

Ecological Values

1. Methodology
2. Study Area
3. Priority Conservation Areas
4. Marxan analyses
5. Distribution of conservation features

1. Methodology

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 1.).

1. Identify areas of high ecological value

First we collated existing ecological datasets and local and traditional ecological knowledge into a spatial database. We gathered existing datasets from publicly accessible databases (e.g. government and non-profit data), and conducted a series of semi-structured interviews in 2017 to gather local ecological knowledge about the region's marine ecology and areas that need protection or restoration. After mapping these data, we held a workshop in April 2018 to review the data's integrity and accuracy with approximately 50 regional experts and residents. We incorporated the feedback and additional data from the workshop into our database and then conducted a Marxan analysis on the spatial data layers.

A Marxan analysis identifies networks of protected areas based on criteria points associated with data layers that are inputted into the program. Each data layer is assigned a protection target and a penalty factor. Protection targets are determined based on a given layer's ecological value and outline what percentage of the layer's total area is to be protected. For example, eelgrass has a 75% protection target due to its high ecological value in supporting nearshore biodiversity, and because it is relatively scarce in the region compared to rocky shorelines. Penalty targets help account for confidence levels associated with the spatial cover and integrity of each data layer. In our study, low penalty factors are associated with data layers with uneven or focused regional spatial coverage, whereas data layers with more even coverage across the region have high penalty factors. It should be noted that protection targets are a value-based assignment and thus are subject to ongoing revision. All Marxan criteria points were selected by DSF and CORI staff and are displayed on page 2 of this document.

Upon running our Marxan analysis, we identified approximately 43 areas of high ecological value in Atl'ka7tsem/Howe Sound. These areas predominantly occur along shorelines and in shallow (<30 m) waters. This geographic concentration may be due to true higher ecological value along shorelines, or may stem from data biases associated with diveable depths and regions closer to human centres.

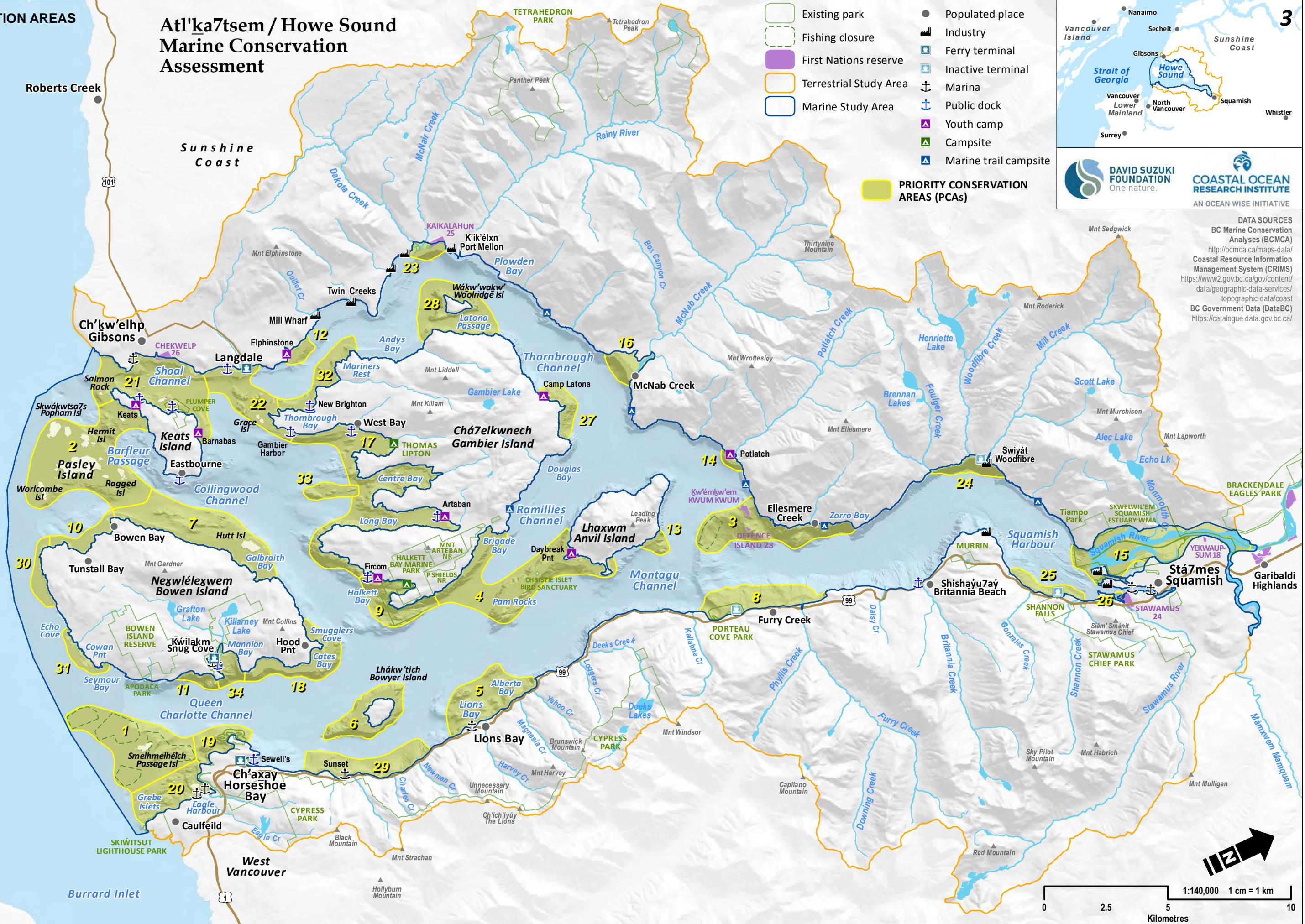
We then conducted a second round of peer-review using questionnaires and map books that we sent electronically to our workshop participants and other local experts. The purpose of this peer-review was to verify the accuracy of the high-ecological-value-area borders, names, and regions and to identify any missing data or knowledge gaps. We received feedback from 19 individuals. The following map book outlines the areas of high ecological value that were identified through the above process. Please note that some of these areas occur in highly populated or heavily used sites and are thus not viable for formal protection measures; however, these are still areas where conservation and stewardship practices can and should be applied. This confluence of high ecological value and human activity is reviewed in the [Threats Assessment](#) documentation.

Atl'ka7tsem / Howe Sound Marine Conservation Assessment

- PRIORITY CONSERVATION AREAS**

 - 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 Williamson's Landing
 - 13 Anvil Island East
 - 14 Potlatch Creek

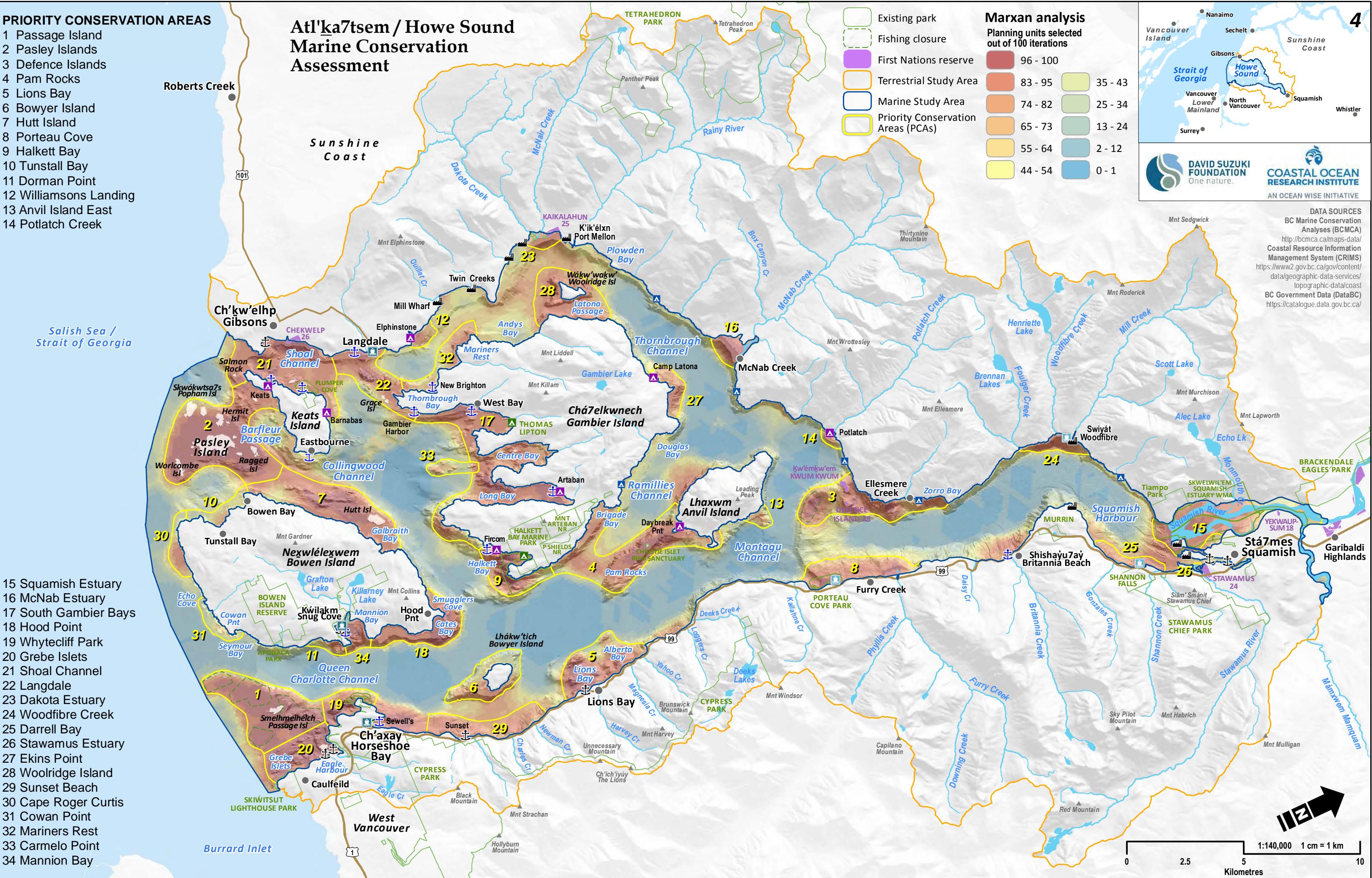
- 15 Squamish Estuary
 - 16 McNab Estuary
 - 17 South Gambier Bays
 - 18 Hood Point
 - 19 Whytecliff Park
 - 20 Grebe Islets
 - 21 Shoal Channel
 - 22 Langdale
 - 23 Dakota Estuary
 - 24 Woodfibre Creek
 - 25 Darrell Bay
 - 26 Stawamus Estuary
 - 27 Ekins Point
 - 28 Woolridge Island
 - 29 Sunset Beach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



PRIORITY CONSERVATION AREAS

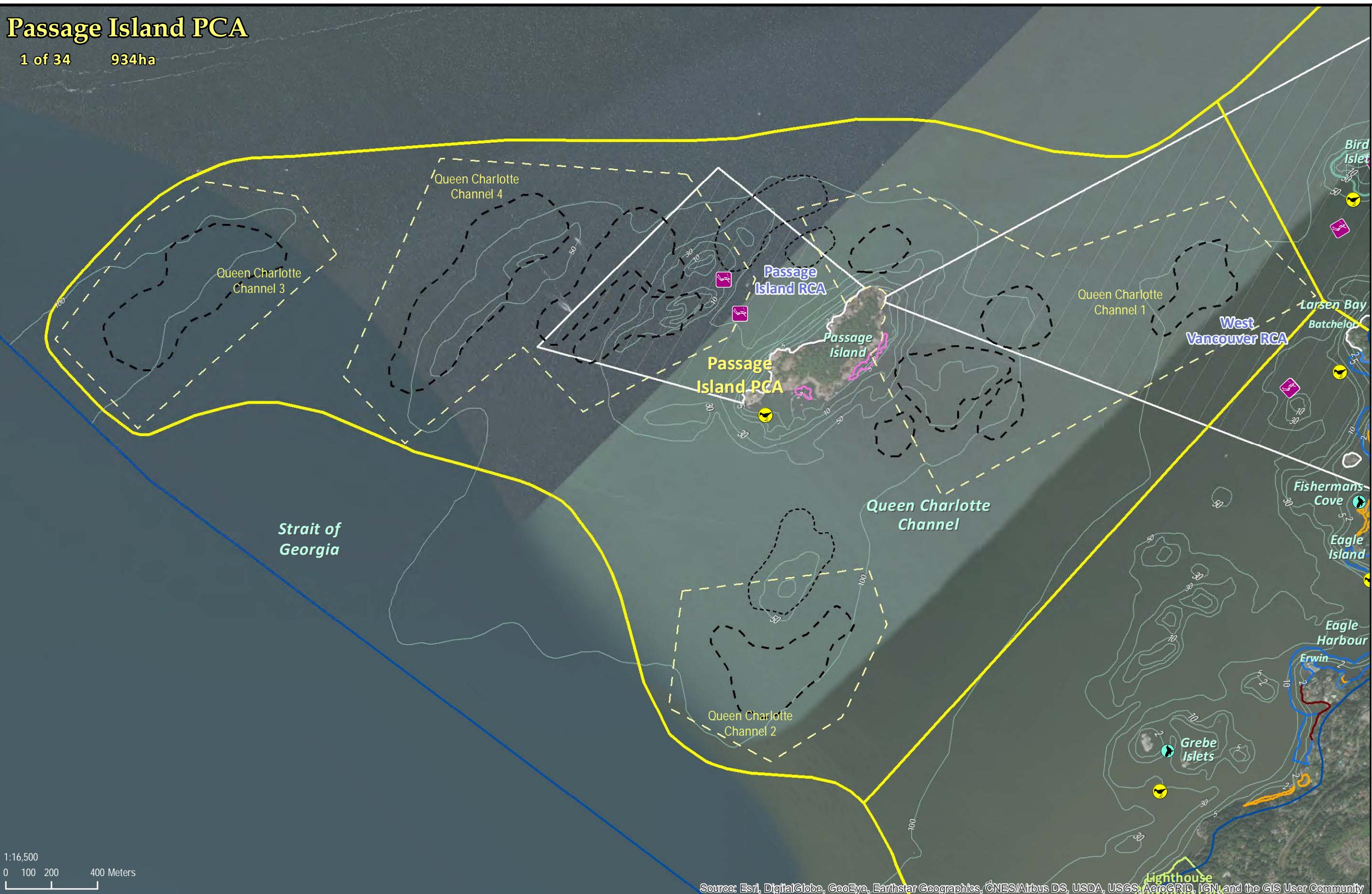
- 1 Passage Island
- 2 Pasley Islands
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- 14 Potlatch Creek

