MANAGEMENT PLAN FOR THE AMENDMENT OF THE BLOCK A, D.L. 30-G AQUATIC LEASE IN SAANICH INLET, BRITISH COLUMBIA

MALAHAT FIRST NATION CROWN LANDS FILE No. 0336205



July 2021 (Updated November 2021)



MANAGEMENT PLAN FOR THE RENEWAL OF THE DISTRICT LOT 30-G AQUATIC LEASE IN SAANICH INLET, BRITISH COLUMBIA

MALAHAT FIRST NATION

LANDS FILE NO. 0336205

Prepared for:

Tristan Gale
Executive Director
Malahat First Nation
110 Thunder Road
Mill Bay, BC
V0R 2P4

Prepared by:

Ben Matthews, BSc &
Serena Johnston, BSc, BIT

Reviewed by:

Marissa Miles, RPBio

Date:

July 12th, 2021 (Updated November 22nd, 2021)

PACIFICUS BIOLOGICAL SERVICES LTD.
P.O. Box 2760
Port Hardy, B.C.
V0N 2P0



Management Plan Submitted by: Marissa Miles, RPBio	Management Plan Received by:
Signature:	Signature:
Mcrissa Milos G MPLIEO MCrissa Milos G MPLIEO MCRISSA G MILOS G R.P. BIO 3608 CAB	
Date: November 22 nd , 2021	Date:

TABLE OF CONTENTS

1.0	BACE	GROUND & PROJECT DESCRIPTION	6
1.1	Pro	ject Overview & Description	<i>€</i>
1.2	Inv	estigative Work	7
1.3	Firs	st Nation Consultation	8
2.0	LOCA	ATION	8
2.1	Des	scription	8
2.2	Loc	ation Justification	9
2.3	Sea	sonal Expectations of Use	10
3.0	INFR.	ASTRUCTURE AND IMPROVEMENTS	12
3.1	Fac	ilities and Infrastructure	12
3.2	Acc	ess Plans	18
3.3	Uti	lity Requirements and Sources	18
3.4	Wa	ter Supply	18
3.5	Wa	ste Collection Treatment and Disposal	18
3.6	Fire	Smart BC	18
4.0	ENVI	RONMENTAL CONSIDERATIONS	19
4.1	Lan	d Impacts	19
4.	.1.1	Vegetation Removal	19
4.	.1.2	Soil Disturbance	19
4.	.1.3	Riparian Encroachment	19
4.	.1.4	Pesticides and Herbicides	19
4.	.1.5	Visual Impacts	19
4.	.1.6	Archeological Sites	19
4.	.1.7	Construction Methods and Materials	20
4.2	Atn	nospheric Impacts	20
4.	.2.1	Sounds, Odor, Gas or Fuel Emissions	20
4.3	Wa	ter and Land Covered by Water Impacts	21
4.	.3.1	Drainage Effects	21
4.	.3.2	Public Access	21
4	.3.3	Flood Potential	21
1.1	Eigl	and Wildlife Hebitet Impacts	21

4.4.1	Disturbance to Wildlife and Wildlife Habitat	21
5.0 SOCI	IO-COMMUNITY	22
5.1 Lai	nd Use	22
5.1.1	Land Management Plans and Regional Growth Strategies	22
	cio-Community Conditions	
	Adjacent Users or Communities	
	Existing Services	

1.0 BACKGROUND & PROJECT DESCRIPTION

1.1 Project Overview & Description

Saanich Inlet is located on south Vancouver Island, British Columbia. As a multi-use waterway, it hosts a variety of recreational, commercial, and industrial activities. Currently, the Malahat First Nation (MFN) holds an existing aquatic Crown foreshore lease for Block A D.L. 30-G (Lands File No. 0336205) on the western shore of Saanich Inlet (Figure 1; 48°35'7.94"N 123°31'17.77"W). This aquatic foreshore lease has been in place since 1989. To support continued industrial use of the area, MFN has proposed to renew the tenure of Block A D.L. 30-G for an additional 30-year term. However, to ensure sufficient space for current and future uses of the site, an expansion to the current boundary has been proposed. Proposed uses for the tenure are as follows:

- Load and unload barges of contaminated soils, creosote piles, cement powder, scrap metal, aggregate, and fuels;
- Store hydrocarbons in the existing upland tanks;
- Maintain piles, dolphins, and shoreline armouring;
- Conduct barge and vessel maintenance;
- Moor vessels associated with the upland activities.

