

# ShoreZone 101



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**SeaChange Marine Conservation Society**

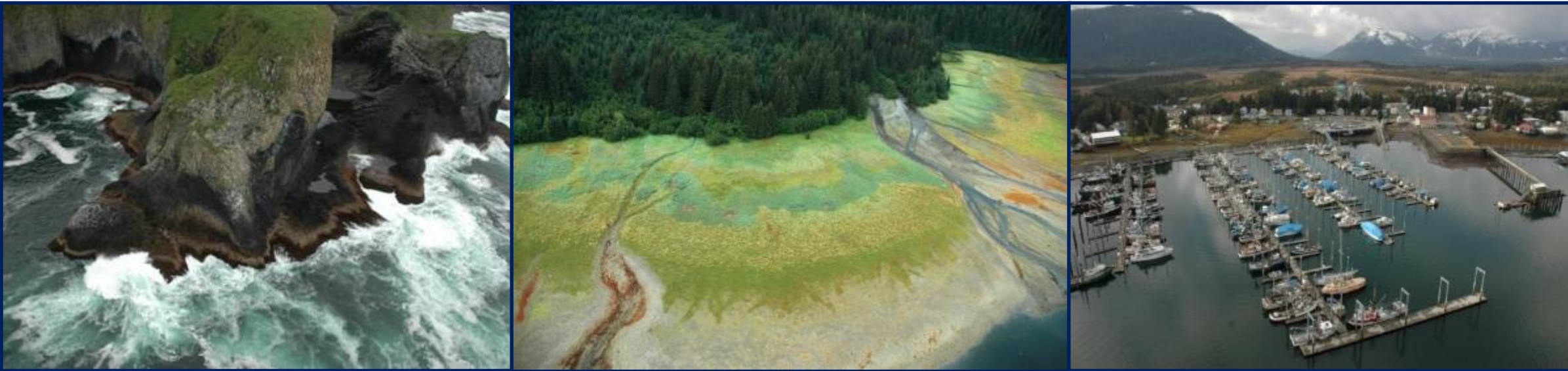
**Coastal and Ocean Resources**

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# What is ShoreZone?



A standardized **coastal imaging** and **habitat mapping** system that characterizes **physical and biological attributes** of the shoreline in a searchable, **georeferenced** database.



