responsible to forward referral comments on to FLNRORD.

STRATEGIC PLAN AND RELATED POLICIES

SCRD's newly adopted strategic plan describes SCRD role: "SCRD provides a variety of services that support our quality of life, protect our natural environment and foster economic growth."

Logging activities and the corresponding log dumps foster economic growth and must also ensure that cumulative impacts do not decrease the community's quality of life or the ability of our natural systems to thrive.

SCRD also has goals re enhancing the region's climate resilience, and advocating for marine protection, including habitat restoration.

Thriving marine habitats are natural assets which have significant carbon sequestration potential. Through the referral process, SCRD is advocating for the Province and industry to analyze and effectively mitigate against the cumulative impacts of industry on terrestrial and marine environments. Ensuring our marine habitats can thrive is a climate resilience action.

CONCLUSION

The SCRD was provided an opportunity to comment on a Provincial referral to permit a log handling, storage and floating work camp facility at East Glacial Creek in Prince of Wales Reach, Jervis Inlet. The proposal was analyzed against applicable SCRD policies, bylaws and regulations.

Staff recommend that SCRD respond to the referral with the option that the SCRD has no objection to the project subject to conditions identified in the management plan and this report, and that this recommendation be forwarded to the Regular Board meeting on November 14, 2019.

Attachments

Attachment A – Referral Package

Reviewed by:			
Manager	X – D. Pady	Finance	
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Other	

This form is to accompany applications for log handling and storage purposes.

APPLICANT
NAME AND
ADDRESS →

APPLICANT
CONTACT NAME
AND TITLE →

PROJECT
JUSTIFICATION
Attach separate
sheets if
necessary. →
1. Summarize the
economic and
operational
reasons why this
project is
important to the
company.
2. Describe briefly
alternate sites
and/or methods of
operation which
were considered
for this project
site. Summarize
the reasons for
selecting the
proposed project
over the
alternatives
considered.

PROJECT
LOCATION →
Provide
information
relevant to the
project. Check ☒ the categories
included as
applicable.

PROJECT
DESCRIPTION
→

A&A Trading Ltd.		1210-1111 Melville Street, Vancouver, BC, V6E 3V6		Ministry File No. 2412101																
Agent - Adam Harding, RPBio - Pacificus Biological Services Ltd. aharding@pacificus.ca 250-949-9450				NTS Map No.																
Jon Moore, RPF - Operations Engineer				Phone 604-695-5108																
Development Location Jervis Inlet		Name of proposed development (if applicable) East Glacial Creek Log Dump		Is project: new application <input checked="" type="checkbox"/> renewal application <input type="checkbox"/>																
<p>1. A&A Trading Ltd. (A&A) is in the planning stages of conducting forestry activities in the East Glacial Creek area of Jervis Inlet. A log dump is required to transfer harvested wood from the upland to the water for transport to market. As there are no existing log dumps in the direct vicinity of the area, a new log dump is required. As such, A&A intends to construct a new log dump at the site to facilitate the movement of wood to market.</p> <p>2. Conventional harvesting methods will be used for the proposed development. Barging of wood off site is not possible due to cost and upland space limitations. A historic log dump is located approximately 7.2km to the southeast of the proposed site; however, upland access from the proposed harvest area to this historic site is not possible, and would significantly increase costs. As such, a new log dump at the proposed site is required.</p>																				
<table border="1"> <thead> <tr> <th>REQUIRED</th> <th>INFORMATION</th> <th>Proposed site <input checked="" type="checkbox"/></th> <th>New and existing upland facilities neighbouring the proposed site <input checked="" type="checkbox"/></th> <th>Other facilities related to the project. Describe briefly. <input checked="" type="checkbox"/></th> </tr> </thead> <tbody> <tr> <td>A. Project area map (To define the site location in relation to surrounding facilities and services)</td> <td>Existing and proposed roads <input checked="" type="checkbox"/> Construction borrow sources <input checked="" type="checkbox"/></td> <td></td> <td>Waste and dredge material disposal areas <input checked="" type="checkbox"/></td> <td>Skidway, booming ground, bullpen, dock.</td> </tr> <tr> <td>B. Proposed site map (state the scale) (To show location of development and improvements within the site.)</td> <td>Boundaries of proposed site. <input checked="" type="checkbox"/> Construction works or improvements. <input checked="" type="checkbox"/> Area to be dredged <input checked="" type="checkbox"/> Area to be filled <input checked="" type="checkbox"/></td> <td></td> <td>Total project site area in hectares. <input checked="" type="checkbox"/> Existing works, improvements or fill on the proposed site claimed by the applicant. <input type="checkbox"/> Yes. <input checked="" type="checkbox"/> No.</td> <td>Other information related to the project: Describe briefly. <input checked="" type="checkbox"/> Facility features are included in the site specific map.</td> </tr> </tbody> </table>						REQUIRED	INFORMATION	Proposed site <input checked="" type="checkbox"/>	New and existing upland facilities neighbouring the proposed site <input checked="" type="checkbox"/>	Other facilities related to the project. Describe briefly. <input checked="" type="checkbox"/>	A. Project area map (To define the site location in relation to surrounding facilities and services)	Existing and proposed roads <input checked="" type="checkbox"/> Construction borrow sources <input checked="" type="checkbox"/>		Waste and dredge material disposal areas <input checked="" type="checkbox"/>	Skidway, booming ground, bullpen, dock.	B. Proposed site map (state the scale) (To show location of development and improvements within the site.)	Boundaries of proposed site. <input checked="" type="checkbox"/> Construction works or improvements. <input checked="" type="checkbox"/> Area to be dredged <input checked="" type="checkbox"/> Area to be filled <input checked="" type="checkbox"/>		Total project site area in hectares. <input checked="" type="checkbox"/> Existing works, improvements or fill on the proposed site claimed by the applicant. <input type="checkbox"/> Yes. <input checked="" type="checkbox"/> No.	Other information related to the project: Describe briefly. <input checked="" type="checkbox"/> Facility features are included in the site specific map.
REQUIRED	INFORMATION	Proposed site <input checked="" type="checkbox"/>	New and existing upland facilities neighbouring the proposed site <input checked="" type="checkbox"/>	Other facilities related to the project. Describe briefly. <input checked="" type="checkbox"/>																
A. Project area map (To define the site location in relation to surrounding facilities and services)	Existing and proposed roads <input checked="" type="checkbox"/> Construction borrow sources <input checked="" type="checkbox"/>		Waste and dredge material disposal areas <input checked="" type="checkbox"/>	Skidway, booming ground, bullpen, dock.																
B. Proposed site map (state the scale) (To show location of development and improvements within the site.)	Boundaries of proposed site. <input checked="" type="checkbox"/> Construction works or improvements. <input checked="" type="checkbox"/> Area to be dredged <input checked="" type="checkbox"/> Area to be filled <input checked="" type="checkbox"/>		Total project site area in hectares. <input checked="" type="checkbox"/> Existing works, improvements or fill on the proposed site claimed by the applicant. <input type="checkbox"/> Yes. <input checked="" type="checkbox"/> No.	Other information related to the project: Describe briefly. <input checked="" type="checkbox"/> Facility features are included in the site specific map.																
C. Marine chart (if necessary). The location of the site is shown on marine chart # 3514.																				
D. Indicate the approximate slope of the application area (percent and direction.) Bathymetric slope is approximately 35-45% to the west, away from the shoreline.																				
<p>A. TYPE OF DEVELOPMENT (Check <input checked="" type="checkbox"/> all applicable categories.)</p> <p>1. Log sorting Dry land sort <input checked="" type="checkbox"/> Water sort <input type="checkbox"/></p> <p>2. Log dumping Logs bundled (dry land) <input checked="" type="checkbox"/> Logs bundled (in water) <input type="checkbox"/> Loose logs <input type="checkbox"/></p> <p>3. Barging Log barge loading <input type="checkbox"/> Log barge unloading <input type="checkbox"/> n/a</p> <p>4. Log booming (indicate percentages) Flat rafts <u>0</u> % Bundle booms <u>100</u> %</p> <p>5. Log boom storage Continuous base <input type="checkbox"/> Intermittent basis <input checked="" type="checkbox"/> Emergency only <input type="checkbox"/></p> <p>6. Conversion plants Sawmill <u>85</u> % <input checked="" type="checkbox"/> Pulp mill <u>15</u> % <input checked="" type="checkbox"/> Shakemill <u>0</u> % <input type="checkbox"/> Other (specify) <u>0</u> % <input type="checkbox"/></p> <p>7. Location: 50° 02.193' N, 123° 48.918' W</p>																				



Prospectus - Log Handling and Storage

PROJECT → DESCRIPTION (Continued)

B. LOG FLOW

1. State the origin of the logs to be handled at the proposed site. Give type of tenure (ie TFL), location and name or number and life of tenure (no. of years).

Sunshine Coast TSA Forest Licenses
FL A19229, FL A80590

2. List type and percentage of log species to be handled. 45% Western Hemlock, 40% Douglas-fir, 15% Red Cedar

3. Anticipated log volume to be handled (Give ranges expected)

Daily	800-1200	m ²
Annually	30,000	m ²

4. Average turn-over period for the logs. 2-3 weeks

C. DEVELOPMENT

1. Duration of construction period.	Log dump area: 5-8 days Road network: 3-5 months	4. Life span of proposed project in years.	10 years
2. Anticipated date to begin construction.	Late 2019	5. Volume to be dredged	n/a m ²
3. Method and timing of dredging and/or filling.	n/a	6. Area to be filled	n/a m ²

D. Indicate the following as applicable.

Upland ownership Crown ☒ Company ☐ Other private ownership ☐ Uncertain ☐

PROJECT → IMPLICATIONS

Attach any available information describing nature of discharges or accumulations and proposed remedy, if applicable. Operational activities at the site (i.e. log dumping) will generate wood waste within the marine environment fronting the facility. However, a marine habitat assessment conducted by Pacificus Biological Services Ltd. in June 2018 identified that forestry activities at the site would not cause serious harm to fish of commercial, recreational, or Aboriginal (CRA) importance, or fish that support such a fishery, as per the Fisheries Act.

Spill kits will be on site at all times to contain a fuel spill, should it occur.

ADDITIONAL INFORMATION → (Attach separate sheets if necessary)

1. Briefly describe any further project planning and assessment studies which the company feels are required.

2. Provide any information which the company feels is necessary to clarify or expand upon the questions answered.

This project is not anticipated to result in serious harm to CRA fisheries or fish that support such fisheries and therefore may proceed without a DFO review. However, recent amendments to the Fisheries Act have been introduced as of the date of the preparation of this document. Although these amendments have yet to become lawful, it is possible that this project, once constructed, may be enforceable under the provisions of the amended Act. As such, A&A may wish to seek a DFO Review to obtain further regulatory guidance.

A Notice of Works under the Navigation Protection Program of Transport Canada has also been submitted.

AUTHORIZATION	DATE	SIGNATURE	TITLE
---------------	------	-----------	-------

**MANAGEMENT PLAN FOR AN
INDUSTRIAL LOG HANDLING & STORAGE
LICENSE OF OCCUPATION
FOR A&A TRADING LTD. IN JERVIS INLET
LANDS FILE No. 2412101**



August 2019



T: 250-949-9450 F: 250-949-7656 PO Box 2760 Port Hardy, BC V0N 2P0
info@pacificus.ca www.pacificus.ca

**MANAGEMENT PLAN FOR AN INDUSTRIAL LOG HANDLING &
STORAGE LICENCE OF OCCUPATION FOR A&A TRADING LTD. IN
JERVIS INLET**

LANDS FILE NO. 2412101

Prepared for:

Front Counter BC
Ministry of Forests, Lands, and Natural Resource Operations
Province of British Columbia

Prepared by:

Adam Harding, RPBio
&
Marissa Miles, BSc

Reviewed by:

Adam Harding, RPBio



Date:

August 26th, 2019

PACIFICUS BIOLOGICAL SERVICES LTD.

P.O. Box 2760
Port Hardy, B.C.
V0N 2P0



Management Plan Submitted by:

Adam Harding, RPBio

Signature:

A handwritten signature in black ink, appearing to be 'A. Harding', written over a horizontal line.

Date:

August 26, 2019

Management Plan Received by:

Signature:

Date:

TABLE OF CONTENTS

1.0	BACKGROUND & PROJECT DESCRIPTION.....	6
1.1	Project Overview & Description.....	6
1.2	Investigative Work.....	6
1.3	First Nations Consultation	7
2.0	LOCATION	8
2.1	Description.....	8
2.2	Location Justification.....	8
2.3	Seasonal Expectations of Use	8
3.0	INFRASTRUCTURE AND IMPROVEMENTS	9
3.1	Facilities and Infrastructure	9
3.2	Access Plans.....	9
3.3	Utility Requirements and Sources.....	9
3.4	Water Supply	9
3.5	Waste Collection Treatment and Disposal.....	9
4.0	ENVIRONMENTAL CONSIDERATIONS	10
4.1	Land Impacts.....	10
4.1.1	Vegetation Removal.....	10
4.1.2	Soil Disturbance.....	10
4.1.3	Riparian Encroachment.....	10
4.1.4	Pesticides and Herbicides.....	10
4.1.5	Visual Impacts.....	10
4.1.6	Archeological Sites	10
4.1.7	Construction Methods and Materials	11
4.2	Atmospheric Impacts	11
4.2.1	Sounds, Odor, Gas or Fuel Emissions.....	11
4.3	Water and Land Covered by Water Impacts	11
4.3.1	Drainage Effects.....	11
4.3.2	Public Access	11
4.3.3	Flood Potential	11
4.4	Fish and Wildlife Habitat Impacts	11
4.4.1	Disturbance to Wildlife and Wildlife Habitat	11

5.0	SOCIO-COMMUNITY	12
5.1	Land Use	12
5.1.1	Land Management Plans and Regional Growth Strategies	12
5.2	Socio-Community Conditions.....	12
5.2.1	Adjacent Users or Communities	12
5.2.2	Existing Services.....	12

1.0 BACKGROUND & PROJECT DESCRIPTION

1.1 Project Overview & Description

Jervis Inlet is a deep, mainland fjord located on the South Coast of British Columbia. As a multi-use waterway, it hosts a variety of recreational, commercial, and industrial activities. Forestry is a significant activity in the region, and A&A Trading Ltd. is a forestry company operating in the area. A&A Trading Ltd. is now in the planning stages for conducting forestry activities in the vicinity of East Glacial Creek, located midway along the southern side of Jervis Inlet. In order to facilitate the transfer of harvested logs to market, a log dump is needed in the area. Although a historic log dump is located approximately 7.5km southwest of the current site, for terrain and economic reasons use of that log dump for upcoming operations is not cost-effective. As such, A&A Trading Ltd. has proposed the construction of a new log dump at 50° 02.193' N, 123° 48.918' W.

The purpose of this application is to obtain a new aquatic crown foreshore licence of occupation approximately 2.5ha in size to accommodate log dumping and storage at East Glacial Creek. The new license of occupation (LoO) will be used to facilitate a skidway, bullpen, booming area, dock, and other amenities to support a log dump. The crown foreshore is being applied for under the streamlined log handling process. The upland area will be applied for under a Road Permit by A&A Trading Ltd.

Pacificus Biological Services Ltd. has been retained to act as an agent on behalf of A&A Trading Ltd., and, as such, is submitting an application for an Industrial Log Handling / Storage License of Occupation. This application is inclusive of appropriate site diagrams / plans, a management plan, and a tenure application form, as well as proof of advertising, referrals results, and First Nations consultation record.

1.2 Investigative Work

Prior to this application, a marine habitat survey of the proposed site was conducted by Pacificus Biological Services Ltd. (Pacificus) on June 8th, 2018. Overall, the site assessment identified that biological productivity was low in the vicinity of the project area. Given the findings of the assessment, construction and use of the proposed facility is not anticipated to result

in *serious harm* to CRA fish, should the mitigation measures outlined within the assessment document be followed. Therefore, a DFO review is not required for this project.

1.3 First Nations Consultation

A letter of support has been issued to A&A Trading Ltd. for this project from the Sishalh First Nation (Sishalh file no. FO06001.05, email dated May 14th, 2019).

2.0 LOCATION

2.1 Description

The proposed LoO is located within BC's South Coast Region, along the southern shore of Jervis Inlet. The site is approximately 33km north of Egmont, BC.

2.2 Location Justification

The current site was selected based on upland considerations, i.e. the proximity of the site to upland forest harvest blocks, and road access from the blocks to the water. Much of the shoreline within the area is undeveloped; however, the proposed site represents the most feasible location based on access from the upland and access to deep water. Use of an existing log dump approximately 8.4km to the southwest is not possible, due to difficulties in access from the proposed harvest blocks.

2.3 Seasonal Expectations of Use

Variations in use of the log watering facility will be dictated based on works scheduled. Construction of the facility features, including the landing, skidway, and booming grounds, is expected to start in early 2020, with operation shortly thereafter. Once constructed, the site will be in operation year-round, until timber harvesting activities are complete.

3.0 INFRASTRUCTURE AND IMPROVEMENTS

3.1 Facilities and Infrastructure

As no infrastructure currently exists at the proposed location of the East Glacial Creek Log Watering Facility, vegetation clearing, as well as some blasting and leveling, will be required before construction begins. Vegetation clearing will be conducted by machine (e.g. feller buncher) or by hand in the upland area. Blasting and leveling may be required to create a level landing surface for operations; however, all blasting activities will take place in upland areas, above the high water mark.

Once the upland area has been cleared and leveled, installation of the facility features will begin. The skidway and dock will both arrive pre-constructed on a barge. The skidway will be installed with the help of an excavator or similar machine, using cables and rocks to anchor it to the shoreline. The dock will be anchored within the waters fronting the log watering facility. The bullpen and booming grounds will then be established using floating log booms secured in place with anchor blocks and chains.

3.2 Access Plans

Access to the site at East Glacial Creek in Jervis Inlet is by boat, helicopter, or floatplane only. No road access currently exists at the site.

3.3 Utility Requirements and Sources

No utility requirements will be necessary during the construction and/or operation phase(s) of the proposed development.

3.4 Water Supply

No water is required during the construction and/or operation phase(s) of the proposed development.

3.5 Waste Collection Treatment and Disposal

Waste collection, treatment, and disposal will not be required during the construction and/or operation phase(s) of the proposed development.

4.0 ENVIRONMENTAL CONSIDERATIONS

4.1 Land Impacts

4.1.1 Vegetation Removal

The proposed LoO is entirely located within the marine environment. As such, vegetation removal within the license of occupation will not occur. However, some vegetation clearing on the upland of the site will be required.

4.1.2 Soil Disturbance

As the proposed license of occupation is entirely located within the marine environment, soil disturbance will be limited to those areas above the high water mark and beyond the extent of the application area.

4.1.3 Riparian Encroachment

The proposed log dump will be developed within the marine environment. Encroachment upon freshwater riparian areas is not expected.

4.1.4 Pesticides and Herbicides

There will be no use of pesticides or herbicides during construction, operation, and/or maintenance of the proposed development.

4.1.5 Visual Impacts

The proposed development is located in a remote area that is only accessed by boat or float plane. Therefore, the site is not readily visited by residents or other members of the public. As such, no adverse effects on the sight lines to the project area from the surrounding areas, likely to be used for scenic viewing by residents or other users, are anticipated to occur as a result of the project.

4.1.6 Archeological Sites

There are no known or high potential archaeological sites within the project area. A Preliminary Archaeological Field Reconnaissance was completed on November 7th, 2018 by In Situ Consulting Inc, and concluded that “no further archaeological work is recommended.”

4.1.7 Construction Methods and Materials

Construction required within the marine environment and the application area will be limited, with the bullpen and booming area constructed by placement of anchors and chains in the marine environment as shown in the submitted site diagrams. The skidway will be placed along the shoreline, and anchored with rocks and cables. Further construction will occur on the upland, with excavation, clearing, and grubbing.

4.2 Atmospheric Impacts

4.2.1 Sounds, Odor, Gas or Fuel Emissions

The project construction and/or operation is not anticipated to cause any sound, odor, gas, and/or fuel emissions that will disturb wildlife in the area.

4.3 Water and Land Covered by Water Impacts

4.3.1 Drainage Effects

The project is not anticipated to result in changes to land drainage.

4.3.2 Public Access

The project is not anticipated to result in changes to public access.

4.3.3 Flood Potential

The project is not anticipated to increase flooding potential.

4.4 Fish and Wildlife Habitat Impacts

4.4.1 Disturbance to Wildlife and Wildlife Habitat

Although the construction and operation phases of the project will occur around the marine environment, the proposed log watering facility is not expected to result in any adverse effects to wildlife or wildlife habitat, should the mitigation measures outlined within the biological assessment be followed. No increase in erosion or sedimentation is anticipated to occur as a result of the project, and no water diversion will be required throughout any of the development phases. In addition, the project is not likely to threaten or endanger any species at risk in the area.

5.0 SOCIO-COMMUNITY

5.1 Land Use

Due to its remote location, there is no existing land use at the proposed project site. As surrounding land is generally undeveloped and seldom used, no overall changes to land use are expected. Similarly, with respect to the marine areas adjacent to the site, use is typically for recreational, commercial, and industrial purposes, but given the relatively small overall footprint of the project and low productivity of the surrounding marine environment, no changes in the use of this marine area is anticipated. The closest community setting to the proposed development is Egmont, located approximately 33km south of the site.

5.1.1 Land Management Plans and Regional Growth Strategies

No land and resource management plans, coastal plans, provincial, regional growth strategies or local government plans with zoning or management policies or use restrictions exist that limit or preclude the proposed development.

5.2 Socio-Community Conditions

5.2.1 Adjacent Users or Communities

No current land owners or tenure holders exist within the vicinity of the proposed development. Therefore, the proposed log watering facility will not restrict public access, or the ability of adjacent land owners or tenure holders, to access their properties or tenures.

5.2.2 Existing Services

No predicted increases in the demand on fire protection or other health facilities and emergency services are anticipated to result from the proposed project due to the project's remote location.

**MARINE ASSESSMENT FOR THE PROPOSED
DEVELOPMENT OF THE EAST GLACIAL CREEK LOG
HANDLING FACILITY IN JERVIS INLET, BC**



June 2018



T: 250-949-9450 F: 250-949-7656 PO Box 2760 Port Hardy, BC V0N 2P0
info@pacificus.ca www.pacificus.ca

MARINE ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF THE EAST GLACIAL CREEK LOG WATERING FACILITY IN JERVIS INLET, BC

Prepared for:

Sam Powell
A&A TRADING LTD.
111 Melville Street
Vancouver, BC, V6E 3V6

Written by:

Curtis Curkan, BSc
Biologist
PACIFICUS BIOLOGICAL SERVICES LTD.



Reviewed by:

Adam Harding, RPBio
Marine Programs Manager
PACIFICUS BIOLOGICAL SERVICES LTD.



Date:

June 27th, 2018



PO Box 2760, 6990 Market Street
Port Hardy BC, V0N 2P0



Disclaimer

You have requested our assistance in conducting a marine assessment for the development of the East Glacial Creek Log Watering Facility in Jervis Inlet, BC. Amendments to Fisheries and Oceans Canada's (DFO) *Fisheries Act* came into force on November 25th, 2013. Pertinent to this project, the scope of Section 35(1) was refocused to prohibit *serious harm* to commercial, recreational, or Aboriginal fisheries (CRA fisheries), or fish that support such fisheries. While it is our professional opinion that the project as described will not result in *serious harm*, we cannot guarantee DFO's interpretation without a submission for review.

Table of Contents

1.0	EXECUTIVE SUMMARY	5
2.0	INTRODUCTION	6
3.0	DESCRIPTION OF THE PROPOSED DEVELOPMENT	9
4.0	ENVIRONMENTAL ASSESSMENT PROTOCOL	10
5.0	DESCRIPTION OF FISH AND FISH HABITAT	16
5.1	SUMMARY OF PHYSICAL ENVIRONMENT	16
5.2	HABITAT SUMMARY	16
5.3	CRA SPECIES OBSERVATIONS.....	17
5.4	DESCRIPTION OF WOOD WASTE ACCUMULATION	18
5.5	DATABASE RESEARCH RESULTS	18
5.6	COMMERCIAL AND RECREATIONAL INTERESTS	19
6.0	DESCRIPTION OF EFFECTS ON FISH AND FISH HABITAT	26
6.1	EXPECTED DURATION OF IMPACTS.....	26
6.2	GEOGRAPHIC SCALE OF IMPACTS	26
6.3	AVAILABILITY AND CONDITION OF NEARBY FISH HABITAT	27
6.4	IMPACT ON THE RELEVANT FISH	27
7.0	MEASURES AND STANDARDS TO AVOID, MITIGATE, OR OFFSET <i>SERIOUS HARM</i> TO CRA FISH	30
7.1	AVOIDANCE	30
7.2	MITIGATION	30
7.3	RESIDUAL <i>SERIOUS HARM</i> AND OFFSETTING MEASURES	31
7.4	POST-OPERATIVE MONITORING	31
8.0	CONCLUSION.....	32
9.0	CHECKLIST FOR THE DEVELOPMENT OF THE EAST GLACIAL CREEK LOG WATERING FACILITY IN JERVIS INLET, BC.....	34
10.0	REFERENCES	35
11.0	APPENDICES	36

1.0 EXECUTIVE SUMMARY

A&A Trading Ltd. (A&A) is in the planning stages of developing a new log watering facility within Jervis Inlet on the south coast of British Columbia. As such, Pacificus Biological Services Ltd. (Pacificus) was contracted to conduct a marine biological assessment of the proposed site to determine the level of regulatory review necessary for project development. Although the proposed site is considered a new development, evidence of historic operations within the vicinity of the proposed skidway location were observed, including the presence of wood waste with areal coverage up to 80%. Overall, the site was of low productivity, with shallow boulder and cobble habitat, which transitioned to moderately sloped sand and gravel. Macroalgae cover was low to moderate, with higher coverage of brown and green filamentous algae, while kelp coverage was low. Although the site was of low productivity, seven fish¹ species of commercial, recreational, or Aboriginal (CRA) importance, or fish that support such species were observed. However, it is anticipated that any impacts, should they occur, will be limited to the area fronting the landing, while wood waste will distribute to depth along the low productivity slope where historic wood waste was observed.