As part of the tenure application process, MFN is required to submit an updated management plan for the Block A D.L. 30-G water lot, as requested by the Province of British Columbia. Pacificus Biological Services Ltd. (Pacificus) was retained as an agent to assist with the preparation and submission of the Management Plan for the Block A D.L. 30-G aquatic lease amendment.

1.2 Investigative Work

Investigative work has been extensively conducted in the vicinity of the water lot since the 1990's. This includes investigative work such as site characterization and remediation, environmental liability site assessments, review of hydrogeological settings, environmental studies, and transportation and infrastructure studies. Details of the most recent biological assessment¹ and remediation plan² are provided in Table 1.

Table 1. Recent investigative work conducted within or adjacent to Block A D.L. 30-G.

Activity	Brief Description of Activity	Status (complete, incomplete, ongoing)	Comments/ Milestones
Biological Assessment for the marine access road (Seacor 2005)	Assessment of foreshore habitat and development of a habitat compensation plan.	• Complete	Recommendations for habitat enhancement were developed.
• Remediation Plan (Seacor 2007)	 Identification of areas of potential environmental concern, confirmatory sampling of soil pre-and post-remediation. Proposed monitoring program for surface and ground water relating to soil storage facility. 	• Complete	Certificate of Compliance was received.

¹ Seacor Environmental Inc. December 1, 2005. Biological Assessment and Compensation Plan, South Landfill Access Road, Bamberton Lands, Mill Bay, BC.

² Seacor Environmental Inc. May 16, 2007. Remediation Plan, District Lot 73 and Block B of Lot 30-G, Bamberton Lands, Mill Bay, BC.

1.3 First Nation Consultation

Redacted

2.0 LOCATION

2.1 Description

District Lot 30-G is located within BC's South Coast Region, along the western shore of Saanich Inlet, Vancouver Island. The site is approximately 7.4 km south of Mill Bay, BC. The water lot can be accessed off of Highway 1 and/or from Saanich Inlet via float place / helicopter / vessel.

³ BC Contacts for First Nation Consultation Areas. https://maps.gov.bc.ca/ess/hm/cadb/ Accessed July 1, 2021.

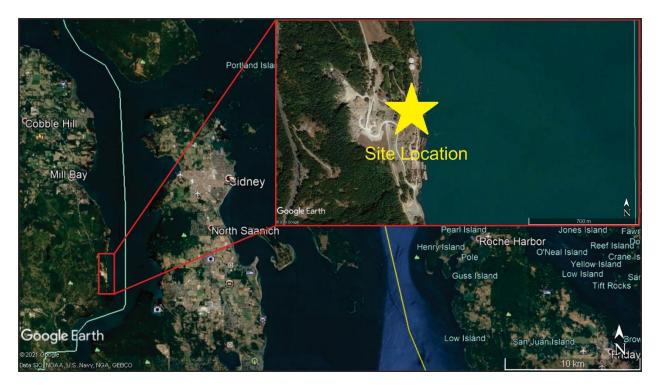


Figure 1: General location of the foreshore lease at D.L. 30-G, located along the western shore of Saanich Inlet, on Vancouver Island. The site is approximately 7.4km south of Mill Bay, BC.

2.2 Location Justification

The MFN currently holds a tenure for the subject water lot and is seeking to expand the existing tenure to encompass the entire area required for the continuation of operations. The site is currently used for industrial activities due to its proximity to a multi-use waterway and economic feasibility. The Block A D.L. 30-G water lot is an active site, with several sub-leased parcels of land for a variety of industrial uses (see Table 2). As Block A D.L. 30-G is currently active, existing industrial infrastructure within the tenure is present. This site is highly developed with multiple industrial uses and activities being conducted on the premises.

Table 2. List of Tenants of Block A DL 30-G and industrial uses of sub-lease areas.

Tenant	Industrial Use
Lehigh Hanson Materials Ltd.	Store and distribute marine construction materials and purposes reasonably incidental to such use
Heavy Metal Marine Ltd.	Store and distribute construction materials and aggregate
Ruskin Construction Ltd.	Store and distribute marine construction materials and purposes reasonably incidental to such use

2.3 Seasonal Expectations of Use

Usage of the industrial infrastructure within Block A D.L. 30-G will continue to occur year-round. Operations include the maintenance of existing infrastructure, loading and unloading of barge materials, storage of hydrocarbons in existing upland tanks, barge and vessel maintenance, and vessel moorage (Table 3). Improvements to the existing facilities are likely to occur in the future but depend on several factors, including economic benefits and environmental impacts. Over the short-term, however, the only improvement proposed is the repair of four aging pilings. Variations in usage of the facility will be dictated based on works scheduled.