# Coastal Imaging

**Low-altitude  
Oblique Angle  
Video and Stills**

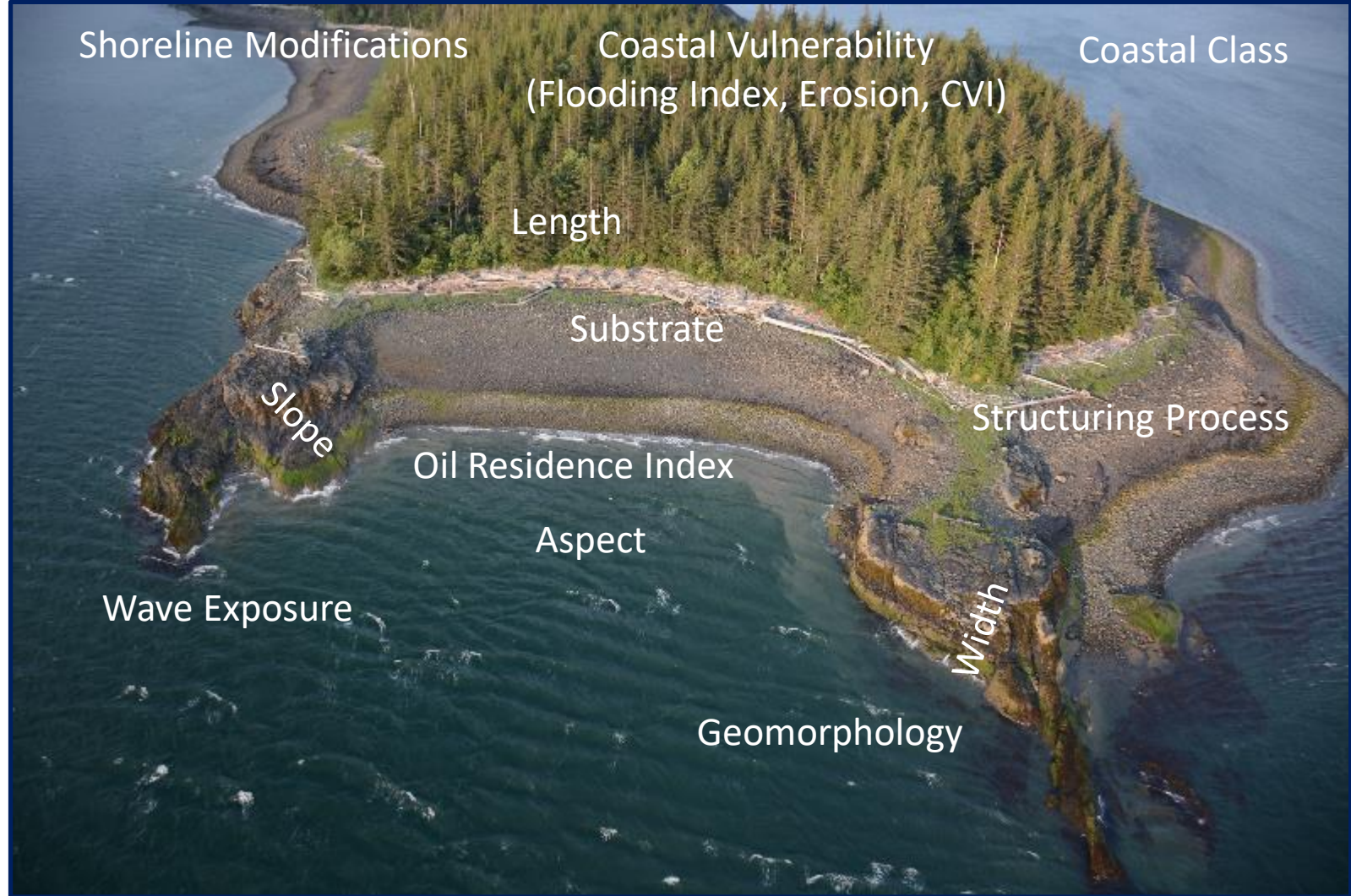


**Low tide windows  
Georeferenced**





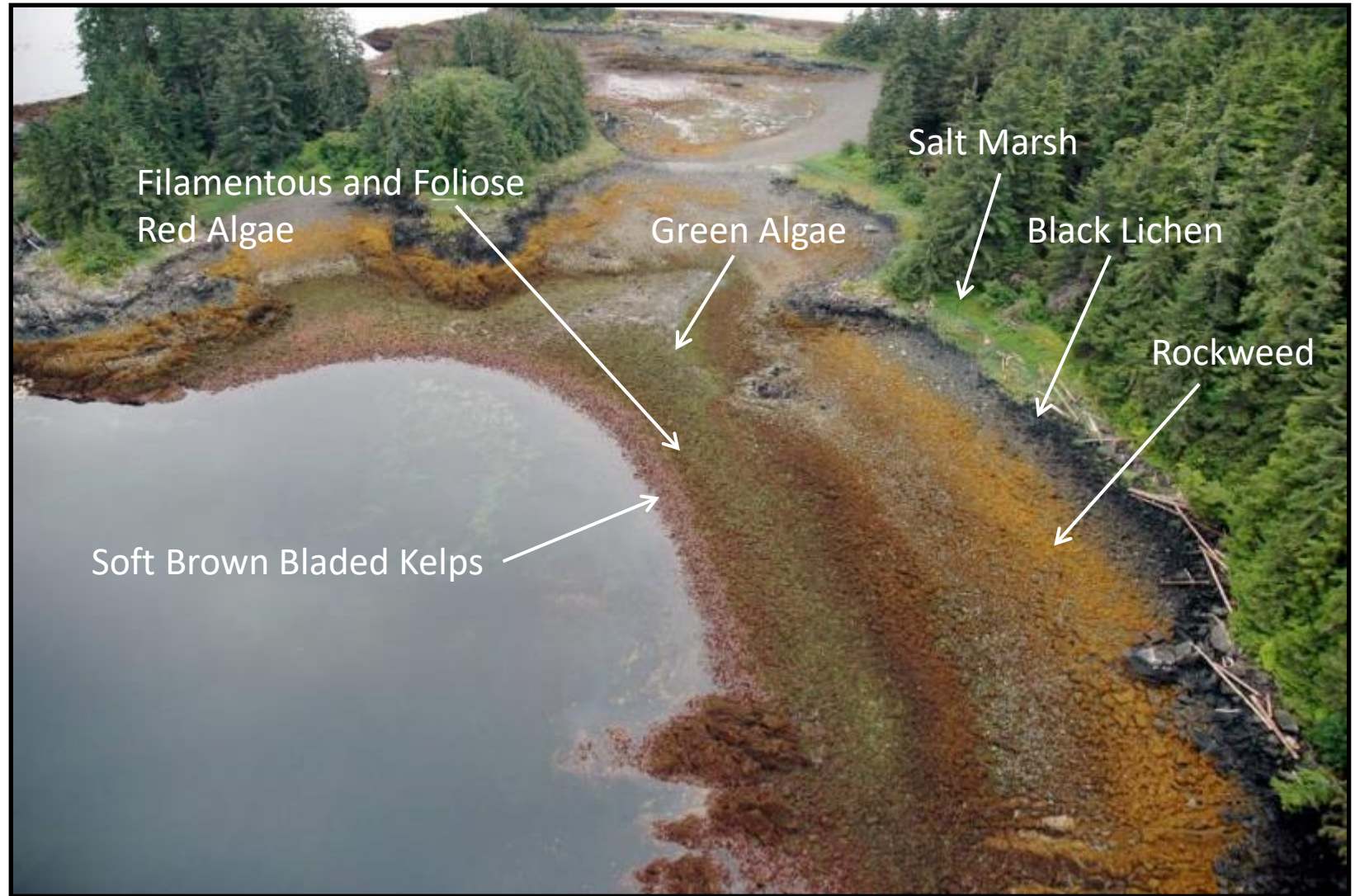