Given this, despite the presence of several CRA species, if standard and site specific mitigation measures are implemented, we do not anticipate that the proposed operations at the site should result in deleterious impacts to CRA fish species to a level that constitutes *serious harm*. As such, it is our opinion that should the mitigation measures as detailed in this report be implemented and maintained properly throughout the duration of the project, *serious harm* may be avoided. This should be confirmed during a post-operational survey of the site. Because avoidance and mitigation at the East Glacial Creek Log Watering Facility should preclude *serious harm*, a DFO Review is not required. Measures and standards to avoid and mitigate *serious harm* are detailed in this report, and should be followed during the construction, operation, and decommissioning of the site.

¹ For the purpose of this report, as defined in the *Fisheries Act*, fish are defined as parts of fish, shellfish, crustaceans, and marine animals, and any parts of shellfish, crustaceans, or marine animals, and the eggs, sperm, spawn, larvae, spat, and juvenile stages of fish, shellfish, crustaceans, and marine animals.

2.0 INTRODUCTION

A&A Trading Ltd. (A&A) has proposed to develop a log watering facility within Jervis Inlet on the south coast of British Columbia, approximately 33km north of Egmont, BC (50° 02.184'N 123° 48.887'W; Figure 1). A&A is now in the planning stages of conducting forestry operations within the vicinity of the site, and therefore need a log watering facility in order to proceed with operations. In order for the new facility to be constructed, a thorough marine biological assessment is required to determine the necessary level of regulatory review for the project. As such, A&A contracted Pacificus Biological Service Ltd. (Pacificus) to conduct a survey of the foreshore, intertidal, and subtidal habitat at and within the immediate vicinity of the site.

The objectives of this assessment were to:

- Determine the suitability of the selected site for the proposed operations;
- Document physical and biological characteristics of the local marine habitat;
- Determine if the proposed development is likely to cause *serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery*;
- Describe the procedures for monitoring potential log handling related impacts specific to the East Glacial Creek facility (if any);
- Provide recommendations to avoid and mitigate potential construction or operational impacts;
- Identify and quantify *residual serious harm* as a result of development and operation (if any).

The survey was conducted over the course of one field day and included observations of the proposed landing and skidway locations, and foreshore and intertidal zones, as well as an underwater SCUBA examination of the lower intertidal and subtidal habitats.

The following report provides and/or identifies:

- Description of the proposed development;
- Description of fish and fish habitat;
- Description of effects on fish and fish habitat;

- Measures and standards to avoid, mitigate, or offset *serious harm* to fish that are part of a commercial, recreational, or Aboriginal fishery, or that support such a fishery, and the public interest;
- Underwater video & still photos.

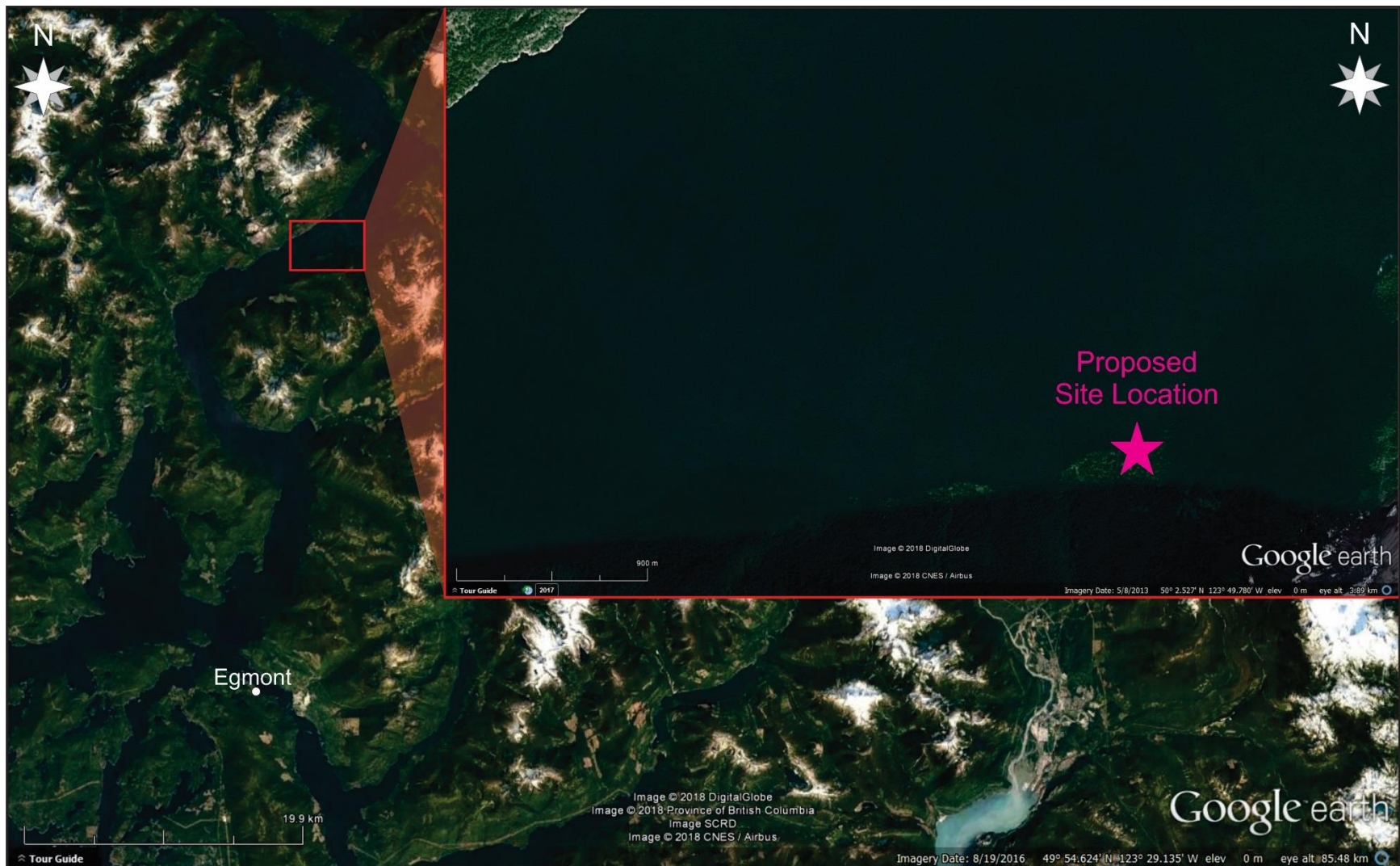


Figure 1. Location of the proposed East Glacial Creek Log Watering Facility in Jervis Inlet, BC.

3.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed East Glacial Creek Log Watering Facility will be located on the southern shore of Jervis Inlet, approximately 33km north of Egmont, BC. Development of the East Glacial Creek facility will require vegetation clearing, blasting, and leveling. It is anticipated that the development of the site will not require any infill to be placed within the marine environment. The site requires the installation of a skidway, dock, establishment of a bullpen and booming grounds. A floating camp will not be placed at the proposed facility (pers. comm. S. Powell (A&A) to D. McCorquodale, RPBio (Pacificus), 15/06/2018).

A&A intends to use the facility to water wood from harvest blocks within the area, with approximately 30,000m³ of harvested timber to watered through the site with the potential for additional timber to watered through the facility (pers. comm. S. Powell (A&A) to D. McCorquodale, RPBio (Pacificus), 15/06/2018). The facility is anticipated to be operational in late 2019, and after operation, the facility will be decommissioned and infrastructure removed from site.

4.0 ENVIRONMENTAL ASSESSMENT PROTOCOL

In order to assess the condition of the foreshore, intertidal, and subtidal zones, as well as suitability for the proposed development, a thorough examination of the proposed site at the East Glacial Creek facility was undertaken. Qualified marine biological professionals and WorkSafeBC – certified occupational SCUBA divers from Pacificus (Doug McCorquodale, RPBio, Jennifer Russell, RPBio, and Curtis Curkan, BSc) assessed the site on June 8th, 2018. Conditions on the date of assessment were rain, with no underwater current present.

Boom Islet (#7843) is the closest tidal station to the proposed log dump, located approximately 33km southwest of the site, and was used as the tidal reference station during this assessment. The highest tidal height at this station for the past 12 months was 5.1m and the tidal height at the time of the survey at approximately 0930hrs was 2.2m.² Chart Datum is used as the depth reference in this report.

Procedures for the survey followed the *Information Requirements for Proposed Works and Activities Related to New Log Handling Facilities in Coastal British Columbia* (DFO, 2009) jointly developed by DFO and the Coast Forest Products Association (CFPA)³. The marine assessment was composed of two parts: a reconnaissance survey of the foreshore and nearshore environment, and a transect-based SCUBA survey to examine marine habitat and substrate in the intertidal and subtidal zones. The reconnaissance survey included a review of marine charts, topographic maps, and operational maps of the site. Once on site, biologists conducted an initial foreshore overview, collected depth soundings to determine if the proposed development area was suitable, and determined the appropriate locations to focus survey efforts.

Four 60m-long transects originating at the HHWM were established perpendicular to the shoreline in order to thoroughly survey the marine environment. Transect 1 was set along the boulder and cobble shoreline where evidence of a historic operation had occurred (i.e. alders surrounded by cedar and hemlock) to the east of the road centerline. Transect 2 was set at the end of the road centerline and proposed skidway location. Transect 3 was set approximately 45m west of the proposed road centerline skidway location. Transect 4 was set approximately

² <http://www.waterlevels.gc.ca/eng/station?sid=7843> (accessed 15/06/2018)

³ It should be noted that this guidance document was produced under the old *Fisheries Act* directives, and thus legislative advice is no longer relevant, and mitigation measures suggested may not be applicable. Most relevant for this assessment is the guidance provided for survey methodology. Mitigation advice for this log dump involves ensuring that *serious harm* to CRA fisheries (or fish that support such fisheries) does not occur.

115m west of proposed road centerline and skidway location. In addition to the four transects, an underwater parallel to shore swim survey from Transect 4 to Transect 1 was conducted. The purpose of this swim survey was to identify sensitive habitat features (e.g. eelgrass, clam beds, abalone habitat) that may exist along the shoreline at the proposed log watering facility. Transects and parallel to shore swims were numbered and geo-referenced, and are outlined in the site diagrams contained within this document (Figure 2; Photo 1; Photo 2).

Fish habitat observations were recorded every 10m along each transect line and more frequently when significant changes in habitat characteristics occurred. Substrate type (Table 1) and relative abundance was recorded along the length of each transect. Estimates of abundance for marine flora, sessile fauna, and motile fauna within the survey area were also recorded. Abundance estimates were recorded as counts, percent coverage, or relative estimates, depending on the particular organism being assessed. When using a count estimate, if the density of the organism was greater than 1/m², a square-meter estimate is provided instead of a count. In addition, when present, wood waste was categorized (Table 2), depth measurements were collected and areal coverage was estimated at 10m intervals along the transect lines. Underwater video footage of each transect and the parallel to shore swim was recorded and is contained within the supplemental DVD provided with this report.

Table 1. List of substrate types and accompanying definitions for use in underwater assessments (DFO, 2009: Table 1).

Substrate	Definition	Size (mm)
Silt, clay, mud	Loose sedimentary deposit	<0.06
Sand	Loose granular material	0.06-2
Gravel	Loose rounded fragments of rock	2-64
Cobbles	Loose stone larger than gravel, smaller than a boulder	64-256
Boulders	A detached mass of rock	>256
Bedrock	Solid rock underlying unconsolidated surface material	n/a
Shell hash	Shell fragments of various organisms	n/a
Wood waste	Fine, coarse, and large woody debris material	n/a

Table 2. Wood waste categories for log dump reactivation assessments (DFO, 2011, p. 11 Table 2).

Fine	Coarse	Large	Other
small woody pieces	defined strips	large branches	cable
woody silt	small branches	stumps	steel pipe
	sticks	logs	glass
	bark	log bundles	refuse

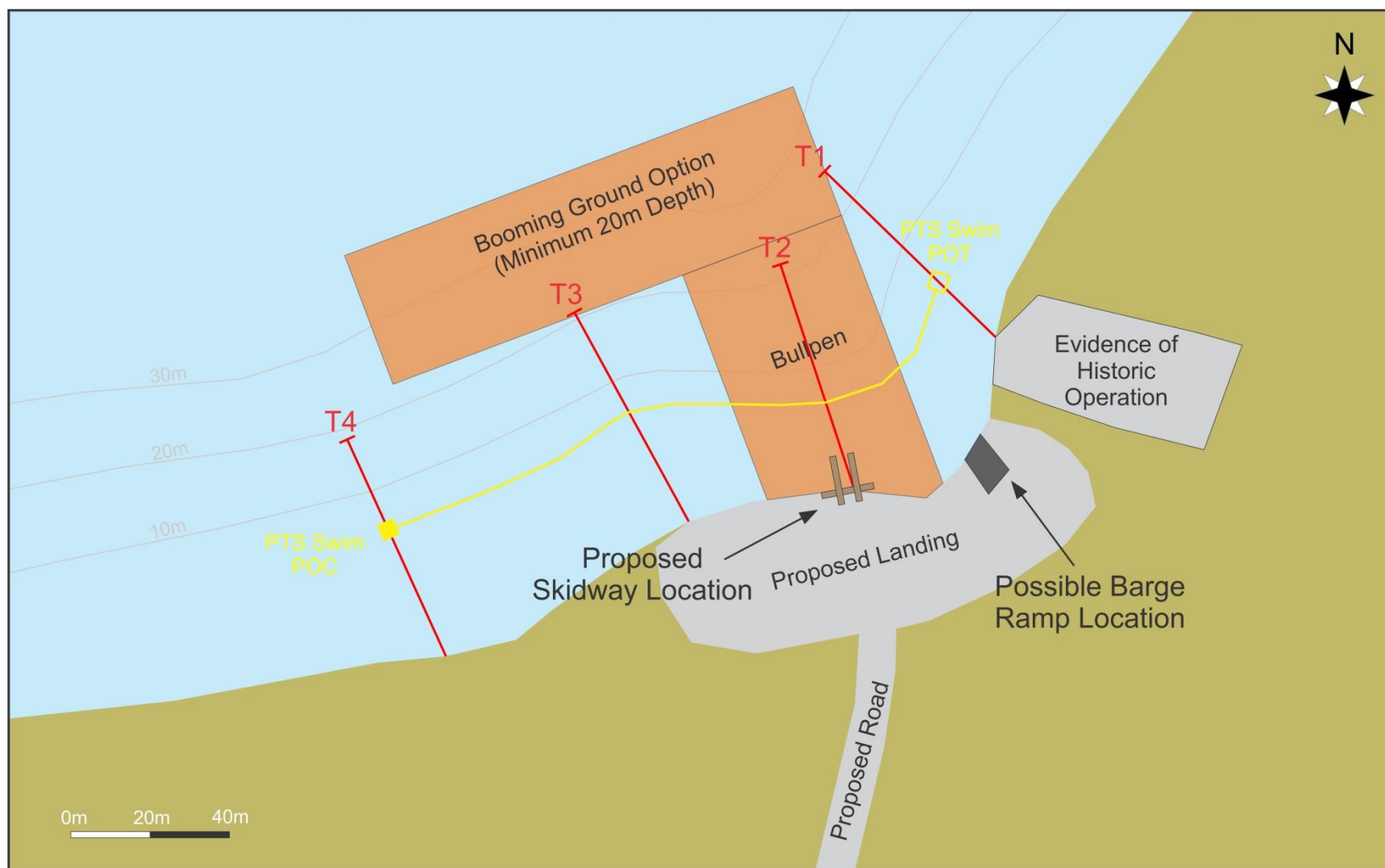


Figure 2. Site map for the proposed East Glacial Creek Log Watering Facility with the proposed approximate layout of facility features and transect locations. Depth contours as illustrated are approximate.

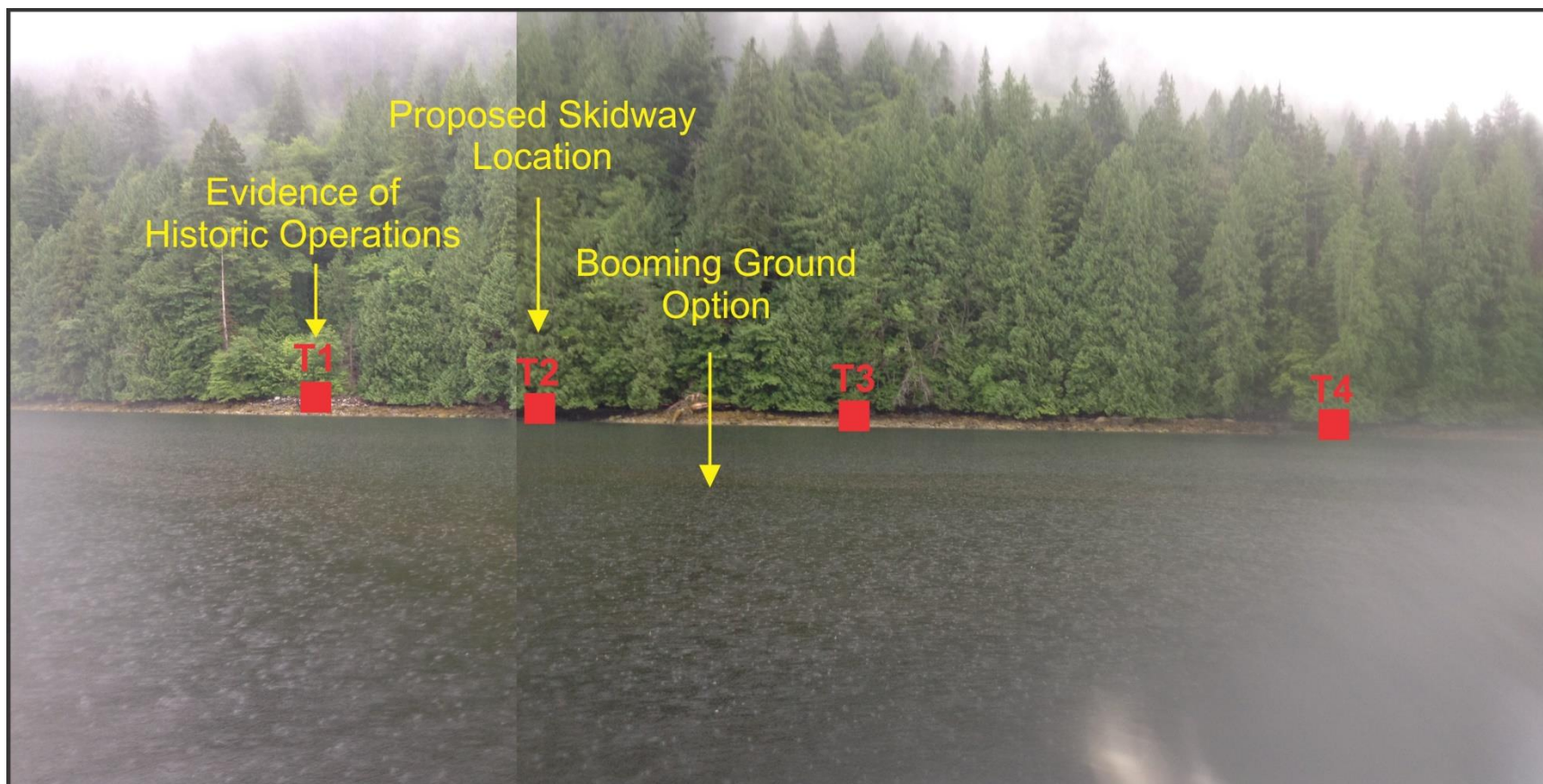


Photo 1. Overview of facility features at the proposed East Glacial Creek Log Watering Facility. Photos taken June 8th, 2018.

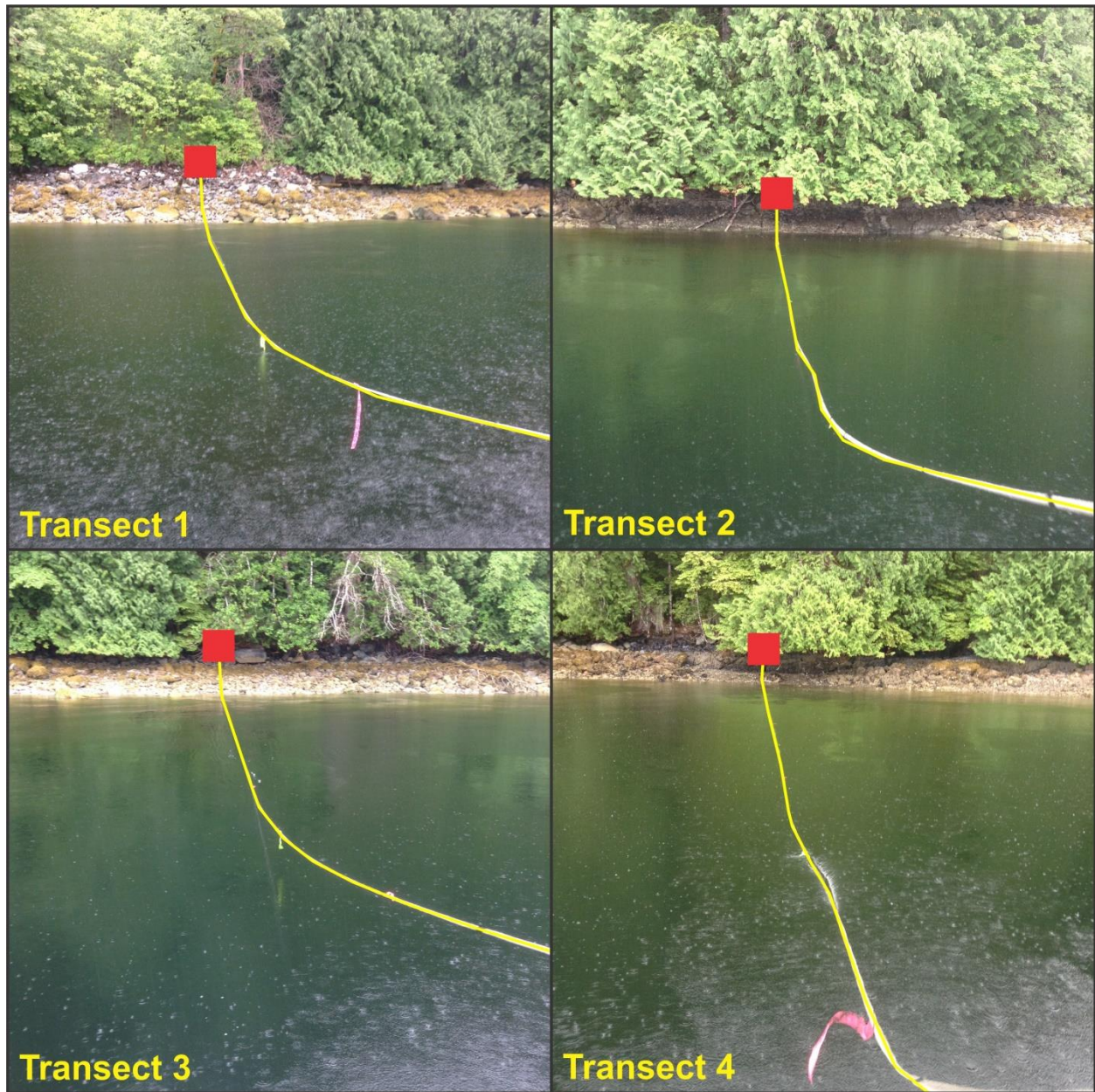


Photo 2. Overview of transect locations at the proposed East Glacial Creek Log Watering Facility. Photos taken June 8th, 2018.

