

Conservation Options

- 1. Methodology
- 2. Priority Conservation Area (PCA) categories
- 3. Current and future human use within PCAs

To identify priority conservation areas we conducted a two-part analysis: 1.) identify areas of high ecological value, and 2.) overlay these areas with existing or future human activities to identify conservation needs and opportunities. This document outlines the methods associated with part 2.). The Priority Areas document outlines the methods associated with part 1.).

1. *Overlay areas of high ecological value with current and future human activities to identify conservation needs and opportunities*

Part 1 of our analysis identified areas of high marine ecological value in Atli'ka7tsem/Howe Sound. Many of these areas overlap with existing human activity and are therefore not suitable for formal conservation protection (e.g. marine protected areas). However, these areas present excellent opportunities for employing best management and stewardship practices. Accordingly, CORI and DSF staff conducted an assessment of current and future human activities to categorize the high ecological areas into the following groups:

Category Blue

Criteria:

- i. High ecological value
- ii. Insufficient current protection
- iii. Minimal current and future human activity, use and development

Outcomes:

- i. Promote marine protection (e.g. no-take marine reserve, marine protected area designation, other effective area-based conservation measurements)

Category Green

Criteria:

- i. High ecological value
- ii. Existing or potential future medium to high human use, activity and development

Outcomes:

- i. Promote management and stewardship best practices and ecosystem restoration

Given these criteria points, assigning a category depended not only on the ecological attributes present, but also the existing and potential future development proposed for the area. Accordingly, some regions (e.g. McNab creek), which are rich in estuarine values, were assigned Category Green given that there is an industrial tenure in the estuary. Lions Bay, however, was designated as a Category Blue given that the glass sponge reefs and rockfish habitat in this area do not conflict with existing tenures.

Our intent with this analysis is to ensure that all identified areas of high ecological value have the opportunity to catalyze conservation action. Category blue areas offer excellent opportunity for formal protection of ecological values and attributes that may be threatened by present and potential future human activities. Category green areas where humans live and work are excellent opportunities to employ best practices to reverse harm, restore ecosystem health, and protect socio-ecological systems.

The following map book outlines the areas of high ecological value and their associated categories (blue or green). We look forward to receiving input on our above analysis. Please note that we are open to continual revision of our threats assessment and welcome your feedback.

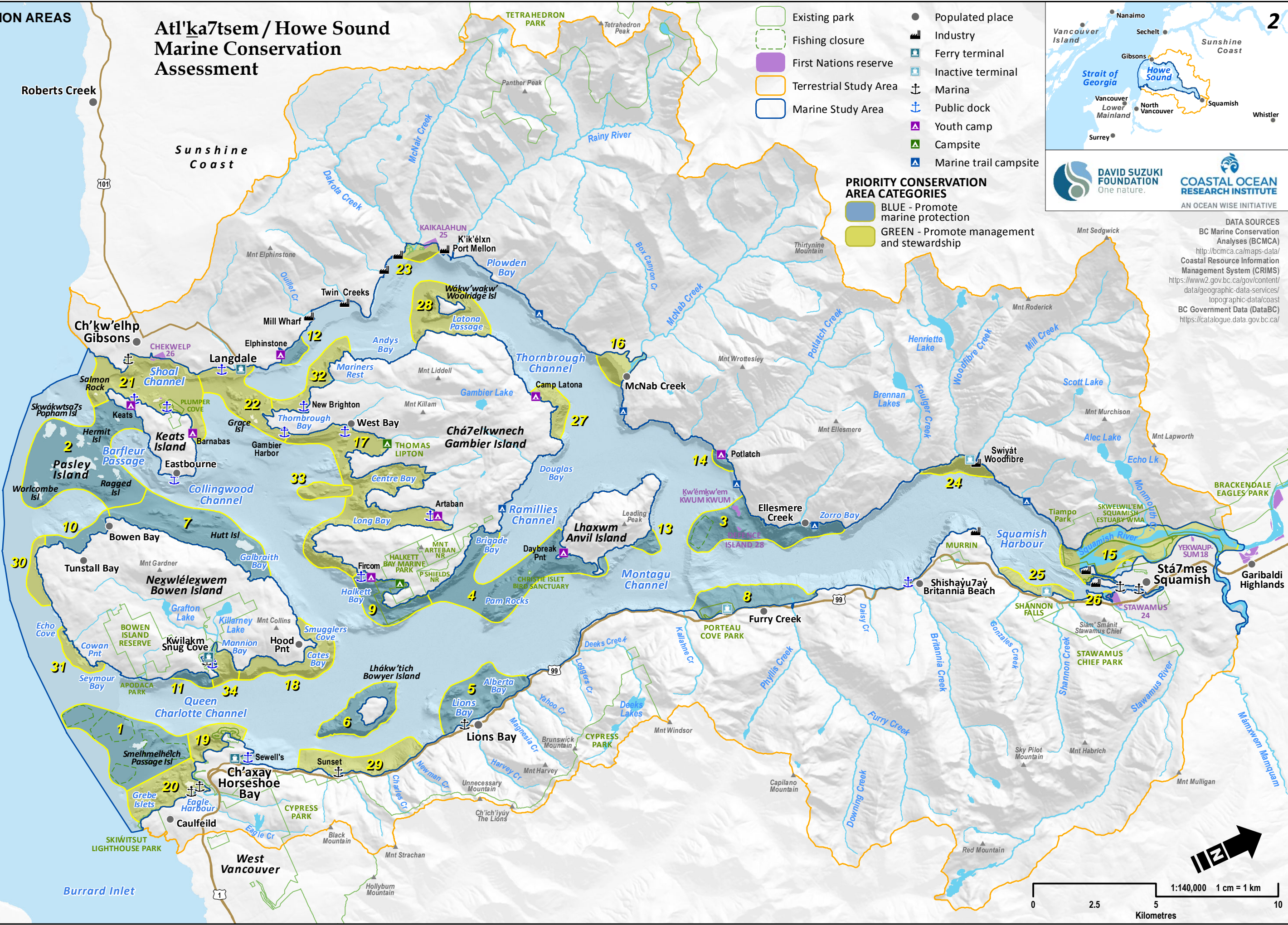
PRIORITY CONSERVATION AREAS
BLUE CATEGORY