# ShoreZone Physical Attributes



# ShoreZone Biological Attributes

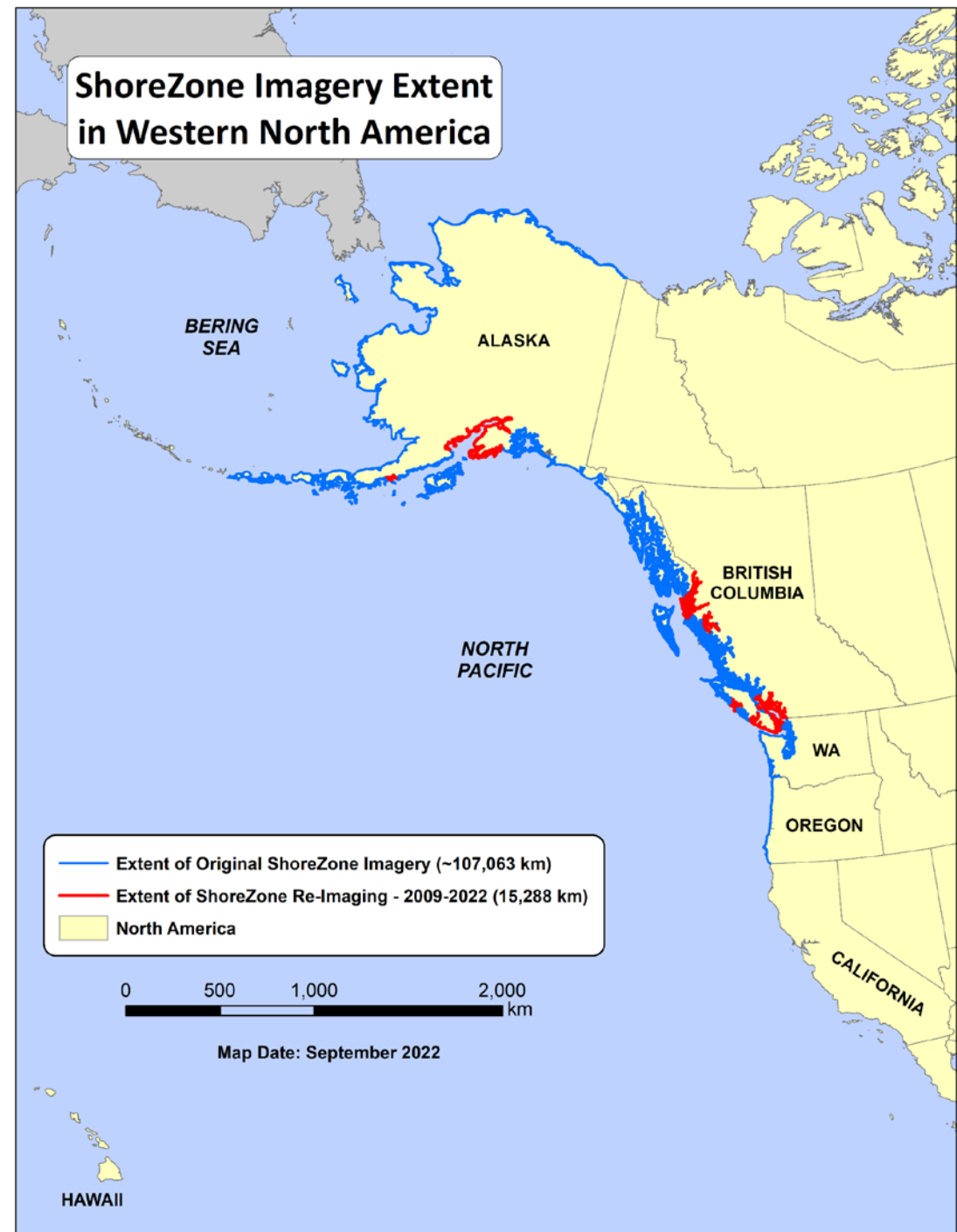
**Biobands are assemblages defined by a typical:**