5.0 DESCRIPTION OF FISH AND FISH HABITAT

5.1 SUMMARY OF PHYSICAL ENVIRONMENT

The shoreline of the proposed East Glacial Creek Log Watering Facility was generally composed of bedrock, boulder, and cobble (Photo 3). Subtidal substrate was generally composed of two distinct zones throughout the assessment area. The first zone was observed in shallow water and consisted of boulder, cobble, and gravel with some bedrock (Figure 3). The second zone was observed along the slope of each transect where depth began to increase, and was composed of gravel, sand, and shell hash with some cobble.

The shoreline at the East Glacial Creek facility was moderately sloped along Transects 1 and 2, but gently sloped along Transects 3 and 4. Subtidal bathymetry was generally moderately sloped; however along Transects 3 and 4, a shallow intertidal bench occurred before dropping off to deeper depths approximately 20m from the highest high water mark (Table 3; Figure 4).

5.2 HABITAT SUMMARY

Habitat at the East Glacial Creek Log Watering Facility was observed to be of low productivity throughout the entire assessment area. The intertidal zone was characterized by a moderate cover of rockweed (*Fucus gardneri*), brown and green filamentous algae, and limited cover of sea lettuce (*Ulva sp.*), while marine invertebrates consisted of acorn barnacle (*Balanus glandula*), Pacific blue mussel (*Mytilus trossulus*), purple/ochre star (*Pisaster ochraceus*), mottled sea star (*Evasterias troschelii*), and shells of Pacific oyster (*Crassostrea gigas*).

Subtidal macroalgae observations at the site consisted of low to moderate coverage of green filamentous algae (up to 70%; all transects), brown filamentous algae (up to 50%; all transects), fringed sea colander kelp (*Agarum fimbriatum*; up to 30%; all transects), sugar wrack kelp (*Saccharina latissimi*; <5%; Transect 4), wireweed (*Sargassum muticum*; up to 30%, Transects 1 to 3), sea lettuce (up to 10%; Transects 1 and 2), Turkish towel (*Chondracanthus sp.*; up to 60%; Transects 2 and 4), and red bladed algae (30%; Transect 3). Generally, macroalgae was observed in shallower water ranging from 0+000m to 0+030m on Transects 1 and 2, and 0+000m to 0+040m along Transect 4, however macroalgae was observed along Transect 3 in deeper waters, with observations ranging from 0+000m to 0+050m.

A total of 21 subtidal marine invertebrate species were observed on the date of assessment. These included leather star (*Dermasterias imbricata*), green sea urchin

(*Strongylocentrotus droebachiensis*), and giant sea cucumber (*Parastichopus californicus*) which were observed on all transects and the parallel to shore swim (PTS swim). Other marine invertebrate species observed within the assessment area included acorn barnacles (Transects 1 to 4), Pacific oysters (Transects 2 to 4), purple/ochre star (Transects 2 to 4), tube dwelling anemone (*Pachycerianthus fimbriatus*; Transects 1 to 4), and mottled sea star (*Evasterias toschelii*; Transects 2 and 3 and the PTS swim). Marine species considered to be of CRA importance included green sea urchin (up to 10/m²), giant sea cucumber (up to 4/m²), red sea cucumber (*Cucumaria miniata*; one individual), Pacific blue mussel (up to 60%), giant Pacific octopus (*Enteroctopus dofleini*; one individual), and Pacific oyster (shell; up to 2/m²). No live Pacific oysters were observed on the date of assessment.

A total of two marine vertebrate species were observed at the site including one species of CRA importance. Blackeye goby (*Coryphopterus nicholsi*; up to 2/m²) were observed on all transects and the parallel to shore swim. Copper rockfish (*Sebastes caurinus*; 12 individuals), the only vertebrate species of CRA importance observed, were observed on Transects 1 to 3 and the parallel to shore swim (12 individuals).

A comprehensive list of all species observed at the site with density abundances and spatial distribution information for each is provided in Appendix .

5.3 CRA SPECIES OBSERVATIONS

Seven species of CRA importance, or species that support such species, were observed at the proposed East Glacial Creek Point Log Watering Facility:

- Pacific blue mussel (*Mytilus trossulus*)
- Pacific oyster (shell; *Crassostrea gigas*)
- Giant Pacific octopus (*Enteroctopus dofleini*)
- Green sea urchin (*Strongylocentrotus droebachiensis*)
- Giant sea cucumber (*Parastichopus californicus*)
- Red sea cucumber (*Cucumaria miniata*)
- Copper rockfish (*Sebastes caurinus*)

For more detailed information regarding each observation and corresponding abundances, see Appendix 2.

5.4 DESCRIPTION OF WOOD WASTE ACCUMULATION

During the marine assessment for the proposed East Glacial Creek Log Watering Facility, wood waste was discovered within the area fronting the proposed skidway location (Photo 5). Divers observed fine wood waste in deeper water along the sand and gravel slope of Transects 1 to 3. Along Transect 1, wood waste was observed from 0+025m until the end of the transect, with areal coverage up to 80% and accumulation <2cm. Along Transect 2, wood waste was observed from 0+022m until the end of the transect with coverage up to 80% and accumulation <2cm. Along Transect 3, wood waste was observed from 0+020m to the end of the transect, with coverage up to 80% and accumulation <2cm. Throughout the assessed area, wood waste observations did not meet the criteria to be considered harmful for environmental impacts (i.e. greater than 67% coverage and 2.5cm deep; DFO, 2011). Refer to Appendix 2 for a detailed description of wood waste on each transect.

5.5 DATABASE RESEARCH RESULTS

No federally-listed Species at Risk or provincially red- or blue-listed marine species, significant kelp forests, eelgrass beds, or clam beds are registered as being in proximity to the site (<100m) according to online mapping resources (iMapBC)⁴.

The proposed East Glacial Creek Log Watering Facility is located within DFO's herring spawn records Section 164 (Jervis Inlet), but there are no records of herring spawn occurring within immediate proximity of the proposed log watering facility⁵ (Appendix 1). Records do indicate that herring spawn has occurred historically along the eastern shore Jervis Inlet within and near Deserted Bay, with records indicating that spawning events have occurred approximately 830m northeast of the proposed site. Should herring spawn occur at the site in the future, measures to accommodate for herring spawn have been included in the Mitigation Management Plan for this site (Appendix 3)

This portion of Jervis Inlet is listed within online mapping resources (iMapBC) as an area utilized by killer whale (*Orcinus orca*) and harbour porpoise (*Phocoena phocoena*). No known

⁴ <http://maps.gov.bc.ca/ess/sv/imapbc/> (accessed 15/06/2018)

⁵ <http://www.pac.dfo-mpo.gc.ca/science/species-especes/pelagic-pelagique/herring-hareng/herspawn/164fig-eng.html> (15/06/2018)

seal or sea lion haul out locations are known within the area surrounding the proposed facility⁶. Appendix provides best practices to follow should marine mammals transit the area.

Online mapping records indicate the presence of several unnamed watercourses within the area of the proposed East Glacial Creek Log Watering Facility. The nearest stream is an unnamed stream (WSC: 900-217700) approximately 380m to the west of the proposed skidway location. No existing fish distribution information exists for the unnamed stream. Stakawus Creek (WSC: 900-219600) is the nearest stream (approximately 4.9km northeast of the proposed facility) that with existing fish distribution data. Stakawus Creek is a fish bearing stream with records of chum salmon (*Oncorhynchus keta*), pink salmon (*O. gorbuscha*), cutthroat trout (*O. clarki*), rainbow trout and steelhead (*O. mykiss*)⁷. It is not expected that operation of this site will result in any adverse impacts to these systems during the operation of this site.

5.6 COMMERCIAL AND RECREATIONAL INTERESTS

The proposed East Glacial Creek Log Watering Facility is located within DFO's Fisheries Management Area 16⁸. Online mapping records indicate that there is a commercial salmon net fishery within this portion of Jervis Inlet⁹. Should the suggested mitigation measures as described in this report be adopted, it is not anticipated that the proposed development will cause any impacts to commercial fisheries within the area.

Online mapping records indicate that there are no significant recreational fisheries within the area of the proposed East Glacial Creek Log Watering Facility¹⁰. It is not anticipated that construction or operation of this log dump will have any adverse effects on the productivity of recreational fisheries in the area. The nearest Rockfish Conservation Area to the proposed facility is the Queens Reach West Rockfish Conservation Area located approximately 7km north of the proposed East Glacial Creek Log Watering Facility¹¹.

⁶ <http://maps.gov.bc.ca/ess/sv/imapbc/> (accessed 15/06/2018)

⁷ <http://a100.gov.bc.ca/pub/fidq/viewSingleWaterbody.do> (accessed 15/06/2018)

⁸ <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/16-eng.html> (accessed 15/06/2018)

⁹ <http://maps.gov.bc.ca/ess/sv/imapbc/> (accessed 15/06/2018)

¹⁰ <http://maps.gov.bc.ca/ess/sv/imapbc/> (accessed 15/06/2018)

¹¹ <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/rca-acsc/rca-acsc/south-sud/QueensReachWChart3514-eng.html> (accessed 15/06/2018)



Photo 3. Characteristics of the foreshore at the proposed East Glacial Creek Log Watering Facility. Photos taken June 8th, 2018.

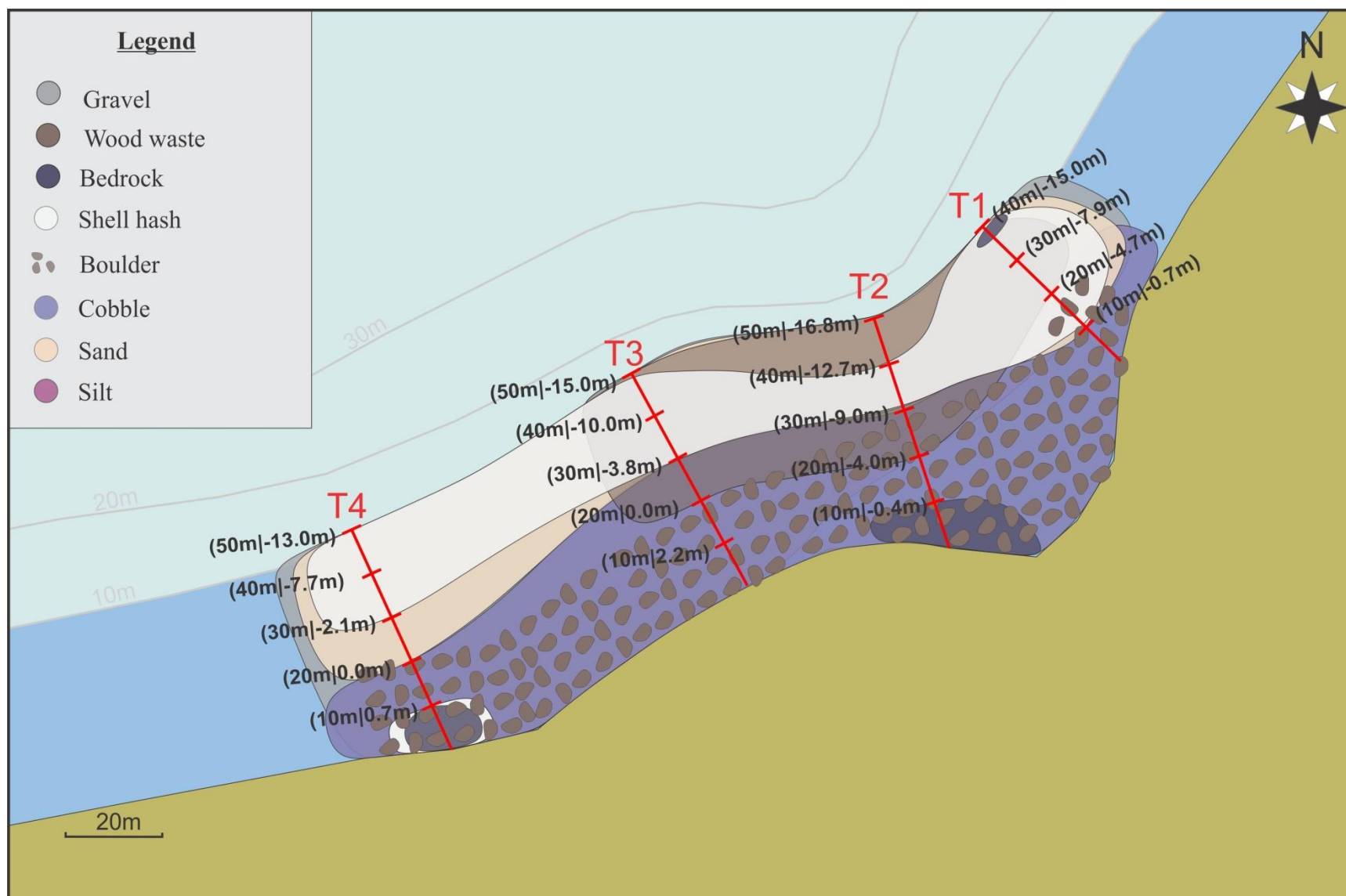


Figure 3. Substrate characteristics observed during the marine assessment at the proposed East Glacial Creek Log Watering Facility on June 8th, 2018.

Table 3. Position of transects and corresponding depths (meters) at 10m intervals at the proposed East Glacial Creek Log Watering Facility. Soundings were recorded on June 8th, 2018.

Transect Number	Origin	Bearing (true)	Reading	0m	10m	20m	30m	40m	50m	60m	70m
Transect 1	50° 02.203'N, 123° 48.861'W	314°	Sounding	n/a	-2.9	-6.9	-10.1	-17.2	-22.0	-27.2	-32.0
			Chart Datum	n/a	-0.7	-4.7	-7.9	-15.0	-19.8	-25.0	-29.8
			HHWM	0.00	0.3	-3.6	-9.8	-13.5	-17.9	-21.4	-34.9
Transect 2	50° 02.184'N, 123° 48.887'W	342°	Sounding	n/a	-2.6	-6.2	-11.2	-14.9	-19.0	-24.2	-29.6
			Chart Datum	n/a	-0.4	-4.0	-9.0	-12.7	-16.8	-22.0	-27.4
			HHWM	0.00	-5.5	-9.1	-14.1	-17.8	-21.9	-27.1	-32.5
Transect 3	50° 02.178'N, 123° 48.923'W	331°	Sounding	n/a	0.0	-2.2	-6.0	-12.2	-17.2	-22.7	-27.1
			Chart Datum	n/a	2.2	0.0	-3.8	-10.0	-15.0	-20.5	-24.9
			HHWM	0.00	-2.9	-5.1	-8.9	-15.1	-20.1	-25.6	-30.0
Transect 4	50° 02.164'N, 123° 48.977'W	336°	Sounding	n/a	-1.5	-2.2	-4.3	-9.9	-15.2	-20.6	-27.0
			Chart Datum	n/a	0.7	0.0	-2.1	-7.7	-13.0	-18.4	-24.8
			HHWM	0.00	-4.4	-5.1	-7.2	-12.8	-18.1	-23.5	-29.9

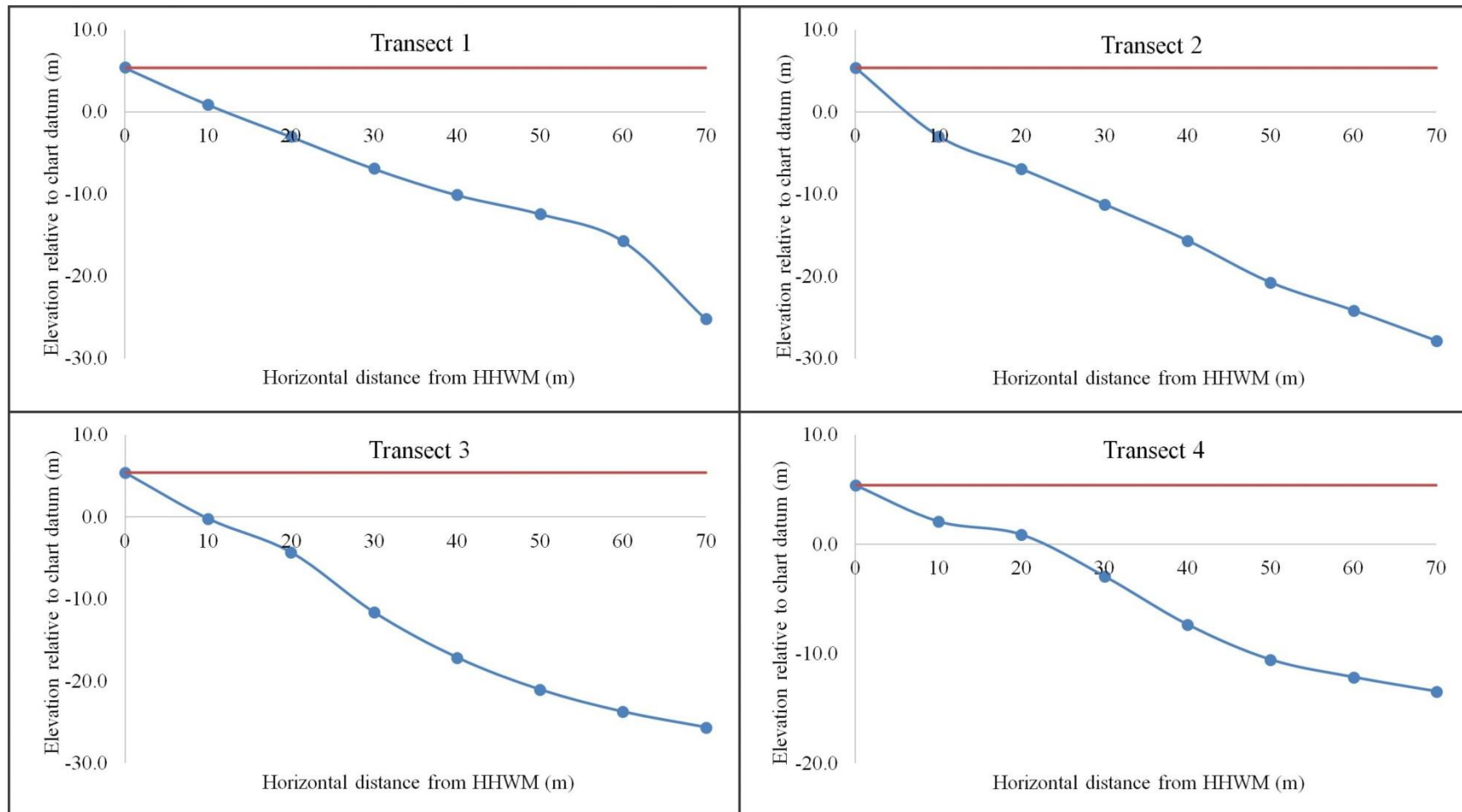


Figure 4. Bathymetric profiles for Transects 1 to 4 at the proposed East Glacial Creek Log Watering Facility starting at the HHWM. Depths have been adjusted to depth at Chart Datum (Table), and the red line indicates the HHWM. See Figure 2 for transect locations.

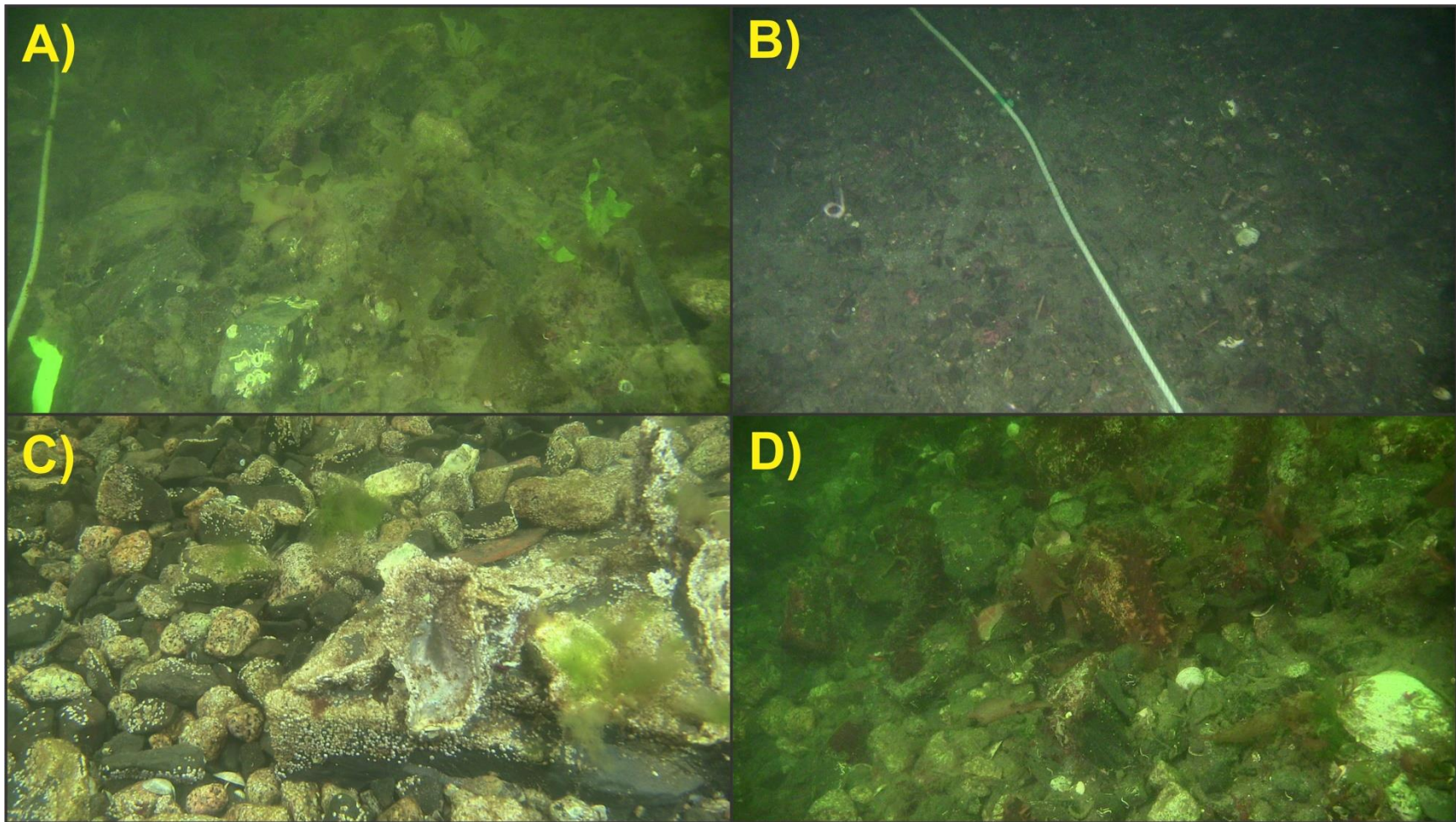


Photo 4. Condition of marine habitat as observed at the proposed East Glacial Creek Log Watering Facility. A) Typical shallow water habitat observed along Transect 2. B) Typical deep water habitat observed along Transect 2. C) Empty oyster shells observed along Transect 3. D) Typical shallow water habitat observed along the parallel to shore swim. Photos taken June 8th, 2018.

