

Where is ShoreZone?



What is ShoreZone?

ShoreZone is an **imaging** and **habitat mapping** system that specializes in the collection and interpretation of low-altitude aerial imagery of the coastal environment.

The objective of ShoreZone is to produce an integrated, searchable inventory of physical and biological features of the intertidal and nearshore zones which can be used as a tool for **science, education, management, and environmental hazard planning**. The ShoreZone mapping system provides a spatial framework for **coastal habitat assessment** on local and regional scales and has been funded by a variety of partners including local and federal governments, First Nations, citizens groups and industry. Imagery now exists for over 115,000 km of coastline from Alaska, British Columbia, Washington and Oregon (see over for map of extent).

ShoreZone Imaging

Oblique low-altitude aerial video and digital still imagery of the shoreline is collected during summer low tides (zero-meter tide level or lower), usually from a helicopter flying at 100 m altitude. Video and still images are geo-referenced using onboard GPS.



ShoreZone Mapping

The imagery is used to divide the shoreline into units with similar geomorphic characteristics and physical attributes (such as exposure, sediment type and size) are described. Biological attributes are then classified for each unit. The main biological attributes are called biobands, which are biotic communities recognizable due to characteristic colour, texture, exposure and tidal height. Examples of biobands are salt marsh (see example distribution map), canopy kelps and eelgrass. Units are digitized as shoreline segments in ArcGIS software, and then integrated with the coastal attribute data in a searchable relational geodatabase.