- Tide Height
- Colour
- Texture





# ShoreZone Across the Pacific Northwest



# Applications for ShoreZone Data



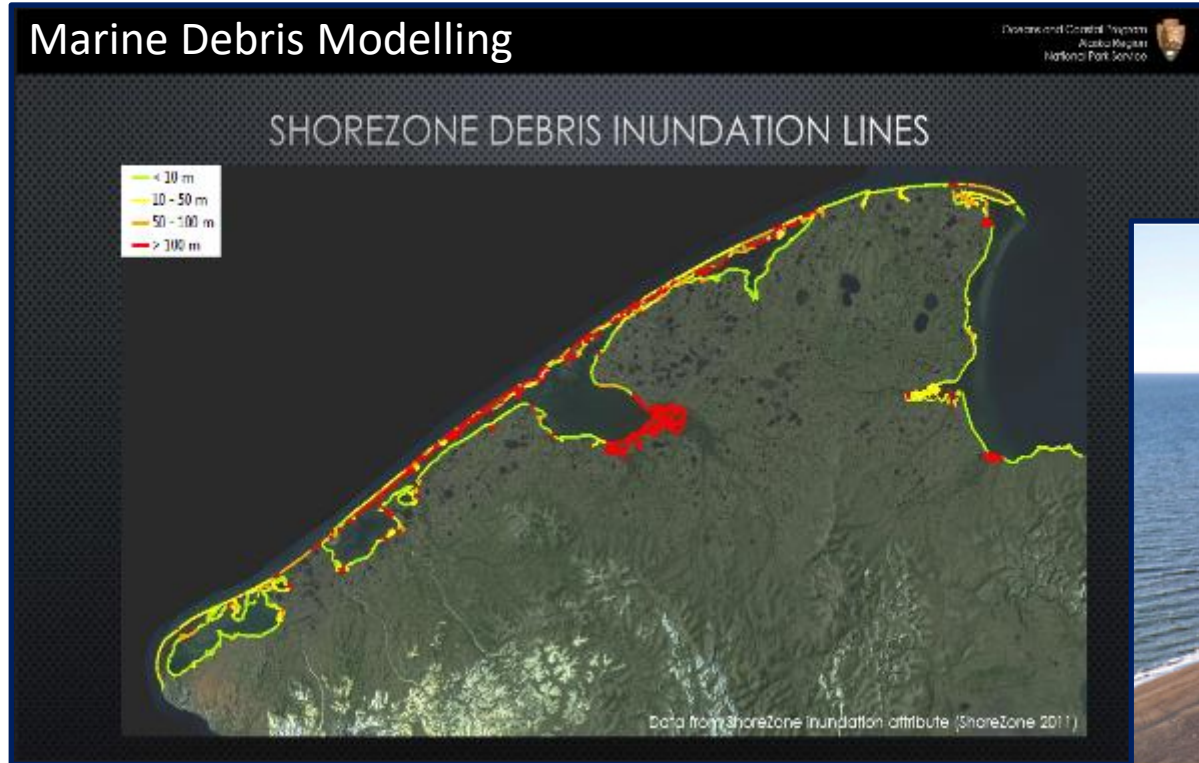
**Oil Spill Planning  
and Response  
Risk Management**