Atl'ka7tsem / Howe Sound Marine Conservation Assessment



Passage Island PCA

1 of 34 934ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	934 ha
Portion of study area	2.5 %
Contribution to PCA total	6.9 %
Contribution to PCA category	13.5%
Overlap with RCA	22.1 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	3.9 %
Tidal current -	0.3 %
Fresh water inflow -	0 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	34.3 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	2.5 %
Listed species -	6.2 %
Barrows Goldeneye -	0 %
Marbled murrelet -	2.5 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	1.3 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	1
-2 to -5	1
-5 to -10	1
-10 to -30	1
-30 to -50	2
-50 to -100	6
-100 to -200	39
> -200	49
	0

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Campsite
- Marine trail campsite
- Harbour seal haulout
- ▲ Youth camp
- ▲ Outstation
- ▲ Public dock
- ▲ Attraction
- Bird colony

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Pasley Islands PCA

2 of 34 1404ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	1404 ha
Portion of study area	3.7 %
Contribution to PCA total	10.3 %
Contribution to PCA category	20.3 %
Overlap with RCA	56.4 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.6 %
Herring spawning -	2.7 %
High rugosity -	6.9 %
Tidal current -	8.8 %
Fresh water inflow -	0 %
Vertical cliff -	0.2 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	5 %

MARINE BIRDS

Shorebird staging -	26 %
Listed species -	12.9 %
Barrows Goldeneye -	18.3 %
Marbled murrelet -	28 %
Great Blue Heron -	4.5 %

MARINE MAMMALS

Harbour seal -	45.1 %
River Otter -	0 %

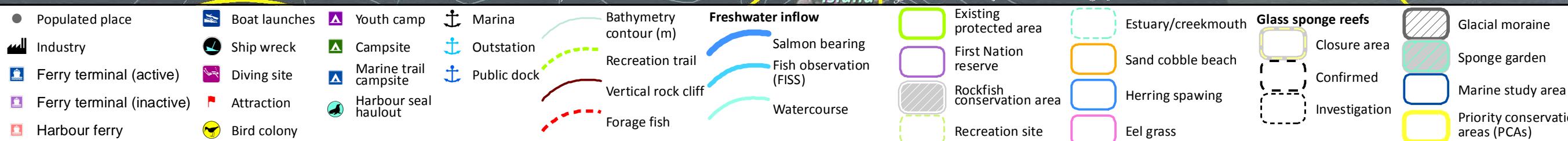
MARINE PLANTS

Eelgrass -	20.5 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	14
-2 to -5	6
-5 to -10	4
-10 to -30	6
-30 to -50	15
-50 to -100	11
-100 to -200	27
> -200	17
	0

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Defence Islands PCA

3 of 34 624ha



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	624 ha
Portion of study area	1.7 %
Contribution to PCA total	4.6 %
Contribution to PCA category	9%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	1.7 %
Herring spawning -	2.3 %
High rugosity -	4.2 %
Tidal current -	1.8 %
Fresh water inflow -	1 %
Vertical cliff -	7.2 %

INVERTEBRATES

Glass sponge reef -	10 %
Sponge garden -	0 %
Sandy intertidal -	1.1 %

MARINE BIRDS

Shorebird staging -	2.5 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	5
-2 to -5	1
-5 to -10	4
-10 to -30	3
-30 to -50	8
-50 to -100	10
-100 to -200	30
> -200	35
	4



Pam Rocks PCA



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	1047 ha
Portion of study area	2.8 %
Contribution to PCA total	7.7 %
Contribution to PCA category	15.1 %
Overlap with RCA	50.9 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	7.1 %
Herring spawning -	0 %
High rugosity -	4.8 %
Tidal current -	1 %
Fresh water inflow -	1.4 %
Vertical cliff -	8.7 %

INVERTEBRATES

Glass sponge reef -	3 %
Sponge garden -	0 %
Sandy intertidal -	6 %

MARINE BIRDS

Shorebird staging -	4 %
Listed species -	6.9 %
Barrows Goldeneye -	8.8 %
Marbled murrelet -	11.6 %
Great Blue Heron -	4 %

MARINE MAMMALS

Harbour seal -	14.8 %
River Otter -	24.2 %

MARINE PLANTS

Eelgrass -	1.1 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	6
-2 to -5	3
-5 to -10	3
-10 to -30	4
-30 to -50	4
-50 to -100	23
-100 to -200	25
> -200	30

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Harbour seal haulout
- Youth camp
- Campsite
- Marine trail campsite
- Public dock
- Marina
- Outstation
- Attractions
- Bird colony

- Freshwater inflow
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

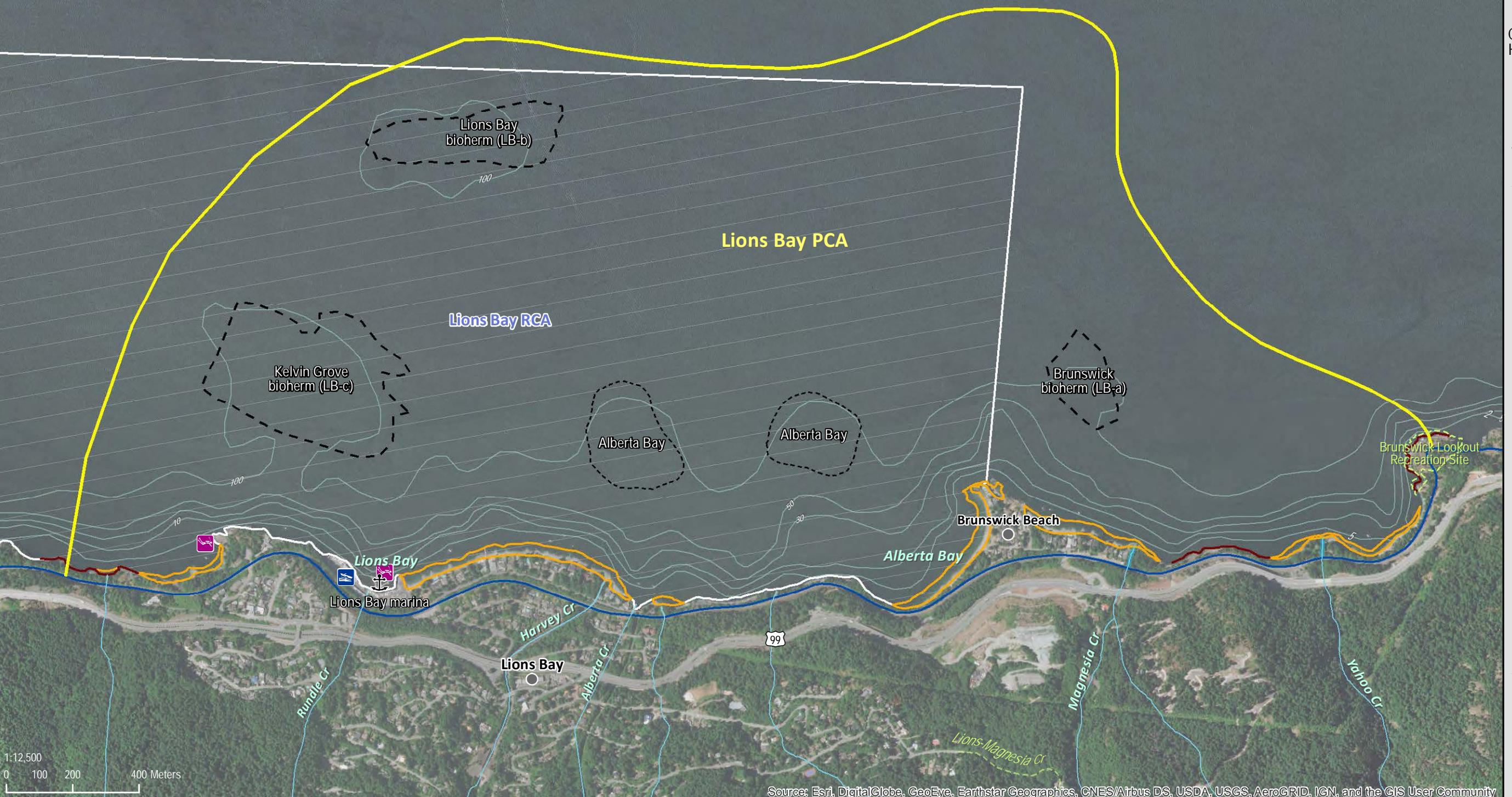
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation

- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Lions Bay PCA

5 of 34 534ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Attractions
- Vertical rock cliff
- Freshwater inflow
- Bathymetry contour (m)
- Recreation trail
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- Estuary/creekmouth
- Closure area
- Confirmed
- Herring spawning
- Recreational site
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	534 ha
Portion of study area	1.4 %
Contribution to PCA total	3.9 %
Contribution to PCA category	7.7 %
Overlap with RCA	71.4 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	1.5 %
Herring spawning -	0 %
High rugosity -	2.8 %
Tidal current -	0 %
Fresh water inflow -	1.3 %
Vertical cliff -	1.2 %

INVERTEBRATES

Glass sponge reef -	13.1 %
Sponge garden -	0 %
Sandy intertidal -	4.2 %

MARINE BIRDS

Shorebird staging -	0.8 %
Listed species -	4.8 %
Barrows Goldeneye -	15.4 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

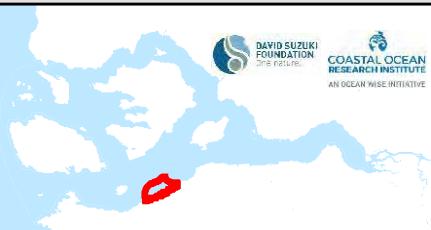
Harbour seal -	0 %
River Otter -	0.7 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	5
-2 to -5	2
-5 to -10	2
-10 to -30	3
-30 to -50	4
-50 to -100	3
-100 to -200	15
> -200	42
	24



Bowyer Island PCA

6 of 34 334ha

6 of 34 334ha

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Populated place
 -  Boat launches
 - Youth camp
 -  Industry
 -  Ship wreck
 - ▲ Campsite
 -  Ferry terminal (active)
 -  Diving site
 - ▲ Marine trail campsite
 -  Ferry terminal (inactive)
 - Attraction
 -  Harbour seal haulout
 -  Harbour ferry
 -  Bird colony

- The legend includes the following entries:

 - Bathymetry contour (m)
 - Recreation trail
 - Vertical rock cliff
 - Forage fish
 - Freshwater inflow
 - Salmon bearing
 - Fish observation (FISS)
 - Watercourse

- Existing protected area
 - First Nation reserve
 - Rockfish conservation area
 - Recreation site

- | Feature | Area Type |
|--------------------|------------------------------------|
| Glass sponge reefs | Glacial moraine |
| Closure area | Sponge garden |
| Confirmed | Marine study area |
| Investigation | Priority conservation areas (PCAs) |

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	334 ha
Portion of study area	0.9 %
Contribution to PCA total	2.5 %
Contribution to PCA category	4.8%
Overlap with RCA	93.1 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	2.2 %
Tidal current -	1 %
Fresh water inflow -	0.3 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef - 3.6 %
 Sponge garden - 0 %
 Sandy intertidal - 0.8 %

MARINE BIRDS

Shorebird staging -	1.8 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.4 %
Great Blue Heron -	1.7 %

MARINE MAMMALS

Harbour seal - 1.3 %
River Otter - 0 %

MARINE PLANTS

Eelgrass - 2 %
Estuary / creek mouth - 0 %

DEPTH ZONES

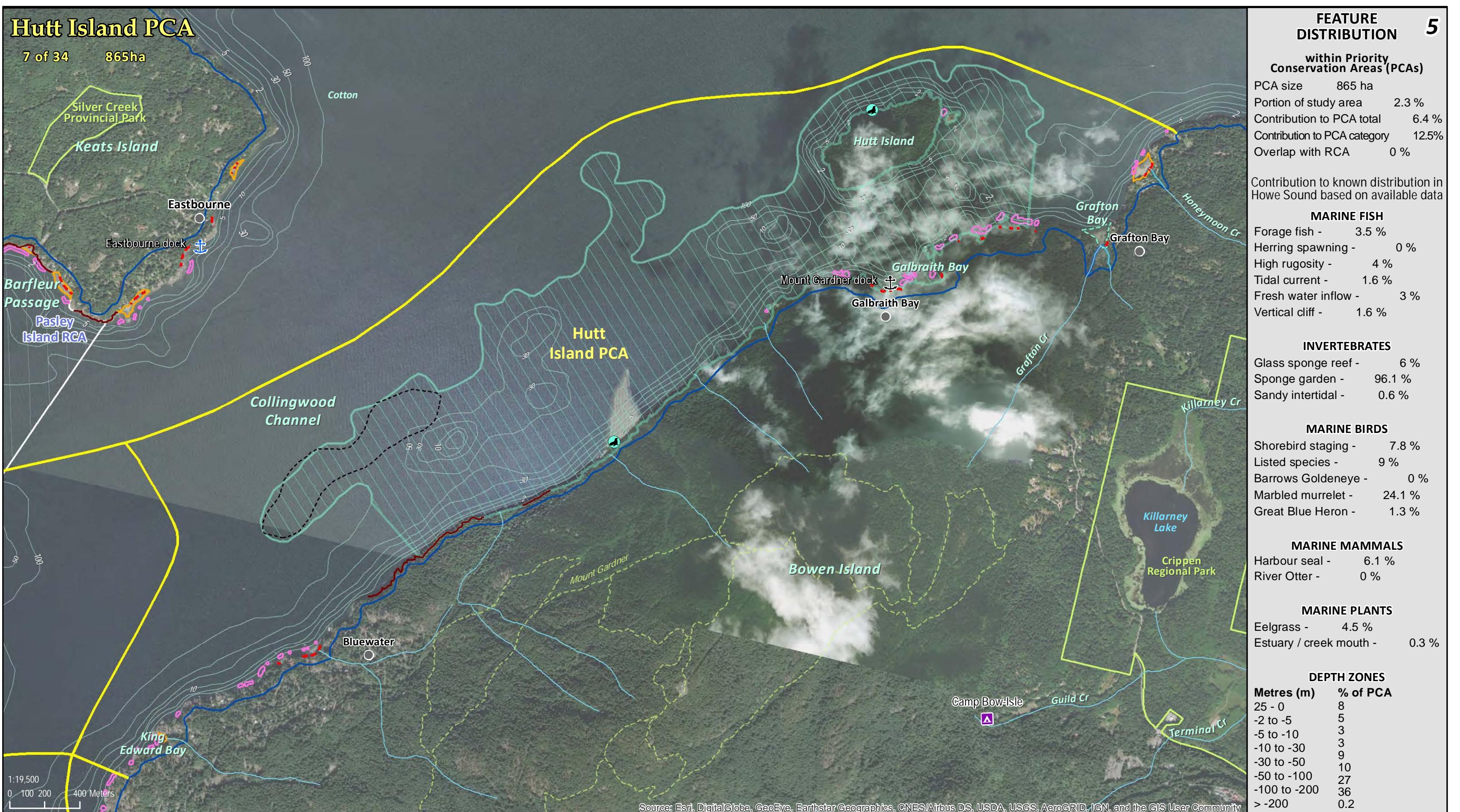
Metres (m)	% of PCA
25 - 0	7
-2 to -5	2
-5 to -10	4
-10 to -30	4
-30 to -50	8
-50 to -100	20
-100 to -200	48
> -200	0