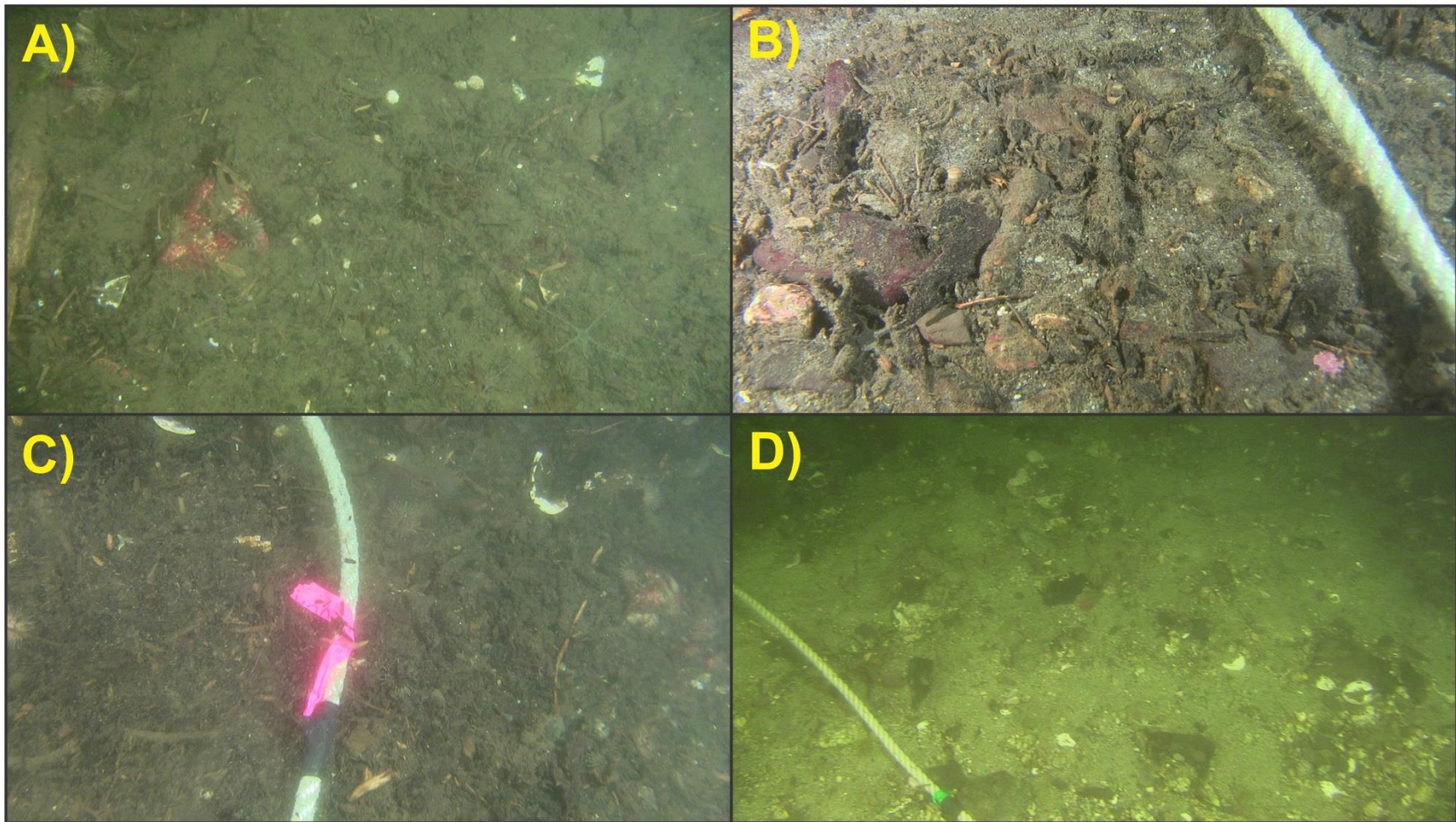


Photo 5. Condition of wood waste as observed at the proposed East Glacial Creek Log Watering Facility. A) Fine wood waste observed along Transect 1 at depth. B) Fine wood waste observed at depth along Transect 2. C) Fine wood waste observed at depth along Transect 3. D) Clean slope substrate observed along Transect 4. Photos taken June 8th, 2018.

6.0 DESCRIPTION OF EFFECTS ON FISH AND FISH HABITAT¹²

In conjunction with the field assessment, the potential effects and associated risks to the marine environment at the proposed East Glacial Creek Log Watering Facility have been examined to determine: a) the level of risk arising from the project and its likelihood to cause *serious harm*, and b) the level of regulatory input required as a result (i.e. DFO Review, DFO Authorization). The following sections provide detail on potential risk as a result of the project, and incorporate advice provided in DFO's *Fisheries Protection Policy Statement* (DFO, 2013c), and *An Applicant's Guide to Submitting an Application for Authorization under Paragraph 35(2)(b) of the Fisheries Act* (DFO, 2013a).

6.1 EXPECTED DURATION OF IMPACTS

Deposited wood waste may remain within a localized pocket in the vicinity of the skidway on a long term scale of years. It is anticipated that the wood waste that is generated from the operation of the site will be deposited on the moderately sloped sea floor and distribute to deeper depths (>20m depth) in front of the proposed skidway location. Due to the presence of wood waste at the facility on the date of assessment, and given recovery and recolonization of wood waste by marine invertebrates within the historically impacted area, it is anticipated that the site will recover to pre-impact levels over time.

Other impacts including shading of marine organisms due to the placement of a dock and wood booms will be minimal, as these structures should occur in sufficient water depth. Any impacts from these structures, should they occur, will be limited only to the operational span of the facility.

6.2 GEOGRAPHIC SCALE OF IMPACTS

During the development of the proposed site blasting of the upland will be required to construct the landing. Provided that blasting follows the mitigation measures as described within this report, impacts from blasting should be confined to the immediate blast area.

¹² The headings in this section have been adopted from DFO's *Fisheries Protection Policy Statement* (DFO, 2013) as a means to identify the relevant impacts and risk of causing *serious harm* to CRA species, or fish that support such species.

With respect to wood waste, due to the consistent, moderately sloped bathymetric profile of the site, we anticipate that debris will distribute to deeper depths along the sand and gravel slope where observed marine productivity is low and expected to decrease further with depth. Booming will potentially occur to west of the facility in an area of water deeper than 20m Chart Datum, and where productivity is low. Overall, wood waste deposition and accumulation should be contained to the area directly fronting the skidway and within the immediate area below the bullpen and booming grounds.

6.3 AVAILABILITY AND CONDITION OF NEARBY FISH HABITAT

Our assessment indicates that the East Glacial Creek site is comprised of low productivity habitat as described above in *Section 5.0 Description of Fish and Fish Habitat*. The shoreline, intertidal, and shallow water habitat along the proposed facility consist of gently to moderately sloped bedrock or boulder cobble habitat, with moderately sloped sand and gravel habitat in deeper waters with few marine species. A thorough examination of the marine environment at this site indicates that this habitat type is not limited, either within the immediate vicinity of the proposed site, or adjacent to the proposed site. Similarly, as moderate to steeply sloped bedrock and boulder/cobble are the main topographic features along the shoreline within Jervis Inlet, it is expected that hard-bottom habitat, and moderately sloped sand and gravel habitat for marine invertebrates are not limited within Jervis Inlet. As such, it is anticipated that any impact to a localized area of the present habitat type will not result in a significant decrease in the availability or condition of dominant habitat for fish in Jervis Inlet.

6.4 IMPACT ON THE RELEVANT FISH

Our assessment indicates that several species of CRA importance were identified within the area of the proposed East Glacial Creek Log Watering Facility. The vast majority of the fish species were observed where the sea floor slope gradient increased and where substrate transitioned from boulder and cobble to sand and gravel. Considering the location of CRA species observations along the bathymetry drop off as well as the moderately sloped bathymetry, it is anticipated that wood waste will distribute and accumulate on the low productivity sand and gravel slope and preclude any deleterious effects to the observed CRA species at the proposed facility.

During the marine assessment, a moderate abundance of green sea urchin (up to 10/m²) was observed throughout the assessed area. Although urchins were observed throughout the assessed area, their densities varied across the assessed area, with some sections of habitat having very few urchins and some areas with higher densities. Urchins at the proposed facility were seen either utilizing the boulder and cobble habitat before the transition to sand and gravel habitat, or on historic wood waste at depth. The higher densities of urchins were located between Transects 1 and 2 on the parallel to shore swim in the vicinity of the proposed skidway location. However, given the moderately steep bathymetric profile of the area fronting the proposed skidway location, it is anticipated that impacts on the urchins present will be limited. It is anticipated that bundles watered at the proposed skidway location will not result in grounding, and therefore will not lead to any direct mortality of urchins at the facility. Impacts to urchins are likely to be as a result of fine wood waste from watered bundles settling in the areas inhabited by urchins. Due to the motile nature of urchins, it is anticipated that once operations start, urchins will migrate to areas where less wood waste deposition occurs. Furthermore, observations of urchins on historic wood waste indicate that urchins may utilize wood waste as habitat, and may readily recolonize deposited wood waste after operations cease.

In addition to the green sea urchins observed, low abundances of Pacific oyster shells were observed within the intertidal zone fronting and to the west of the proposed skidway location. Although shell densities were up to 2/m², all shells that were closely examined were empty. Although there may be some shells that have live oysters in them, given the low volume of wood proposed through the site, and degree of intertidal recovery observed, it is anticipated that impacts from the proposed operation will be minimal to Pacific oysters within the immediate vicinity of the proposed site.

Jervis Inlet is also an area that is known to have historical herring spawn in the vicinity of the proposed facility during the late winter and early spring. The proposed facility is located approximately 830m away from the nearest historical herring spawn record, leading to the possibility that herring spawn may occur within the immediate area of the proposed facility. The proposed facility is anticipated to be operational outside of the historic herring spawn season, however, should works be delayed, overlap between the herring spawn season and operations at the site may occur. As such, mitigation measures to be implemented near and within herring spawn season have been described within the Mitigation Management Plan included within this

report. Should these mitigation measures be followed, it is anticipated that the proposed operations should not have any deleterious impacts on herring or herring spawn.

Therefore, it is anticipated that impacts, if they occur, will be limited to the low productivity slope throughout the assessed area. If impacts do occur, it is likely that due to the motile nature of the observed CRA species, they may relocate to similar habitat that is readily available adjacent to the proposed facility, and not sustain enhanced mortality rates or reduced fecundity or fitness. In addition, mitigation measures will be implemented to limit impacts from blasting. Therefore, it is our opinion that the proposed activities will not result in any significant population-level impacts affecting the ongoing productivity of CRA fisheries in the region.

7.0 MEASURES AND STANDARDS TO AVOID, MITIGATE, OR OFFSET *SERIOUS HARM* TO CRA FISH

7.1 AVOIDANCE

The proposed site for the East Glacial Creek Log Watering Facility has been located in such a way as to avoid some impacts to fish and fish habitat in the area. Siting measures that have been adopted at this site in order to avoid *serious harm* include:

- Skidway will be placed 100m from the mouth of any anadromous fish-bearing streams;
- No tidal flats, salt marshes, kelp forests, large clam beds, or dense eelgrass beds located at the site;
- Log storage will be located in water depths greater than 20m below Chart Datum;

7.2 MITIGATION

In order to further reduce the risk of causing *serious harm* to CRA fish species, the following site-specific mitigation measures should be adopted at this facility:

- Blasting and use of explosives in proximity to the marine environment may take place at this site should the blasting-specific mitigation measures in the Mitigation Management Plan in Appendix 3 of this document be implemented during blasting activities at the site.
- If works are delayed and are expected to occur within the historic herring spawn season, maintain a monitor for herring spawning activity in proximity to the site. Consult an RPBio if these activities occur, and implement appropriate mitigation measures. See Appendix 3 for specific mitigation measures relating to herring and herring spawn.

See the site-specific Mitigation Management Plan in Appendix for further details on general operation best management practices, debris management, and fish and fish habitat protection measures.

7.3 RESIDUAL *SERIOUS HARM* AND OFFSETTING MEASURES

Residual serious harm to fish is any *serious harm* remaining after the application of measures or standards to avoid or mitigate *serious harm* to fish. We anticipate that this project will not result in any *residual serious harm* to fish, as measures and standards to avoid or mitigate impacts should sufficiently address all potential effects from this project. As a result, A&A will not be required to adopt any offsetting measures should the measures and standards to avoid or mitigate serious harm be successful.

7.4 POST-OPERATIVE MONITORING

Upon cessation of logging activities, site de-activation and remediation should follow the *Information Requirements for Proposed Works and Activities Relating to New Log Handling Facilities in Coastal British Columbia* (DFO 2009). Should the avoidance and/or mitigation measures described above not be successful, any *residual serious harm* due to logging activities at the East Glacial Creek Log Watering Facility should be determined during a post-operational assessment. Results from the post-operational assessment may be compared to the baseline pre-operational biological assessment so that environmental changes can be identified. The post-operational marine assessment must be conducted by a qualified marine biological professional and take place within 60 days of site decommissioning.

8.0 CONCLUSION

On June 8th, 2018, biologists from Pacificus conducted a thorough assessment of the marine environment at the proposed East Glacial Creek Log Watering Facility in Jervis Inlet. Biological productivity at and within the vicinity of the site was generally low, with evidence of historic wood handling operations (i.e. deposited wood waste) observed in the area fronting the proposed landing.

Although A&A is planning on developing a new log watering facility in the area, the deposition of wood waste observed during the subtidal habitat assessment and the presence of an area of alder growth, typically associated with forest recolonization of historic developments, indicates that it is possible that a historic log watering facility existed in the immediate vicinity of the proposed skidway. This theory is further supported by a lack of watercourses or slide activity within the immediate vicinity of the proposed skidway location which may introduce natural wood debris to the marine environment. Although the history of the site and volume of wood potentially watered through the site is unknown, the site showed signs of recovery, as the intertidal and shallow subtidal zones show no signs of wood waste, marine invertebrates have recolonized the observed deep subtidal wood waste, and deep subtidal wood waste accumulation observed does not fully meet the criteria to be considered harmful for environmental impacts (i.e. greater than 67% coverage and 2.5cm deep; DFO, 2011). Given the volume of wood that is proposed to be watered through the facility, the deposition of new wood waste will occur, however it is anticipated that the deposition of wood waste should be limited to areas where wood waste was already observed on the moderately sloped, low productivity, sand and gravel habitat.

Despite this, to minimize impacts to fish and fish habitat as much as possible, we have developed a mitigation plan including standard and site specific mitigation measures which should be implemented and maintained throughout the duration of this project. Site specific measures include those related to upland blasting during landing construction, and herring and herring spawn measures if works construction or operation occurs within herring spawn season.. Should both these site-specific and standard measures be implemented, it is our professional opinion that impacts may be localized to the area fronting the skidway and be limited to an extent that should not cause any significant, long-lasting population-level effects to any species of CRA importance at this site. Generally, those CRA species utilizing the site are common

regionally but are either a) low in number (therefore should mortality of individuals occur, it will not result in a population-level effect), b) motile (e.g. fish) and therefore capable of migrating from the site upon commencement of wood watering activities, or c) resilient to perturbations from wood watering activities (e.g. sea cucumbers are often observed inhabiting wood waste footprints post-operation).

As such, despite that some deposition of wood waste may occur and that blasting is required, it is our professional opinion that the construction and operation of this site should not have a deleterious effect on any local or regional fish populations. Therefore, collectively the proposed activities should not affect the ongoing productivity of any species of CRA species at the site to a degree that may cause *serious harm*. Should the measures as described within this report be followed, it is our professional opinion that this project will not require a DFO review, and A&A may proceed with constructing the facility following the guidance in this report.

9.0 CHECKLIST FOR THE DEVELOPMENT OF THE EAST GLACIAL CREEK LOG WATERING FACILITY IN JERVIS INLET, BC.

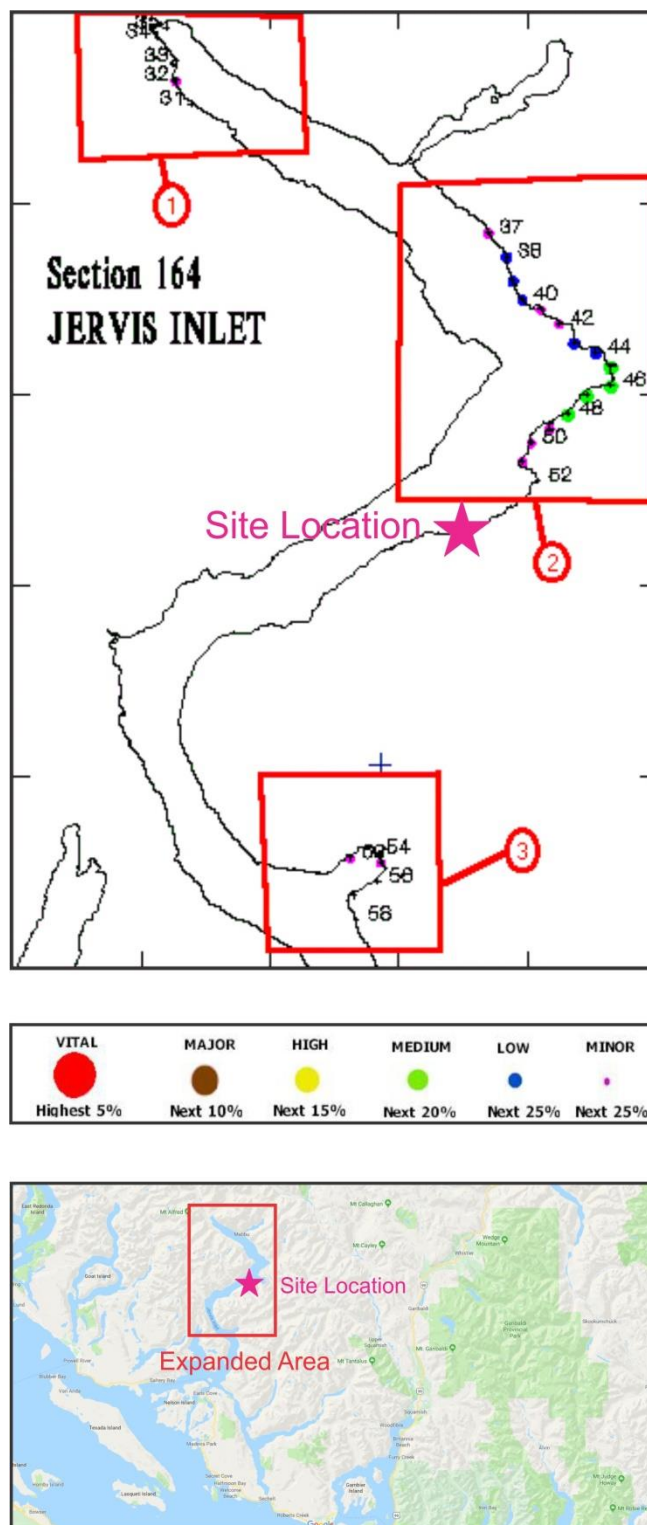
This checklist has been developed to ensure A&A personnel are aware of the recommendations and mitigation measures proposed to ensure that *serious harm* does not occur during the development and operation of the East Glacial Creek Log Handling Facility.

- ☐ A copy of this assessment report has been provided to the manager of the log handling facility.
- ☐ A review of the Mitigation Management Plan for this site has been completed prior to construction activities and mitigation measures as prescribed are in place.
- ☐ Mitigation measures with respect to blasting at the site during construction have been followed.
- ☐ Log storage should be located in water at least 20m deep at Chart Datum and float camps (if used) in at least 12m.
- ☐ Stiff legs and anchors have been used to ensure log booms and the camp (if used) do not come into contact with the shoreline.
- ☐ No construction activities occur beneath the HHWM of the site with the exception of skidway placement and anchor placement for bullpen and booming ground construction.
- ☐ A&A personnel have been made aware of the protocols to be followed if CRA finfish (e.g. herring, salmon) are observed and/or when marine mammals approach within the vicinity of the site.
- ☐ A daily logbook is on site to record observations of wildlife, debris mitigation measures, and cleanup activities.
- ☐ The contractor is made aware of company Standard Operating Procedures (SOPs), fueling responsibilities, and spill response procedures.
- ☐ All new workers on site have been briefed on the requirements at this site prior to initiating work.

10.0 REFERENCES

- Bruce & Associates (2004). "Underwater assessment of the Proposed Keaton Log Dump, Jervis Inlet". Peter Bruce & Associates Biological Consultants. May 2004: 8p.
- Canadian Technical Report of Fisheries and Aquatic Sciences (1998). "Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters." Wright and Hopky, Fisheries and Oceans Canada, 1998.
- DFO (2009). "Information Requirements for Proposed Works and Activities Related to New Log Handling Facilities in Coastal British Columbia." Fisheries and Oceans Canada. 2010: 23p.
- DFO (2011). "Approved Work Practices (AWP) for Re-activated Log Dumps in Marine Waters of British Columbia." Fisheries and Oceans Canada. 2001: 14P.
- DFO (2013a). "An Applicant's Guide to Submitting an Application for Authorization under Paragraph 35(2)(b) of the Fisheries Act." Fisheries and Oceans Canada. November 2013 (Ecosystems Programs Canada) 23p.
- DFO (2013b). "Fisheries Productivity Investment Policy: A Proponents Guide to Offsetting." Fisheries and Oceans Canada. November 2013 (Ecosystem Programs Canada): 22p.
- DFO (2013c). "Fisheries Protection Policy Statement." Fisheries and Oceans Canada. October 2013 (Ecosystem Programs Canada): 22p.
- DFO (2013d). "Science Advice to Support Development of a Fisheries Protection Policy for Canada." Fisheries and Oceans Canada. May 2013 (Canadian Science Advisory Secretariat): 2012/063, 22p.

11.0 APPENDICES



Appendix 1. Proximity of historical herring spawn locations to proposed East Glacial Creek Log Watering Facility in Jervis Inlet.¹³

¹³ <http://www.pac.dfo-mpo.gc.ca/science/species-especes/pelagic-pelagique/herring-hareng/herspawn/164fig-eng.html> (accessed 14/06/2018)

Appendix 2. Detailed biological description of the study site.

Tables 4 to 7 list the marine biota observed during the transect surveys of the environmental assessment at the proposed development site, and provide abundance / density estimates for marine flora and fauna. Table 8 provides estimates of species abundance for the parallel to shore swim conducted by biologists.

Table 4. Summary of organisms and environmental features observed along Transect 1. Potential CRA species are highlighted in light grey.

TRANSECT #1

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
10m	-0.70	boulder, cobble	rockweed	<i>Fucus gardneri</i>	40%			
			green filamentous algae		40%			
			sea lettuce	<i>Ulva sp.</i>	10%			
			acorn barnacles	<i>Balanus glandula</i>	50%			
20m	-4.70	boulder, cobble, gravel, sand, shell hash	brown filamentous algae		30%			
			green filamentous algae		30%			
			sea lettuce	<i>Ulva sp.</i>	10%			
			wireweed	<i>Sargassum muticum</i>	15%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	<5%			
			giant sea cucumber	<i>Parastichopus californicus</i>	3			
			blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
30m	-7.90	gravel, sand, wood waste	brown filamentous algae		20%	fine	50%	<1cm
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	<5%			
			encrusting pink coralline algae		20%			
			giant sea cucumber	<i>Parastichopus californicus</i>	13			
			leather star	<i>Dermasterias imbricata</i>	1			
			blackeye goby	<i>Coryphopterus nicholsi</i>	1/m ²			
			copper rockfish	<i>Sebastes caurinus</i>	1			
40m	-15.00	bedrock, gravel, sand, shell hash, wood waste	mysid swarm			fine	80%	<2cm
			pink encrusting coralline algae		5%			
			giant plumose anemone	<i>Metridium farcimen</i>	2			
			tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²			
			giant sea cucumber	<i>Parastichopus californicus</i>	2			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	13			
			Pacific sea peach	<i>Halocynthia aurantium</i>	1			
			copper rockfish	<i>Sebastes caurinus</i>	1			

Table 5. Summary of organisms and environmental features observed along Transect 2. Potential CRA species are highlighted in light grey.

TRANSECT #2

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
10m	-0.40	bedrock, boulder, cobble	brown filamentous algae		40%			
			green filamentous algae		20%			
			sea lettuce	<i>Ulva sp.</i>	10%			
			wireweed	<i>Sargassum muticum</i>	20%			
			acorn barnacle	<i>Balanus glandula</i>	40%			
			Pacific blue mussels	<i>Mytilus trossulus</i>	60%			
			Pacific oyster (shells)	<i>Crassostrea gigas</i>	1/m ²			
			purple star/ochre star	<i>Pisaster ochraceus</i>	3			
			copper rockfish	<i>Sebastes caurinus</i>	1			
20m	-4.00	boulder, cobble	brown filamentous algae		50%			
			green filamentous algae		30%			
			wireweed	<i>Sargassum muticum</i>	20%			
			turkish towel	<i>Chondracanthus sp.</i>	60%			
			water jelly	<i>Aequorea sp.</i>	1			
			purple star/ochre star	<i>Pisaster ochraceus</i>	1			
			mottled sea star	<i>Evasterias troschelii</i>	2			
			giant sea cucumber	<i>Parastichopus californicus</i>	1			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	8			
30m	-9.00	boulder, cobble, gravel, sand, wood waste	turkish towel	<i>Chondracanthus sp.</i>	20%	fine	80%	<2cm
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	10%			
			encrusting pink coralline algae		20%			
			tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²			
			giant nudibranch	<i>Dendronotus iris</i>	2			
			leather star	<i>Dermasterias imbricata</i>	3			
			mottled sea star	<i>Evasterias troschelii</i>	1			
			giant sea cucumber	<i>Parastichopus californicus</i>	6			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	3/m ²			
			blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
40m	-12.70	gravel, sand, shell hash, wood waste	tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²	fine	70%	<2cm
			gray brittle star	<i>Ophura lütkeni</i>	10/m ²			
			giant sea cucumber	<i>Parastichopus californicus</i>	1			
			red sea cucumber	<i>Cucumaria miniata</i>	1			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	2/m ²			

Table 5 Continued.

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
50m	-16.80	gravel, sand, wood waste	tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²	fine	80%	<2cm
			gray brittle star	<i>Ophuira lütkeni</i>	10/m ²			
			giant sea cucumber	<i>Parastichopus californicus</i>	1			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	2/m ²			
			glassy tunicate	<i>Ascidia paratropa</i>	1			

Table 6. Summary of organisms and environmental features observed along Transect 3. Potential CRA species are highlighted in light grey.