# Applications for ShoreZone Data

## Marine Debris Modelling

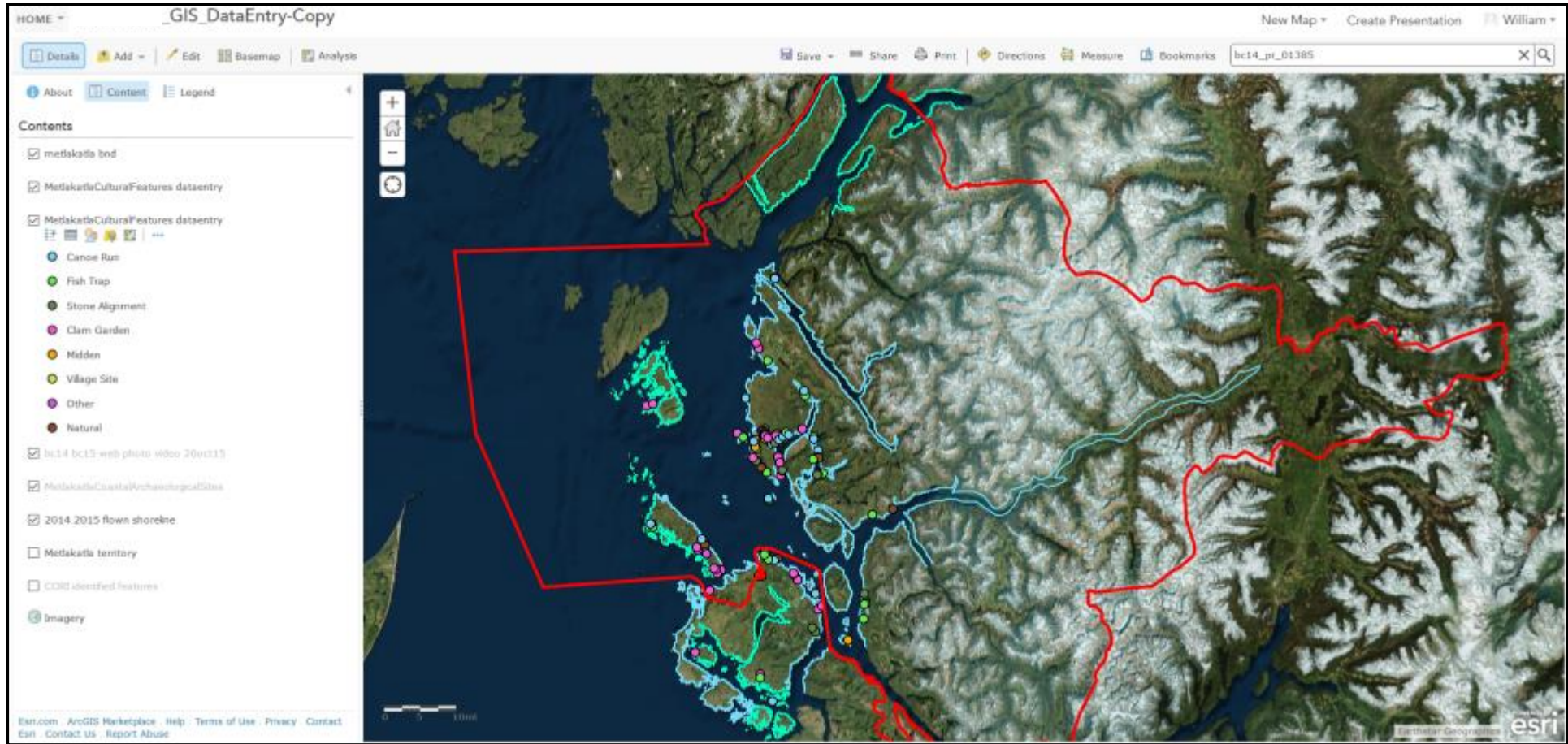


## Marine Debris Coastal Vulnerability





# Applications for ShoreZone Data



## Cultural Features Mapping



# Applications for ShoreZone Data

## Habitat and Species Modelling

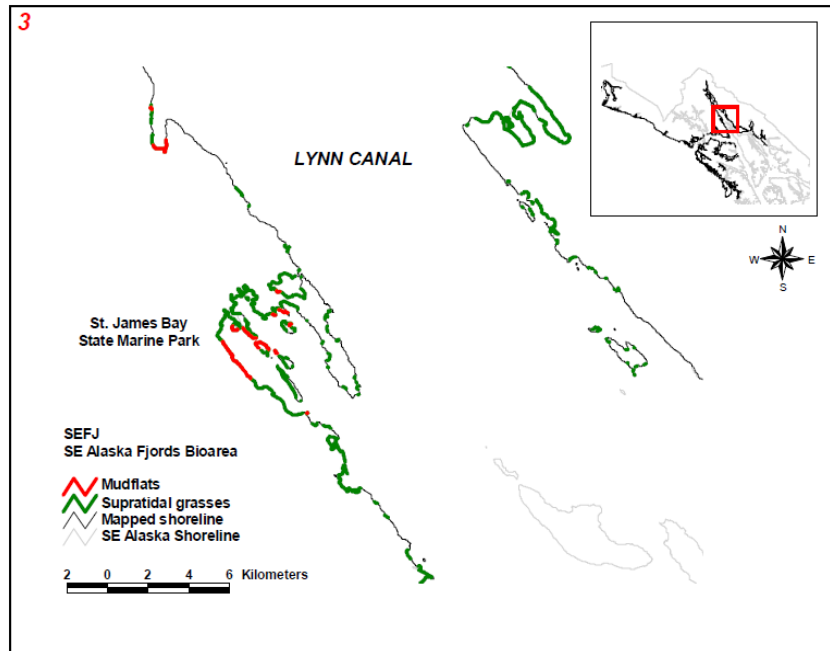
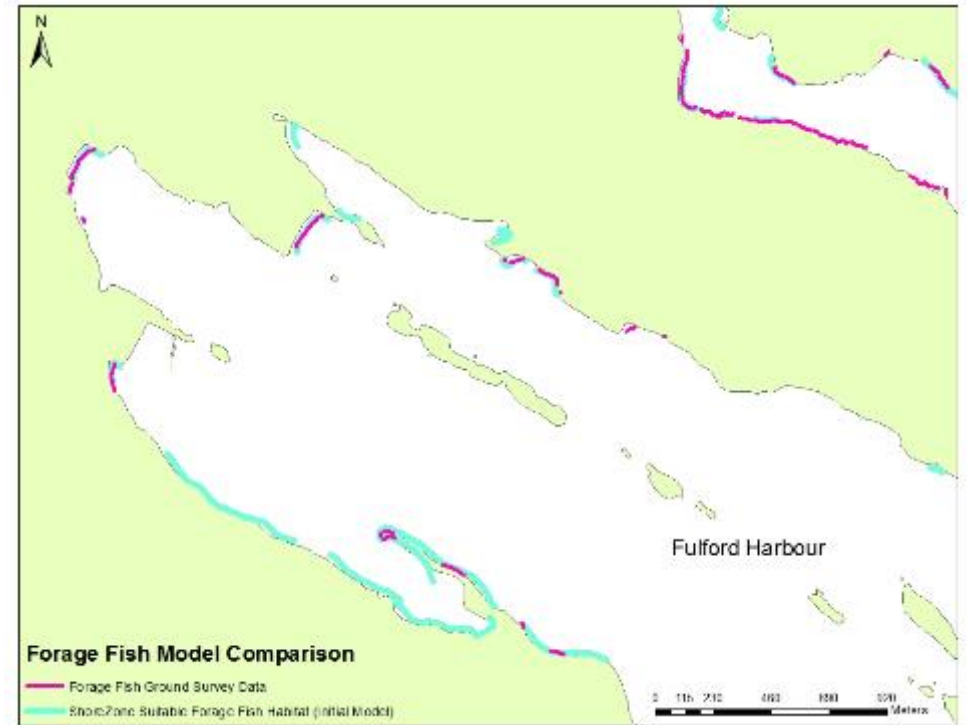


Figure 2.10. Local-level detail map of St. James Bay Marine Park in Lynn Canal, illustrating units with salt marsh vegetation (such as *Puccinella* and sedges, shown in green) overlain by units with fine sediment mapped in the lowest intertidal (shown in red). This combination of habitat attributes is considered particularly suitable for green crab colonization. Shapefiles of query results are provided and can be viewed at any scale for the study area in Southeast Alaska. Location is shown by box 3 in Fig. 2.3.