Table 3. Description of activity and expected schedule of all phases of construction and operation of the Block A D. L. 30-G Facility.

Project Phase (Construction / Operations)	Brief Description of Activity / Works	Schedule
Maintenance of existing infrastructure	Routine maintenance of existing infrastructure, including, but not limited to, piles, dolphins, barge ramps, and shoreline armoring.	Maintenance: Annually, as required. All works will be conducted within appropriate federal and provincial fish windows, pending approvals.
Loading and unloading barges of materials	Transportation and movement of contaminated soils, creosote piles, cement powder, scrap metal, aggregate, and hydrocarbon fuels (Note: storage of these materials will occur at appropriate upland locations, not within Block A D.L. 30-G).	Year-round
Hydrocarbon storage	• Fueling and hydrocarbon storage occurs in tanks in the upland portion of the tenure area.	Year-round
Barge and vessel maintenance	Repairs and maintenance of industrial watercraft will be conducted as required.	Year-round
Moorage of industrial vessels	Industrial vessels associated with upland activities at the site will be moored in the marine area of the lease	Year-round

Repair of pilings	•	Repairs to four steel	Works will aim to be
		pilings situated west of	minimally invasive and will
		the metal grated ramp.	involve reinforcing the
			existing pilings, if possible.
			Driving of new pilings
			directly adjacent to the
			existing pilings may be
			required if repair is not
			possible. If pile driving is
			required, Best Management
			Practices will be followed and
			all appropriate DFO
			notifications/approvals will be
			completed/acquired prior to
			the start of works.

3.0 INFRASTRUCTURE AND IMPROVEMENTS

3.1 Facilities and Infrastructure

The upland facility contains an access road along the shoreline. Two large tanks are located on the upland property at the northern end of the tenure. These tanks are currently empty, and the proponent intends to use these to store water in the future. Three silos are located near the northern end of the upland area and used to store concrete powder. Improvements within the water lot currently consist of:

- A wooden pier to provide access to a barge,
- Three floating docks with metal and/or wooden piling supports,
- A concrete platform with metal supports accessed via a grated metal ramp,
- Ten metal pilings along the shoreline,
- A barge access ramp supported by metal pilings,
- A grated metal ramp, and
- A gravel boat launch.

In addition to the above improvements, portions of the shoreline along the entire water lot have been reinforced with rip rap and/or concrete. Approximately 19,156m² of the lot has been

infilled over time, between the lot boundary and the highwater mark. A list of improvements to the water lot and approximate locations of each are provided in Table 4 and Figure 2 below. The location of infill and the proposed boundary expansion is outlined in Figure 3.

As the facility is currently active, routine maintenance is required for the continued industrial usage of Block A D.L. 30-G. Over the short-term, the repair of four pilings is proposed. Tenants (sub-leasers) within the water lot have proposed to conduct the following activities within the lease tenure:

- Load and unload barges of contaminated soils, creosote piles, cement powder, scrap metal, aggregate, and fuels;
- Store hydrocarbons in the existing upland tanks;
- Maintain piles, dolphins, and shoreline armouring;
- Conduct barge and vessel maintenance;
- Moor vessels associated with the upland activities.

Table 4. Summary of improvements and approximate location of infrastructure at Block A D.L. 30-G.

Site Plan Reference #	Improvement	Status	Location	Approximate Size	Comments
1	Two Large tanks	Existing	Upland (48.59035°, 123.52191°)	33m wide	Located on upland area; currently unused.
2	Three Large silos	Existing	Upland (48.58894°, 123.52169°)	13m in diameter	Located on upland area; contains concrete powder.
3	Barge containing cement powder and wooden pier	Existing	Blk A D.L 30-G (48.58911°, 123.52122°)	Pier: 80m x 7m	Three access points from the shore connected to a wooden walkway and pilings. Wooden pier extends approximately 25m from the highwater mark.
4	Access Road	Existing	Upland (48.59088°, 123.52182°)	980m long	Gravel and paved.
5	Five steel pilings and floating dock	Existing	Blk A D.L 30-G (48.58721°, 123.52129°)	Dock: 40m x 5m Barge: 54m x 18m	Dock constructed of wood and five steel pilings.
6	Floating dock	Existing	Blk A D.L 30-G (48.58640°, 123.52121)	39m x 5m	Floating wood dock Eight wood pilings