TRANSECT #3

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
10m	2.20	boulder, cobble, gravel	rockweed	<i>Fucus gardneri</i>	50%			
			acorn barnacles	<i>Balanus glandula</i>	40%			
			Pacific oyster (shells)	<i>Crassostrea gigas</i>	1/m ²			
			mottled sea star	<i>Evasterias troschelii</i>	1			
20m	0.00	boulder, cobble, gravel, wood waste	brown filamentous algae		10%			
			green filamentous algae		70%			
			wireweed	<i>Sargassum muticum</i>	30%			
			acorn barnacles	<i>Balanus glandula</i>	70%			
30m	-3.80	cobble, gravel, sand, wood waste	brown filamentous algae		40%	fine	40%	<1cm
			wireweed	<i>Sargassum muticum</i>	30%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	10%			
			bladed red algae		30%			
			purple star/ochre star	<i>Pisaster ochraceus</i>	1			
			giant sea cucumber	<i>Parastichopus californicus</i>	1			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	2			
			blackeye goby	<i>Coryphopterus nicholsi</i>	1/m ²			
			copper rockfish	<i>Sebastes caurinus</i>	1			
40m	-10.00	gravel, sand, shell hash, wood waste	fringed sea colander kelp	<i>Agarum fimbriatum</i>	30%	fine	60%	<2cm
			bladed red algae		15%			
			mottled sea star	<i>Evasterias troschelii</i>	1			
			giant sea cucumber	<i>Parastichopus californicus</i>	3/m ²			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	1/m ²			
			blackeye goby	<i>Coryphopterus nicholsi</i>	1/m ²			
50m	-15.00	gravel, sand, shell hash, wood waste	bladed red algae		<5%	fine	80%	<2cm
			tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²			
			giant nudibranch	<i>Dendronotus iris</i>	1			
			mottled sea star	<i>Evasterias troschelii</i>	1			
			leather star	<i>Dermasterias imbricata</i>	1			
			rainbow star	<i>Orthasterias koehleri</i>	1			
			gray brittle star	<i>Ophuira lütkeni</i>	10/m ²			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	2/m ²			

Table 7. Summary of organisms and environmental features observed along Transect 4. Potential CRA species are highlighted in light grey.

TRANSECT #4

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
10m	0.70	bedrock, boulder, cobble, gravel, shell hash	rockweed	<i>Fucus gardneri</i>	10%			
			acorn barnacle	<i>Balanus glandula</i>	50%			
			Pacific blue mussel	<i>Mytilus trossulus</i>	60%			
			Pacific oyster (shell)	<i>Crassostrea gigas</i>	2/m ²			
			purple star/ochre star	<i>Pisaster ochraceus</i>	3			
20m	0.00	boulder, cobble, gravel	brown filamentous algae		10%			
			green filamentous algae		40%			
			acorn barnacle	<i>Balanus glandula</i>	50%			
			Pacific oyster (shell)	<i>Crassostrea gigas</i>	2			
			purple star/ochre star	<i>Pisaster ochraceus</i>	8			
30m	-2.10	gravel, sand	brown filamentous algae		30%			
			green filamentous algae		20%			
			turkish towel	<i>Chondracanthus sp.</i>	10%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	15%			
			sugar wrack kelp	<i>Saccharina latissima</i>	<5%			
			purple star/ochre star	<i>Pisaster ochraceus</i>	4			
			leather star	<i>Dermasterias imbricata</i>	1			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	2			
40m	-7.70	gravel, sand, shell hash	blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
			brown filamentous algae		40%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	20%			
			giant plumose anemone	<i>Metridium farcimen</i>	1%			
			tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	1/m ²			
			leather star	<i>Dermasterias imbricata</i>	2			
			giant sea cucumber	<i>Parastichopus californicus</i>	5			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	5/m ²			
50m	-13.00	gravel, sand, shell hash	blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
			tube dwelling anemone	<i>Pachycerianthus fimbriatus</i>	2/m ²			
			giant Pacific octopus	<i>Enteroctopus dofleini</i>	1			
			leather star	<i>Dermasterias imbricata</i>	1			
			sunflower star	<i>Pycnopodia helianthoides</i>	1			
			giant sea cucumber	<i>Parastichopus californicus</i>	2			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	1			
			blackeye goby	<i>Coryphopterus nicholsi</i>	1/m ²			

Table 8. Summary of organisms and environmental features observed along the parallel to shore swim. Potential CRA species are highlighted in light grey.

PARALLEL TO SHORE SWIM

Transect Location	Chart Datum (m)	Substrate	Biota			Wood Waste		
			Common Name	Scientific Name	Abundance	Category	% coverage	Accumulation
T4 - T3		bedrock, boulder, cobble, gravel, sand, shell hash	brown filamentous algae		40%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	60%			
			turkish towel	<i>Chondracanthus sp.</i>	20%			
			purple star/ochre star	<i>Pisaster ochraceus</i>	1			
			mottled sea star	<i>Evasterias troschelii</i>	3			
			vermillion star	<i>Mediaster aequalis</i>	1			
			leather star	<i>Dermasterias imbricata</i>	4			
			giant sea cucumber	<i>Parastichopus californicus</i>	4/m ²			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	6/m ²			
			blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
T3- T2		boulder, cobble, gravel, sand, shell hash	brown filamentous algae		40%			
			fringed sea colander kelp	<i>Agarum fimbriatum</i>	50%			
			turkish towel	<i>Chondracanthus sp.</i>	20%			
			sugar wrack kelp	<i>Saccharina latissima</i>	5%			
			leather star	<i>Dermasterias imbricata</i>	3			
			mottled sea star	<i>Evasterias troschelii</i>	4			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	3/m ²			
			giant sea cucumber	<i>Parastichopus californicus</i>	3/m ²			
			blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
			copper rockfish	<i>Sebastes caurinus</i>	6			
T2 - T1		boulder, cobble, gravel, sand, shell hash	fringed sea colander kelp	<i>Agarum fimbriatum</i>	20%			
			turkish towel	<i>Chondracanthus sp.</i>	15%			
			brown filamentous algae		30%			
			leather star	<i>Dermasterias imbricata</i>	2			
			mottled sea star	<i>Evasterias troschelii</i>	2			
			green sea urchin	<i>Strongylocentrotus droebachiensis</i>	10/m ²			
			giant sea cucumber	<i>Parastichopus californicus</i>	3/m ²			
			blackeye goby	<i>Coryphopterus nicholsi</i>	2/m ²			
			copper rockfish	<i>Sebastes caurinus</i>	2			

Appendix 3. East Glacial Creek Log Watering Facility Mitigation Management Plan.

These mitigation measures apply to the East Glacial Creek Log Watering Facility. The objective of the plan is to avoid and mitigate causing *serious harm* to CRA fisheries, or fish that support such fisheries. This plan has been adapted from DFO's *Information Requirements for Proposed Works and Activities Related to New Log Handling Facilities in Coastal British Columbia* (DFO, 2009), DFO's *Fisheries Protection Policy Statement* (DFO, 2013c), and DFO's website *Measures to Avoid Causing Harm to Fish and Fish Habitat*¹⁴.

Site-Specific Mitigation Measures

- Blasting and use of explosives in proximity to the marine environment may take place at this site should the guidance in the “*Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters*” (Canadian Technical Report of Fisheries and Aquatic Sciences, 1998) and DFO's Projects Near Water website be implemented. These measures should be implemented during all blasting activities at the site, regardless of time of year (i.e. fisheries windows). These measures include:
 - Place blast mats over top of holes to minimize scattering of blast debris and deposition into the water;
 - Do not use ammonium nitrate-based explosives due to the production of toxic byproducts;
 - Back-fill/stem all holes in an appropriate manner to contain the blast to the required area;
 - Recover and remove all shock tubes and detonation wire from each charge;
 - Minimize blast weight and charges and subdivide each charge into a series of smaller charges with a minimum 25 millisecond delay between detonations;
 - Remove all blasting debris and other associated equipment/byproducts from the blast area;
 - Do not detonate when any marine mammals are within 500m of the site, or when there is visual contact from an observer using a 7x35 power binocular;
 - If the setback distances provided in Table 9 and Table 10 are adhered to, then a qualified environmental monitor is not required during blasting activities, as

¹⁴ <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html> (accessed 15/06/2018)

shockwaves should be below the established threshold of 100kPa which has been previously published as a level at which percussive effects may have a lethal effect on fish, and for which peak particle velocities are not expected to exceed 13mm/s. If the setback distances cannot be met (i.e. the distance from the blast charge hole to the shoreline is less than the distances provided in Table 9 and Table 10), then a qualified environmental monitor should be present on site to assess the presence of CRA fisheries, implement additional mitigation measures as necessary (e.g. bubble curtain) to exclude fish from the harmful shock zone, and/or to monitor the shockwave effect.

Table 9. Setback distance (m) from centre of detonation of a confined explosive to fish habitat to achieve 100 kPa guideline criteria for various substrates. From: “Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters” (Canadian Technical Report of Fisheries and Aquatic Sciences, 1998)

Substrate Type	Weight of Explosive Charge (kg)							
	0.5	1	2	5	10	25	50	100
Rock	3.6	5.0	7.1	11.0	15.9	25.0	35.6	50.3
Frozen Soil	3.3	4.7	6.5	10.4	14.7	23.2	32.9	46.5
Ice	3.0	4.2	5.9	9.3	3.2	20.9	29.5	41.8
Saturated Soil	3.0	4.2	5.9	9.3	13.2	20.9	29.5	41.8
Unsaturated Soil	2.0	2.9	4.1	6.5	9.2	14.5	20.5	29.0

Table 10. Setback distance (m) from centre of detonation of a confined explosive to achieve 13 mm•sec-1 guideline criteria for all types of substrate. From: “Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters” (Canadian Technical Report of Fisheries and Aquatic Sciences, 1998)

	Weight of Explosive Charge (kg)						
	0.5	1	5	10	25	50	100
Setback distance (m)	10.7	15.1	33.7	47.8	75.5	106.7	150.9

General Operation Mitigation Measures

- Enclose all log dump sites with a ring of boomsticks to prevent escape of log bundles and floating wood debris.
- To prevent boomsticks (for log dump and booming areas) from collapsing onto the shoreline, keep boomsticks offshore with stiff legs and/or anchors. If anchors are required, anchor lines, chains or cables should be used so that excess line does not collect on the bed of the waterbody or form loops that may ensnare marine mammals. If concrete anchors are used, they are to be pre-cast and cured away from water before use to prevent toxic leachate.
- Log storage will located in water at least 20m deep at Chart Datum and float camps (if used) in at least 12m.
- Prevent log bundles from coming into contact with the ocean bottom as much as practicably possible.
- Where practicable, grade and slope the dumping platform surface so that water drains to the rear of the site where it can be filtered to remove leachate and fine wood waste before entering freshwater streams, wetlands, or marine waters. Employ sumps where possible and maintain regularly.
- Float camps must be equipped with appropriate sewage containment and/or treatment facilities to prevent discharge of deleterious substances to fish-bearing waters. Ensure that deleterious substances do not enter marine waters.
- Ensure barges, float camps, boats, and docks do not ground and come into direct contact with the seafloor.
- Keep emergency spill kits and spill response plans on-site at all times.
- Consult DFO's *Measures to Avoid Causing Harm to Fish and Fish Habitat* website to ensure most the most recent and relevant guidance has been sourced (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>).

Debris Management Plan

General

- All staff working on the log dump site must be briefed on the Debris Management Plan prior to initiating work on the site.

Minimize Debris Generation

- If logs are sorted or handled on land prior to being bundled, limb them and collect loose bark, limbs, and wood debris as much as practicable before logs are transferred into the water.
- Ensure log bundles are tightly secured to prevent escape, breakage or excessive shifting during handling on the skidway and during watering activities. Loose debris, excess limbs and wood chunks should not be in the bundles.
- Avoid violent dumping of log bundles by constructing the angle of the skidway so that log bundle velocity is minimized.
- Minimize the duration of in-water log storage to reduce abrasion of bundles and deposition of bark and wood debris in the marine environment.

Debris Containment and Collection

- Wood waste generated as logs are moved from the dumping platform onto the skidway should be contained to facilitate removal and prevent deposition into the marine environment. The dumping platform should be cleaned daily, or as required, to prevent wood debris accumulation and deposition on the marine foreshore.
- A berm constructed of non-erodible materials (e.g. brow logs, blasted rock, or concrete lock blocks) must be established around the seaward edge of the dumping platform to facilitate wood debris clean-up and prevent loss of wood debris onto the marine foreshore.
- Collect and remove bark and wood waste deposited at the skidway and on the adjacent upland, intertidal, and shallow foreshore areas regularly. Remove wood waste to appropriate designated temporary or permanent upland disposal locations only, such that there will be no impact to riparian vegetation, fresh water streams, wetlands, or marine waters.
- Solid waste (cables, metal bands, machinery parts, metal drums, lubricant containers, etc.) should be regularly collected and removed to an appropriate designated upland disposal location where it is not permitted to enter riparian vegetation, fresh water streams, wetlands, or marine waters.

- Maintain daily log book records of the debris management measures taken to reduce, remove, and monitor wood debris from the upland sort surface and the tidal marine foreshore areas.

Fish and Fish Habitat Protection Plan

Measures to Protect Key Species

Marine Mammals

- Ensure that operational activities do not disturb marine mammals.
 - To avoid disturbance, as much as practicably possible, follow DFO's *How to Watch Marine Wildlife* guidelines for vessels operating near whales, dolphins and porpoises: be cautious, slow down (<7kts), keep clear of the animals' path and do not approach or position vessels within 100m of a whale. If a vessel is unexpectedly within 100m of a whale, stop or keep the boat stationary and let the animal pass. (see <http://www.dfo-mpo.gc.ca/fm-gp/mammals-mammiferes/viewing-observation-eng.html> for more information).
 - This may also involve the temporary suspension of work should marine mammals approach the site.

Fish and Fish Habitat

- Operation of the East Glacial Creek Log Watering Facility outside of the least risk work window (Area 16 – Pender Harbour: July 1 – September 1 (summer), December 1 – February 15 (winter))¹⁵ is possible, however, A&A should employ additional precautionary measures. This may include maintaining a “Fish and Fish Habitat Monitoring Form” to monitor and assess presence of CRA fishery species and migrating salmon, and implement appropriate mitigation measures. It is recommended that a Qualified Biological Professional be available for consultation.
- All measures related to blasting and the use of explosives should be followed.
- Follow the herring spawn mitigation advice below to avoid impacts to herring and herring spawn.

¹⁵ <http://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/bc-s-eng.html#area-16> (accessed 18/06/2018). This area includes the coastline of the mainland of B.C. from the Trail Islands (excluded) to Frolander Bay (included). It also includes Jervis Inlet, Texada Island, and Northeast Lasqueti Island from Jelina Island to Young Point. The area extends into the open water of the Strait of Georgia to approximately the halfway point between Vancouver Island and the Mainland.

Measures to Protect Herring and Herring Spawning

Operations at the proposed East Glacial Creek Log Watering Facility are anticipated to be conducted in late 2019, outside of the historic herring spawn season for the area. However, if works are delayed and are to be conducted near or within herring spawn season, mitigation measures should be implemented to ensure that no *serious harm* occurs. An on-site worker should be designated the herring spawn monitor and daily observations should be kept by this person. Refer to Appendix 4 for an example of the Fish and Fish Habitat Monitoring form. The designated Herring Monitor(s) will require training by a qualified environmental professional (QEP). **Immediately contact the QEP (Pacificus) for advice if herring are observed in the area**, or if there is any question about the presence of herring within the vicinity of log handling operations. Site visits should be conducted by a QEP on an as-needed basis as soon as herring have been observed within the area; daily monitoring by the on-site monitor should continue during this period.

Operations conducted outside of the historical spawn window should be prepared for the possibility of a spawn occurrence, considering the poor historical record for much of the area. The following mitigation measures should be followed at any time of year:

- On-site operators should have a general awareness about Pacific herring and potential conflict with operations.
- During the spawning season, daily observations should be made and documented.
- **If spawning Pacific herring are noted within 1km of the site, works should stop immediately**, and resumption of operations may only occur upon consultation with the QEP.
- If herring should happen to enter the operational area unnoticed and spawn successfully, the spawn sites must be left undisturbed until herring have hatched and dispersed. Spawn usually occurs on marine vegetation, but can also occur on log bundles, cables, dock structures, and other equipment. These items must also be left undisturbed or impacted by operations.
- Marine mammals or birds associated with schools of fish or spawn must not be disturbed.

- If schooling fish (e.g. pilchard or herring), marine mammals, or birds associated with spawning activities could potentially be disturbed or impacted, then works must be temporarily suspended.
- If schooling fish (e.g. herring or pilchard) are observed in the direct vicinity of the log handling facility, suspend operations and contact the designated QEP immediately for further advice.

Sediment and Erosion Control Plan

Develop and implement a sediment and erosion control plan for the site that minimizes the risk of sedimentation of the marine environment during all phases of the project including infill. Sediment and erosion control measures should be maintained until all ground, if disturbed, has been permanently stabilized, suspended sediment, if produced, has resettled in the marine environment, and any runoff, should it occur, is clear. The plan should, if necessary, include:

- Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the marine environment.
- If necessary (e.g. if the risk of significant sedimentation is high), site isolation measures (e.g. silt curtain) for containing suspended sediment where in-water work is required.
- Measures for containing and stabilizing waste material (e.g. wood waste) above the HHWM to prevent re-entry.
- Regular inspection and maintenance of sediment and erosion control measures and structures during the course of their use.
- Repairs to sediment and erosion control measures and structures if damage occurs.
- Removal of non-biodegradable erosion and sediment control materials once the site is stabilized and sediment and erosion control measures are no longer needed.

Contaminant and Spill Management

This spill monitoring response plan and procedures will be used to mitigate the negative effects to fish and fish habitat should a petroleum, oil, or fuel spill occur. Appropriate fuel handling and storage procedures should be implemented to prevent the discharge of deleterious substances to the marine environment. The following mitigation measures should also be taken:

- Emergency spill kits and spill response plans should be kept on-site. All machinery should be equipped with an emergency spill kit and a spill response plan.
- All petroleum products should be identified, handled and stored appropriately.

- Machinery should be used and stored only within designated areas and not be allowed to operate within the intertidal zone.
- Industrial debris (i.e. machinery parts, metal drums, lubricant containers) shall not be disposed of within or adjacent to the marine environment.
- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks.
- Wash, refuel, and service machinery and store fuel and other materials for the machinery in such a way as to prevent the discharge of deleterious substances to the marine environment.



Appendix 4. Fish and Fish Habitat Monitoring Form and Activity Log
for the Prevention of *Serious Harm* to Species of Commercial, Recreational, and Aboriginal Importance

Observer: _____

Location/Site: _____

Biologist Contact: Pacificus Biological Services Ltd. (250-949-9450)

Date	Time	Species (common name)	Life Stage (if known)	Number (count OR estimated)	Location Description (e.g. intertidal, offshore, beside skidway, etc.)	Behaviour Observed (e.g. schooling, transiting area, spawning on rocks, etc.)	Actions Taken	Monitor Initials
Example	1430	Orca Whales	Adult	5	Approximately 100m from dock.	Swam by site	Paused works for 15min until animals had left the site, then resumed works.	JD

**** This form may be used to describe the observations, location, and activity of any species of commercial, recreational, or aboriginal importance in proximity to a forestry operation, and as a log to describe the actions taken to mitigate and prevent *serious harm*. ****

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Julie Clark, Planner

SUBJECT: PROVINCIAL REFERRAL CRN00095 FOR LOG HANDLING, STORAGE
(INTERFOR) – ELECTORAL AREA F

RECOMMENDATIONS

1. THAT the report titled Provincial Referral CRN00095 for Log Handling, Storage (Interfor) – Electoral Area F be received;

2. AND THAT the following comments be forwarded to Interfor:

Subject to the following conditions, the Sunshine Coast Regional District has no objection to the proposed log handling facility located at Avalon, Provincial Referral Number 2407474:

- a. Any Species at Risk or regionally significant species and their Critical Habitat in or near the tenure area should be identified and protected.
- b. Water quality should not be impacted by log handling, maintenance or construction activities, materials or fuel storage.
- c. Update the management plan to include:
 - Measures to address potential navigational concerns resulting from escaped logs or related wood debris and the collection of any lost wood debris in the project management plan.

d. Ensure that Skwxwú7mesh Nation's comments are addressed and that any work undertaken complies with the *Heritage Conservation Act*.

3. AND THAT Comments from the SCRD Natural Resources Advisory Committee and the West Howe Sound Advisory Planning Commission be provided to the Interfor;

4. AND FURTHER THAT the recommendations be forwarded to the Regular Board meeting of November 14, 2019.

BACKGROUND

The SCRD received a referral for a License of Occupation for the expansion of a log handling and storage facility at the mouth of Bear / Avalon Creek, Thornborough Channel Howe Sound, approximately 7 km north of Landgale and 2.5km south of Port Mellon.

Applications to make use of Provincial lands are typically referred to SCRD from FLNRORD, who has historically coordinated and received referral responses from agencies in advance of the Provincial decision-maker's process. This referral was received direct from the proponent, Interfor. The proponent is now responsible for referring their application to the relevant agencies, compiling and submitting the responses to FLNRORD.

The purpose of this report is to provide analysis of the referred application and recommend a response to Interfor. The referral package can be found in Attachment A.

Figure 1 – Location Map

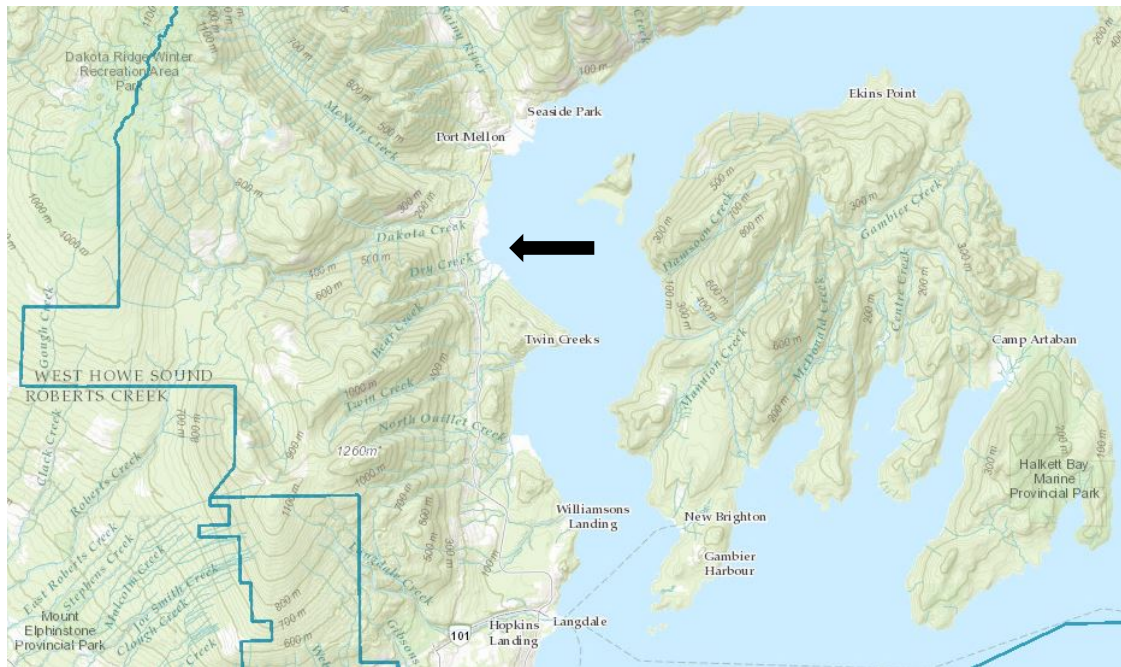


Figure 2 –Facility Plan

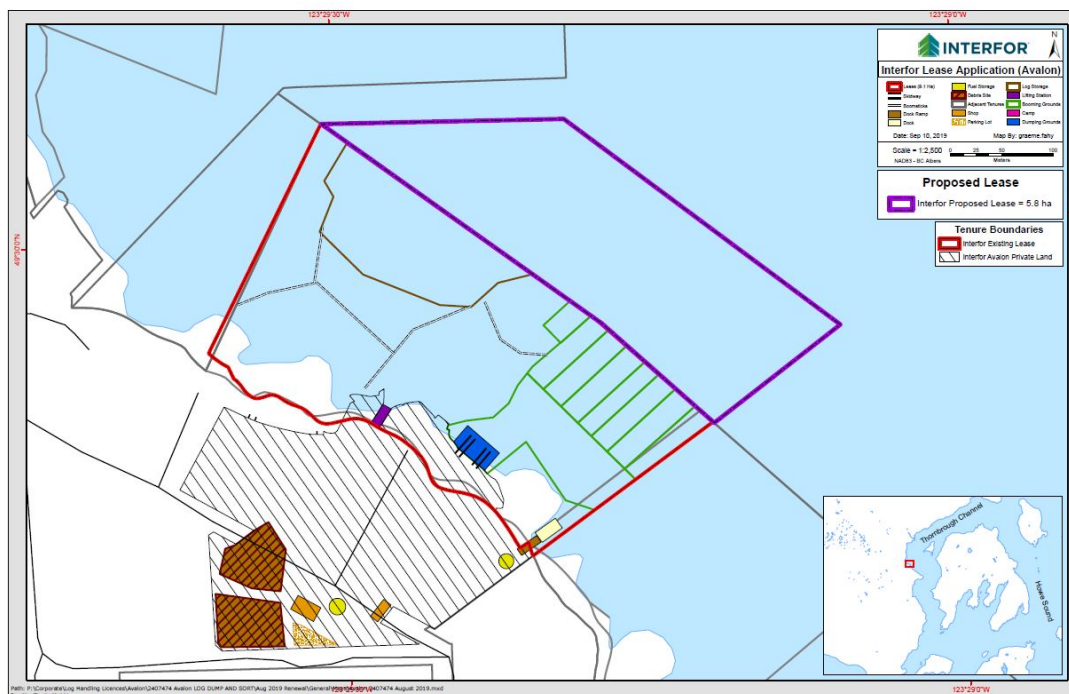


Table 1 - Application Summary

Owner / Applicant:	Interfor
Purpose:	Log handling, storage
Tenure Type:	Lease
Size:	5.8ha
Location:	Bear Creek, Thornborough Channel
Legal Description:	N/A
Electoral Area:	F – West Howe Sound
OCP Land Use:	Industrial
Land Use Zone:	W2 – Water Two
Comment deadline:	October 31, 2019

DISCUSSION

The existing log handling facility is located at the mouth of Bear Creek, within the Skwxwú7mesh Nation's territory on the west side of the Howe Sound in Thornborough Channel. The applicant is requesting a Lease on the ocean for 30 years. The current size of the log handling facility is 9 ha. The applicant proposes to add 5.8ha for a total of 14.8ha to facilitate transfer of logs to market.