Green Crab Monitoring



Forage Fish Spawning

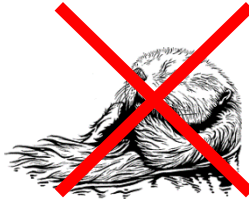







# Applications for ShoreZone Data

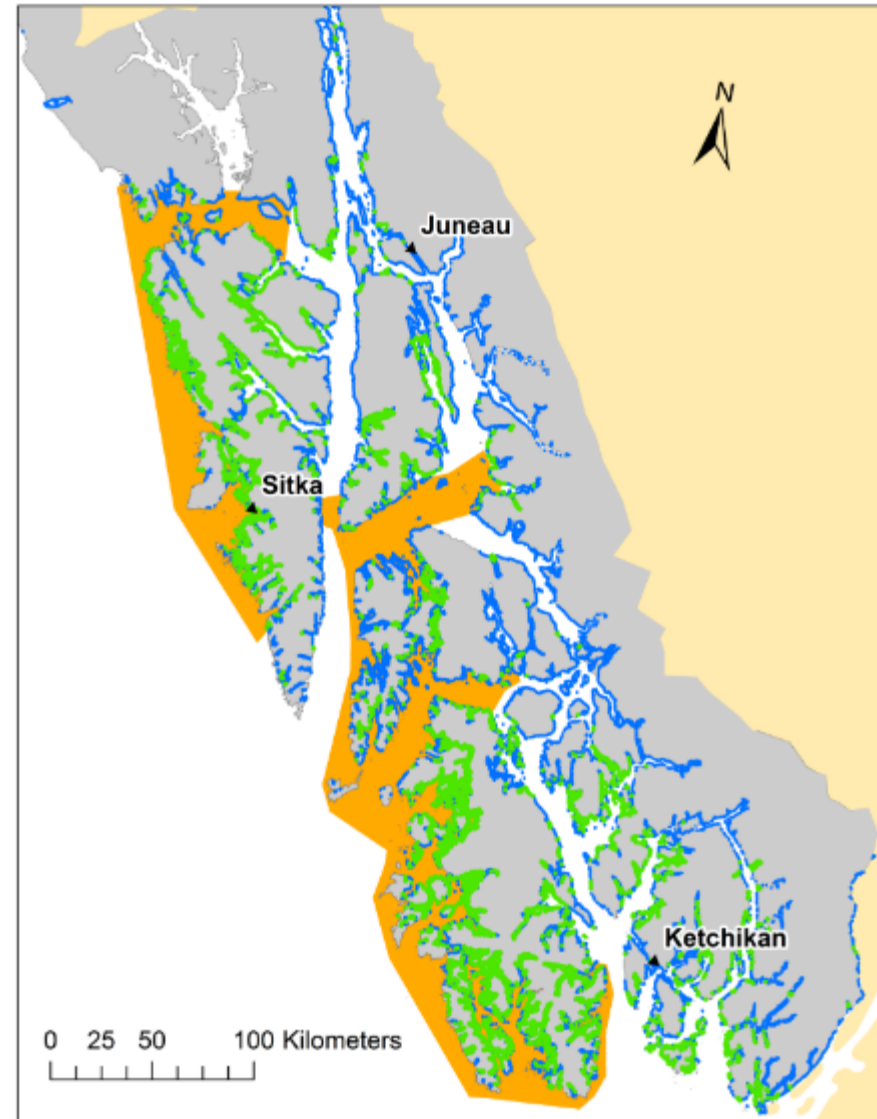
## Habitat and Species Modelling

### Eelgrass and sea otters in SEAK



Potential seagrass habitat	14,705 km	22,976 km
Habitat with seagrass	5,793 km <u>39%</u>	4,371 km <u>19%</u>

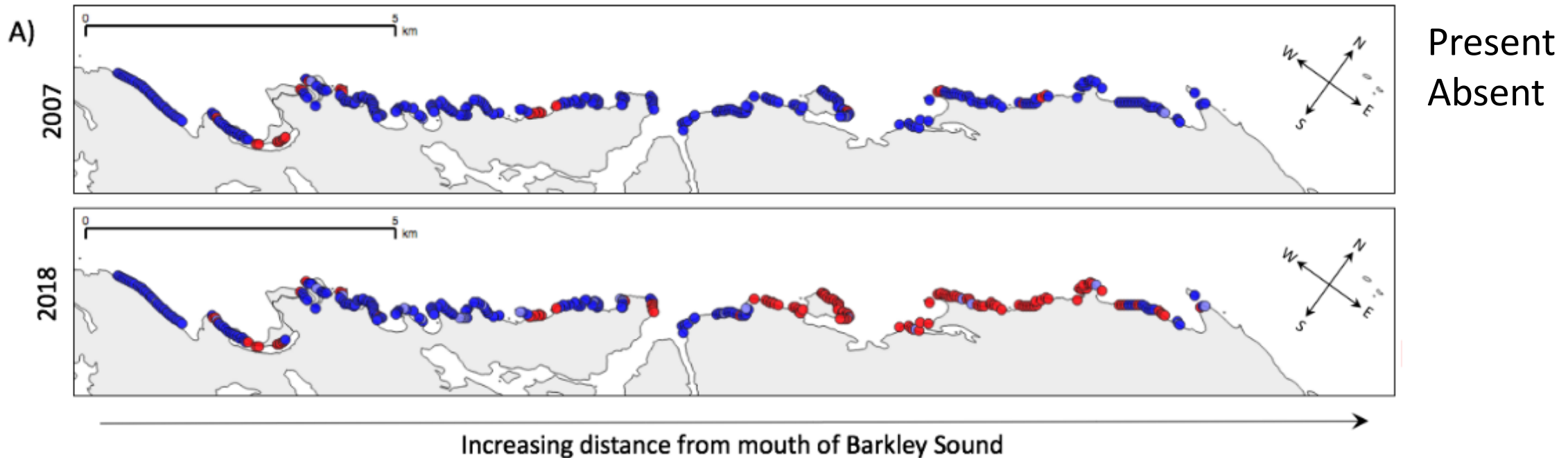
-  Sea otter range
-  Seagrass
-  Suitable for seagrass