- 1 Passage Island
- 2 Pasley Islands
- 3 Defence Islands
- 4 Pam Rocks
- 5 Lions Bay
- 6 Bowyer Island
- 7 Hutt Island
- 8 Porteau Cove
- 9 Halkett Bay
- 10 Tunstall Bay
- 11 Dorman Point
- 12 Williamsons Landing
- 13 Anvil Island East
- 14 Potlatch Creek

GREEN CATEGORY

- 15 Squamish Estuary
- 16 McNab Estuary
- 17 South Gambier Bays
- 18 Hood Point
- 19 Whytecliff Park
- 20 Grebe Islets
- 21 Shoal Channel
- 22 Langdale
- 23 Dakota Estuary
- 24 Woodfibre Creek
- 25 Darrell Bay
- 26 Stawamus Estuary
- 27 Ekins Point
- 28 Woolridge Island
- 29 Sunset Beach
- 30 Cape Roger Curtis
- 31 Cowan Point
- 32 Mariners Rest
- 33 Carmelo Point
- 34 Mannion Bay

**Atl'ka7tsem / Howe Sound
Marine Conservation
Assessment**



DATA SOURCES
BC Marine Conservation Analyses (BCMCA)
<http://bcmca.ca/maps-data/>
Coastal Resource Information Management System (CRIMS)
<https://www2.gov.bc.ca/gov/content/data/geographic-data-services/topographic-data/coast>
BC Government Data (DataBC)
<https://catalogue.data.gov.bc.ca/>

#	PRIORITY CONSERVATION AREAS	DEVELOPMENT													RECREATION				RESIDENTIAL / AGRICULTURAL				
		EAO Footprint	Proposed Cargo Route	Ferry Route	Flood Dyke	Transmission Line	BCMPI	Industry	Private dock	Mineral deposit	Mineral tenure	Vessel density		Crown tenure		Anchorage / Moorage	Marina / Public dock	Private dock	Youth camp	ALR	Private land	Municipality	Water licenses
		% of PCA	Km within PCA				Location			Location	% of PCA	High, % of PCA	Very high, % of PCA	% OF PCA	#	Location				Ha	% of PCA (terrestrial)	% of PCA	#
#	BLUE CATEGORY																						
1	Passage Island		2.4								69	15	0.8	8			15			75	0		
2	Pasley Islands		0.8						1		24	4	0.4	11			30			39	0	2	
3	Defense Islands					0.01					27		3.6	4	3		1	1		24		17	
4	Pam Rocks		1.4						1		32		0.1	3			6	2		95		11	
5	Lions Bay								1		18		0.4	3						46	25	2	
6	Bowyer Island										43		0.3	2			16			79		7	
7	Hutt Island		2.5						1		42	4	0.3	16		1	27			52		56	
8	Porteau Cove						1			1	10			0.4	6	5		1		45		2	
9	Halkett Bay											34		0.2	6	3	1	5	2		59		11
10	Tunstall Bay											6		5.6	28			17			98	94	21
11	Dorman Point											20		12	2			2			64	91	11
12	Williamsons Landing											25		1.4	2	7		4	1	2	93	43	32
13	Anvil Island East																						
14	Potlatch Creek													0.7	1	1		1	1		90		
#	GREEN CATEGORY																						
15	Squamish Estuary				11	1.5		2	10		0.4	9		4.6	13	17				86	1	99	1
16	McNab Estuary	36	1.5			0.9				3	75			8.5	3	6		2			83		5
17	South Gambier Bays									1		27		1.9	59	37	3	138	2	12	95		138
18	Hood Point		0.4									46	9	0.4	12			20			99	70	88
19	Whytecliff Park						1					65	21	59	8						56	63	
20	Grebe Islets											53	33	34	13	2	2				55	47	
21	Shoal Channel											57		4.4	119	10	4	66	2		66	13	63
22	Langdale		1.4	3						1		38	19	1.6	16	1	3	9			85		25
23	Dakota Estuary							2	2	1		17		37	4	18					24		3
24	Woodfibre Creek	54	0.6			0.07		1						79	4	7					45	66	2
25	Darrell Bay										24			14.9	5	8					36	96	
26	Stawamus Estuary						1									3					21	100	1
27	Ekins Point													5.3	13		1	9	1		64		3
28	Woolridge Island		1									51	6	11	4						94		
29	Sunset Beach											25		14	16	1	1				45	18	25
30	Cape Roger Curtis											57		2.2	6			2			99	77	9
31	Cowan Point											24		0.2	5			3			97	96	44
32	Mariners Rest											48	13	9	10	6	1	13			82		20
33	Carmello Point											83											
34	Mannion Bay			1								39	24	42	19	4	2	26			58	94	3