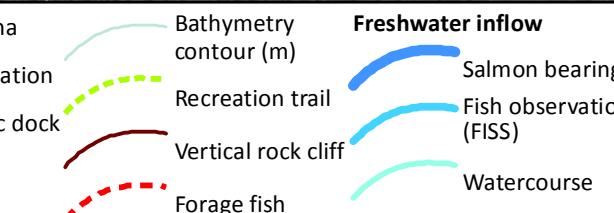
Hutt Island PCA

7 of 34

865ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Forage fish
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Porteau Cove PCA

8 of 34 437ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- Marina
- Outstation
- Public dock

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	437 ha
Portion of study area	1.2 %
Contribution to PCA total	3.2 %
Contribution to PCA category	6.3 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	6.3 %
Herring spawning -	0 %
High rugosity -	2.8 %
Tidal current -	2.4 %
Fresh water inflow -	2.2 %
Vertical cliff -	1.3 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	3.3 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.1 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	4.3 %
Estuary / creek mouth -	4.3 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	9
-2 to -5	6
-5 to -10	5
-10 to -30	5
-30 to -50	9
-50 to -100	11
-100 to -200	28
> -200	28
	0



Halkett Bay PCA

9 of 34

346ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	346 ha
Portion of study area	0.9 %
Contribution to PCA total	2.5 %
Contribution to PCA category	5%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	2.9 %
Herring spawning -	0 %
High rugosity -	1.9 %
Tidal current -	1.1 %
Fresh water inflow -	0.5 %
Vertical cliff -	3.5 %

INVERTEBRATES

Glass sponge reef -	1.7 %
Sponge garden -	2.4 %
Sandy intertidal -	4.2 %

MARINE BIRDS

Shorebird staging -	3 %
Listed species -	3.7 %
Barrows Goldeneye -	2.6 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	5.7 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	2.9 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	12
-2 to -5	7
-5 to -10	5
-10 to -30	4
-30 to -50	6
-50 to -100	5
-100 to -200	25
> -200	26
	11

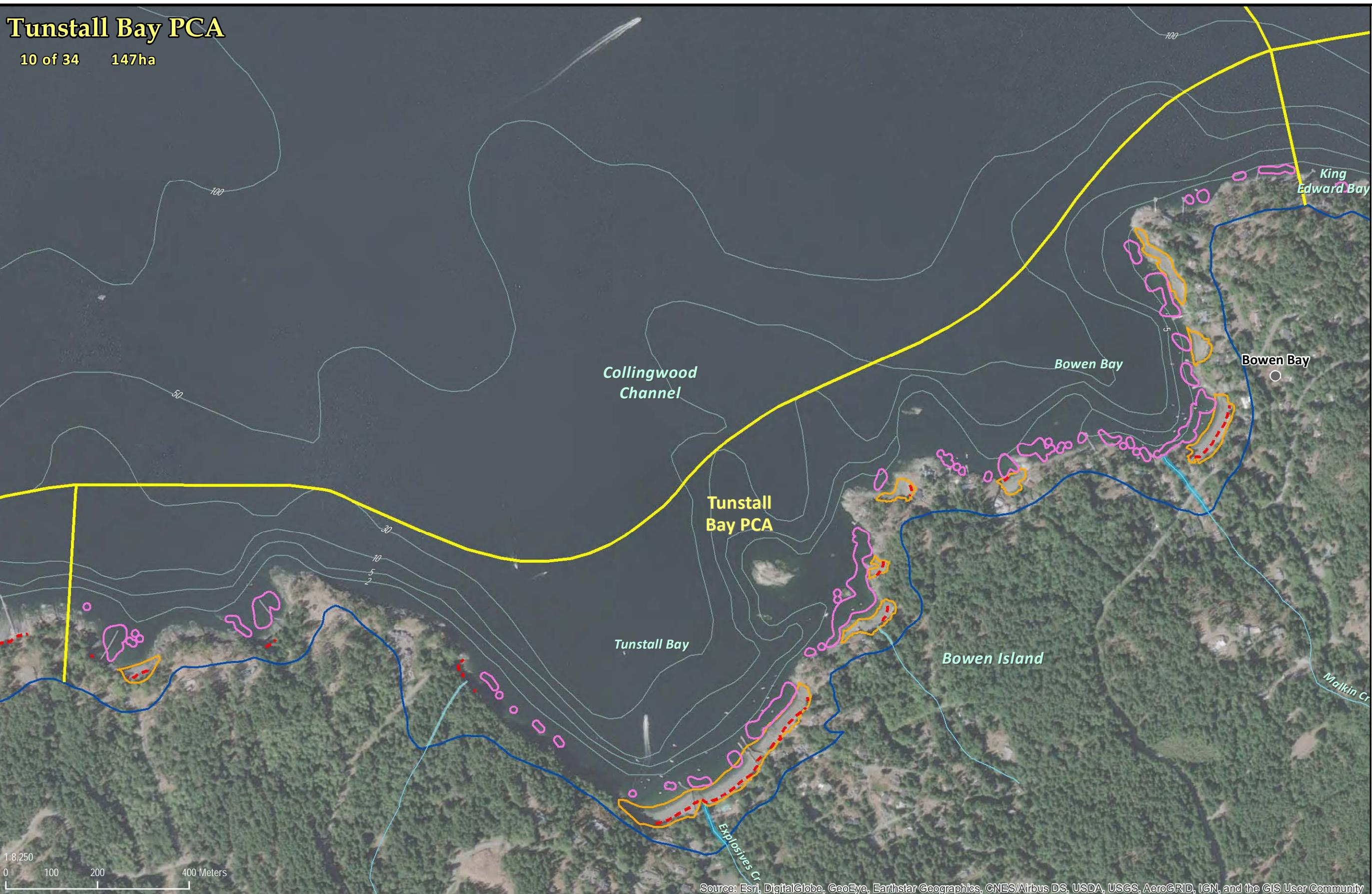
- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- ⚓ Marina
- ⚓ Outstation
- ⚓ Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Forage fish
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Tunstall Bay PCA

10 of 34 147ha



FEATURE DISTRIBUTION

5

within Priority Conservation Areas (PCAs)

PCA size	147 ha
Portion of study area	0.4 %
Contribution to PCA total	1.1 %
Contribution to PCA category	2.1 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	3.5 %
Herring spawning -	0 %
High rugosity -	0.8 %
Tidal current -	0.9 %
Fresh water inflow -	1.4 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	2.7 %

MARINE BIRDS

Shorebird staging -	4.2 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	3.1 %

MARINE MAMMALS

Harbour seal -	3.6 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	7.9 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	21
-2 to -5	20
-5 to -10	8
-10 to -30	12
-30 to -50	22
-50 to -100	16
-100 to -200	1
> -200	0

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Dorman Point PCA

11 of 34

70ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	70 ha
Portion of study area	0.2 %
Contribution to PCA total	0.5 %
Contribution to PCA category	1%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.8 %
Herring spawning -	0 %
High rugosity -	0.4 %
Tidal current -	0.3 %
Fresh water inflow -	0 %
Vertical cliff -	2.8 %

INVERTEBRATES

Glass sponge reef -	2.5 %
Sponge garden -	0 %
Sandy intertidal -	0.6 %

MARINE BIRDS

Shorebird staging -	0.2 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	1 %

MARINE MAMMALS

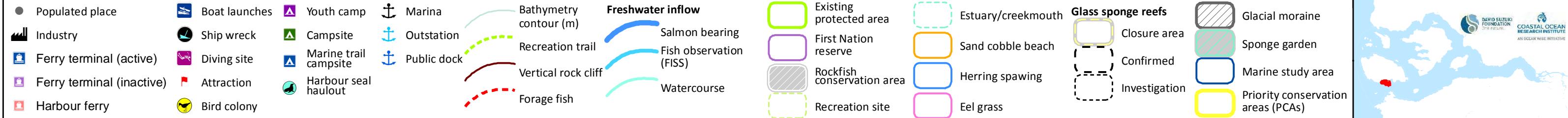
Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	11
-2 to -5	9
-5 to -10	6
-10 to -30	5
-30 to -50	5
-50 to -100	12
-100 to -200	18
> -200	22
	11

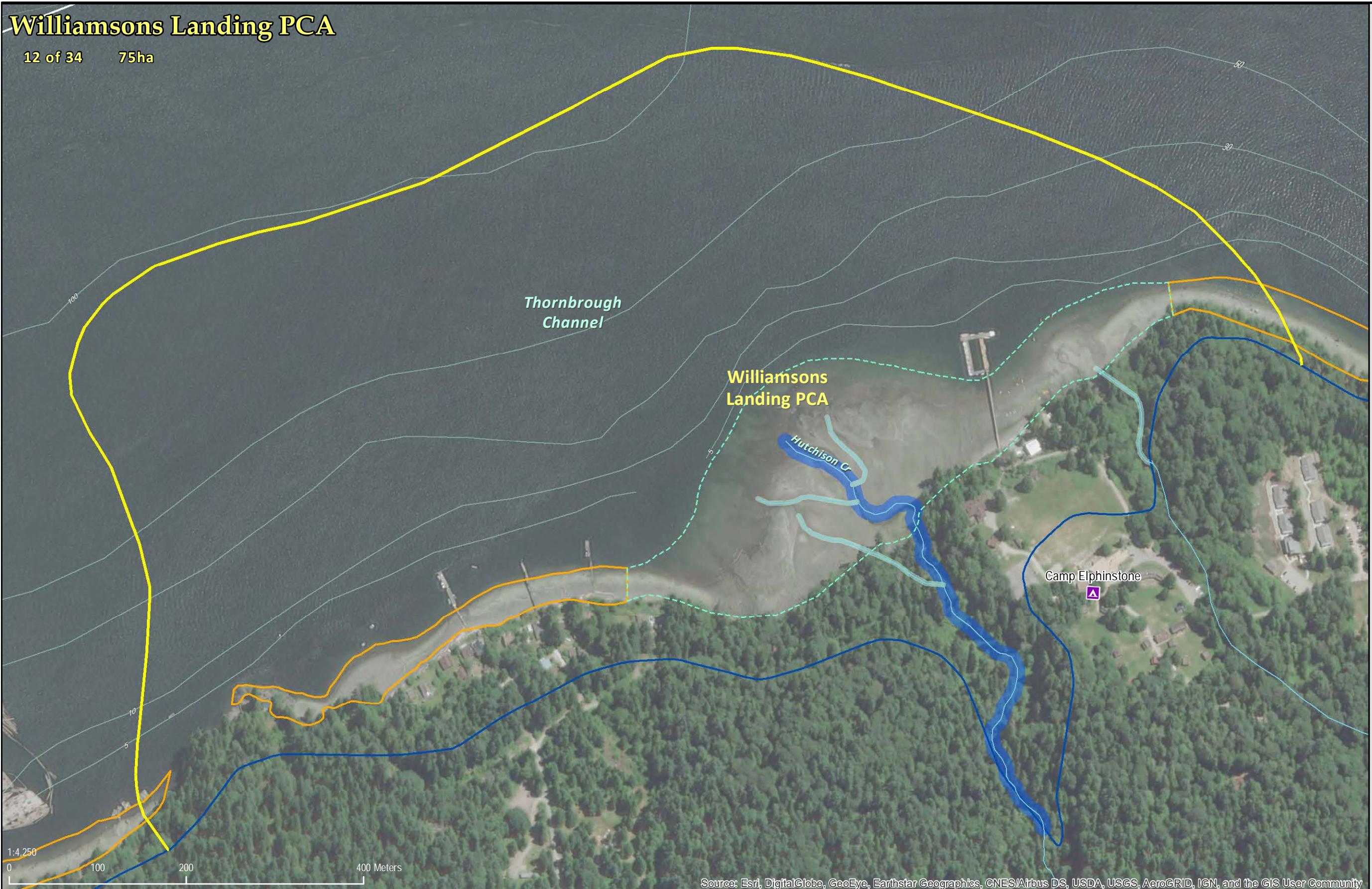


Williamsons Landing PCA

12 of 34

75ha

5



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	75 ha
Portion of study area	0.2 %
Contribution to PCA total	0.6 %
Contribution to PCA category	1.1%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	2.8 %
Herring spawning -	0 %
High rugosity -	0.4 %
Tidal current -	0.5 %
Fresh water inflow -	1.2 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	1.3 %

MARINE BIRDS

Shorebird staging -	0.2 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.1 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	2.6 %

DEPTH ZONES

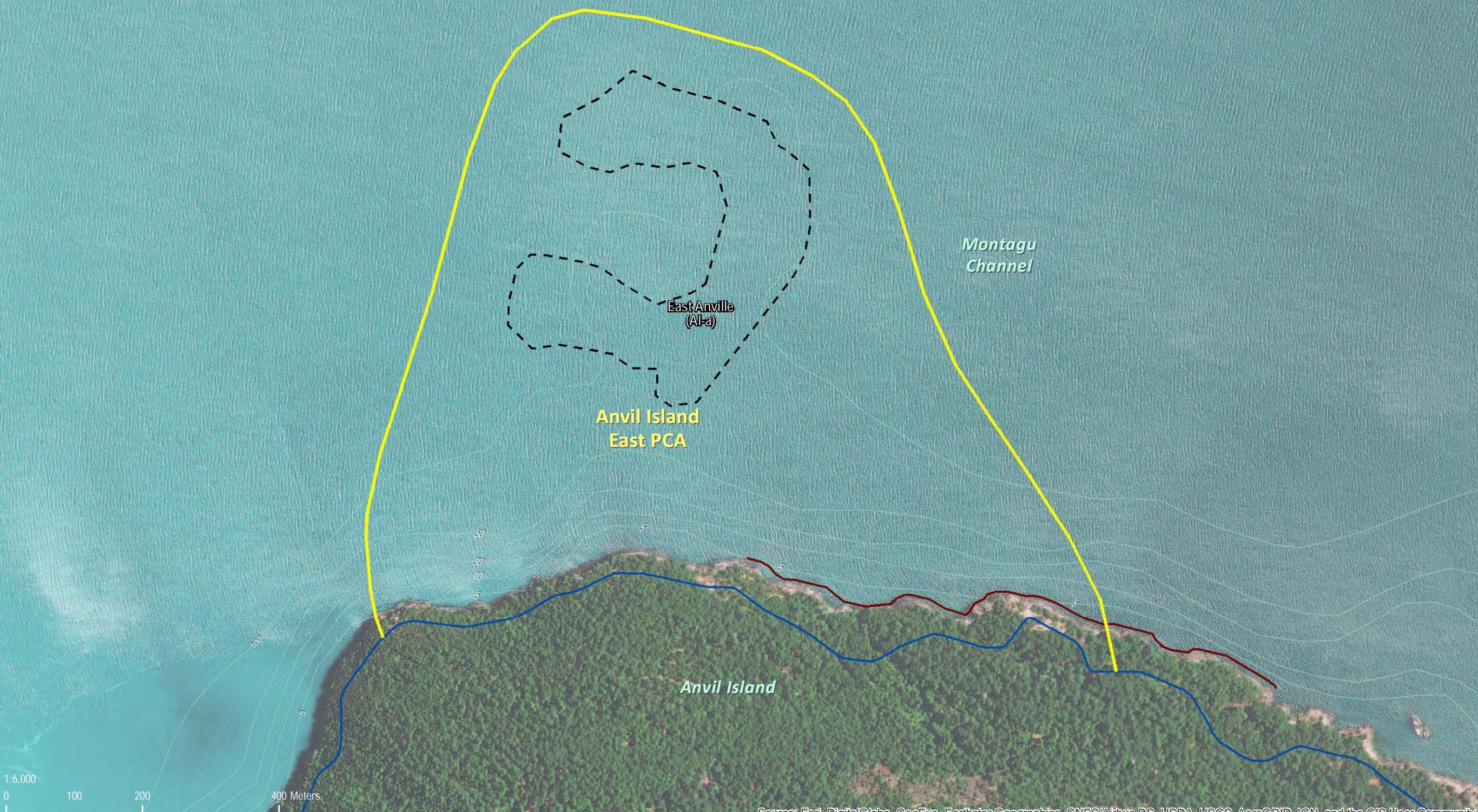
Metres (m)	% of PCA
25 - 0	19
-2 to -5	15
-5 to -10	9
-10 to -30	6
-30 to -50	13
-50 to -100	13
-100 to -200	25
> -200	1
	0