# Applications for ShoreZone Data

## Change Over Time

Kelps have disappeared from deeper into Barkley Sound





# Applications for ShoreZone Data

## Change Over Time

Dramatic reduction of kelp/expansion of urchin barrens on North Coast of BC in recent years

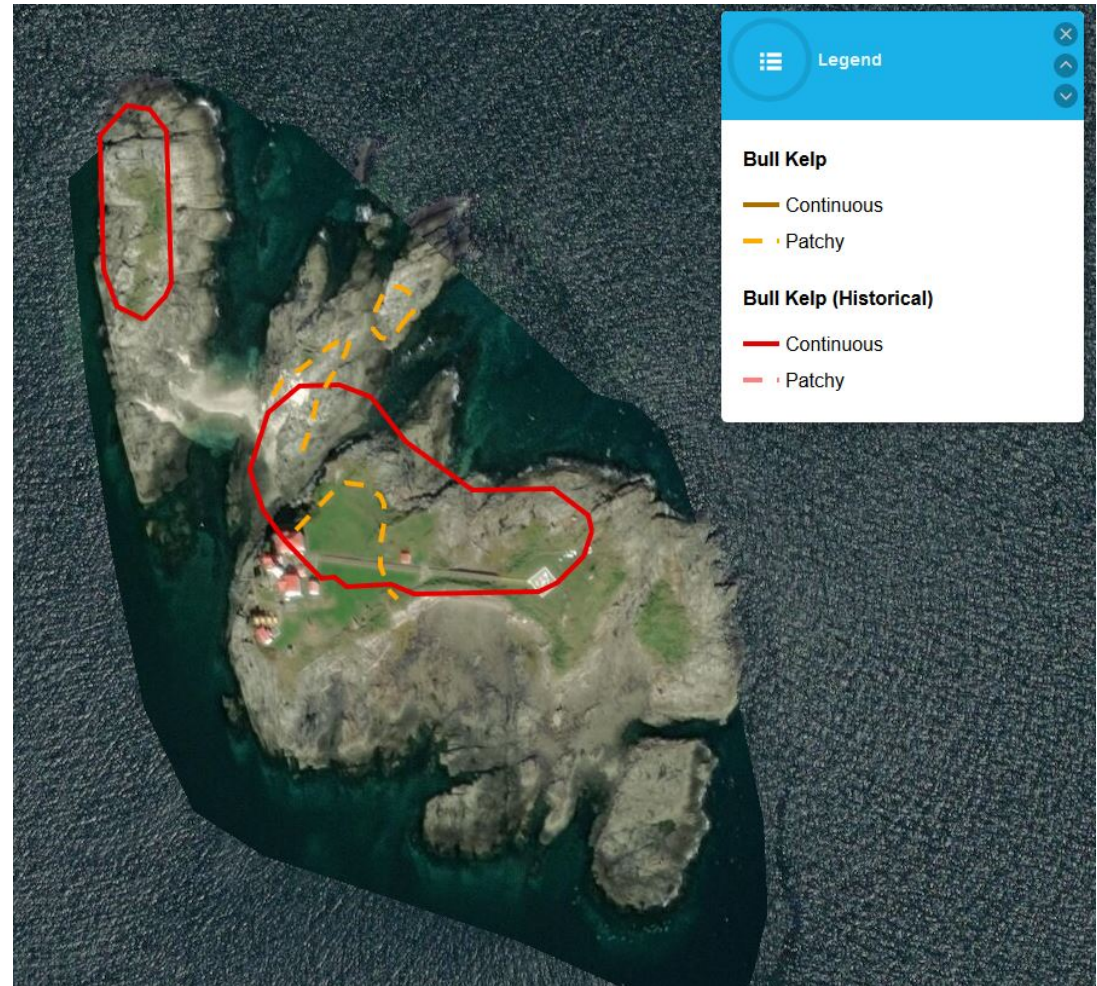




# Applications for ShoreZone Data

## Change Over Time

Dramatic reduction of kelp/expansion of urchin barrens on North Coast of BC in recent years





# Where to Access ShoreZone

[BC ShoreZone ArcGIS Site](#)

[NOAA ShoreZone Site](#)

[AOOS Portal](#)

[Strait of Georgia Data Centre](#)





Thank-you!

Questions?

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