ARL - Agricultural Land Reserve

BC - British Columbia

BCMPI - BC Major Projects Inventory

BC EAO - BC Environmental Assessment Office

Ha - Hectare

- Number

BLUE CATEGORY					
PCA	#	PURPOSE	#	SUBPURPOSE	#
Bowyer Island	3	RESIDENTIAL	3	PRIVATE MOORAGE	3
Defense Islands	4	INDUSTRIAL	2	LOG HANDLING/STORAGE	2
		RESIDENTIAL	1	PRIVATE MOORAGE	1
		UTILITY	1	ELECTRIC POWER LINE	1
Dorman Point	2	UTILITY	2	ELECTRIC POWER LINE	2
Halkett Bay	6	RESIDENTIAL	5	PRIVATE MOORAGE	5
		TRANSPORTATION	1	PUBLIC WHARF	1
Hutt Island	16	RESIDENTIAL	14	PRIVATE MOORAGE	13
				RECREATIONAL RESIDENTIAL	1
		TRANSPORTATION	1	PUBLIC WHARF	1
		UTILITY	1	TELECOMMUNICATION LINE	1
Lions Bay	3	COMMERCIAL	1	MARINA	1
		RESIDENTIAL	1	PRIVATE MOORAGE	1
		TRANSPORTATION	1	RAILWAY	1
Pam Rocks	3	RESIDENTIAL	3	PRIVATE MOORAGE	3
Pasley Islands	11	INSTITUTIONAL	1	PUBLIC WORKS	1
		RESIDENTIAL	6	PRIVATE MOORAGE	6
		UTILITY	4	TELECOMMUNICATION LINE	4
Passage Island	9	COMMERCIAL	1	COMMERCIAL A	1
		RESIDENTIAL	7	PRIVATE MOORAGE	6
		UTILITY	1	ELECTRIC POWER LINE	1
Porteau Cove	6	COMMERCIAL	1	COMMERCIAL B	1
		UTILITY	5	ELECTRIC POWER LINE	1
				MISCELLANEOUS	1
				SEWER/EFFLUENT LINE	3
Potlatch Creek	1	UTILITY	1	ELECTRIC POWER LINE	1
Tunstall Bay	28	COMMERCIAL	2	COMMERCIAL B	2
		COMMUNITY	1	COMMUNITY FACILITY	1
		INSTITUTIONAL	1	MISCELLANEOUS	1
		RESIDENTIAL	19	PRIVATE MOORAGE	17
				THERMAL LOOPS	2
		UTILITY	5	TELECOMMUNICATION LINE	4
				WATER LINE	1
Williamsons Landing	2	RESIDENTIAL	1	PRIVATE MOORAGE	1
		INDUSTRIAL	1	LOG HANDLING/STORAGE	1