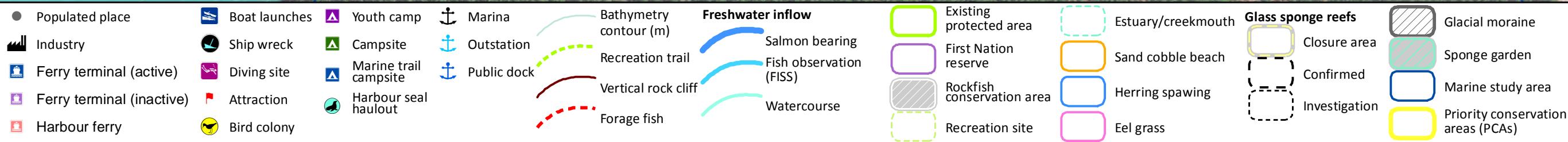
Anvil Island East PCA

13 of 34 67ha

5



FEATURE DISTRIBUTION	
within Priority Conservation Areas (PCAs)	
PCA size	67 ha
Portion of study area	0.2 %
Contribution to PCA total	0.5 %
Contribution to PCA category	1%
Overlap with RCA	0 %
Contribution to known distribution in Howe Sound based on available data	
MARINE FISH	
Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	0.3 %
Tidal current -	0 %
Fresh water inflow -	0 %
Vertical cliff -	0.8 %
INVERTEBRATES	
Glass sponge reef -	3 %
Sponge garden -	0 %
Sandy intertidal -	0 %
MARINE BIRDS	
Shorebird staging -	0.4 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.1 %
Great Blue Heron -	0.3 %
MARINE MAMMALS	
Harbour seal -	0 %
River Otter -	0 %
MARINE PLANTS	
Eelgrass -	0 %
Estuary / creek mouth -	0 %
DEPTH ZONES	
Metres (m)	% of PCA
25 - 0	8
-2 to -5	0
-5 to -10	3
-10 to -30	5
-30 to -50	4
-50 to -100	34
-100 to -200	41
> -200	0



Potlatch Creek PCA

14 of 34

43ha

FEATURE
DISTRIBUTION

5

within Priority Conservation Areas (PCAs)

PCA size	43 ha
Portion of study area	0.1 %
Contribution to PCA total	0.3 %
Contribution to PCA category	0.6%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.5 %
Herring spawning -	0 %
High rugosity -	0.2 %
Tidal current -	0 %
Fresh water inflow -	1.5 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0.4 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.3 %
Great Blue Heron -	0 %

MARINE MAMMALS

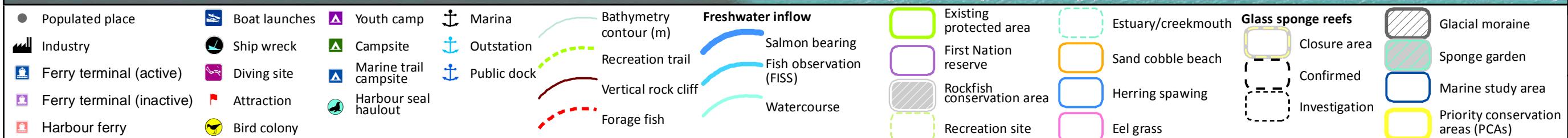
Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	2.1 %

DEPTH ZONES

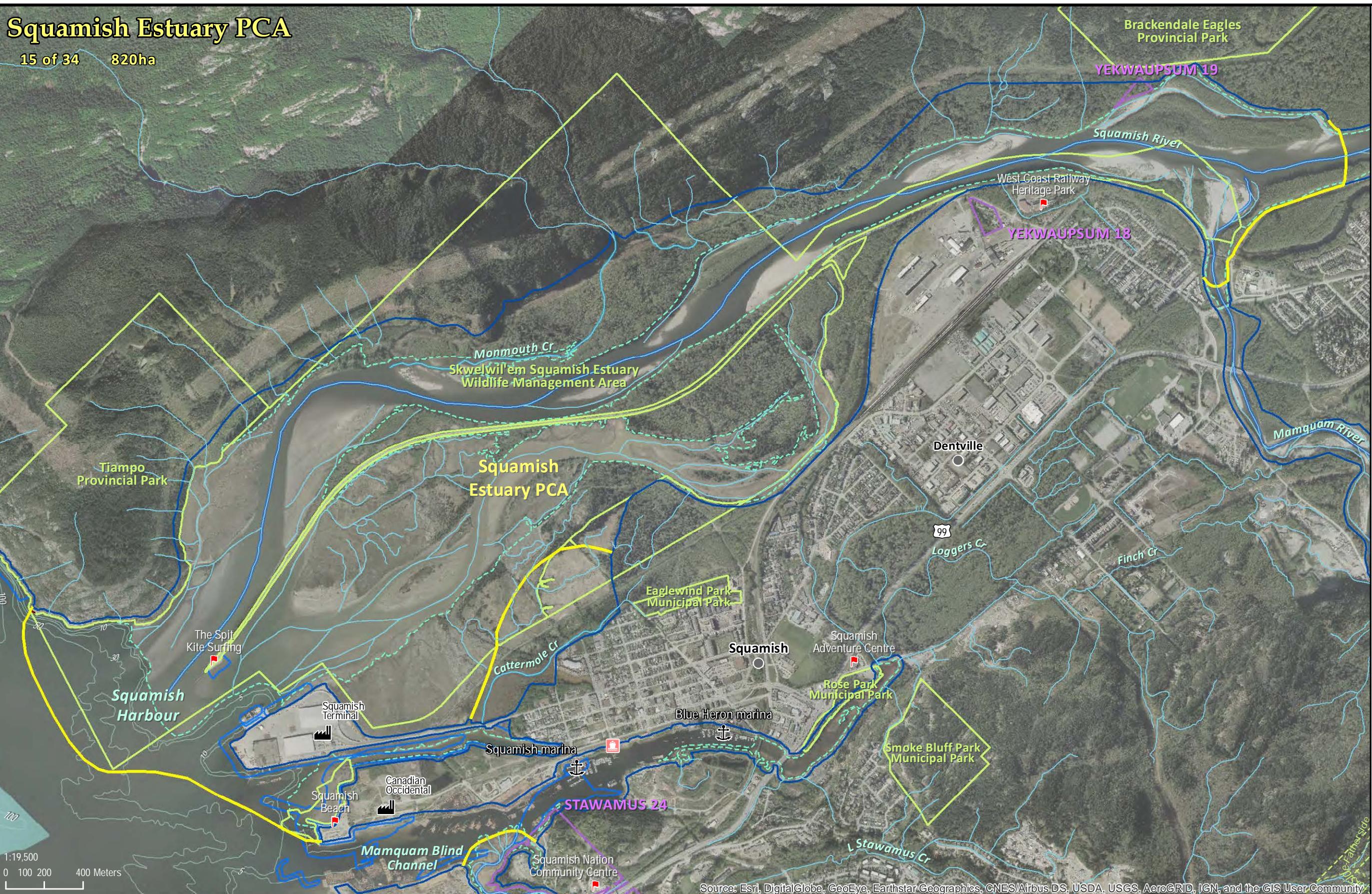
Metres (m)	% of PCA
25 - 0	25
-2 to -5	28
-5 to -10	7
-10 to -30	9
-30 to -50	9
-50 to -100	10
-100 to -200	12
> -200	0



Squamish Estuary PCA

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820ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry

- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony

- ▲ Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout

- Marina
- Outstation
- Public dock

- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Forage fish

- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site

- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation

- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	820 ha
Portion of study area	2.2 %
Contribution to PCA total	6 %
Contribution to PCA category	12.3%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	1 %
Herring spawning -	7.4 %
High rugosity -	0.3 %
Tidal current -	1 %
Fresh water inflow -	0.1 %
Vertical cliff -	0.1 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	1.6 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.5 %
Great Blue Heron -	27.1 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	22.8 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	66.3 %

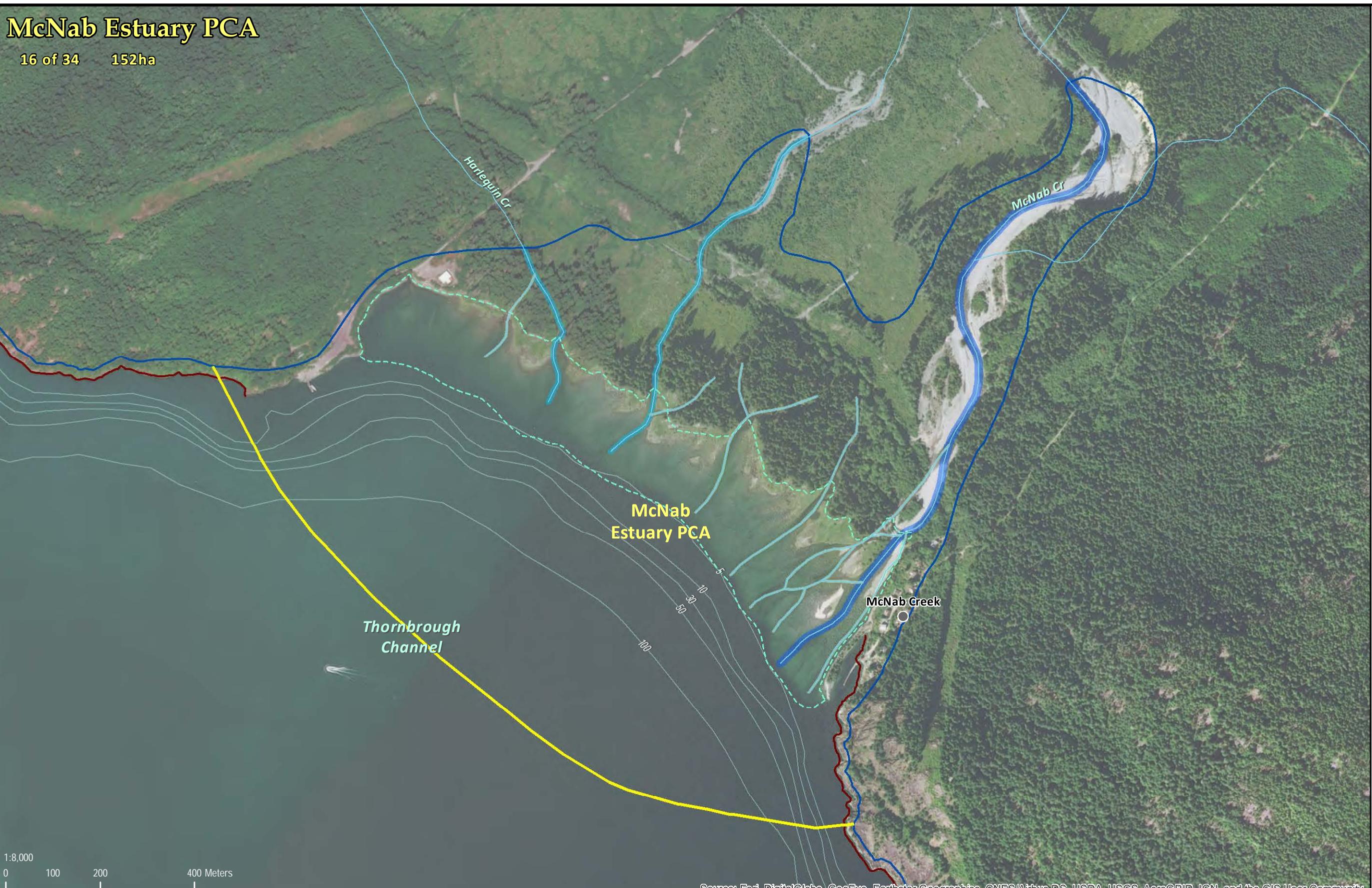
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	31
-2 to -5	62
-5 to -10	1
-10 to -30	1
-30 to -50	3
-50 to -100	1
-100 to -200	2
> -200	0



McNab Estuary PCA

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FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	152 ha
Portion of study area	0.4 %
Contribution to PCA total	1.1 %
Contribution to PCA category	2.3 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.3 %
Herring spawning -	0 %
High rugosity -	0.5 %
Tidal current -	0 %
Fresh water inflow -	41.5 %
Vertical cliff -	0.8 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.8 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	8 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	41
-2 to -5	20
-5 to -10	4
-10 to -30	3
-30 to -50	3
-50 to -100	9
-100 to -200	17
> -200	0

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Forage fish
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation

- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)





FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	1180 ha
Portion of study area	3.1 %
Contribution to PCA total	8.7 %
Contribution to PCA category	17.7 %
Overlap with RCA	19.2 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	13.4 %
Herring spawning -	25.3 %
High rugosity -	6 %
Tidal current -	7.3 %
Fresh water inflow -	2.6 %
Vertical cliff -	1.8 %