SCRD Official Community Plan and Zoning Analysis

The subject area is in Electoral Area F, within the Twin Creeks Official Community Plan area. The land use designation for the upland area is Industrial and the area over the water is designated Marine Industrial.

The surface of water in the subject area is zoned Water Two (W2) under Zoning Bylaw No. 310. W2 permits log booming and storage. The adjacent upland areas are zoned Industrial 5B (I5B), which permits a range of industrial uses including wood processing and booming. The uses proposed are aligned with the I5B and W2 zoning.

Ecological Impact Analysis

Interfor has not completed a marine assessment for the proposed expansion of the log handling area.

Interfor's Manager of Sustainable Forestry determined: "The depths at the proposed expansion are too deep to dive safely; therefore, we have not completed a site-specific marine assessment and have extended the mitigation and debris management measures provided in the marine assessment for the foreshore area."

Sinking and settled wood debris causes changes to habitat and water quality by altering the sediment composition on the sea floor. Log Handling facilities are known to cause these impacts.

Recently there has been focus on the rehabilitation of Howe Sound from multi levels of government and community organizations. Despite being a highly impacted industrial area, Bear Creek and nearby Dakota Creek estuaries have natural assets. Based on information found on the howesoundconservation.ca/mapapp/ a rockfish protection area exists 1km across the channel around Woolridge Island. Additionally, forage fish are still observed in and near the tenure area. Coho, Cutthroat, Rainbow Trout and Steelhead are observed in the creeks that feed this part of the Sound.

In March 2019, Federal protections for Glass Sponge Reefs were announced on the east side of Howe Sound along with corresponding fishing closures.

Department of Fisheries and Oceans has a [Pacific Region Cold-water Coral and Sponge Conservation Strategy](#) that specifically points to deep water log dumps, among other resource extraction activities, as potentially impactful to sponges:

The number of small log dumps is increasing in the Pacific Region as companies move into more remote areas to access merchantable timber. In an effort to direct log handling activities out of the highly productive intertidal and shallow subtidal areas where logging companies prefer to operate, guidelines were developed in 2003 that directed operations into “steep and deep” areas which may increase the risk to cold-water corals and sponges.

The proposed expansion of the log handling area may have an impact on the deep water ecology of Thornborough Channel for species such as Glass Sponge Reefs. Field data for Glass Sponges are limited. A Qualified Environmental Professional, with expertise in deep marine environments is recommended to determine potential impacts and if necessary, mitigation measures.

Cultural Impact Analysis

Interfor has referred the application to Skwxwú7mesh, Tsleil-Waututh and Musqueam Nations.

Moving forward the applicant should ensure that the Skwxwú7mesh Nation is kept informed and any work undertaken complies with the *Heritage Conservation Act*.

The west side of Howe Sound is frequented by recreational users and is a tourism destination. The recreational and visual values within the area are important. Staff recommend the management plan be updated to include:

- Specific measures to protect recreational and visual values of the site.
- Address potential navigational concerns resulting from escaped logs or related wood debris.

Options

The Province requests SCRD to decide on one of the following options in response to the referral:

1. Interests unaffected
2. No objection to approval of project
3. No objection to approval of project subject to conditions
4. Recommend refusal of project due to reasons

Staff recommend Option 3, subject to comments outlined in the Recommendations.

Consultation

Interfor referred this application to First Nations, SCRD and other agencies it identifies as appropriate. The applicant is responsible for advertising the application in a local paper to enable comments from the public.

If meetings can be arranged within the short available window the proposal may be referred to the Natural Resources Advisory Committee (NRAC) and the West Howe Sound Advisory Planning Commission for review. Advisory Committee comments will be forwarded to the Interfor by SCRD.

Timeline for Next Steps

Interfor requested a response within 30 days. The deadline was extended by 30 days to October 31, 2019 in order to obtain an SCRD Board resolution. Interfor has been informed of the November 14th Committee and Board meeting timeline. The resolutions will be forwarded to Interfor who in turn is responsible to forward referral comments on to FLNRORD.

STRATEGIC PLAN AND RELATED POLICIES

SCRD's newly adopted strategic plan describes SCRD role: "SCRD provides a variety of services that support our quality of life, protect our natural environment and foster economic growth."

Logging activities and corresponding log dumps foster economic growth and must also ensure that cumulative impacts do not decrease the community's quality of life or the ability of our natural systems to thrive.

SCRD also has goals to enhance the region's climate resilience, and advocating for marine protection, including habitat restoration.

Thriving marine habitats are natural assets which have significant carbon sequestration potential. Through the referral process, SCRD is advocating for the Province and industry to analyze and effectively mitigate against the cumulative impacts of industry on terrestrial and marine environments. Ensuring our marine habitats can thrive is a climate resilience action.

CONCLUSION

The SCRD was provided an opportunity to comment on a Provincial referral to permit expansion of a log handling, storage facility at Avalon / Bear Creek on the west side of Howe Sound in Thornborough Channel. The proposal was analyzed against applicable SCRD policies, bylaws and regulations.

Staff recommend that SCRD respond to the referral with the option that the SCRD has no objection to the project subject to conditions identified in the management plan and this report, and that this recommendation be forwarded to the Regular Board meeting on November 14, 2019.

Attachments

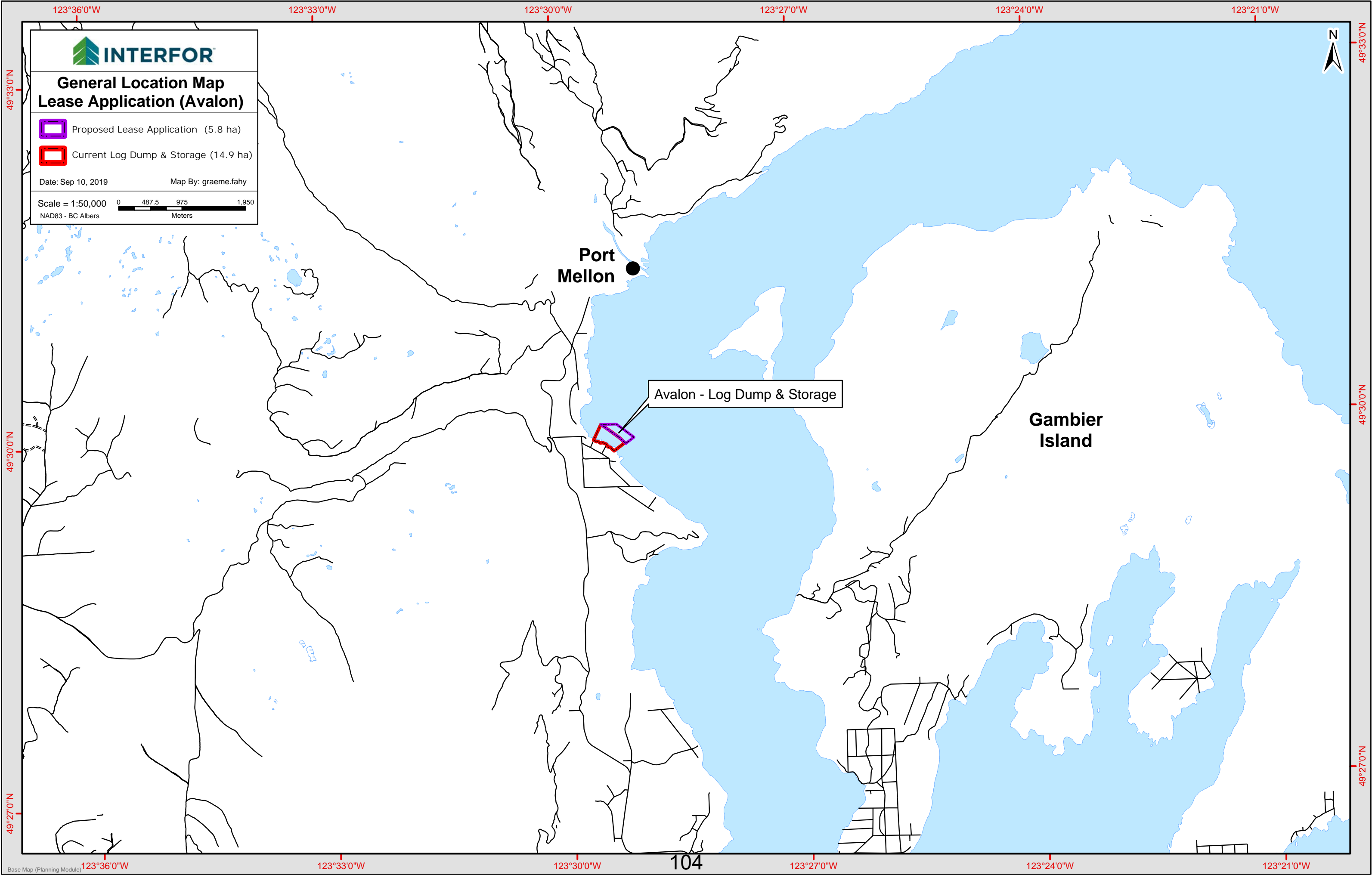
Attachment A – Referral Package

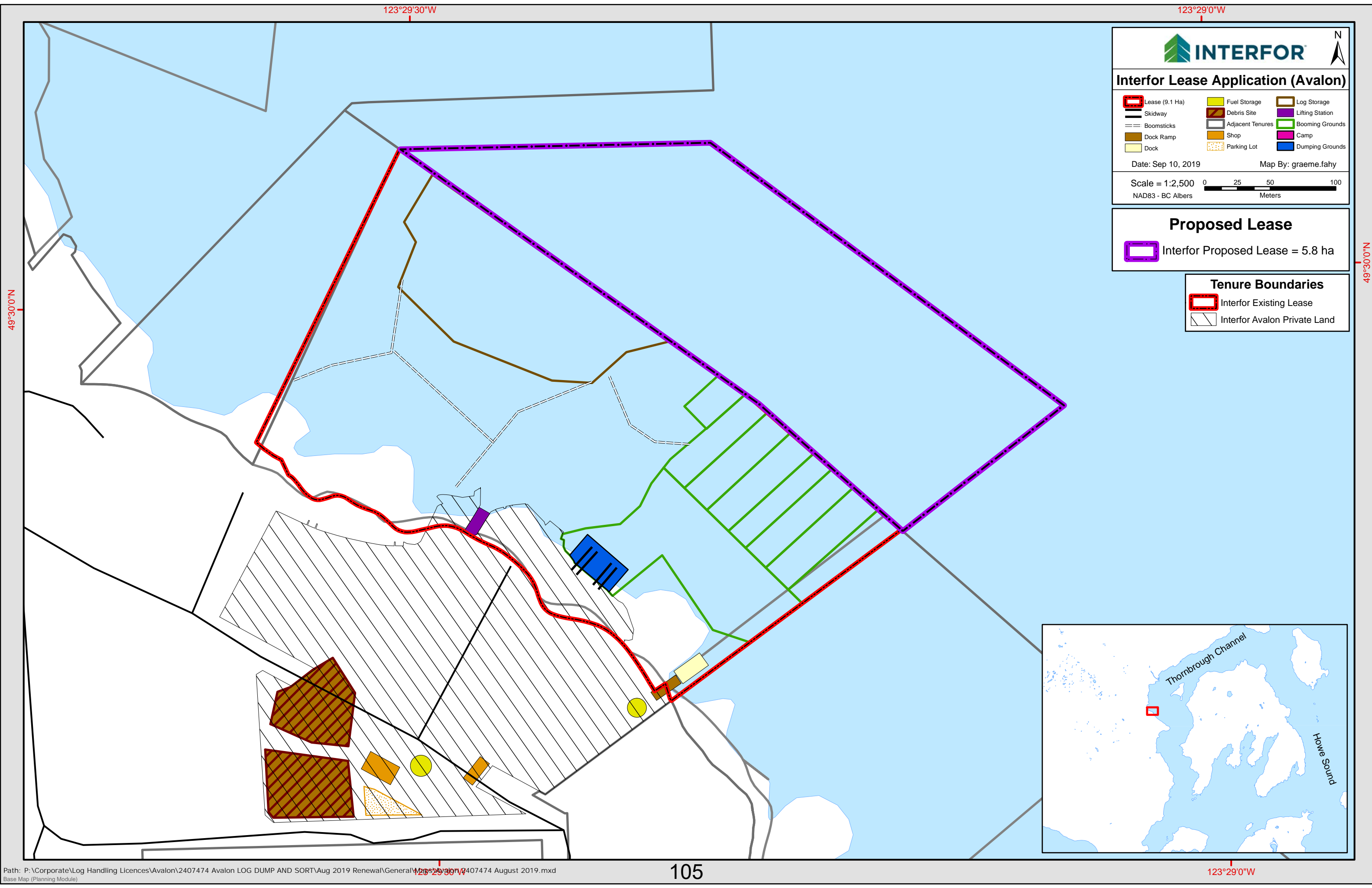
Reviewed by:			
Manager	X - D. Pady	Finance	
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Other	

Referral Request		Attachment A	
<div>TO:</div> <div><div>Sunshine Coast Natural Resource District</div><div>Sunshine Coast Regional District</div><div>FLNR Rec Sites & Trails</div><div>Environment Canada – Marine Water Quality</div><div>Chinook Timber Sales</div><div>Pacific Fibre Ltd.</div><div>Zi Yin Liu</div><div>City Transfer</div></div>		<div>Application: New <input checked="" type="checkbox"/> Amendment <input type="checkbox"/></div> <div>You are invited to comment on the following: Application for Crown land tenure. Copy of the application is attached.</div> <div>Referral responses must be received by this office 30 calendar days from date sent. If we do not hear from you by that date, we will move forward with the application process. If you require additional information on the proposal(s), please contact the applicant.</div>	
APPLICANT			
APPLICANT NAME Interfor Corporation		PHONE NUMBER 250-286-5132	DATE REFERRAL SENT October 16, 2019
ADDRESS 1250A Ironwood Street, Campbell River, BC		EMAIL ADDRESS wendy.hamilton@interfor.com	
LAND OFFICER CONTACT Lindsay Wriglesworth, RFT		CONTACT PHONE NUMBER 604-485-0727	LAND FILE NUMBER 2412272
LOCATION OF CROWN LAND Avalon Creek – Thornbrough Channel		REF MAP No. 92G043	PARCEL SIZE 5.8 Ha
LEGAL DESCRIPTION BLOCK B, DISTRICT LOT 3386, GROUP 1, NEW WESTMINSTER LAND DISTRICT, LEASE FOR LOG HANDLING AND STORAGE PURPOSES (LAND UNDER WATER), CONTAINING 5.8 HECTARES MORE OR LESS.			
INTENDED LAND USE Log Handling & Storage		NOTES Proposed expansion of tenure area for increased storage	
PROPOSED TENURE TYPE Lease	PROPOSED TERM 30 years	PURPOSE Log Handling & Storage	
<div>RESPONSE COMMENTS:</div> <div>Please forward a copy of any concerns/requirements directly to the applicant</div> <div>1. Does the proposal relate to your agency's legislated responsibilities? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please identify the relevant legislation (including section).</div> <div>2. If the proposal proceeds, will the proponent require approval or a permit from your agency? Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>3. Will compliance monitoring be required by your agency if the proposal goes ahead? Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>4. If the Land application proposal is implemented, in your opinion, would public use of the area be impacted? Explain.</div> <div>For Municipal/Regional Government Use Only: Is the area for the Land application zoned for the proposed purpose? Yes <input type="checkbox"/> No <input type="checkbox"/> If no, what is the current zoning? What is the estimated time required for a decision on an application to re-zone the area should the applicant wish to pursue this option?</div>			
<div><input type="checkbox"/> Approval Supported</div> <div><input type="checkbox"/> Approval Supported Subject To Conditions Outlined On Reverse</div> <div><input type="checkbox"/> Approval Not Supported For Reasons Outlined On Reverse (Indicate what mitigation measures, if any, would address your concerns)</div> <div><input type="checkbox"/> Interests Unaffected</div>			
Signed By:		Date:	Phone No.:
Please Print:			
Please indicate which agency you are responding on behalf of:			

Log Handling Prospectus/Management Plan Form

File No.	2412272																				
Location	Avalon Log Sort, Thornbrough Channel																				
APPLICANT NAME Interfor Corporation	NTS Map No. 92G043																				
ADDRESS 1250A Ironwood Street, Campbell River, BC V9W 6H5	Phone 250-286-5132																				
DESCRIPTION OF ACTIVITY Log Handling and Storage – additional area																					
TYPE OF TENURE Lease																					
GEOGRAPHIC COORDINATES 501294 N, 1181892 E BC Albers																					
GENERAL LOCATION MAP/SITE PLAN MAP (Mapping Template for both maps to be provided to ensure consistent format; it is understood that these maps would be attached to the document as the Legal Description Schedule) A Site Plan of the entire application area, drawn to scale with a north arrow, identifying the location of all improvements (buildings, structures, roads, powerlines, fences, etc.) in relation to the boundaries of the tenure area and other legal boundaries. <ul style="list-style-type: none">drawn to scale with a north arrowlocation of all improvements (buildings, structures, roads, power lines, fences, waste areas, parking areas burn sites etc.) in relation to the boundaries of the tenure area and other legal boundariesArea to be dredged (provide details)Area to be filledTotal project site area in hectaresTotal Area General Use vs. Total Area for Intensive Use (refer to log handling policy) http://www.for.gov.bc.ca/Land_Tenures/documents/policies/log_handling.pdfOther information related to the project: Describe briefly Attach Maps and Provide Shape files																					
PROPOSED TERM 10 – 30 Years																					
UPLAND OWNERSHIP Crown? <input type="checkbox"/> Private? <input checked="" type="checkbox"/> If private, attach upland owner consent - Private Lot Adjacent to Proposed Tenure owned by Interfor																					
ASSOCIATED FOREST TENURE INFORMATION <ul style="list-style-type: none">Avalon is Interfor’s main central sort that supports sorting and scaling of logs from our operations in the Sunshine, Campbell River, Arrowsmith and North Island-Central Coast Districts. Interfor’s AAC on the Coast is approx. 1,700,000 m3 per year. Of this, 900,00 m3 goes through the Avalon sort each year. This site also sorts and scales approximately 100,000 m3 from each of the Sechelt and Homalco Nations annually.																					
OTHER REQUIRED TENURES/AUTHORIZATIONS/DOCUMENTS <table><tr><td></td><td>Y/N</td></tr><tr><td>Water Licence</td><td>N</td></tr><tr><td>Waste Permit</td><td>N</td></tr><tr><td>Transport Canada Authorization</td><td>Y</td></tr><tr><td>DFO Authorization</td><td>N</td></tr><tr><td>Archaeological Impact Assessment</td><td>N</td></tr><tr><td>Site Alteration Permit</td><td>N</td></tr><tr><td>Health Authority Permit</td><td>N</td></tr><tr><td>MOE Authorization</td><td>N</td></tr><tr><td>Other tenures, permit or authorization required to carry-out proposed activity:</td><td></td></tr></table>			Y/N	Water Licence	N	Waste Permit	N	Transport Canada Authorization	Y	DFO Authorization	N	Archaeological Impact Assessment	N	Site Alteration Permit	N	Health Authority Permit	N	MOE Authorization	N	Other tenures, permit or authorization required to carry-out proposed activity:	
	Y/N																				
Water Licence	N																				
Waste Permit	N																				
Transport Canada Authorization	Y																				
DFO Authorization	N																				
Archaeological Impact Assessment	N																				
Site Alteration Permit	N																				
Health Authority Permit	N																				
MOE Authorization	N																				
Other tenures, permit or authorization required to carry-out proposed activity:																					





123°29'0\"/>

123°29'0\"/>

49°30'0\"/>

49°30'0\"/>



Interfor Lease Application (Avalon)

- | | | |
|----------------|------------------|-----------------|
| Lease (9.1 Ha) | Fuel Storage | Log Storage |
| Skidway | Debris Site | Lifting Station |
| Boomsticks | Adjacent Tenures | Booming Grounds |
| Dock Ramp | Shop | Camp |
| Dock | Parking Lot | Dumping Grounds |

Date: Sep 10, 2019 Map By: graeme.fahy

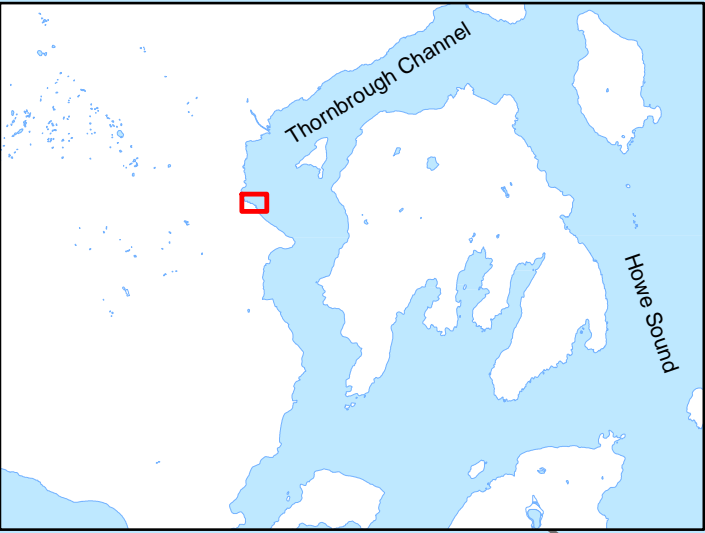
Scale = 1:2,500 0 25 50 100
NAD83 - BC Albers Meters

Proposed Lease

Interfor Proposed Lease = 5.8 ha

Tenure Boundaries

- | |
|------------------------------|
| Interfor Existing Lease |
| Interfor Avalon Private Land |



Avalon – Thornbrough Channel - Log Dump & Log Storage Management Plan Overview

Lands File: 2407474 IFP File: AVA013-0
Wednesday, September 4, 2019

PROJECT OVERVIEW

This project is for the purpose of expanding the foreshore lease area associated with Interfor's existing log watering facility at Avalon Creek in Thornbrough Channel. Avalon is an existing log sort located on private land held by Interfor that has been operational for many years. Our current lease for the adjacent foreshore is approximately 9 hectares in size, due to expire in August of 2021. Until recently, Interfor held a lease with the Province to use DL 3386 Block B to support our operations as well as subleased a portion of DL3386 Block C from Kozul Holdings. When the uplands to Block C was recently sold by Kozul to Zi Yin Liu, our annual rent was raised from \$5,000 to \$20,000 per month. This 400% increase in lease costs has triggered us to adjust how we operate at Avalon and the precipitous for this application to expand our foreshore lease with the Province.

The existing log watering facility is a critical and necessary component of our coastal operations. Avalon is Interfor's main central sort that supports the sorting and scaling of logs from our operations in the Sunshine, Campbell River, Arrowsmith and North Island-Central Coast Districts. Interfor's AAC on the coast is approximately 1,700,000 m³ per year. Of this, 900,000 m³ goes through the Avalon sort each year. Interfor also sorts and scales approximately 100,000 m³ from the each of the Sechelt and Homalco Nations projects annually.

On average, Avalons production is 4,000 m³/day which includes the processing of 2 booms which are dewatered, sorted, scaled, dumped and boomed for market.