GREEN CATEGORY											
PCA	#	PURPOSE	#	SUBPURPOSE	#	PCA	#	PURPOSE	#	SUBPURPOSE	#
Cape Rodger Curtis	6	RESIDENTIAL	4	PRIVATE MOORAGE	4	South Gambier Bays	59	COMMERCIAL	3	MARINA	2
		TRANSPORTATION	1	NAVIGATION AID	1					PRIVATE YACHT CLUB	1
		UTILITY	1	TELECOMMUNICATION LINE	1			INDUSTRIAL	2	LOG HANDLING/STORAGE	2
Cowan Point	5	RESIDENTIAL	3	PRIVATE MOORAGE	3			RESIDENTIAL	51	MISCELLANEOUS	3
		TRANSPORTATION	1	NAVIGATION AID	1					PRIVATE MOORAGE	42
		NAVIGATION AID	1	SEWER/EFFLUENT LINE	1					STRATA MOORAGE	5
Dakota Estuary	4	COMMERCIAL	1	COMMERCIAL A	1					TRANSPORTATION	3
		INDUSTRIAL	1	HEAVY INDUSTRIAL	1			NAVIGATION AID	1		
		INSTITUTIONAL	1	MISCELLANEOUS	1			PUBLIC WHARF	2		
		TRANSPORTATION	1	PUBLIC WHARF	1						
Darrell Bay	5	FIRST NATIONS	1	INTERIM MEASURES	1	Shoal Channel	119	COMMERCIAL	17	COMMERCIAL B	1
		INDUSTRIAL	3	LIGHT INDUSTRIAL	1					MARINA	16
				LOG HANDLING/STORAGE	2			COMMUNITY	1	COMMUNITY FACILITY	1
		UTILITY	1	TELECOMMUNICATION LINE	1			INDUSTRIAL	4	LIGHT INDUSTRIAL	2
Ekins Point	9	COMMERCIAL	7	COMMERCIAL A & B	3			RESIDENTIAL	64	LOG HANDLING/STORAGE	2
				PRIVATE YACHT CLUB	4					PRIVATE MOORAGE	55
		RESIDENTIAL	1	STRATA MOORAGE	1					RURAL RESIDENTIAL	6
		UTILITY	1	SEWER/EFFLUENT LINE	1					STRATA MOORAGE	1
Grebe Islets	5	COMMERCIAL	1	COMMERCIAL A	1					URBAN RESIDENTIAL	2
		RESIDENTIAL	1	URBAN RESIDENTIAL	1			TRANSPORTATION	4	PUBLIC WHARF	4
		UTILITY	3	GAS AND OIL PIPELINE	1					UTILITY	29
				SEWER/EFFLUENT LINE	2			ELECTRIC POWER LINE	3		
Hood Point	12	RESIDENTIAL	11	PRIVATE MOORAGE	11	Squamish Estuary	13	INDUSTRIAL	3	LIGHT INDUSTRIAL	1
		INSTITUTIONAL	1	MISCELLANEOUS	1					LOG HANDLING/STORAGE	2
Langdale	6	TRANSPORTATION		PUBLIC WHARF	2			INSTITUTIONAL	3	MISCELLANEOUS	3
				FERRY TERMINAL	1			TRANSPORTATION	1	ROADWAY	1
		UTILITY	3	ELECTRIC POWER LINE	2			UTILITY	6	ELECTRIC POWER LINE	2
				TELECOMMUNICATION LINE	1	GAS AND OIL PIPELINE	2				
Mariners Rest	10	INDUSTRIAL	2	LOG HANDLING/STORAGE	2	Sunset Beach	16	COMMERCIAL	1	COMMERCIAL A	1
		RESIDENTIAL	5	PRIVATE MOORAGE	5			RESIDENTIAL	14	PRIVATE MOORAGE	14
		TRANSPORTATION	1	PUBLIC WHARF	1			UTILITY	1	SEWER/EFFLUENT LINE	1
		UTILITY	2	ELECTRIC POWER LINE	2	Whytecliff Park	8	COMMERCIAL	1	COMMERCIAL A	1
Mannion Bay	19	COMMERCIAL	2	MARINA	2			RESIDENTIAL	1	URBAN RESIDENTIAL	1
		INSTITUTIONAL	1	MISCELLANEOUS	1			TRANSPORTATION	1	NAVIGATION AID	1
		RESIDENTIAL	12	PRIVATE MOORAGE	11			UTILITY	5	ELECTRIC POWER LINE	3
				THERMAL LOOPS	1					TELECOMMUNICATION LINE	2
		TRANSPORTATION	1	PUBLIC WHARF	1	Woodfibre Creek	4	ENERGY PRODUCTION	1	GAS PROCESSING PLANT	1
		UTILITY	3	ELECTRIC POWER LINE	2			INDUSTRIAL	1	HEAVY INDUSTRIAL	1
SEWER/EFFLUENT LINE	1			MISC. LAND USES	1			CARGO MOORING	1		
McNab Estuary	3	INDUSTRIAL	1	LOG HANDLING/STORAGE	1			UTILITY	1	ELECTRIC POWER LINE	1
		RESIDENTIAL	1	PRIVATE MOORAGE	1						
		UTILITY	1	ELECTRIC POWER LINE	1						