7	Concrete platform with metal supports	Existing	Blk A D.L 30-G (48.58604°, 123.52102°)	65m x 55m	Large concrete float.
8	Metal grated ramp	Existing	Blk A D.L 30-G (48.58486°, 123.52143°)	6m x 23m	Ramp with two metal dolphin pilings.
9	Row of steel pilings	Existing	Blk A D.L 30-G (48.58444°, 123.52129°)	Pilings span ~72m along shoreline	Eight steel pilings parallel to shore.
10	Barge ramp	Existing	Blk A D.L 30-G (48.58377°, 123.52115°)	5m x 5m	Ramp with steel piling support and two metal pilings parallel to shore.
11	Dock/ ramp with four metal piling supports	Existing	Blk A D.L 30-G (48.58328°, 123.52144°)	Dock: 13m x 5m Gangway: 3mx 25m	Metal gangway and ramp, with floating wooden dock
12	Gravel boat launch	Existing	Blk A D.L 30-G (48.58308°, 123.52158°)	8m wide	Boat launch toward western extent of lease area.
14	Shoreline infill	Existing	Blk A D.L 30-G (48.581601°, 123.521083°)	Infill footprint: 19,156m ²	Approximately 19,156m ² of infill between the Block A lot and the highwater mark.

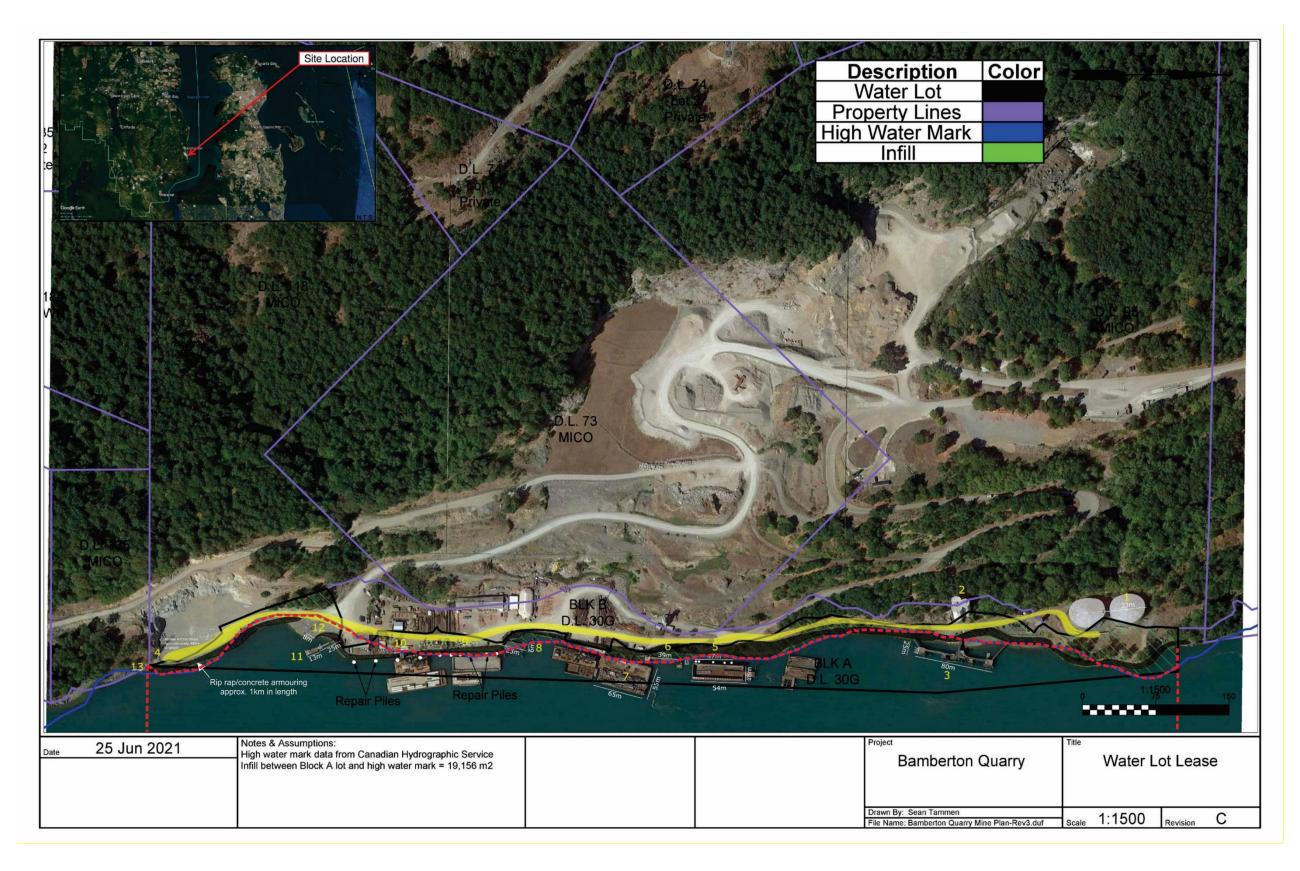


Figure 2: Site characteristics and facility diagram for Block A D.L. 30-G. Improvements within and adjacent to the lot are numbered as per Table 4.

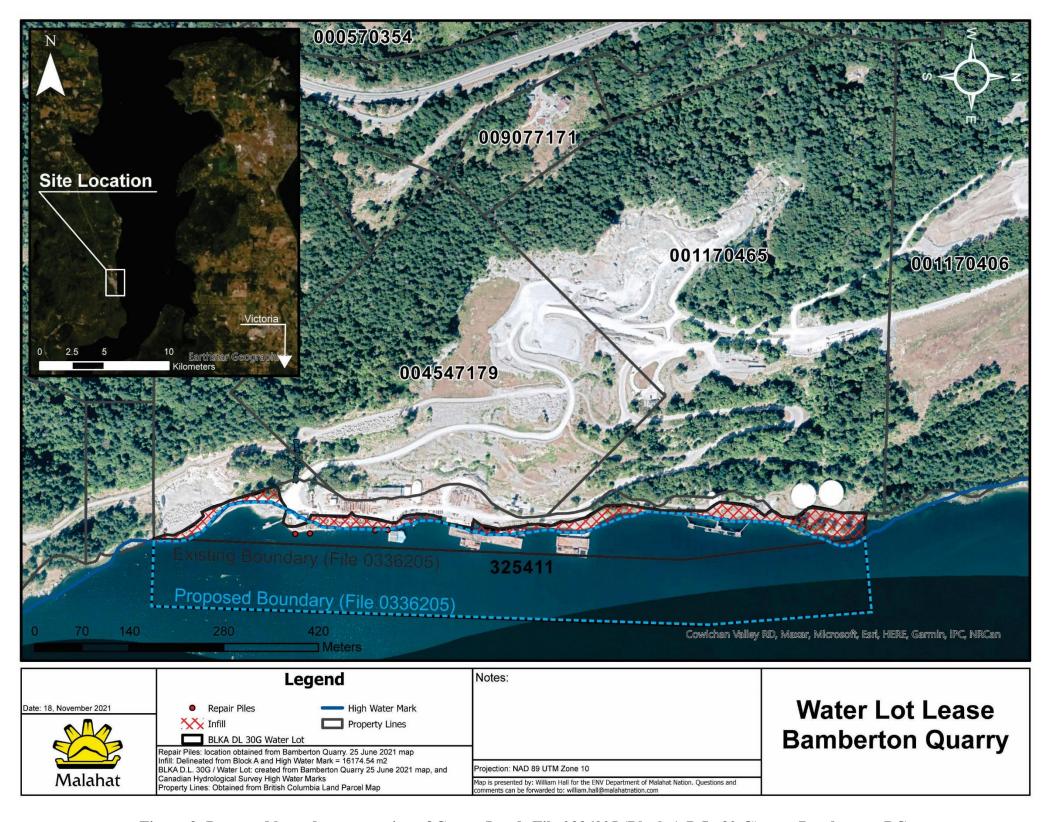


Figure 3: Proposed boundary expansion of Crown Lands File 0336205 (Block A D.L. 30-G) near Bamberton, BC.

