

Notes to Users

1. This map is produced to accompany the District of Ucluelet Coastal Flood Mapping report (Ebbwater Consulting Inc. and Cascadia Coast Research Ltd., 2020) and is intended for the purposes set out in that report only. See the report for further details on the methodology, results, and limitations.
2. Flood water levels were developed using a 0.5% AEP flood and 1.0 m Relative Sea Level Rise (RSLR) to represent future flood levels. This is based on guidelines from Ausenco Sandwell (2011). RSLR values are subject to change and may need to be reassessed in future.
3. A 0.6 m freeboard allowance is included in flood construction levels (FCLs) in accordance with Ausenco Sandwell (2011).
4. The Flood Construction Levels (FCLs) have been divided into zones based on similar flood level values (FCL values are given relative to CGVD2013).
5. The coloured FCL Zone polygons show flood hazard extent areas as defined by the indicated FCL.
6. FCLs apply within the mainland District of Ucluelet (DOU) and Francis Island only.
7. The FCLs Zones represent a specific planning level as defined by Ausenco Sandwell (2011). This map should not be interpreted to mean that flooding will be limited to the FCLs indicated for each zone on the map.
8. Application of the FCLs presented in this map should be done in accordance with relevant policy and regulations by a suitably qualified professional.
9. The extreme variability of the western (outer) coastline means that care must be taken in interpreting these FCLs for specific sites. Exposed areas with steep frontages are subject to more wave runoff and could experience higher flood levels.

Limitations

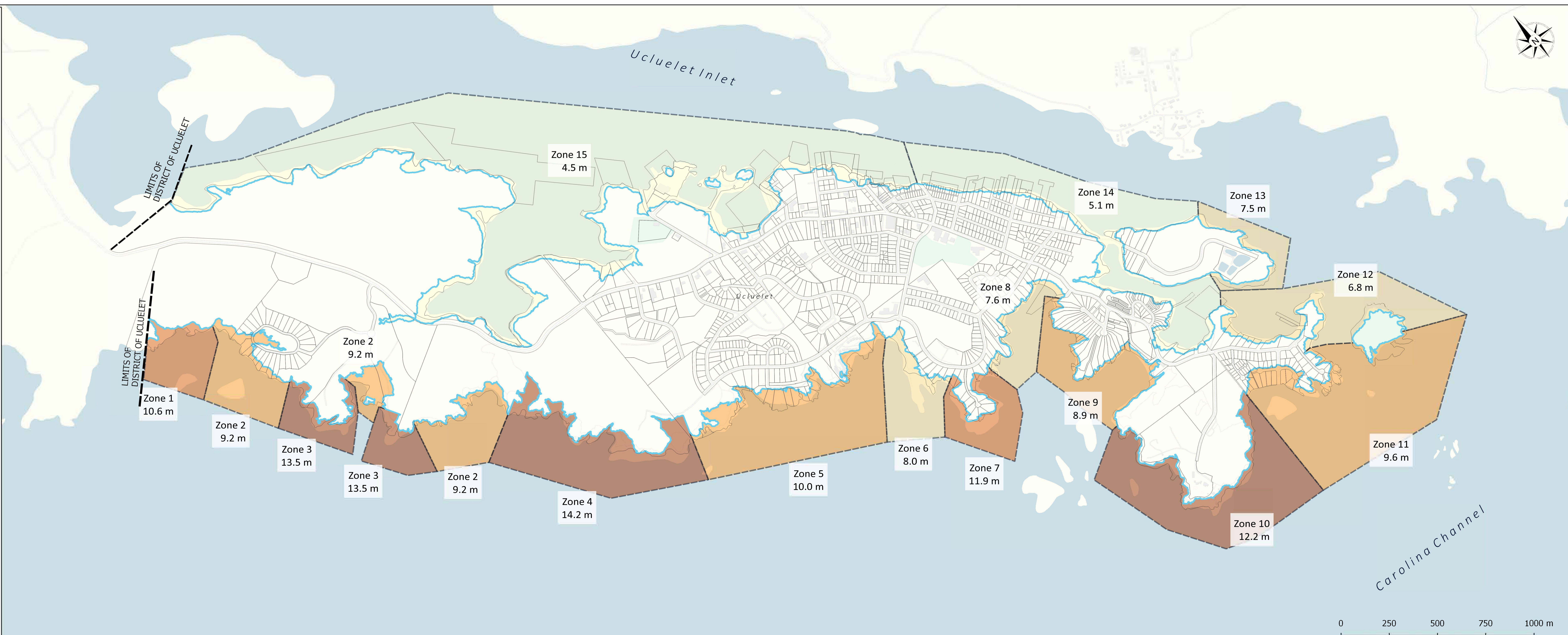
1. The accuracy of the presented FCLs is limited by available data and modelling approaches. The FCLs are based on 1D cross-shore transects. These have been simplified by merging areas of similar transects into FCL zones. Please refer to the report for a detailed discussion of limitations.
2. The accuracy of the flood hazard extent is limited by the accuracy of the base surveys and mapping data. The flood hazard extents were not established on the ground by legal survey.
3. This map was produced by Ebbwater Consulting Inc. using generally accepted best practice and guidelines for the province of British Columbia. However, flooding may still occur outside the defined flood hazard boundary, and Ebbwater Consulting Inc. and Cascadia Coast Research Ltd. do not assume any liability by reason of the failure to delineate flood hazard areas on this map.
4. The flood extents and levels shown on this map are to provide an assessment of current and future flooding to help inform decisions on future land use policy. Under the provisions of the Local Government Act 2004, these flood extents only take effect when adopted by bylaw or implemented via another planning tool (such as a development permit area). They therefore do not currently have any legal or planning standing.
5. Base map and parcel layers were provided by different data owners and are subject to differences.

Data Sources

1. Flood Construction Reference Plane (FCRP) values were provided by Cascadia Coast Research Ltd.
2. Water depths were interpolated from a limited number of transects and are relative to onshore topography.
3. Digital Elevation Model (DEM) was created based on LiDAR data surveyed in 2015 and obtained from the DOU.
4. Mapping Templates and Land Parcels were received from the DOU.
5. Base layer is based on CARTO's Positron, created using derivatives of OpenStreetMap data - openstreetmap.org (© OpenStreetMap contributors; cartography license CC BY-SA).

References

1. Ebbwater Consulting Inc. and Cascadia Coast Research Ltd. (2020). District of Ucluelet Coastal Flood Mapping (Final Report).
2. Ausenco Sandwell (2011). Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use - Guidelines for Management of Coastal Flood Hazard Land Use. Prepared for the British Columbia Ministry of Environment.



**Coastal Storm Flood
Planning Support Map 3/5**

**Flood Construction Level –
Zones for Rare Event (Future)**

0.5% AEP, 1 m RSLR, with 0.6 m freeboard

Land Parcels

**Flood Construction Level
(CGVD 2013, m)**

- 4.0 - 6.0
- 6.0 - 8.0
- 8.0 - 10.0
- 10.0 - 12.0
- 12.0 +

Flood Hazard Boundary

Official Community Plan

Map 4

Ebbwater Consulting Inc.
Coastal Storm Flood
Planning Support Map 3/5

DISTRICT OF
UCLUELET

Stamp provided
in original
version

Date Created:
June 26, 2020

Map Scale:
1:12,500

Coordinate System:
NAD83, UTM 10N

Vertical Datum:
CGVD 2013