Recent marine assessments were conducted to assess the impacts of our operations and facility upgrades on the marine environment. Both assessments determined that proposed and current operations at the site will not result in serious harm to a commercial, recreational or aboriginal fishery or fish that support such a fishery as prohibited under S. 35 of the Fisheries Act. The reports detail measures and standards to avoid and mitigate serious harm during the operation of the site.

SITE DESCRIPTION

Interfor currently holds a lease for DL 3386 Block B that is 9 hectares. All facilities on site area are consistent with the current lease provisions. The proposed expansion would increase the lease area by 5.8ha to 14.9 ha in total.

This site was selected due to its proximity to the harvest areas and is centralized between Interfor's tenures. The site has water depths of +/- 5 meters at the bottom of the skidway and between 10-100 meters throughout the log dumping, booming and storage areas.

The site already includes the following infrastructure:

- Skidway
- Dock

- Log storage area
- Booming grounds
- Barge grid
- Lifting station
- Transfer bunk
- Ramp

To facilitate the expansion of the storage and sort area, upon approval, Interfor would be installing the following:

- 5 Anchors and cans to mark out the perimeter and secure the infrastructure (boomsticks)
- Boomsticks to delineate the boundary of the lease area and facilitate movement and sorting of booms as they enter and exit the facility.

Refer to the attached Lease Map for the estimated location of general infrastructure within the proposed expansion area. The location of the development will be as per assessment recommendations.

SAFETY CONSIDERATIONS

Interfor maintains a safety program that meets the requirements of the WorkSafe BC Occupational Health and Safety Regulations and Part 3 of the Workers Compensation Act.

FIRST NATIONS

As the proposed expansion area is within the traditional territory of the Squamish, Tsleil-Waututh and the Musqueam Nations, Interfor has initiated information sharing. A summary of those conversations will be provided to the Province upon conclusion.

ENVIRONMENTAL CONSIDERATIONS

There are no ecological reserves or parks within the vicinity of the proposed lease area. No raptor nests, wildlife trees or heron colonies or nests were identified within the vicinity of the proposed lease area.

FISH AND WILDLIFE

Avalon Creek is directly adjacent to the original lease area of Avalon. A Tidal Fan Assessment of Avalon Creek was conducted on August 2015 to determine if armouring and removal of fluvial deposits would cause serious harm to CRA fisheries. The assessment found that subject to conditions (Embedded in this Management Plan's *Fish and Habitat Protection Plan*, *Sediment and Erosion Control Plan*, and *Containment and Spill Management*), current mitigation measures can proceed without causing serious harm to CRA fisheries.

FISH AND FISH HABITAT PROTECTION PLAN

Operations associated with the foreshore lease area of Avalon will be conducted in accordance with the following guidance provided by DFO.

Marine Mammals

- Follow DFO's *How to Watch Marine Wildlife* guidelines for vessels operating near whales, dolphins and porpoises: be cautious, slow down (<7 kts), keep clear of the animals' path and do not approach or position vessels within 100 m of a whale and 200m of a killer whale. Should a whale unexpectedly become within 100 m of a vessel stop or keep the vessel stationary until the animal passes.
- If marine animals approach the site work is to be temporary suspended.

Herring

- Annual herring monitor training is provided at Avalon.
- During spawning season record observations daily.
- Contact a Qualified Environmental Professional (QEP) if herring are observed.
- If herring spawn are noted within 1km of the site Interfor shall cease operations immediately until they are cleared to re-commence.
- If herring enter the site undetected and spawn successfully, spawn sites are to be left undisturbed until hatching has occurred.
- Marine mammals and birds associated with spawning or schools must be protected.

Measures and Standards to Avoid, Mitigate, or Offset *Serious Harm* to CRA fish

- No tidal flats, salt marshes, kelp forests, large clam beds, or dense eelgrass beds are located at or adjacent to the site.

DEBRIS DEPOSITION and MANAGEMENT PLAN

To minimize debris deposition on the sea floor, all workers will be briefed on the following procedures prior to commencing work:

DEBRIS MINIMIZATION:

- If logs are sorted or handled on land prior to being bundled, collect loose bark, limbs and wood waste as much as practicable before logs are transferred into the water.
- Ensure log bundles are tightly secured to prevent escape, breakage or excessive shifting during handling on the skidway and during watering activities. Loose debris, excess limbs and wood chunks should not be in the bundles.
- Avoid violent dumping of logs bundles by constructing the angle of the skidways so that log bundle velocity is minimized.
- Minimize the duration of in-water log storage to reduce abrasion of bundles and deposition of bark and wood waste in the marine environment.

DEBRIS CONTAINMENT AND COLLECTION:

- Wood waste from dumping onto the skidway should be contained and removed to prevent deposition into the marine environment. Clean dumping platform daily.
- A berm will be built on the seaward edge of the dumping platform to facilitate clean up and prevent loss onto foreshore.
- Collect and remove bark, wood and solid waste from skidway area and adjacent upland, intertidal and shallow foreshore areas to designated upland storage areas.
- Maintain daily log-book of debris management.

CONTAMINANT AND SPILL MANAGEMENT

Interfor is certified under SFI and has a Fuel Management Procedure in place as part of this certification. Fuel and other deleterious substances will be managed as per this procedure. The fuel dispensing facility will follow the requirements of all applicable legislation. Additional Measures include:

- Machinery is to be used and stored only within designated areas and operation within the intertidal zone should be avoided where possible.
- Industrial debris shall not be disposed of within or adjacent to the marine environment.
- Ensure machinery arriving on site is in clean condition and is maintained free of fluid leaks.
- Wash, refuel, and service machinery and store fuel and other materials for the machinery in such a way as to prevent the discharge of deleterious substances to the marine environment.

SEDIMENT AND EROSION CONTROL PLAN

The following recommendations are to minimize the risk of sedimentation into the marine environment. All measures should be maintained until all ground, if disturbed, has been permanently stabilized, suspended sediment,

if produced, has resettled in the marine environment, and any runoff, should it occur is clear:


- Installation of effective erosion and sediment control measures before starting work (e.g. back-sloping dump and use of sump(s) where practicable).
- If necessary, site isolation measures for containing suspended sediment, where in water work is required.
- Regular inspection and maintenance of sediment and erosion control measures while in use
- Repairs to control measures if required.
- Removal of non-biodegradable erosion and sediment control materials once the site is stabilized and sediment and erosion control measure are no longer needed.
- If necessary, work in 'pulses' or intervals to allow turbidity to settle out and avoid excessive sedimentation in the marine environment.

LOG HANDLING OPERATIONS

Interfor is committed to implementing best management practices throughout the operation. All operations will be in accordance with the measures described in the marine assessment and the General Operational Measures described below.

GENERAL OPERATIONAL MEASURES

- Ensure all log dump sites have a ring of broomsticks to prevent escape of log bundles and floating waste.
- Use stiff legs and/or anchors to keep broomsticks offshore. For anchors avoid excess line. For concrete anchors- pre-cast and cure away from water.
- Log storage will be located in water at least 20 m deep at Chart Datum.
- Prevent bundles from coming into contact with ocean bottom.
- Where practicable, grade and slope the dumping platform surface so that water drains to the rear of the site where it can be filtered to remove leachate and fine wood waste before entering freshwater streams, wetlands, or marine waters. Employ sumps where possible and maintain regularly.
- Ensure barges, boats and docks do not ground and come into contact with ocean floor.
- Keep emergency spill kits and spill response plans on site at all times.
- Utilize DFO's *Measures to Avoid Causing Harm to Fish and Fish Habitat* website.

Management Plan submitted by:	Management Plan received by:
	
Signature:	Signature:
Date:	Date:
Wednesday, September 4, 2019	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Rebecca Porte, Parks Planning Coordinator

SUBJECT: Provincial Licence No. 241525 Dan Bosch Park Renewal

RECOMMENDATIONS

THAT the report titled Provincial Licence No. 241525 Dan Bosch Park Renewal be received;

AND THAT SCRD submit a Crown renewal application to FrontCounter BC for the area covered by Licence No. 241525.

BACKGROUND

In 1983, the SCRD applied for, and was granted a licence of occupation for “park purposes” on 25 acres of land and water along the east side of Ruby Lake in Electoral Area A. In the early 1990’s the park was named in memory of an active local resident, Mr. Dan Bosch. Amenities of the park include: on-site parking, sandy beach, picnic table, swimming area, outhouse and trails. The current licence term is expiring, and is now due for renewal. The purpose of this report is to provide information about the site, including SCRD responsibilities if renewal is sought, and to seek direction from the Planning and Community Development Committee moving forward.



Figure 1 – Ruby Lake Licence of Occupation Area 2401275

DISCUSSION

A licence of occupation 241525 for license area 2401275 has been held by the SCRD since 1983. This park receives year round use, with seasonal heavy visitation and usage throughout the summer months. The parking lot and public beach are at or over-capacity on most summer weekends. Dan Bosch Park is used by residents and visitors for freshwater and beach access, swimming, paddle sports input and egress, and picnicking. It is also a staging area and jumping off point for a scenic portion of the Suncoaster Trail, which connects Ruby Lake to Klein Lake. The local and regional community value access to water and recreational amenities and Dan Bosch Park provides this portion of the Sunshine Coast's most readily accessible access to Ruby Lake.

A maintenance service contract (gate opening, garbage removal, etc.) is held by the same caretaker that holds the maintenance service contract for Katherine Lake Campground.

Views of site showing beach, path, and outhouse facility



Organization and Intergovernmental Implications

Current Management

In 2019, the majority of staff time associated with the operation of Dan Bosch Park was associated with regular (weekly) site inspections, light maintenance, infrastructure repair and contract management associated with the caretaker.

Additional administrative time involved tenure and permit applications to FrontCounter BC for authority to perform foreshore works and place supplementary sand on Dan Bosch beach for recreational purposes. As well, staff time was dedicated to responding to public concerns regarding parking/road access, unauthorized camping and campfires.

Future Management Needs

A management plan is needed for Dan Bosch Park, and is tentatively included in the 2020 staff workplan. Through this planning process, public participation and input will help define existing pressures and specific future needs. These needs may include: parking improvements, washroom renewal and signage improvements.

Increasing park use may require additional resources to be applied. In the past, an on-site caretaker (concrete RV pad, septic, electrical and water hookups) was responsible for day-to-day park oversight. Future park management plans will need to consider service levels.

Staff are working with the Rotary Club on potential donation of an AED and rescue tube for Dan Bosch Park, as directed by the Board earlier this year

Intergovernmental Implications

If supported, an application to FrontCounter BC for the renewal of the license of occupation for Dan Bosch Park will involve a referral process, whereby all affected stakeholders and interest groups, including First Nations, will be provided opportunity to review and comment.

Financial Implications

The application fee for licence of occupation renewal is \$200, and the fee for the entire 10 year term is \$1.00 (subject to review upon renewal).

Renewal of the licence of occupation entails continued investment from SCRD to operate Dan Bosch Park. In addition to staff time, operating costs include approximately \$9,000 for seasonal caretaker services, and approximately \$2,000 for materials and equipment including annual beach sand addition.

Timeline for next steps or estimated completion date

If the SCRD Board directs staff to renew the licence, the application will be prepared and submitted by January 2020.

Communications Strategy

Staff have advised shíshálh Nation of the opportunity to renew this licence and committed to discussion through the referral process and to engagement during a future management planning process.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

Crown Licence of Occupation No. 241525 is up for renewal. Dan Bosch Park has broad community appeal and is highly used by residents of and visitors to the Sunshine Coast. Staff recommend that an application be submitted to renew the licence.

Reviewed by:			
Manager	X – K. Robinson	Finance	
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Superintendent	X – K. Clarkson

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning & Community Development Committee – November 14, 2019

AUTHOR: Ian Hall, General Manager, Planning and Community Development

SUBJECT: SECHELT AQUATIC CENTRE - POOL SHUTDOWN TIMING UPDATE

RECOMMENDATIONS

THAT the report titled **Sechelt Aquatic Centre - Pool Shutdown Timing Update** be received.

AND THAT the current annual maintenance shutdown schedule for **Sechelt Aquatic Centre (June)** be maintained.

BACKGROUND

At the May 23, 2019 Regular Board meeting, it was resolved:

157/19 Recommendation No. 2 *Chinook Swim Club Facility Rental Requests*

The Planning and Community Development Committee recommended that the report titled Chinook Swim Club Facility Rental Requests be received;

AND THAT staff coordinate with the Chinook Swim Club using the current Pool Lane Policy to schedule whole-pool special events and to schedule additional lane access;

AND THAT Community Recreation Facilities Fees & Charges Bylaw 599 be amended to establish a youth pool lane/pool rental rate;

AND FURTHER THAT a 2020 Budget Proposal be prepared to support engineering and staffing required to reschedule the annual maintenance shutdown of the Sechelt Aquatic Centre from June to May.

Staff have worked with the Chinook Club to facilitate new rental/schedule opportunities. Amendments to Community Recreation Facilities Fees and Charges Bylaw 599 have been completed. The Chinook Club held its first whole-pool event in September and reported a positive benefit was achieved for youth athletes.

This report provides an update on the engineering/staffing related to changing the timing of annual maintenance shutdown and recommends next steps.

DISCUSSION

Following the Board directive in May 2019, staff have done further exploration of a change to shutdown dates from June to May, including seeking preliminary engineering advice.

Impact to Pool Users, including Chinook Club

In June, Chinook Swim Club wrote to staff asking that the Sechelt Aquatic Facility's closure remain the same as it is currently starting sometime in the middle-to-end of May. Correspondence received indicates that any earlier shutdown would not be a benefit to the Club, and, from the Club's perspective, more members of the community would benefit from the status quo versus moving one month earlier.

Preliminary Engineering Advice

Staff contacted pool design engineers about scoping a project/report on hydrostatic pressure and risk to the pool basin(s). Feedback received indicates that a comprehensive 12-month geotechnical study would be required (estimated at \$25,000+), with results analyzed by structural and mechanical engineers. However, such a study could not account for annual variations (or long term trends) in weather/climate and water table, and so would not be able to provide detailed point-in-time information about risks associated with pool draining.

Options and Analysis

Considering the input received from Chinook Club, and the relatively high cost and lack of effectiveness of engineering study results, staff do not recommend proceeding with this work.

Work done on this file highlights the risks associated with draining of pools. Staff will give further consideration to development of policy or procedure that provides a corporate guidelines on when pools are drained, and may bring forward recommendations to a future Committee.

Organizational and Intergovernmental Implications

Staff will maintain the current schedule for pool maintenance shutdowns.

Financial Implications

None. No budget proposal will be developed.

Communications Strategy

Staff will confirm to Chinook Club that no undesired maintenance schedule change is being contemplated.

STRATEGIC PLAN AND RELATED POLICIES

Careful consideration of risks to facilities aligns with SCRD's priorities around **Infrastructure Management**. Considering climate trends in our facility management supports **Climate Resilience**. Working with stakeholders to optimize services supports **Regional Collaboration and Partnership**.

CONCLUSION

Since May 2019 staff have completed Board-directed changes to support youth aquatics groups. Further exploration of changing the annual maintenance shutdown at Sechelt Aquatic Centre from June to May has revealed that this change would not benefit the Chinook Club and poses structural risks to the facility that would be difficult to assess, even following an engineering study. Staff do not recommend a change to the shutdown schedule at the current time, and no budget proposal for this work will be developed.

Reviewed by:			
Manager	X - K. Robinson	CFO/Finance	X - T. Perreault
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Risk Management	X - V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Ian Hall, General Manager, Planning and Community Development

SUBJECT: **POTENTIAL PARTNERSHIP WITH THE DEAD BOAT DISPOSAL SOCIETY**

RECOMMENDATION(S)

THAT the report titled Potential Partnership with the Dead Boat Disposal Society be received.

BACKGROUND

At the July 11, 2019 Planning and Community Development Committee meeting, John Roe from the Dead Boat Disposal Society (DBDS), addressed the Committee to request collaboration with the Sunshine Coast Regional District (SCRD) to inventory and remove derelict boats on the Sunshine Coast through the Transport Canada Abandoned Boat Program.

On July 25, 2019, the SCR D Board adopted the following recommendation:

204/19 **Recommendation No. 1** *The Dead Boat Disposal Society delegation*

THAT staff provide a report to a Q3 or early Q4 Committee regarding a potential program delivery and funding model for working in partnership with the Dead Boat Disposal Society in 2020.

As described by Mr. Roe, the process used by DBDS is to first survey a region for abandoned and derelict boats and then seek funding, on a prioritized basis, for recovery, removal and disposal of boats.

The purpose of this report is to provide the Committee with information about potential partnership options for consideration of the next steps.

DISCUSSION

Options and Analysis

Discussion of SCR D's Role with Respect to Abandoned Boats

All levels of government share concerns about abandoned boats. The social, ecological and economic impacts of derelict boats and marine debris affects all aspects of communities, including local government services. Marine pollution is generally considered a federal matter, with business/sales regulation (including of vessels) a provincial matter. Around BC, some local governments have taken a role in creating inventories or cleaning up (directly or through

partnerships) abandoned boats. Others have taken direct action, in lieu of senior government acting, to address vessel removal needs.

The SCRD does not have a service that deals with marine pollution or beach clean ups, *per se*.

The SCRD does not have legal authority to remove vessels.

Grant-in-aid support was provided to a community group in Pender Harbour in 2019 to support a community-led initiative to remove several abandoned boats.

The SCRD's Good Samaritan program can assist with tipping fees for waste disposal resulting from clean up certain types of nuisance/illegal dumping, however, the program has limited annual funding.

Regional Districts do not hold a legislated responsibility for addressing marine pollution caused by abandoned boats.

Inter-jurisdictional Analysis

Staff reached out to Association of Vancouver Island and Coast Communities (AVICC) communities to understand approaches applied elsewhere and also about beach clean ups in order to assess possibilities related to beached vessels. Responses received are included in Attachment A.

Respondents who had worked with DBDS spoke very favourably about the experience.

The roles being taken by local governments vary. A supporting/linking/communication and awareness role appears common.

Options - Partnership Area 1: Inventory of Vessels of Concern

Based on SCRD services, staff have identified two possibilities for the survey/inventory part of the DBDS partnership opportunity:

- A. If on-shore/near-shore abandoned vessels are considered a regional planning concern, it may be appropriate to conduct a crowd-sourced regional study of the program through the [500] Regional Planning service. Coordinating / partnering actions such as those undertaken by qathet Regional District could be accomplished with a moderate amount of staff time and using existing SCRD communication channels (bulletin, website, etc.).

As an additional consideration, if such partnership would create a resource demand on DBDS, they could be invited to apply for grant-in-aid funding to support a timebound project. A budget proposal for (modest) incremental temporary resources may be required, depending on the intended scope of work and the number / type of other initiatives assigned to the Planning and Development Division.

- B. A more active approach to inventorying could be supported by an environmental / marine community group applying for one-time grant-in-aid funding (perhaps matched with Canada Summer Jobs funding) to have a person(s) conduct a geographically-focused survey. The likely requirement for a boat and associated safety considerations

would require a partnering group to have existing resources for such an approach to be successful.

Either approach would need careful consideration of privacy and information custody.

Options - Partnership Area 2: Removal of Vessels of Concern

Based on the successful Pender Harbour precedent, supporting community associations with grant-in-aid could be an option to support the 25% match requirement for Transport Canada Abandoned Boat Program.

It is possible that inventory results could point to particular areas of concern where there could be a fit for other grant programs (e.g. an economic development or tourism benefit, or a specific environmental benefit) to which a community group could apply.

Organizational and Intergovernmental Implications

As noted above, incremental / temporary resources would be required to support partnership activities related to inventory. The scope of work and other demands (and resources) available to the Planning and Development Division will determine whether a budget proposal would be required to support a potential 2020 partnership with DBDS. Committee feedback would guide staff in developing a more detailed partnership plan and, if necessary, a budget proposal.

Cooperation, coordination and exchange of information between member municipalities and the SCRD would greatly benefit the accuracy and completeness of an inventory. Potential future removals would also likely require cooperation and/or coordination.

Lessons from other local governments, especially qathet Regional District and District of Sechelt can be applied.

Financial Implications

Depending on the partnership opportunity and any method used to address abandoned vessels, further financial implications would need to be considered.

Other factors to consider are the current Rural Grant-in-Aid policy funding limitation of up to \$5,000 as well as the current Regional Solid Waste-Good Samaritan program funding of approximately \$6,000 per year.

Timeline for next steps or estimated completion date

Feedback received from the Committee would provide more information at Round 1 Budget.

Communications Strategy

Staff will continue the dialogue with the DBDS and seek the Society's input on next steps, aligned with Board direction.

STRATEGIC PLAN AND RELATED POLICIES

The identification and/or removal of derelict and abandoned vessels aligns with the Strategic Priority of **Infrastructure Management** (ensure that natural assets serve our residents now and in the future), will rely on **Regional Collaboration and Partnership** and can provide information helpful to **Advocacy**.

CONCLUSION

Staff have considered the invitation to partnership from the DBDS as well as SCRD services that may assist in efforts to identify and remove derelict vessels. Although within the domain of senior government, there are options available for the SCRD to assist with inventory efforts. As the SCRD does not have legal authority for vessel removal, such projects would best be undertaken by another party.

Partnership may require incremental resources from the SCRD. Pending Board direction, staff are prepared to develop preferred option(s) including a potential budget proposal to be included at Round 1 Budget.

Reviewed by:			
Manager		Finance	X – T. Perreault
GM	X – I. Hall	Legislative	X – S. Reid
I/CAO	X – M. Brown	Risk Management	X - V. Cropp

ATTACHMENT A

Interjurisdictional Comparison – Select BC Communities

Based on response to email questionnaire, September/October 2019

Community	Experience/role in beach clean-ups	Experience/role with inventory of derelict or abandoned vessels	Experience/role in derelict or abandoned vessel removal/disposal
qathet Regional District	<p>In 2017 the qathet Regional District (qRD) Board approved a Coastal Cleanup Initiative that allocated \$7,500 of funding per year over the next five years into the Solid Waste Management budget for coastline cleanup efforts in all Electoral Areas including an additional \$2,500 per year over the next five years allocated into the Lasqueti Island Solid Waste Management budget for local coastline cleanups.</p> <p>In 2019 the qRD supported 6 large shoreline clean ups, partnering with local volunteer groups and Ocean Legacy to remove beach debris and recycle beach Styrofoam, rope and hard plastics. The qRD Coastal Cleanup Initiative does not include the removal of abandoned boats.</p> <p>In addition, Let's Talk Trash (LTT) allocated \$2,870 towards the administration of the shoreline cleanups in their budget.</p>	<p>No.</p> <p>We hold no physical inventory and we have not directly engaged in any physical identifying and/or number counting. We have left that to the Dead Boat Society to account for and map out. Our partnership has been assisting with promoting Dead Boat Disposal Society's message to our community. What we have done is:</p> <ul style="list-style-type: none"> • Provided a dedicated webpage to their services and related "Derelict/Abandoned Boat Reporting Form" under our Solid Waste Management webpage • Created an ad in Powell River Living regarding their services, and how to report derelict and abandoned boats that ran in August 2019 Our Waste Education Team, Let's Talk Trash, has also provided communication assistance through radio advertisements • We have redirected the public to the Dead Boat Society when they call or visit with inquiries. 	No.
Village of Alert Bay	Public Works Department has acted as the lead and cleaned up various items off the beach, including docks, garbage and boats.	There was an Inventory done in 2017 by the Village which identified 18 Vessels of Concern – the condition of each was reviewed, priority levels were assigned to each and the owners were contacted.	In February of 2018 the Village worked with the Coast Guard to remove 2 derelict boats. It was a grant program through the Canadian Coast Guard, Environmental Response.