3.2 Access Plans

The D.L. 30-G Water Lot in Saanich Inlet can be accessed via Highway 1 (Trans-Canada Highway) from Victoria, or by boat, helicopter, and/or floatplane.

3.3 Utility Requirements and Sources

No utilities will be required during the continued operation of the site.

3.4 Water Supply

No water supply is required within the Block A D.L. 30-G water lot. Water supply to the existing upland facilities is currently in place. All water on site comes from Oliphant Lake and is untreated and non-potable. Water is supplied via a water intake and gravity-fed pipeline that supplies water to the Bamberton Lands (pers. comm. Tristan Gale to Marissa Miles June 30, 2021)

3.5 Waste Collection Treatment and Disposal

Waste generated during operation of the water lot lease will be removed and disposed of at appropriate upland waste disposal facilities. Upland sewage disposal methods are currently in place and include use of a septic system and/or collection and pump out of holding tanks or portable toilets. No septic is required within Block A D.L. 30-G, and no sewer outfalls are associated with the water lot (pers. comm. Tristan Gale to Marissa Miles, June 30, 2021).

3.6 FireSmart BC

All industrial activities that occur within the lease area will be conducted in accordance with recommendations made by FireSmart BC to prevent and reduce risk of wildfire occurrence from the continued operation of this facility.

4.0 ENVIRONMENTAL CONSIDERATIONS

4.1 Land Impacts

4.1.1 Vegetation Removal

As Block A D.L. 30-G is an active industrial area, no vegetation removal is anticipated to occur from the continued operation of the site and/or expansion of the tenure area.

4.1.2 Soil Disturbance

Soil disturbance is not anticipated to occur as a result of the continued operation of the Block A D.L. 30-G water lot and/or expansion of the tenure area.

4.1.3 Riparian Encroachment

The Block A D.L. 30-G water lot is located within the marine environment and, as a previously disturbed site, continued use of the tenure will not require the removal of any functional marine riparian vegetation. No riparian encroachment is anticipated to occur from continued use of the site and/or expansion of the tenure area.

4.1.4 Pesticides and Herbicides

There will be no use of pesticides or herbicides during operation and/or maintenance of the site.

4.1.5 Visual Impacts

The Block A D.L. 30-G lease has been used for industrial purposes for over 30 years. The existing visual impacts associated with industrial activities at this site are not anticipated to change as a result of continued operation of the lease area and/or expansion of the tenure area.

4.1.6 Archeological Sites

Redacted

4.1.7 **Construction Methods and Materials**

Construction required within the marine environment and the application area will be limited, as the facility is currently operational and only minor improvements (i.e., piling repair) are proposed at this time. Appropriate mitigation measures will be in effect during all construction activities and operation of the site to prevent death of fish or harmful alteration, disruption or destruction of fish habitat. Repairs to the pilings indicated on the site plan (see Figure 2 for locations) will involve reinforcing the existing pilings. If repair is not possible, driving of new pilings directly adjacent to the existing pilings. If pile driving is required, relevant best management practices will be followed and appropriate DFO notifications/approvals will be completed/acquired prior to the start of works. A qualified environmental professional (QEP) will be engaged, as necessary, to provide advice regarding works in and around water.

4.2 Atmospheric Impacts

4.2.1 Sounds, Odor, Gas or Fuel Emissions

Expansion and continued operation of the site is not anticipated to cause any additional sound, odor, gas, and/or fuel emissions that will disturb wildlife in the area.

⁴ Bamberton Binder, Environmental Studies, Section, 6.5.2 – 6.5.4.

⁵ Malahat Investment Corporation. (2015) Bamberton Quarry Archaeological Monitoring and Chance Encounter Protocol (DRAFT).

4.3 Water and Land Covered by Water Impacts

4.3.1 Drainage Effects

The expansion and continued use of the site is not anticipated to result in changes to land drainage.

4.3.2 Public Access

The expansion and continued use of the site is not anticipated to result in changes to public access.

4.3.3 Flood Potential

The expansion and continued use of the site is not anticipated to increase flooding potential.

4.4 Fish and Wildlife Habitat Impacts

4.4.1 Disturbance to Wildlife and Wildlife Habitat

A biological assessment in the vicinity of the site was last conducted in 2005 by Seacor Environmental Inc.⁶ The biological assessment and compensation plan was conducted prior to the construction of an access road for remedial excavation of contaminated areas of the Bamberton Lands. As the general use of the site is not changing, continued use of the site is considered low risk and is not anticipated to cause any additional impacts to fish or fish habitat.