INVERTEBRATES

Glass sponge reef -	0.4 %
Sponge garden -	0 %
Sandy intertidal -	9.8 %

MARINE BIRDS

Shorebird staging -	12.2 %
Listed species -	0.7 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.9 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	1.2 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	14.4 %
Estuary / creek mouth -	5 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	17
-2 to -5	5
-5 to -10	11
-10 to -30	9
-30 to -50	14
-50 to -100	15
-100 to -200	20
> -200	9
	0.1



Hood Point PCA

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Mannion Bay

Millers Landing

Bluff C

Bowen Island

Eagle Cliff

Smugglers Cove

Hood Point

Columbine Bay

Hood

Cates Bay

Safety Cove

Poca Cove

Enchanta Bay

Montevista Bay

Finisterre Island

Queen Charlotte Channel

Hood Point PCA

1:12,500
0 100 200 400 Meters

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Diving site
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Youth camp
- Outstation
- Public dock
- Attraction
- Bird colony

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Marina
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	382 ha
Portion of study area	1 %
Contribution to PCA total	2.8 %
Contribution to PCA category	5.7 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	6.1 %
Herring spawning -	0 %
High rugosity -	2.3 %
Tidal current -	1.9 %
Fresh water inflow -	0.5 %
Vertical cliff -	1.8 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	4.9 %

MARINE BIRDS

Shorebird staging -	2.2 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.1 %
Great Blue Heron -	1.3 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	4.4 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	10
-2 to -5	10
-5 to -10	5
-10 to -30	5
-30 to -50	9
-50 to -100	18
-100 to -200	29
> -200	5



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Whytecliff Park PCA

19 of 34 208ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	208 ha
Portion of study area	0.6 %
Contribution to PCA total	1.5 %
Contribution to PCA category	3.1 %
Overlap with RCA	56.4 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	1.3 %
Tidal current -	1 %
Fresh water inflow -	0 %
Vertical cliff -	2.9 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	1.5 %
Sandy intertidal -	2.2 %

MARINE BIRDS

Shorebird staging -	0.7 %
Listed species -	1.7 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	2.3 %

MARINE MAMMALS

Harbour seal -	4.5 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	11
-2 to -5	2
-5 to -10	8
-10 to -30	6
-30 to -50	7
-50 to -100	8
-100 to -200	15
> -200	33
	9



Grebe Islets PCA

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400ha

Queen Charlotte
Channel 2Queen Charlotte
Channel 1

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Diving site
- Campsite
- Marine trail campsite
- Harbour seal haulout
- ▲ Youth camp
- ▲ Outstation
- ▲ Public dock
- Attraction
- Bird colony

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Marina
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Estuary/creekmouth
- First Nation reserve
- Rockfish conservation area
- Closure area
- Confirmed
- Herring spawning
- Eel grass

- Existing protected area
- Recreational site
- Glacial moraine
- Sand cobble beach
- Herring spawning
- Eel grass

- Estuary/creekmouth
- Rockfish conservation area
- Closure area
- Confirmed
- Herring spawning
- Eel grass



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	400 ha
Portion of study area	1.1 %
Contribution to PCA total	2.9 %
Contribution to PCA category	6%
Overlap with RCA	8.8 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	10.3 %
High rugosity -	2.5 %
Tidal current -	2.9 %
Fresh water inflow -	0.5 %
Vertical cliff -	0.9 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	2.2 %

MARINE BIRDS

Shorebird staging -	3.9 %
Listed species -	4.4 %
Barrows Goldeneye -	3.5 %
Marbled murrelet -	0 %
Great Blue Heron -	1.6 %

MARINE MAMMALS

Harbour seal -	9.3 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

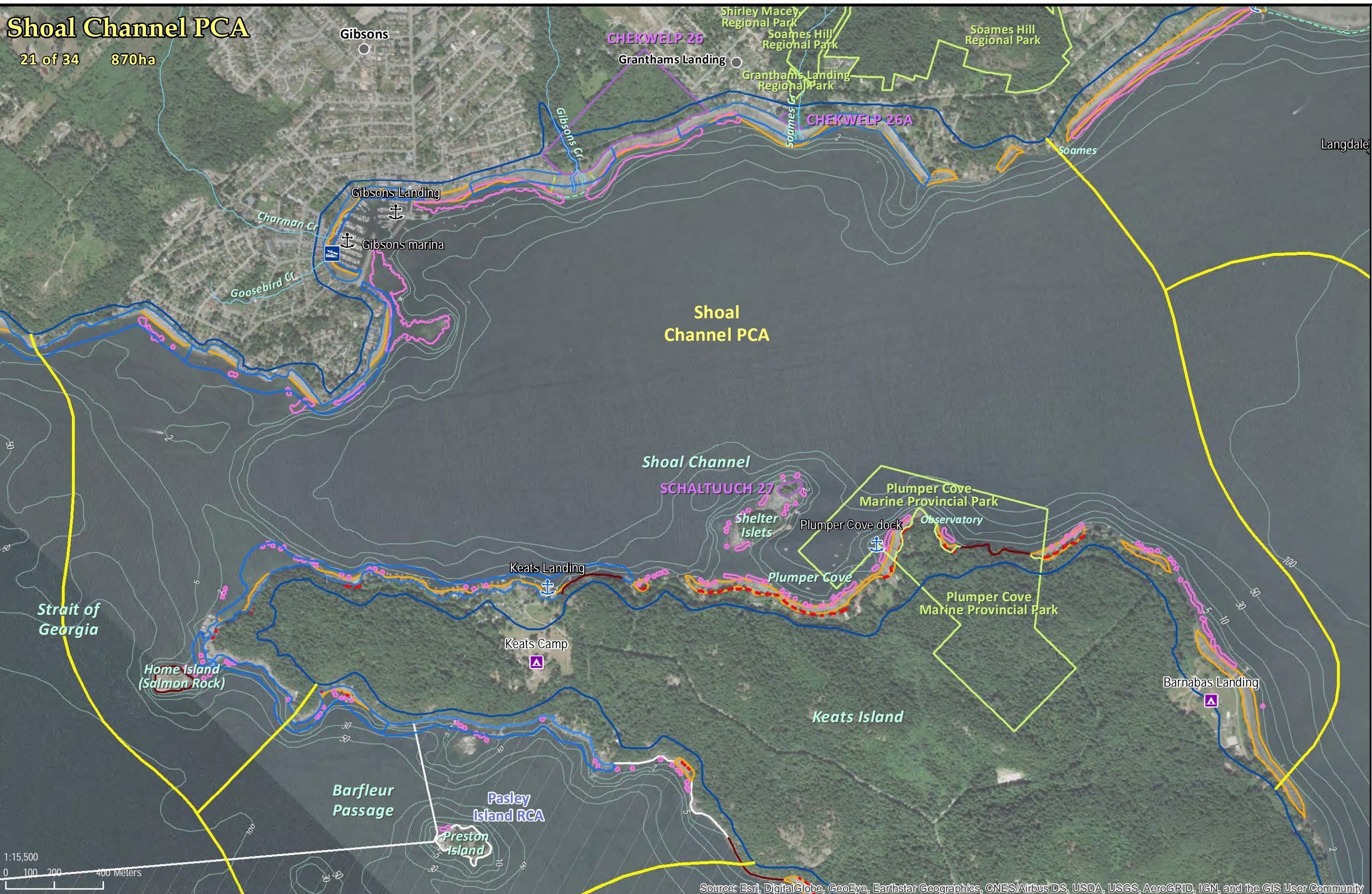
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	10
-2 to -5	7
-5 to -10	4
-10 to -30	7
-30 to -50	12
-50 to -100	20
-100 to -200	38
> -200	0

Shoal Channel PCA

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870ha



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	870 ha	2.3 %
Portion of study area	2.3 %	6.4 %
Contribution to PCA total	6.4 %	13%
Contribution to PCA category	13%	0 %
Overlap with RCA	0 %	

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	14.5 %
Herring spawning -	14.6 %
High rugosity -	2.9 %
Tidal current -	6.5 %
Fresh water inflow -	1.3 %
Vertical cliff -	1.6 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	15.3 %

MARINE BIRDS

Shorebird staging -	5 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	7.5 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	20 %
Estuary / creek mouth -	0.4 %

DEPTH ZONES

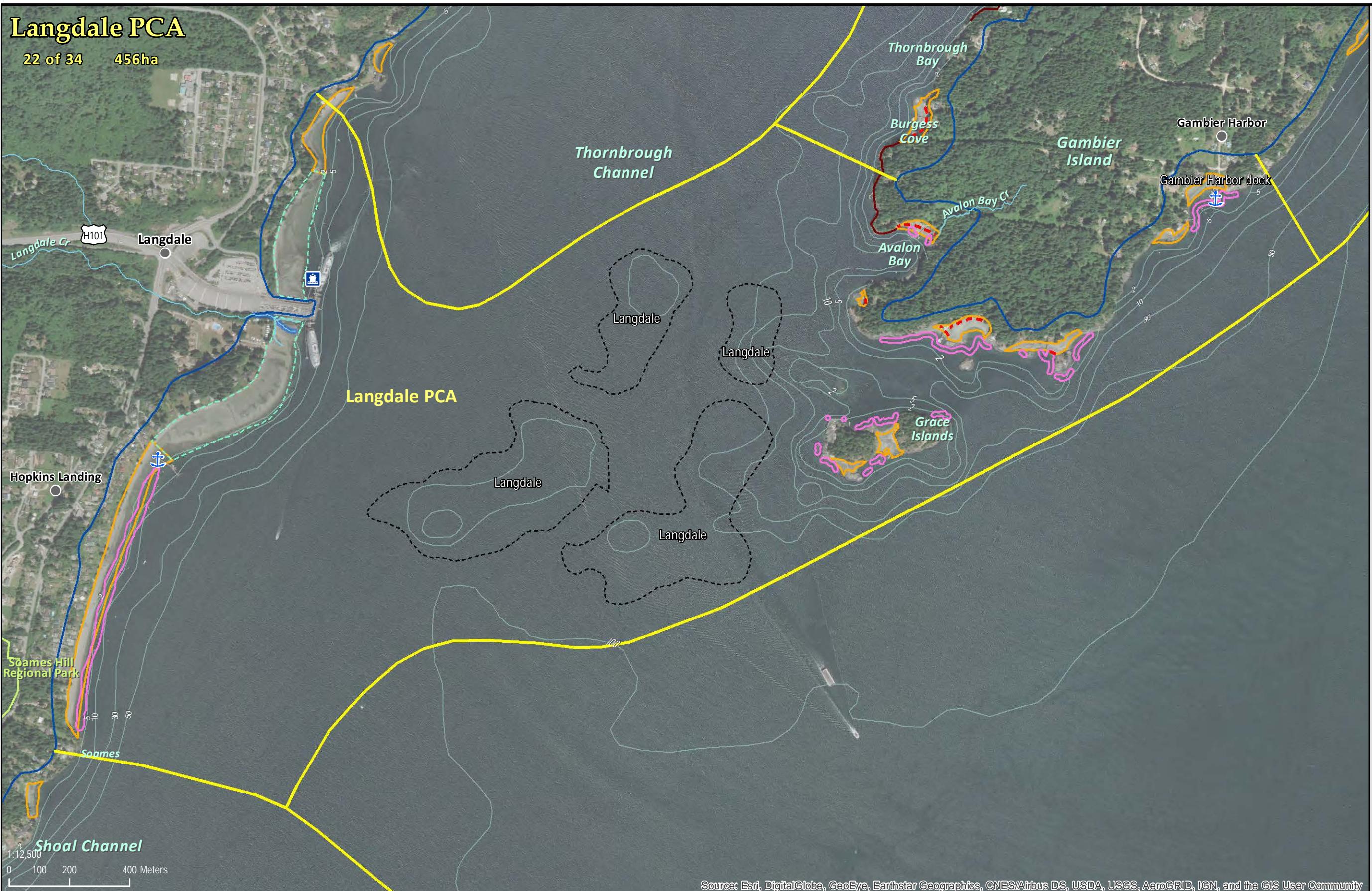
Metres (m)	% of PCA
25 - 0	11
-2 to -5	10
-5 to -10	8
-10 to -30	6
-30 to -50	11
-50 to -100	9
-100 to -200	47
> -200	0



Langdale PCA

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456ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	456 ha
Portion of study area	1.2 %
Contribution to PCA total	3.3 %
Contribution to PCA category	6.8 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	6.9 %
Herring spawning -	0 %
High rugosity -	1.5 %
Tidal current -	3.5 %
Fresh water inflow -	0.3 %
Vertical cliff -	0.4 %

INVERTEBRATES

Glass sponge reef -	12.2 %
Sponge garden -	0 %
Sandy intertidal -	6.1 %

MARINE BIRDS

Shorebird staging -	3 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.2 %
Great Blue Heron -	1.3 %

MARINE MAMMALS

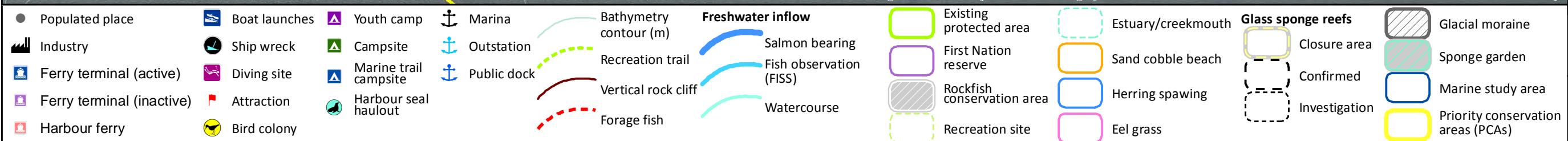
Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	7.8 %
Estuary / creek mouth -	3.3 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	9
-2 to -5	7
-5 to -10	5
-10 to -30	6
-30 to -50	9
-50 to -100	13
-100 to -200	51
> -200	1



Dakota Estuary PCA

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86ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	86 ha
Portion of study area	0.2 %
Contribution to PCA total	0.6 %
Contribution to PCA category	1.3 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	2.5 %
Herring spawning -	0 %
High rugosity -	0.4 %
Tidal current -	0.3 %
Fresh water inflow -	2.3 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0.6 %

MARINE MAMMALS

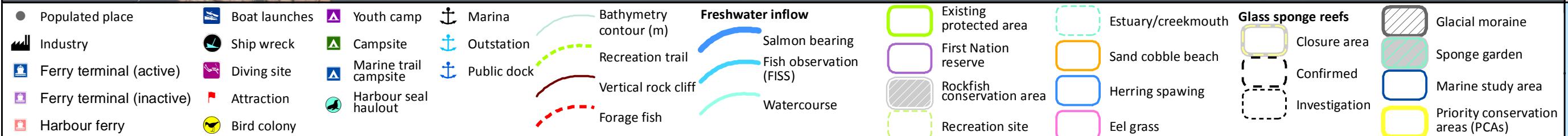
Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	4 %