Community	Experience/role in beach clean-ups	Experience/role with inventory of derelict or abandoned vessels	Experience/role in derelict or abandoned vessel removal/disposal
District of Sechelt	Partnered with the Salish Sea Nearshore Habitat Recovery Project to help with the removal of debris from the Porpoise Bay beach in 2018. Public works crew spent 5 days sorting garbage and recyclables, then trucking them to the landfill and recycling depot. We also covered the tipping fees.	Yes, received funding from Transport Canada's Abandoned Boats program to do an inventory of derelict and abandoned vessels in Sechelt. The inventory was completed by District of Sechelt staff and has been submitted to Transport Canada.	Yes, each year our Public Works department removes 20-25 small water craft such as canoes, kayaks and row boats. This year Public Works contracted a private company with special trailer to remove a 40' vessel from Porpoise Bay. The vessel is currently being stored until it can be disposed of.
CRD	<p>Provides funding to local groups for beach clean-up projects through the Community Clean Up fund (through Environmental Resource Management (solid waste) group). More info on this program, including the program guidelines and application form can be found at: https://www.crd.bc.ca/service/community-clean-up-assistance-program/community-clean-up-assistance-program</p> <p>In addition, board designates funds specific for marine debris related to boats.</p>	<p>Has received TC ABP funding for education and boat assessments. Developed a "See One Say Something" public campaign requesting the public to notify us about the location of potential abandoned boats.</p> <p>Additionally, through an inter-municipal working group, worked with municipal staff and the Dead Boats Disposal Society to inventory and assess potential abandoned boats. From inventory, we either applied for assessment funding through TC or provided support to DBDS and they applied for funding to TC.</p> <p>CRD does not have a service that can deal with Abandoned boats, however, due to the Hartland Landfill disposal requirements and the significance of this problem within regional bays and harbours, funds from the ERM Sustainability Reserve Fund (from Hartland Landfill Tipping Fees) were designated to assist with abandoned boat removal and disposal.</p>	<p>The CRD Board designated funds from the Environmental Resource Management Sustainability Reserve to provide the 25% funding required through Transport Canada's Abandoned Boat Program grants for the assessment and removal of abandoned boats in the Capital Region. CRD works with local government partners as well as the Dead Boats Society to assess and remove as many abandoned boats as possible through this program.</p> <p>We have created a partnership with the Dead Boats Society and the Salish Sea Industrial Services to remove and dispose of Abandoned Vessels in our region. We created a funding agreement to formalize this relationship.</p>
District of Sooke	Partners with community groups by supplying gloves, bags and disposal. Larger marine debris is collected by staff as it appears, stored in our works yard, and then taken to recycling/landfill as appropriate.	Works with the Dead Boats Society via the CRD's abandoned boat program to identify derelict vessels, post notices, apply for federal funding and then, finally, remove and dispose of these vessels.	Yes, through CRD and in partnership with DBDS.
District of Port Hardy	No	No, other than in harbour (in partnership with Coast Guard and Small Craft Harbours)	Removal from Harbour only.

Community	Experience/role in beach clean-ups	Experience/role with inventory of derelict or abandoned vessels	Experience/role in derelict or abandoned vessel removal/disposal
District of North Cowichan	Supports local organizations during their beach cleanup projects: providing permission and arranging to dispose of debris collected.	Not to date, being actively looked at.	Not to date, being actively looked at.
District of Ucluelet	Received a grant and led a significant amount of work to respond to the Japan tsunami clean-up in 2012/2013. Have provided some support to Surfrider in their work to do beach clean ups.	No	No

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – November 14, 2019

AUTHOR: Matt Treit, Manager of Protective Services

SUBJECT: COMMUNITY RESILIENCY INVESTMENT PROGRAM GRANT APPLICATION

RECOMMENDATION(S)

THAT the report titled Community Resiliency Investment Program Grant Application be received;

AND THAT the grant application to the Union of British Columbia Municipalities' Community Resiliency Investment Program for development of a Community Wildfire Protection Plan for the Sunshine Coast Regional District be approved;

AND FURTHER THAT this recommendation be forwarded to the Regular Board meeting of November 14, 2019.

BACKGROUND

The Community Resiliency Investment (CRI) program is a new provincial program intended to reduce the risk and impact of wildfire to communities in BC by funding a variety of activities including the development of a Community Wildfire Protection Plan. Prior to applying for funding, applicants must consult with a BC Wildfire Service Wildfire Prevention Officer.

The following resolution was adopted by the Board at its regular meeting on October 11, 2018:

293/18 **Recommendation No. 11** *Grants Status Update*

THAT the report titled Grants Status Update be received;

AND THAT staff consult with a BC Wildfire Service Wildfire Prevention Officer regarding a potential application to the Community Resiliency Investment program for the development of a Community Wildfire Protection Plan.

Staff reviewed the program details with a BC Wildfire Service Wildfire Prevention Officer who indicated support for an application to develop a Community Wildfire Protection Plan (CWPP). A current and acceptable CWPP is required in order to qualify for funding for other eligible activities under this program.

A Board resolution indicating support for the application is required before the application will be considered.

DISCUSSION

In October 2018, UBCM announced the CRI program. SCRD staff and Emergency Management Teams met to discuss applying for funding to support the creation of a CWPP and, following direction from the Board, consulted with a Wildfire Prevention Officer who confirmed support for an application.

An SCRD application to CRI was prepared seeking funding to develop a CWPP specifically for parks within the Sunshine Coast Regional District. This application was eventually withdrawn as a result of being advised that a CWPP which focused specifically on parks within the SCRD was too narrow in scope.

Financial Implications

The cost to develop a CWPP for the Sunshine Coast Regional District is estimated to be approximately \$110,000 based on an assessment by a contractor who produces these types of plans. The grant being applied for will cover 100% of the cost of the project.

Development of CWPP is not currently included in the Financial Plan. Should the application for funding be successful, a Financial Plan amendment will be required.

Timeline for next steps or estimated completion date

The application deadline for the CRI to UBCM was October 15, 2019. The application has already been submitted; however, it is permissible for Board Resolutions to be submitted subsequent to the submission of the application. Results of the decision regarding the application are expected by March 2020. As the plan will encompass the entire SCRD, resolutions of support are also required from the District of Sechelt, the Sechelt Indian Band, and the Town of Gibsons.

STRATEGIC PLAN AND RELATED POLICIES

This grant application is consistent with the SCRD Financial Sustainability Plan, seeking alternative funding for SCRD projects.

CONCLUSION

The completion of a plan which includes an assessment and identification of FireSmart and/or fuel management priorities is necessary in order to be eligible for future grants which will fund activities to reduce the risk of wildfire throughout the SCRD.

An application to CRI was prepared and submitted through the Sunshine Coast Emergency Program. A resolution of support from the Board is required for the application to be considered.

Reviewed by:			
Manager	X – M. Treit	CFO/Finance	X - T. Perreault X - B. Wing
GM	X – I. Hall	Legislative	
I/CAO	X – M. Brown	Other	

**SUNSHINE COAST REGIONAL DISTRICT
POLICING AND PUBLIC SAFETY COMMITTEE**

October 17, 2019

MINUTES OF THE SUNSHINE COAST POLICING AND PUBLIC SAFETY COMMITTEE
MEETING HELD IN THE BOARDROOM OF THE SUNSHINE COAST REGIONAL DISTRICT
1975 FIELD ROAD, SECHELT, BC.

PRESENT:

(Voting Members)

Director, Electoral Area F, Chair
Director, Electoral Area A
Director, Electoral Area B
Director, Electoral Area E
Mayor, District of Sechelt
Councillor, District of Sechelt
Mayor, Town of Gibsons
School District No.46

Mark Hiltz
Leonard Lee
Lori Pratt
Donna McMahon
Darnelda Siegers
Tom Lamb
Bill Beamish
Sue Girard

ALSO PRESENT:

(Non-Voting)

RCMP Staff Sergeant
RCMP Sergeant
Gibsons Fire Chief
Fire Prevention Officer
SCRD Interim Chief Administrative Officer
Executive Assistant / Recorder
Media

Poppy Hallam
Michael Hacker
Rob Michael
Rick Ruth
Mark Brown
Tracey Hincks
2

CALL TO ORDER

1:30 p.m.

AGENDA

The agenda was adopted as presented.

INTRODUCTIONS**PRESENTATIONS AND DELEGATIONS*****Cannabis and Fire Safety***

Rob Michael, Gibsons Fire Chief and Rick Ruth, Fire Prevention Officer, attended the meeting to discuss cannabis and fire safety.

On October 17, 2018, the Cannabis Act, SC 2018, c.16 came into force in Canada which creates a strict legal framework for controlling the production, distribution, sale and possession of cannabis across Canada. Cannabis edible products and concentrates will be legal for sale soon. The licensing requirements for the production, distribution and consumption of cannabis is a multi-jurisdictional licensing scheme involving federal, provincial and municipal governments. Issues arise regarding zoning restrictions, bylaw requirements, privacy issues and use of cannabis in the workplace where employers and employees have responsibilities under the Occupational Health and Safety Act to ensure a non-hazardous environment.

The Chair thanked Chief Michael and Mr. Ruth for their attendance.

Recommendation No. 1 *Cannabis Regulatory Gaps*

The Sunshine Coast Policing and Public Safety Committee recommended that staff identify the gaps in legislation, bylaws, permits and licensing pertaining to the regulatory jurisdiction of the Regional District.

MINUTES

Recommendation No. 2 *Minutes*

The Sunshine Coast Policing and Public Safety Committee recommended that the minutes of July 18, 2019 be received.

REPORTS

Recommendation No. 3 *Monthly Crime Statistics – July 2019*

The Sunshine Coast Policing and Public Safety Committee recommended that the RCMP Monthly Crime Statistics for July 2019 be received.

Recommendation No. 4 *Monthly Crime Statistics – August 2019*

The Sunshine Coast Policing and Public Safety Committee recommended that the RCMP Monthly Crime Statistics for August 2019 be received.

Recommendation No. 5 *Monthly Crime Statistics – September 2019*

The Sunshine Coast Policing and Public Safety Committee recommended that the RCMP Monthly Crime Statistics for September 2019 be received.

RCMP Update

Staff Sergeant Hallam gave an update on local policing.

- *RCMP statistics show a spike in break and enters that continued through September with 12 reported to police in the Sechelt area, bringing the total since July 1 to 28. There were 14 break-ins in the other jurisdictions on the Coast over the same time period.*
- *Crystal Meth use has increased on the Sunshine Coast.*
- *The Youth Liaison Officer has been visiting the Elementary Schools as part of the RCMP outreach.*

Cameras Capturing Images from Public Spaces – Video Surveillance

Collection and use of personal information through video surveillance must be done in accordance with BC privacy laws, otherwise may lead to other costly liabilities.

Before implementing video surveillance, two things must happen to mitigate privacy concerns with Freedom of Information and Protection of Privacy Act (FOIPPA).

1. *A privacy impact assessment must be conducted*

2. *A policy must be drafted (in progress)*

The SCRD's guiding document for the development of a Corporate Surveillance Policy is the Office of Information and Privacy Commissioner's guidance document on overt video surveillance.

ADJOURNMENT 2:30 p.m.

Committee Chair

**SUNSHINE COAST REGIONAL DISTRICT
AGRICULTURAL ADVISORY COMMITTEE**

October 22, 2019

MINUTES FROM THE AGRICULTURAL ADVISORY COMMITTEE MEETING HELD IN THE CEDAR ROOM AT THE SUNSHINE COAST REGIONAL DISTRICT OFFICES, 1975 FIELD ROAD, SECHELT, BC

PRESENT:	Members	Gretchen Bozak Erin Dutton Faye Kiewitz Jon Bell
ALSO PRESENT:	General Manager, Planning & Development Manager, Planning & Development Planner Recording Secretary Public	Ian Hall (part) Dave Pady Julie Clark Genevieve Dixon 4
REGRETS:	Electoral Area F Director Chair Members	Mark Hiltz (Non-Voting Board Liaison) Paul Nash Gerald Rainville David Morgan Raquel Kolof Barbara Seed

CALL TO ORDER 3:32 p.m.

Faye Kiewitz assumed the role of Chair for the meeting.

AGENDA The agenda was amended and adopted as follows:

Notice of Motion Regarding Glyphosate Ban

- Don't support these generic broad bans.

MINUTES

Recommendation No. 1 *AAC Meeting Minutes of July 23, 2019*

The Agricultural Advisory Committee recommended that the meeting minutes of July 23, 2019 be received and adopted as presented.

INTRODUCTION

- General Manager thanked the committee for their continued support and membership re-appointments.
- Introduction of the new Manager, Planning and Development.

- Vice chair would assume the role of chair until an election can commence.
- Round table introductions where made.

REPORTS

Consultation Process for BC Timber Sales Licence A91376 (Reed Road)

Planner gave a brief background introduction to the committee.

Key points of committee discussion included the following points:

- 104 years ago there was a fire on DL1313.
- What damage will harvesting the current crop (trees) do to potential farm land on the property?
- Once logged could the provincial land be sold / purchased?
- The property consists of 118 acres.
- Is there a time lapse for when you can clear-cut beside a lot that was previously logged?
- What is the AG rating on the property?
- Tree removal from steep terrain would affect many of the downstream properties including farms?
- Would the water table be affected for ground drinking water?
- Any obligation from BCTS to mitigate runoffs?
- Flooding is known to occur in the area already. Removing the trees from this District Lot would increase the runoff and increase the impacts on downstream residents and businesses.
- Department of fisheries should be involved due to fish barring streams below.
- Is BCTS looking to include an agricultural person in public consultation process?
- Any bee keepers or mushroom growers in the area?
- Was the Elphinstone Community Association consulted?
- More information on underground water networks/water tables?
- Pre-meeting documentation for specific stake holder group.
- Are we meeting provincial requirements to hold a public consultation?

Recommendation No. 2 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Agricultural Advisory Committee recommends staff provide more information on soils, land quality and water systems if certain information exists to come back to the committee.

Recommendation No. 3 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Agricultural Advisory Committee recommends if the BCTS consultation plan goes forward that the Farmers Institute be invited.

Recommendation No. 4 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Agricultural Advisory Committee recommends a public consultation process goes forward facilitated by the SCRD and funded by BCTS.

Recommendation No. 5 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Agricultural Advisory Committee recommends the approach of direct invitations be sent to all downstream residences in Electoral Area E, as well as specific stakeholders.

NEXT MEETING Tuesday, November 26, 2019

ADJOURNMENT 4:52 p.m.

SUNSHINE COAST REGIONAL DISTRICT**AREA A - EGMONT/PENDER HARBOUR
ADVISORY PLANNING COMMISSION****October 30, 2019**

RECOMMENDATIONS FROM THE AREA 'A' ADVISORY PLANNING COMMISSION MEETING
HELD AT THE PENDER HARBOUR SECONDARY SCHOOL, 13639 SUNSHINE COAST
HIGHWAY, MADEIRA PARK, BC

PRESENT:	Chair	Peter Robson
	Members	Jane McOuat Janet Dickin Yovhan Burega Dennis Burnham Gordon Politeski Alex Thomson
 ALSO PRESENT:	Electoral Area A Director	Leonard Lee (Non-Voting Board Liaison)
	Recording Secretary	Kelly Kammerle
	Public	3
 REGRETS:		Gordon Littlejohn Alan Skelley Tom Silvey Catherine McEachern Sean McAllistar

CALL TO ORDER 7:00 p.m.

AGENDA The agenda was adopted as presented.

DELEGATIONS

Seamus Pope and Herb Mitchell for Subdivision Application SD000056 (Strait Land Surveying Inc. for Sakinaw Heritage)

Doug Cappadocia for Development Variance Application DVP00050 (Cappadocia)

MINUTESArea A Minutes

The Egmont/Pender Harbour (Area A) APC Minutes of September 25, 2019 were approved as circulated.

The following minutes were received for information:

- Halfmoon Bay (Area B) APC Minutes of September 24, 2019
- Roberts Creek (Area D) APC Minutes of September 16, 2019
- Elphinstone (Area E) APC Minutes of September 25, 2019
- West Howe Sound (Area F) APC Minutes of September 24, 2019
- Planning and Community Development Committee Minutes of September 12, 2019

REPORTS

Subdivision Application SD000056 (Strait Land Surveying Inc. for Sakinaw Heritage)

Recommendation No. 1 *Subdivision Application SD000056 (Strait Land Surveying Inc. for Sakinaw Heritage)*

The APC recommends the approval of Subdivision Application SD000056 (Strait Land Surveying Inc. for Sakinaw Heritage) provided all SCRD recommendations are met.

Development Variance Permit Application DVP00050 (Cappadocia)

The Area A Advisory Planning Commission would like clarification when applying for a variance does the variance apply to the property or the applicant?

Recommendation No. 2 *Development Variance Permit Application DVP00050 (Cappadocia)*

The APC recommends the approval of Development Variance Permit Application DVP00050 (Cappadocia) provided all SCRD requirements are met.

DIRECTOR'S REPORT

The Director's report was received.

NEXT MEETING November 27, 2019

ADJOURNMENT 8:45 p.m.

SUNSHINE COAST REGIONAL DISTRICT

AREA B - HALFMOON BAY
ADVISORY PLANNING COMMISSION

October 22, 2019

RECOMMENDATIONS FROM THE AREA B ADVISORY PLANNING COMMISSION MEETING
HELD IN THE COOPERS GREEN COMMUNITY HALL AT COOPERS GREEN PARK, 5500
FISHERMAN ROAD, HALFMOON BAY, BC

PRESENT:	Chair	Frank Belfry
	Members	Elise Rudland Eleanor Lenz Barbara Bolding (Recorder) Catherine Onzik Nicole Huska Alda Grames Bruce Thorpe Lori Pratt (Non-Voting Board Liaison)
	Electoral Area B Director	
REGRETS	Members	Jim Noon Marina Stjepovic
ABSENT	Member	Guy Tremblay

CALL TO ORDER 7:00 p.m.

Meeting minutes taken by an APC member.

AGENDA The agenda was amended and adopted as follows:

New Business

- Invasive species (follow-up from September meeting)
- Status of recent dock applications

MINUTESArea B Minutes

The Area B APC minutes of September 24, 2019 were adopted as presented.

Minutes

The following minutes were received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of September 25, 2019
- Roberts Creek (Area D) APC Minutes of September 16, 2019

- Elphinstone (Area E) APC Minutes of September 25, 2019
- West Howe Sound (Area F) APC Minutes of September 24, 2019
- Planning and Community Development Committee Minutes of September 12, 2019

REPORTS

BCTS 2019 – 2023 Operating Plan

The following comments were made:

- One cut block in Area B.
- The APC supports Option 2 regarding protection of the Suncoaster Trail with the following comments:
 - Adjacent to the Suncoaster Trail, cut blocks can open the view and are okay provided replanting is carried out.
 - Cut blocks allow invasive species to expand their range.
 - SCRD has no formal plan to address invasive species on SCRD properties.
 - The “Interjurisdictional Invasive Plant Management Strategy” will come to the committee next month.
 - A member raised the possibility of various local trail user groups working together to communicate locations of invasive species to the appropriate agencies when they encounter the invaders along the trails.
 - On crown land, members of the public are encouraged to use a Ministry of Forest app to report the GPS coordinates any invasive species they encounter.
- BCTS plan has already been received and passed by the SCRD Board.

NEW BUSINESS

- The APC discussed two recent dock application in Area B that were advertised in the Coast Reporter, but did not come to the APC. Electoral Area Director will ensure that the applications come to the APC for comment and will ask the Board to request an extension to the comments deadline in order to receive any APC comments regarding these applications.
- The invasive species report was received by the SCRD Board and will come forward to the November APC meeting.

DIRECTORS REPORT

The Director’s report was received.

NEXT MEETING November 26, 2019

ADJOURNMENT 8:35 p.m.

SUNSHINE COAST REGIONAL DISTRICT

AREA E – ELPHINSTONE
ADVISORY PLANNING COMMISSION

October 23, 2019

RECOMMENDATIONS FROM THE AREA E ADVISORY PLANNING COMMISSION MEETING
HELD AT FRANK WEST HALL, 1224 CHASTER ROAD, ELPHINSTONE, BC

PRESENT:	Chair	Mary Degan
	Members	Rod Moorcroft Dougald Macdonald Nara Brenchley Anne Cochran Rick Horsley Mike Doyle
ALSO PRESENT:	Electoral Area E Director	Donna McMahon (Non-Voting Board Liaison)
	Recording Secretary	Diane Corbett
	Public	6
REGRETS:	Members	Lynda Chamberlin Bob Morris

CALL TO ORDER 7:02 p.m.

AGENDA The agenda was adopted as presented.

MINUTESElphinstone (Area E) APC Minutes

The Elphinstone (Area E) APC minutes of September 25, 2019 were approved as circulated.

Minutes

Minutes received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of September 25, 2019
- Halfmoon Bay (Area B) APC Minutes of September 24, 2019
- Roberts Creek (Area D) APC Minutes of September 16, 2019
- West Howe Sound (Area F) APC Minutes of September 24, 2019
- Planning and Community Development Committee Minutes of September 12, 2019

REPORTS

Consultation Process for BC Timber Sales Licence A91376 (Reed Road)

The APC discussed the staff report regarding Consultation Process for BC Timber Sales Licence A91376 (Reed Road). Members of the public were invited to share their views.

Elphinstone Advisory Planning Commission previously submitted to the SCRD two to three pages of comments on BCTS and District Lot 1313.

The following concerns and points were noted:

1) Need for a regional plan:

- There is need for a land and resource management plan or regional growth strategy for the Sunshine Coast. We are one of the few areas in the province that does not have a land and resource management plan.
- Present a plan to BCTS for what we want on these lands and get the support of the community. Show a few ideas of what we want to do with this land that we want to have protected. Make a case that it would be of significant economic benefit to protect some of this remarkable forest. Whistler forests are immensely successful.
 - Example: installation of a trail from Langdale to Wilson Creek that passes in some places at higher levels than the power line, through old growth forest. Have one main trunk trail that is accessible and easy to use for all ages.
 - Get more support from the community, such as the Chamber of Commerce. Have a display in the mall about what could be done up there; people would get interested.
 - Have billboards out to increase public awareness that only 3% of the forest is protected.
 - Do a traffic count under the power line at B&K Road to Crow Road; measure volume and type of use. Traffic figures would be valuable to show (mountain bikers, hikers, mushroom pickers). The Regional District should say this is like a provincial park; do not cut within this area.

2) Need for increased forest protection to maintain and protect biodiversity and to protect community interests:

- Forest protection in this region is 3%; average in BC is 15%; Lower Mainland protection is 14%; Canada recommends 17% protected forest to maintain biodiversity. This area is impoverished in terms of balance in the use of the forest with 3% protection; help is needed at the minister level so we do not end up being destroyed piece by piece.
- The interstitial zone between communities is being targeted because of beetle kill and fires in BC. It is vital for our community to protect DL 1313. For the lower Sunshine Coast we should have a band of protection along Mount Elphinstone. We are treated like a tree farm on the coast. Trees grow fast; it is not cold in winter; it is wet.
- Issues pertaining to logging in DL 1313: proximity to residences; potential impacts on well water and water supply; it is a beautiful area.
- We depend on tourism. Once the forest is logged, it is gone for good. The view will be impacted, with clearcuts all over Elphinstone. If people want a community that is attractive, do not clearcut.

- Foresters are now talking about the absolute importance of carbon capture. That is where our future is. We are putting on growth rates of about one inch a year. We have to keep those trees standing.
- DL1312 was logged about six or seven years ago; the stumps were an average of 98 years of age, and were one meter in width. It is incredible country for growing trees. It should be a research operation. We should have another twelve to fifteen thousand hectares of that quality of forest from which to capture carbon. Carbon has a price – probably \$20-\$25 per cubic meter – growing every year.
- Need a forest planner at the municipal level; get a hand on management of our forest resource, including mushrooms, carbon capture, and water.

3) Need for SCR D Directors to communicate with decision makers:

- SCR D directors should express SCR D interests to the Minister (FLNRORD); should also talk to the Sechelt Nation, now moving into a management plan. Should approach the Squamish Nation.
- Recommend that the Regional District request a meeting with and work with Nicholas Simons to get a meeting with a combination of the Minister of FLNRORD and Minister of the Environment, and include representatives from other groups. Look at DL 1313 as an exemplar of what needs to be done for interstitial areas of the coast.
- Get the ear of somebody with connections, who can put a bug in somebody's ear. To get things done, it is who you know.

4) Challenges in working with BC Timber Sales:

- Concern that, after the input of local volunteer time and information gathering during a consultation, BCTS will do whatever it wants and is under no obligation to accept what is proposed by the community, as has happened previously.
- We are up against the coffers of the province looking at billions of dollars. They want this tree farm area as their breadbasket, and are ignoring that we need this also.
- BCTS is an extension of the forest industry; they are fighting for their jobs.
- Under the direction of BCTS, the logging rights to blocks of our remarkable and rare low elevation forests have been issued to non local contractors and the logs are shipped, no value added, to distant markets. We, our children and grandchildren, all lose!

Director McMahon indicated her availability to meet with interested residents for further discussion on District Lot 1313 and the broader issue of a buffer zone.

Recommendation No. 1 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Elphinstone (Area E) APC recommended that Elphinstone Community Association be included as a stakeholder group in the consultation process.

Recommendation No. 2 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Elphinstone (Area E) APC recommended that we are pleased to hear about the Minister's commitment to meaningful communication; we look forward to engaging and are gratified to hear that no decision will be made until community voice is heard.

Recommendation No. 3 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Elphinstone (Area E) APC recommended that we strongly feel that what is needed from a planning perspective is a Regional Growth Strategy or Land and Resource Management Plan, a process that involves all of the stakeholders on the Sunshine Coast, including the Sechelt and Squamish First Nations.

Recommendation No. 4 *Consultation Process for BC Timber Sales Licence A91376 (Reed Road)*

The Elphinstone (Area E) APC recommended support for getting started in the workbook provided for engagement.

DIRECTOR'S REPORT

The Director's report was received.

NEXT MEETING November 27, 2019

ADJOURNMENT 8:33 p.m.