Although the construction and operation phases of the project will occur around the marine environment, the proposed landing and dock sites are not expected to result in any additional impacts to wildlife or wildlife habitat. As proposed works are not anticipated to change, 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, continued operation of the site is not likely to threaten or endanger any species at risk in the area.

⁶ Seacor Environmental Inc. December 1, 2005. Biological Assessment and Compensation Plan, South Landfill Access Road, Bamberton Lands, Mill Bay, BC.

5.0 SOCIO-COMMUNITY

5.1 Land Use

Several areas within the Block A D.L. 30-G lease are subleased to multiple industrial tenants. Tenants that currently hold a sublease and are operating within the Block A D.L. 30-G lease area include Ruskin Construction Ltd., Heavy Metal Marine Ltd., Lehigh Hanson Materials Ltd., and Hall Construction Corporation. As such, the areas within and adjacent to the Block A D.L 30-G tenure is highly developed and no significant changes to land use are expected to occur over the short-term. Similarly, with respect to the marine areas adjacent to the site, use is primarily for industrial purposes; expansion of the tenure area is proposed to encompass all areas currently being used and is therefore not anticipated to result in any significant impacts to fish or fish habitat. The closest community setting to D.L. 30-G is Mill Bay, located approximately 7.4 km north of the site.

5.1.1 Land Management Plans and Regional Growth Strategies

Saanich Inlet is subject to the management guidelines and objectives outlined in the *Vancouver Island Land Use Plan*⁷. Specifically, Saanich Inlet is located within *Special Management Zone 16* (*SMZ-16*)⁸. The listed *Primary Values and Location* of SMZ-16 include marine water quality, waterfowl habitat areas, estuarine habitat, and recreational values and opportunities. Additionally, the west coast of Saanich Inlet lies within the *Biodiversity Emphasis Option – Shawnigan Zone*⁹. The biodiversity emphasis within the Shawnigan Landscape Unit is classified as "Lower" As the site historically contains industrial activity and no changes in activities is proposed, it is not anticipated that the continued use of this site will conflict with the management guidelines and objectives outlined in the *Vancouver Island Land Use Plan*.

-

⁷ Vancouver Island Summary Land Use Plan. 2000. Government of British Columbia.

⁸ Table 5. Management Regimes for Individual SMZ Units in Vancouver Island Land Use Plan. 2000. Government of British Columbia

⁹iMap BC. 2018. Province of British Columbia.

https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc - accessed May 31st. 2021.

¹⁰ Table A. Vancouver Island Summary Land Use Plan Appendices. 2000. Province of British Columbia.

As a result of historic industrial activity in D.L. 30-G, environmental covenants have been created between the lease holders of the lot and the federal government. A compensation plan was developed by SEACOR Environmental Inc. (SEACOR) on behalf of Three Point Properties Ltd. (TPP) in 2006 to help compensate for anticipated habitat loss caused by the construction of the south landfill marine access road in D.L. 30-G¹¹ (DFO Reference File: 05 HPAC PA3 000 000175). Additionally, SEACOR has previously prepared a remediation plan on behalf of TPP for D.L. 30-G to help offset and mitigate against deleterious environmental effects caused by industrial activity within the lot¹².

5.2 Socio-Community Conditions

5.2.1 Adjacent Users or Communities

The Block A D.L. 30-G water lot is located within a First Nation Treaty Area (Lands File No. 1414778) belonging to the Malahat First Nation. As MFN is the tenure holder for the Block A D.L. 30-G lease, expansion of the tenure and continued operations at the site is not anticipated to restrict public access, or the ability of adjacent landowners or tenure holders to access their properties or tenures.

5.2.2 Existing Services

No predicted increases to the demand on fire protection or other health facilities and emergency services are anticipated to result from the continued use of the site.

¹¹ SEACOR Environmental Inc. 2005. Biological Assessment and Compensation Plan for South Landfill Access Road. Bamberton Lands, Mill Bay, BC. Three Point Properties Ltd. Vancouver, BC.

¹² SEACOR Environmental Inc. Remediation Plan, District Lot 73 & Block B of Lot 30-G. Bamberton Lands, Mill Bay, BC. Three Point Properties Ltd. Vancouver, BC.