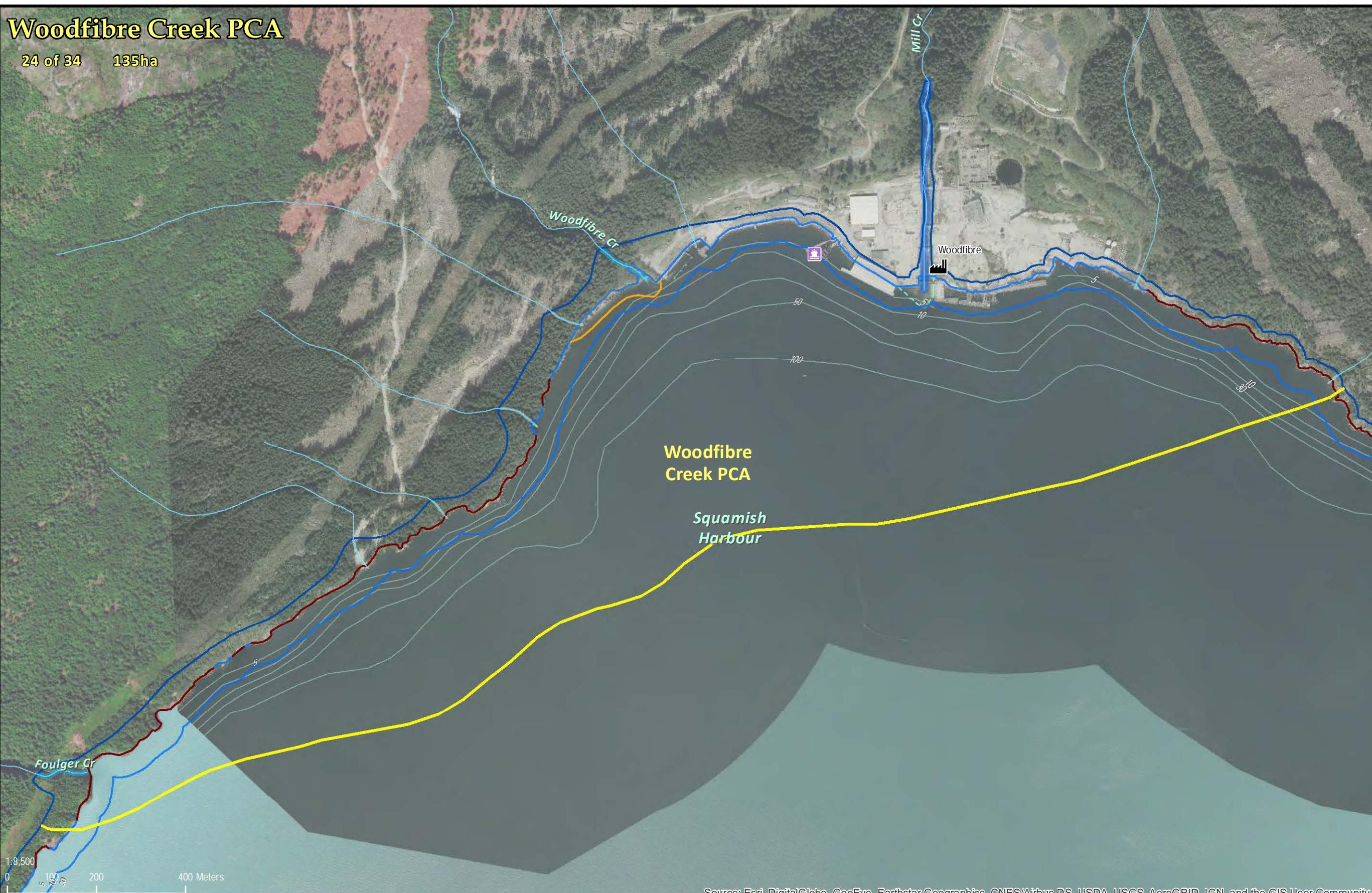
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	33
-2 to -5	10
-5 to -10	9
-10 to -30	5
-30 to -50	7
-50 to -100	7
-100 to -200	13
> -200	14
	0



Woodfibre Creek PCA

24 of 34 135ha



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- Marina
- Outstation
- Public dock

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation

- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	135 ha
Portion of study area	0.4 %
Contribution to PCA total	1 %
Contribution to PCA category	2%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	7.4 %
High rugosity -	0.8 %
Tidal current -	0.6 %
Fresh water inflow -	5.6 %
Vertical cliff -	2.9 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0.4 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0.4 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	11
-2 to -5	2
-5 to -10	8
-10 to -30	6
-30 to -50	7
-50 to -100	8
-100 to -200	15
> -200	33
	9



Darrell Bay PCA

25 of 34 124ha



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	124 ha
Portion of study area	0.3 %
Contribution to PCA total	0.9 %
Contribution to PCA category	1.9 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.4 %
Herring spawning -	7.1 %
High rugosity -	0.6 %
Tidal current -	0.4 %
Fresh water inflow -	1 %
Vertical cliff -	1.1 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	2.3 %

MARINE BIRDS

Shorebird staging -	0.9 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0.3 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	12
-2 to -5	12
-5 to -10	5
-10 to -30	5
-30 to -50	16
-50 to -100	16
-100 to -200	33
> -200	1
	0

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attractions
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

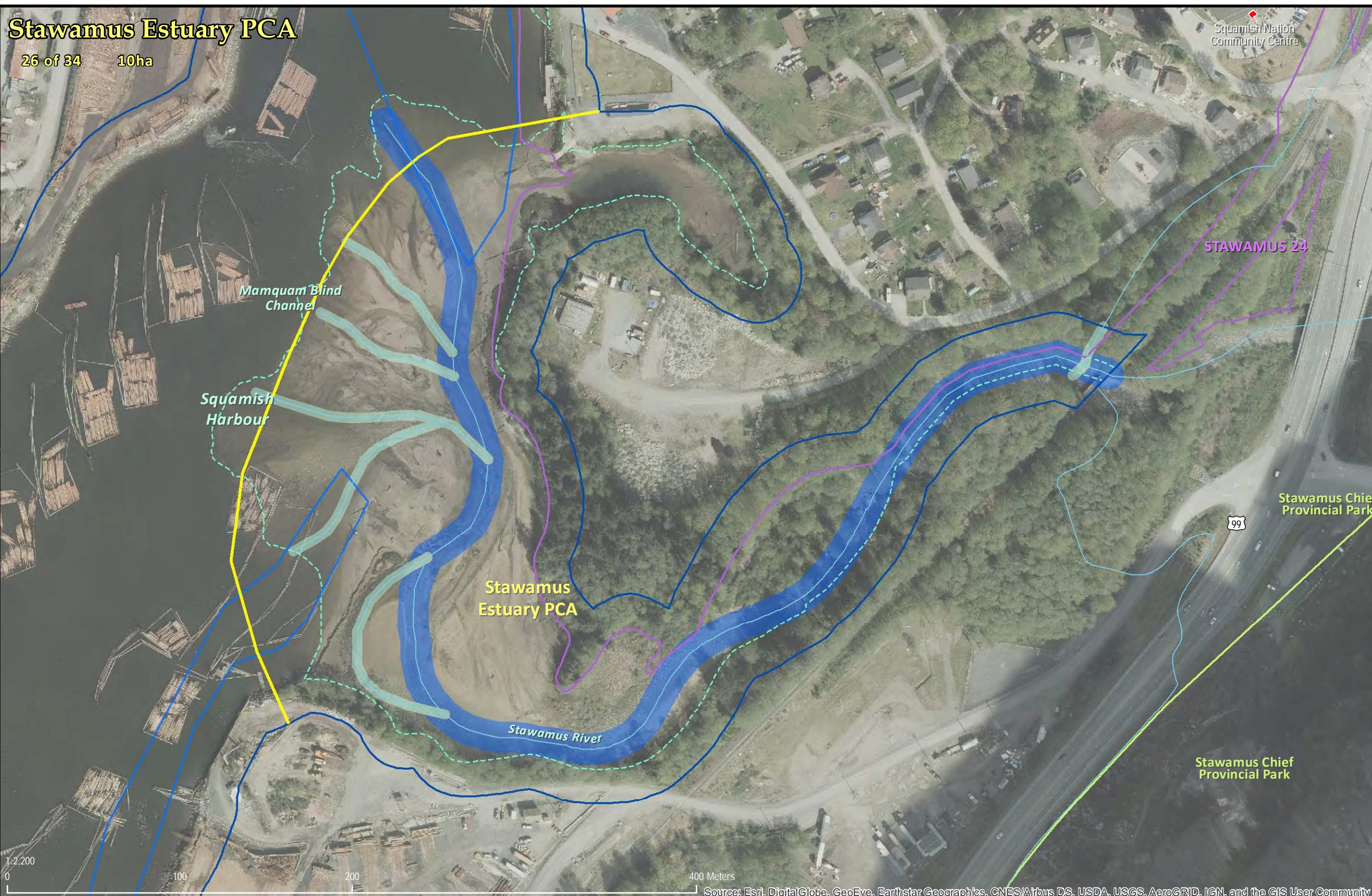
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Stawamus Estuary PCA

26 of 34

10ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	10 ha
Portion of study area	0.1 %
Contribution to PCA total	0.1 %
Contribution to PCA category	0.1%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0.2 %
High rugosity -	0 %
Tidal current -	0 %
Fresh water inflow -	0 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	1.8 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	33
-2 to -5	67
-5 to -10	0
-10 to -30	0
-30 to -50	0
-50 to -100	0
-100 to -200	0
> -200	0

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Ekins Point PCA

27 of 34 158ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	158 ha
Portion of study area	0.4 %
Contribution to PCA total	1.2 %
Contribution to PCA category	2.4 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.4 %
Herring spawning -	0 %
High rugosity -	0.9 %
Tidal current -	1.1 %
Fresh water inflow -	0 %
Vertical cliff -	2.7 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0.3 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.1 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

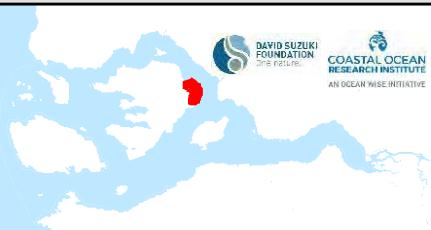
Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	13
-2 to -5	2
-5 to -10	10
-10 to -30	5
-30 to -50	7
-50 to -100	18
-100 to -200	34
> -200	6

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- Marina
- Outstation
- Public dock
- Attractions
- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Watercourse
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Woolridge Island PCA

28 of 34 521ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Youth camp
- Outstation
- Public dock
- Attraction
- Bird colony

- Bathymetry contour (m)
- Freshwater inflow
- Recreation trail
- Vertical rock cliff
- Forage fish
- Salmon bearing
- Fish observation (FISS)
- Watercourse

- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	521 ha
Portion of study area	1.4 %
Contribution to PCA total	3.8 %
Contribution to PCA category	7.8%
Overlap with RCA	68.8 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	1.7 %
Tidal current -	4.1 %
Fresh water inflow -	0.2 %
Vertical cliff -	7.9 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0.7 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.6 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

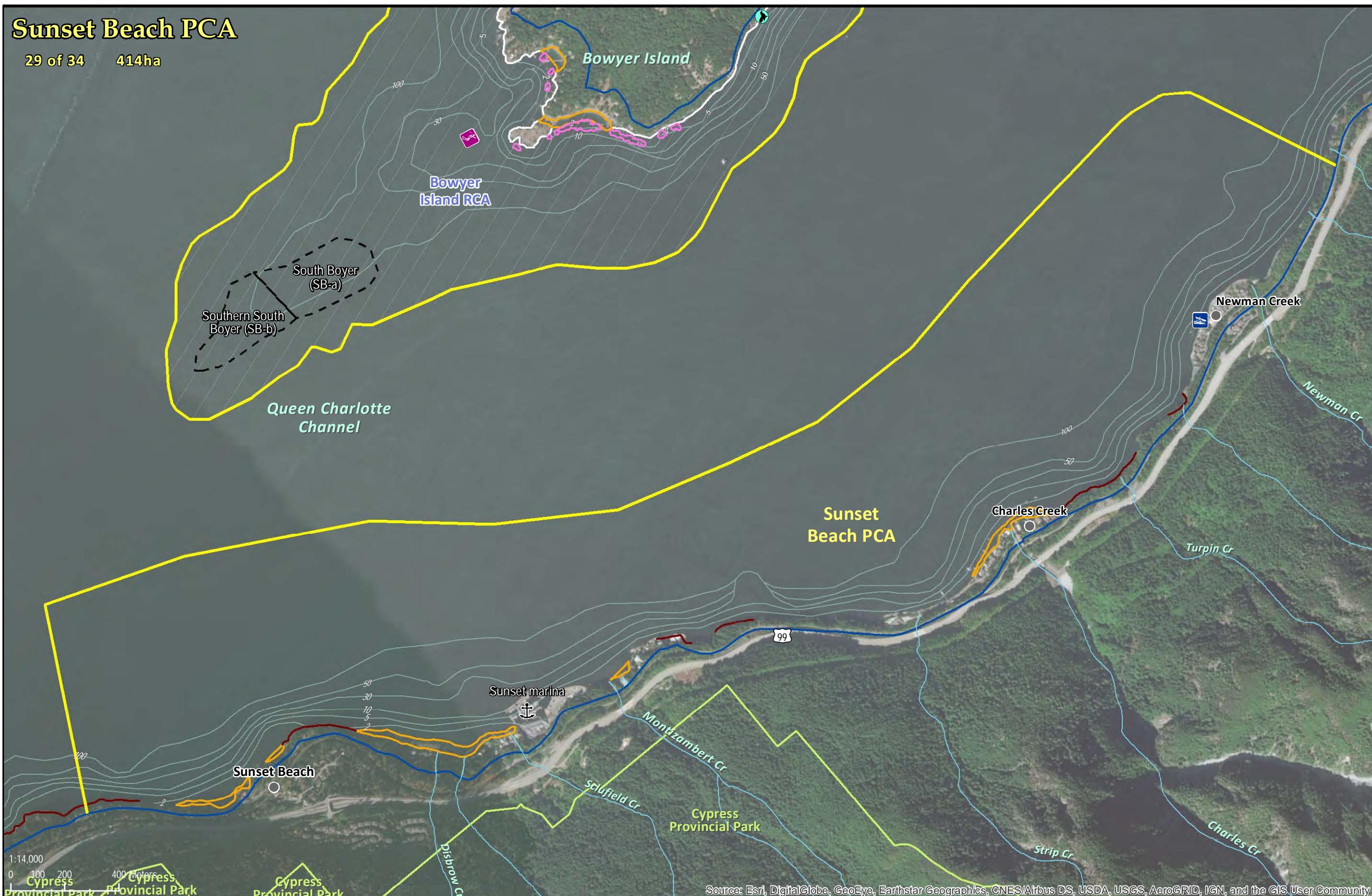
Metres (m)	% of PCA
25 - 0	6
-2 to -5	0.3
-5 to -10	4
-10 to -30	3
-30 to -50	4
-50 to -100	11
-100 to -200	20
> -200	49



Sunset Beach PCA

29 of 34

414ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	414 ha
Portion of study area	1.1 %
Contribution to PCA total	3 %
Contribution to PCA category	6.2 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	1.8 %
Herring spawning -	0 %
High rugosity -	2 %
Tidal current -	3 %
Fresh water inflow -	2 %
Vertical cliff -	2.1 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	1.9 %

MARINE BIRDS

Shorebird staging -	1.4 %
Listed species -	2.1 %
Barrows Goldeneye -	11.7 %
Marbled murrelet -	0 %
Great Blue Heron -	3 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	17.9 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	7
-2 to -5	2
-5 to -10	4
-10 to -30	4
-30 to -50	5
-50 to -100	5
-100 to -200	11
> -200	39
> -200	24



Cape Roger Curtis PCA

30 of 34

132ha

Tunstall Bay

The Cape on Bowen

Bowen Island

Collingwood Channel

Cape Roger
Curtis PCA

Strait of
Georgia

1:8,000

0 100 200 400 Meters

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Forage fish
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	132 ha
Portion of study area	0.3 %
Contribution to PCA total	1 %
Contribution to PCA category	2%
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0.6 %
Herring spawning -	0 %
High rugosity -	0.6 %
Tidal current -	0 %
Fresh water inflow -	0.2 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	0.1 %

MARINE BIRDS

Shorebird staging -	2.4 %
Listed species -	1.5 %
Barrows Goldeneye -	0 %
Marbled murrelet -	4.7 %
Great Blue Heron -	1.9 %

MARINE MAMMALS

Harbour seal -	8.3 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

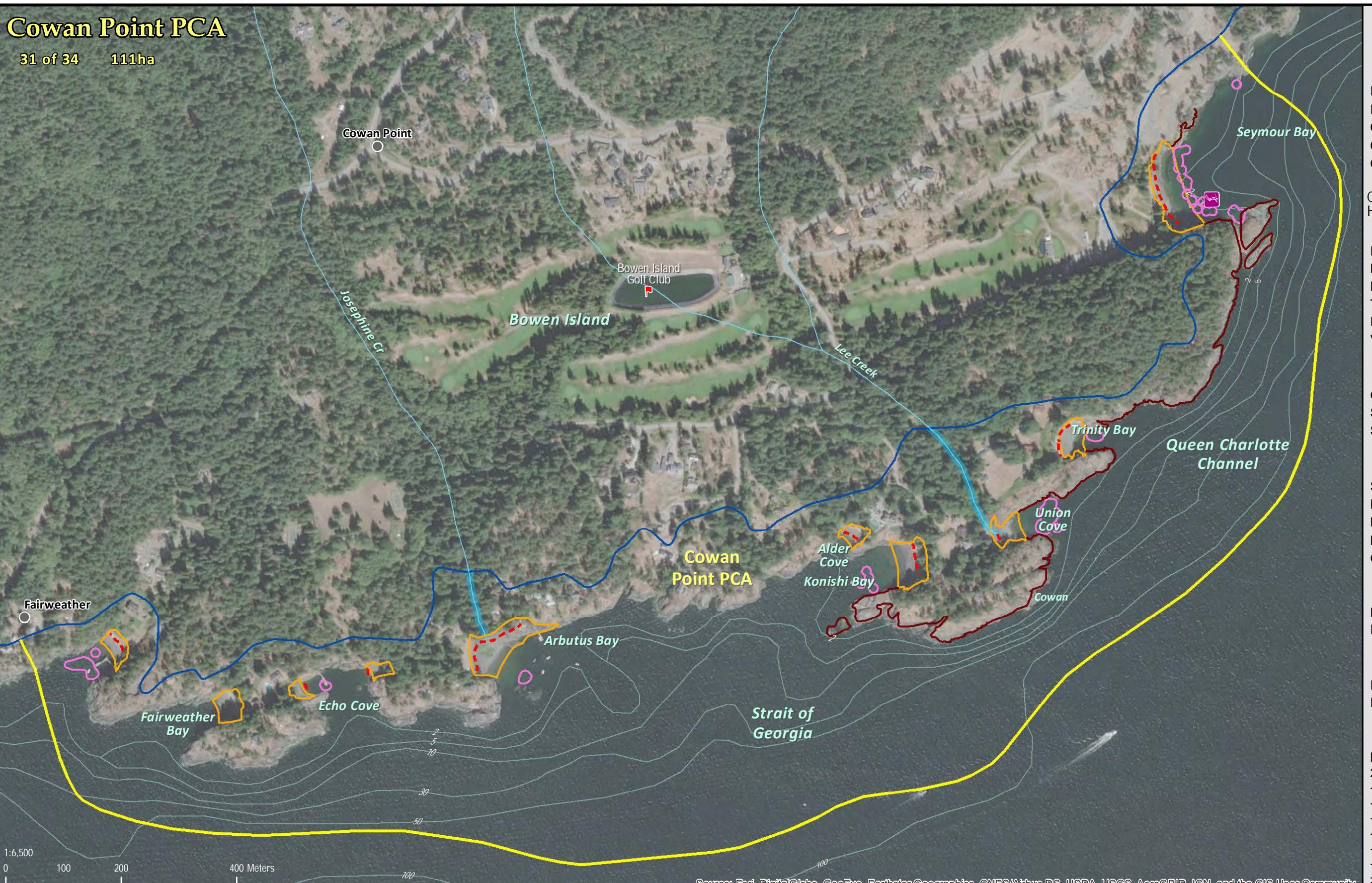
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	15
-2 to -5	18
-5 to -10	3
-10 to -30	7
-30 to -50	12
-50 to -100	9
-100 to -200	16
> -200	21
	0



Cowan Point PCA

31 of 34 111ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	111 ha
Portion of study area	0.3 %
Contribution to PCA total	0.8 %
Contribution to PCA category	1.7 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	2.2 %
Herring spawning -	0 %
High rugosity -	0.5 %
Tidal current -	0 %
Fresh water inflow -	1 %
Vertical cliff -	2.8 %

INVERTEBRATES

Glass sponge reef -	0 %
Sponge garden -	0 %
Sandy intertidal -	1.8 %

MARINE BIRDS

Shorebird staging -	1.1 %
Listed species -	1.1 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	1.6 %
Estuary / creek mouth -	0 %

DEPTH ZONES

Metres (m)	% of PCA
25 - 0	29
-2 to -5	14
-5 to -10	8
-10 to -30	9
-30 to -50	10
-50 to -100	9
-100 to -200	19
> -200	3
	0

- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Youth camp
- Campsite
- Marine trail campsite
- Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation
- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)

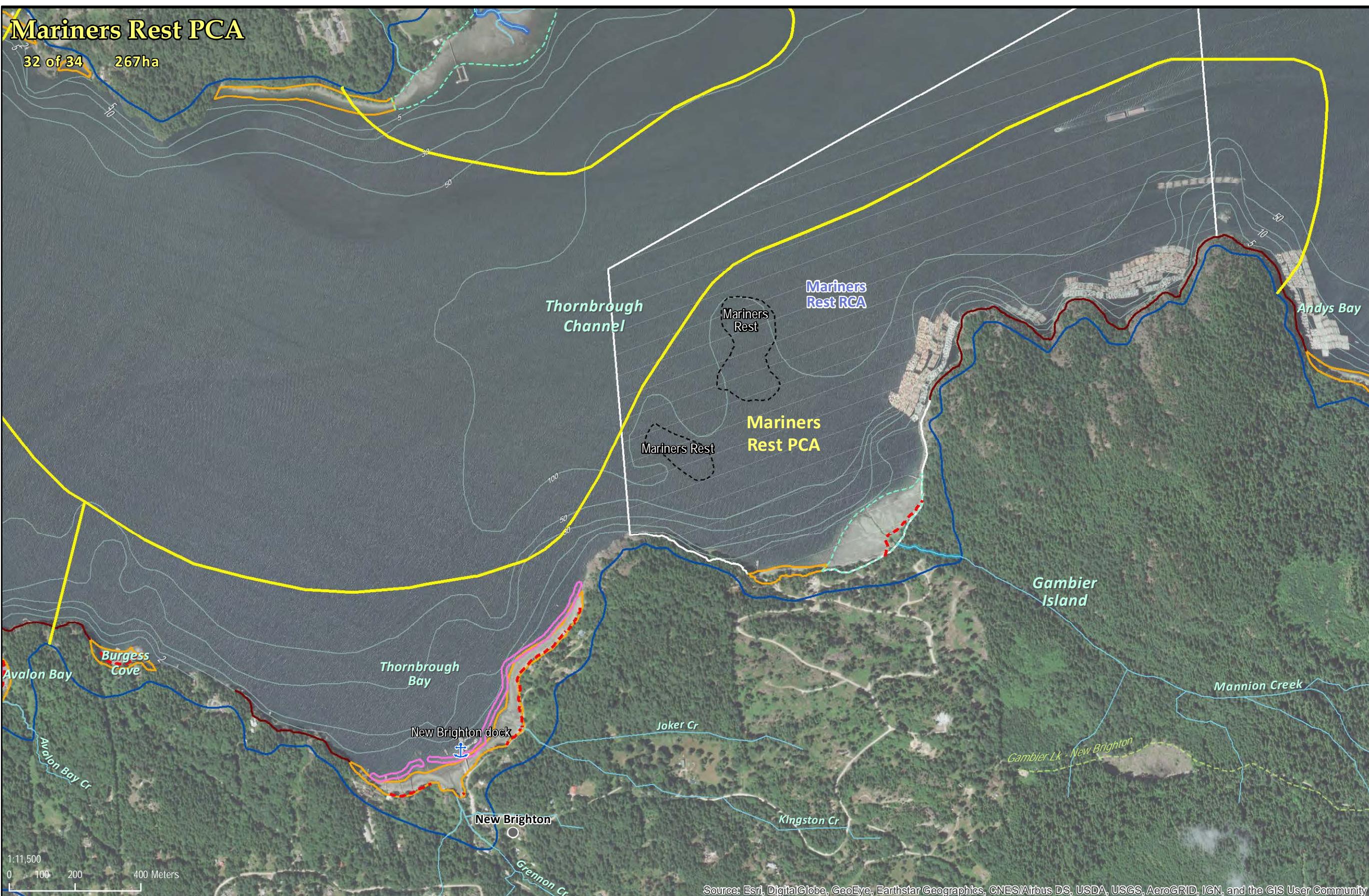


- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass
- Glass sponge reefs
- Closure area
- Confirmed
- Investigation

- Glacial moraine
- Sponge garden
- Marine study area
- Priority conservation areas (PCAs)



Mariners Rest PCA



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- Marina
- Outstation
- Public dock
- Bathymetry contour (m)
- Recreation trail
- Vertical rock cliff
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Existing protected area
- First Nation reserve
- Rockfish conservation area
- Recreation site
- Estuary/creekmouth
- Sand cobble beach
- Herring spawning
- Eel grass

- Glass sponge reefs
- Glacial moraine
- Closure area
- Confirmed
- Investigation
- Priority conservation areas (PCAs)

FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	267 ha
Portion of study area	0.7 %
Contribution to PCA total	2 %
Contribution to PCA category	4%
Overlap with RCA	51.6 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	3.4 %
Herring spawning -	0 %
High rugosity -	1.1 %
Tidal current -	1.9 %
Fresh water inflow -	1.2 %
Vertical cliff -	3.1 %

INVERTEBRATES

Glass sponge reef -	2.8 %
Sponge garden -	0 %
Sandy intertidal -	3.4 %

MARINE BIRDS

Shorebird staging -	0.3 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0.5 %
Great Blue Heron -	0 %

MARINE MAMMALS

Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	2.5 %
Estuary / creek mouth -	1.2 %

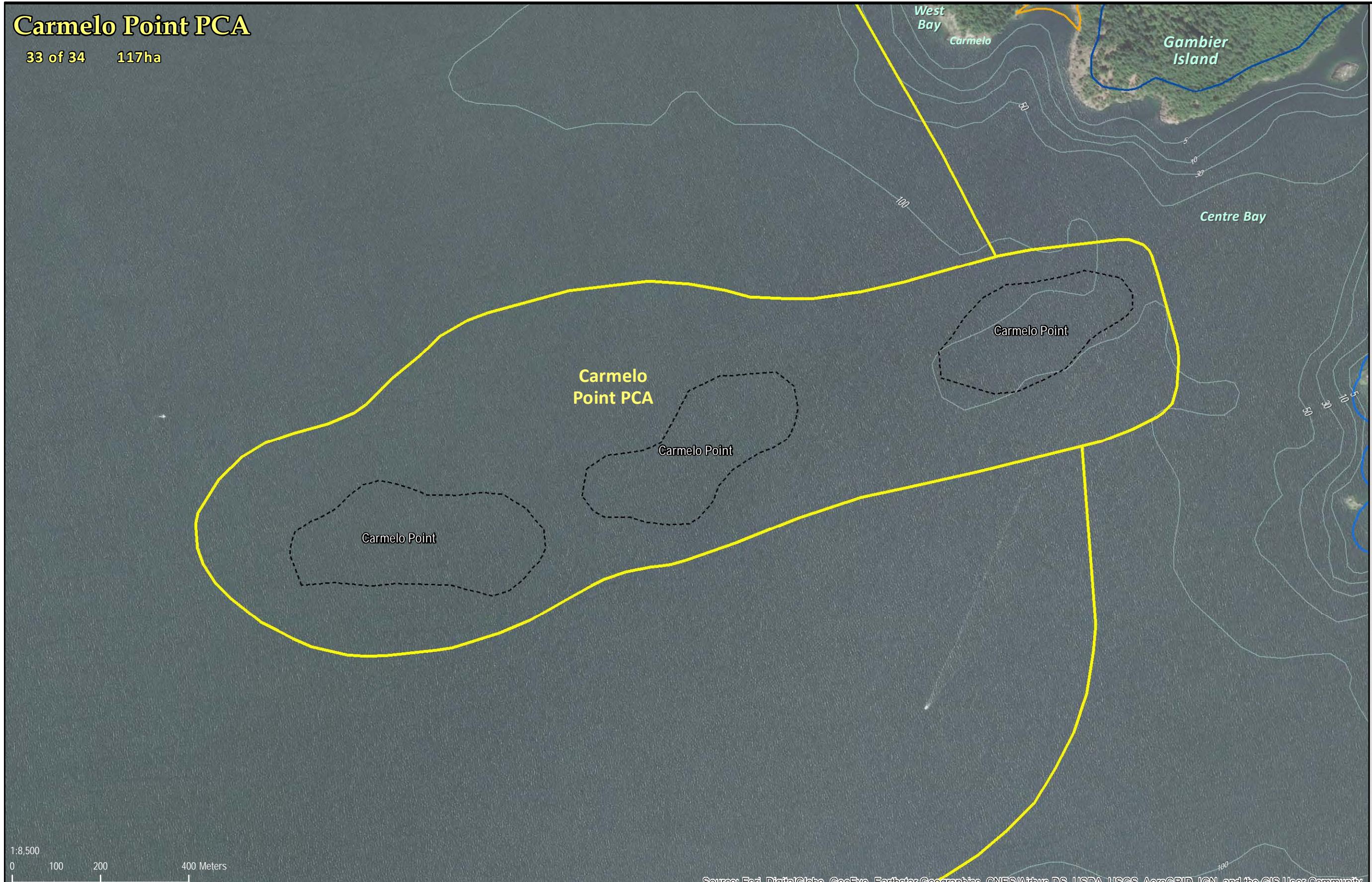
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	13
-2 to -5	5
-5 to -10	6
-10 to -30	5
-30 to -50	11
-50 to -100	9
-100 to -200	22
> -200	28
	0



Carmelo Point PCA

33 of 34 117ha



FEATURE DISTRIBUTION

within Priority Conservation Areas (PCAs)

PCA size	117 ha
Portion of study area	0.3 %
Contribution to PCA total	0.9 %
Contribution to PCA category	1.8 %
Overlap with RCA	0 %

Contribution to known distribution in Howe Sound based on available data

MARINE FISH

Forage fish -	0 %
Herring spawning -	0 %
High rugosity -	0.1 %
Tidal current -	0.1 %
Fresh water inflow -	0 %
Vertical cliff -	0 %

INVERTEBRATES

Glass sponge reef -	7.3 %
Sponge garden -	0 %
Sandy intertidal -	0 %

MARINE BIRDS

Shorebird staging -	0 %
Listed species -	0 %
Barrows Goldeneye -	0 %
Marbled murrelet -	0 %
Great Blue Heron -	0 %

MARINE MAMMALS

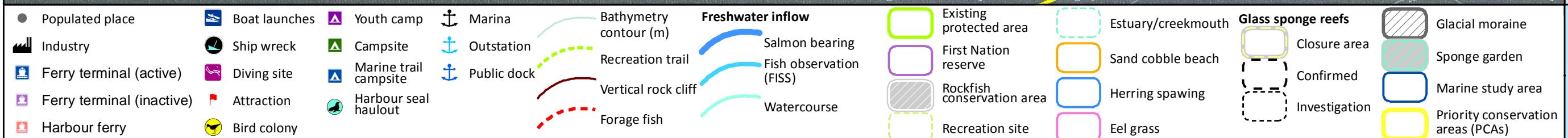
Harbour seal -	0 %
River Otter -	0 %

MARINE PLANTS

Eelgrass -	0 %
Estuary / creek mouth -	0 %

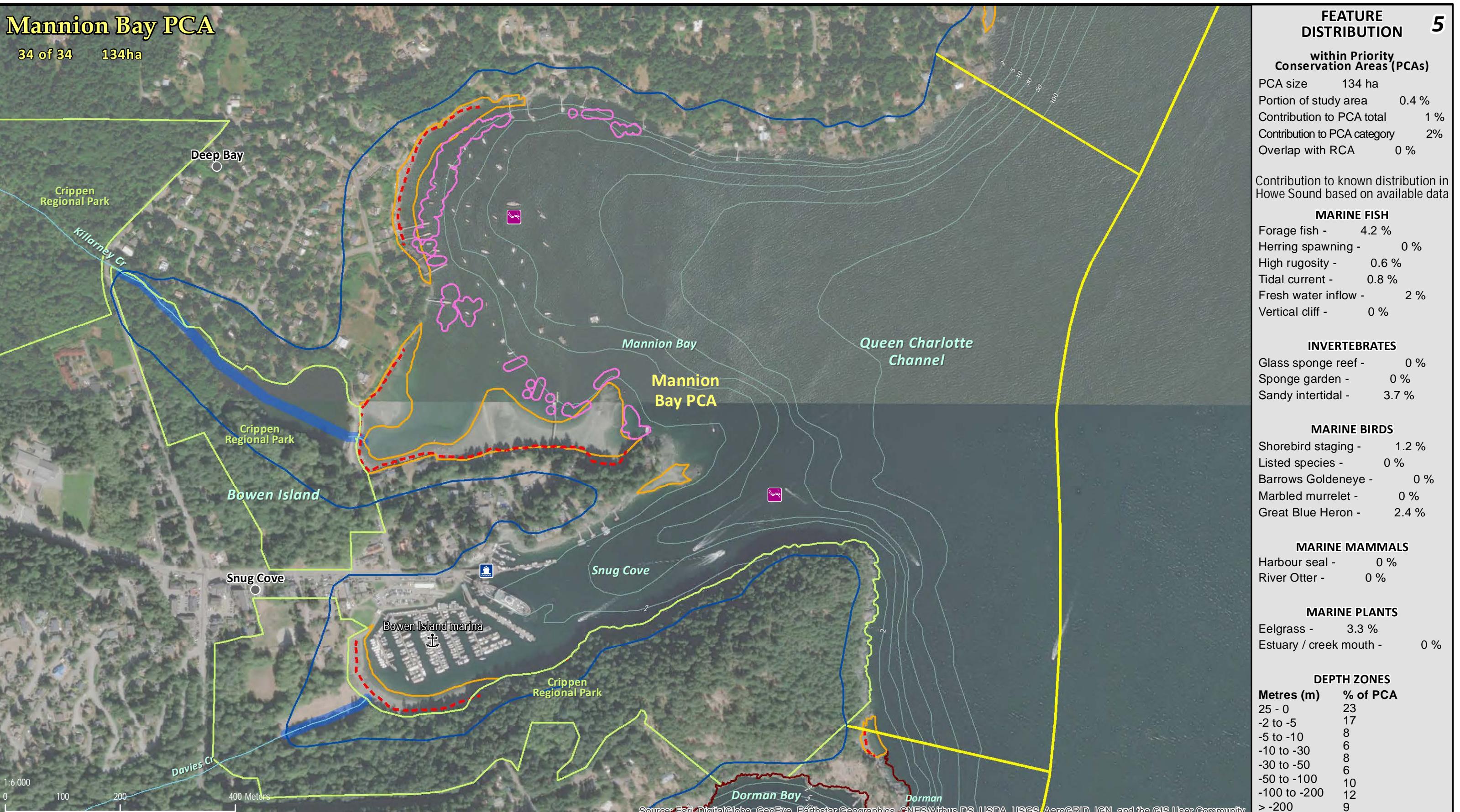
DEPTH ZONES

Metres (m)	% of PCA
25 - 0	0
-2 to -5	0
-5 to -10	0
-10 to -30	0
-30 to -50	0
-50 to -100	8
-100 to -200	89
> -200	4



Mannion Bay PCA

34 of 34 134ha



- Populated place
- Industry
- Ferry terminal (active)
- Ferry terminal (inactive)
- Harbour ferry
- Boat launches
- Ship wreck
- Diving site
- Attraction
- Bird colony
- ▲ Youth camp
- ▲ Campsite
- ▲ Marine trail campsite
- ▲ Harbour seal haulout
- Marina
- Outstation
- Public dock
- Attractions
- Vertical rock cliff
- Forage fish
- Bathymetry contour (m)
- Recreation trail
- Freshwater inflow
- Salmon bearing
- Fish observation (FISS)
- Watercourse
- Existing protected area
- Estuary/creekmouth
- Glass sponge reefs
- Glacial moraine
- Closure area
- Sand cobble beach
- Rockfish conservation area
- Herring spawning
- Recreational site
- Eel grass
- First Nation reserve
- Marine study area
- Priority conservation areas (PCAs)

Bathymetry contour (m)
Recreation trail
Vertical rock cliff
Forage fish

Freshwater inflow
Salmon bearing
Fish observation (FISS)
Watercourse

Existing protected area
Estuary/creekmouth
Glass sponge reefs
Glacial moraine
Closure area
Sand cobble beach
Rockfish conservation area
Herring spawning
Recreational site
Eel grass

First Nation reserve
Marine study area
Priority conservation areas (PCAs)

Rockfish conservation area
Herring spawning
Recreational site
Eel grass



Priority Conservation Areas (PCAs)						FISH						INVERTEBRATES			Marine Birds				Marine Mammals		Marine Plants				
	Area Ha	% of MSA	% of PCA Total	% of PCA Category	RCA Overlap	Forage fish	Herring spawning	High rugosity	Tidal current	Fresh water inflow	Vertical cliff	Sponge reef	Sponge garden	Sandy intertidal	Shorebird staging	Listed bird species	Barrows Goldeneye	Marbled Murrelet	Great Blue Heron	Harbour Seal	River Otter	Eelgrass	Estuaries		
1	Passage Island	934	3	7	14	22	0	0	3.9	0.3	0	0	34	0	0	2.5	6.2	0	2.5	0	0	1.3	0		
2	Pasley Islands	1404	4	10	20	56	0.6	2.7	6.9	8.8	0	0.2	0	0	5.0	26	13	18	28	4.5	45	0	20.5	0	
3	Defence Islands	624	2	5	9	0	1.7	2.3	4.2	1.8	1.0	7.2	10	0	1.1	2.5	0	0	0	0	0	0	0	0	
4	Pam Rocks	1047	3	8	15	51	7.1	0	4.8	1	1.4	8.7	3.0	0	6.0	4.0	6.9	8.8	12	4.0	15	24	1.1	0	
5	Lions Bay	534	1	4	8	71	1.5	0	2.8	0	1.3	1.2	13	0	4.2	0.8	4.8	15	0	0	0	0.7	0	0	
6	Bowyer Island	334	1	3	5	93	0	0	2.2	1.0	0.3	0	3.6	0	0.8	1.8	0	0	0.4	1.7	1.3	0	2.0	0	
7	Hutt Island	865	2	6	13	0	3.5	0	4.0	1.6	3.0	1.6	6	96	0.6	7.8	9.0	0	24	1.3	6.1	0	4.5	0.3	
8	Porteau Cove	437	1	3	6	0	6.3	0	2.8	2.4	2.2	1.3	0	0	3.3	0.0	0	0	0.1	0	0	0	4.3	4.3	
9	Halkett Bay	346	1	3	5	0	2.9	0	1.9	1.1	0.5	3.5	1.7	2.4	4.2	3	3.7	2.6	0	0	5.7	0	2.9	0	
10	Tunstall Bay	147	0	1	2	0	3.5	0	0.8	0.9	1.4	0	0	0	2.7	4.2	0	0	0	3.1	3.6	0	7.9	0	
11	Dorman Point	70	0.2	1	1	0	0.8	0	0.4	0.3	0	2.8	2.5	0	0.6	0.2	0	0	0	1.0	0	0	0	0	
12	Williamsons Landing	75	0.2	1	1	0	2.8	0	0.4	0.5	1.2	0	0	0	1.3	0.2	0	0	0.1	0	0	0	0	2.6	
13	Anvil Island East	67	0	1	1	0	0	0	0.3	0	0	0.8	3.0	0	0	0.4	0	0	0.1	0.3	0	0	0	0	
14	Potlatch Creek	43	0.1	0.3	1	0	0.5	0	0.2	0	1.5	0	0	0	0	0.4	0	0	0.3	0	0	0	0	2.1	
15	Squamish Estuary	820	2	6	12	0	1.0	7.4	0.3	1.0	0.1	0.1	0	0	0	1.6	0	0	0.5	27	0	23	0	66	
16	McNab Estuary	152	0.4	1	2	0	0.3	0	0.5	0	41	0.8	0	0	0	0	0	0	0.8	0	0	0	0	8	
17	South Gambier Bays	1180	3	9	18	19	13	25	6.0	7.3	2.6	1.8	0.4	0	9.8	12	0.7	0	0.9	0	1.2	0	14	5	
18	Hood Point	382	1	3	6	0	6.1	0	2.3	1.9	0.5	1.8	0	0	4.9	2.2	0	0	0.1	1.3	0	0	0	4.4	0
19	Whytecliff Park	208	1	2	3	56	0	0	1.3	1.0	0	2.9	0	1.5	2.2	0.7	1.7	0	0	0	2.3	4.5	0	0	0
20	Grebe Islets	400	1	3	6	9	0	10	2.5	2.9	0.5	0.9	0	0	2.2	3.9	4.4	3.5	0.0	1.6	9.3	0	0	0	
21	Shoal Channel	870	2	6	13	0	15	15	2.9	6.5	1.3	1.6	0	0	15	5.0	0	0	0	7.5	0	0	0	20	0.4
22	Langdale	456	1	3	7	0	6.9	0	1.5	3.5	0.3	0.4	12	0	6.1	3.0	0	0	0.2	1.3	0	0	0	7.8	3.3
23	Dakota Estuary	86	0.2	1	1	0	2.5	0	0.4	0.3	2.3	0	0	0	0	0	0	0	0	0.6	0	0	0	4.0	
24	Woodfibre Creek	135	0.4	1	2	0	0	7.4	0.8	0.6	5.6	2.9	0	0	0.4	0	0	0	0.0	0	0	0	0	0.4	
25	Darrell Bay	124	0.3	1	2	0	0.4	7.1	0.6	0.4	1.0	1.1	0	0	2.3	0.9	0	0	0	0	0	0	0	0.3	
26	Stawamus Estuary	10	0.1	0.1	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	
27	Ekins Point	158	0.4	1	2	0	0.4	0	0.9	1.1	0	2.7	0	0	0	0.3	0	0	0.1	0	0	0	0	0	
28	Woolridge Island	521	1	4	8	69	0	0	1.7	4.1	0.2	7.9	0	0	0	0.7	0	0	0.6	0	0	0	0	0	
29	Sunset Beach	414	1	3	6	0	1.8	0	2.0	3.0	2.0	2.1	0	0	1.9	1.4	2.1	12	0	3.0	0	17.9	0	0	
30	Cape Roger Curtis	132	0.3	1	2	0	0.6	0	0.6	0	0.2	0	0	0	0.1	2.4	1.5	0	4.7	1.9	8.3	0	0	0	
31	Cowan Point	111	0.3	1	2	0	2.2	0	0.5	0	1.0	2.8	0	0	1.8	1.1	1.1	0	0	0	0	0	1.6	0	
32	Mariners Rest	267	1	2	4	52	3.4	0	1.1	1.9	1.2	3.1	2.8	0	3.4	0.3	0	0	0.5	0	0	0	2.5	1.2	
33	Carmelo Point	117	0.3	1	2	0	0	0.1	0.1	0	0	7.3	0	0	0	0	0	0	0	0	0	0	0	0	
34	Mannion Bay	134	0	1	2	0	4.2	0	0.6	0.8	2.0	0	0	0	3.7	1.2	0	0	0	2.4	0	0	3.3	0	

Values = % of known distribution in Howe Sound within each PCA, based on available data