



**City of Courtenay**  
**Flood Risk Assessment**  
**Hazard Map**  
 Mid-Term Future - Less Likely Event  
 Flood Depth



**Map Notes**

1. Map produced by Ebbwater Consulting Inc. on 28 April 2023.
2. The mid-term future climate change scenario considers a 1 m Sea Level Rise (SLR) and a 15% increase in riverine flows compared to present-day (nominally 2020) conditions. A less likely event has a 0.5% Annual Exceedance Probability (AEP).
3. Inset map shows an indicative area. It is not meant to necessarily show areas of higher or lesser importance.
4. Depth classifications are based on Flood Hazard Mapping Guidelines for British Columbia (Ebbwater, 2022).
5. This map is intended to support an understanding of risk. IT SHOULD NOT BE RELIED ON FOR ENGINEERING DESIGN OR REGULATORY CONTROLS.

**Data Sources**

1. The flood hazard extents were received from CVRD on 28 May 2021 (KWL, 2021).
2. Parcel layer data was obtained from the City of Courtenay on 15 July 2022. Current Flood Protection Infrastructure locations were received from CoC on 20 December 2022 (2019/2020 Dike Crest Survey completed by WSP on behalf of the Province).
3. Base Layer (Main Map): OSM Humanitarian Data Model and CARTO's Positron, created using derivatives of OpenStreetMap data - openstreetmap.org (© OpenStreetMap contributors; cartography licence CC BY-SA). Base Layer (Overview Map): OpenStreetMap data - openstreetmap.org (© OpenStreetMap contributors; cartography licence CC BY-SA).

**References**

1. Ebbwater Consulting Inc. (2023). City of Courtenay Flood Management Plan – Appendix A Flood Risk Assessment. Prepared for the City of Courtenay.
2. Kerr Wood Leidal Associates Ltd. (2021). Coastal Flood Mapping Project. Final Report. Prepared for Comox Valley Regional District.
3. Ebbwater Consulting Inc. (2022). Flood Hazard Mapping Guidelines for British Columbia. Draft Report. Prepared for the Province of British Columbia.

**Legend**

- Background**
- Current Flood
  - Protection Infrastructure
  - City Boundary
  - Land Parcels
  - K'ómoks First Nation Reserve Lands

- Mid-Term Future - Less Likely Event Flood Depths (m)**
- 0.0 - 0.1: Most buildings expected to be dry; underground infrastructure and basements may be flooded.
  - 0.1 - 0.3: Water may enter buildings at grade, but most expected to be dry; underground infrastructure and basements may be flooded.
  - 0.3 - 0.5: Water may enter ground floor of buildings; underground infrastructure and basements may be flooded.
  - 0.5 - 1.0: Water on ground floor; underground infrastructure & basements may be flooded; potential for electricity failure.
  - 1.0 - 2.0: Ground floor flooded.
  - > 2.0: First (ground) floor and higher levels covered by water.

Scale	
Main Map 1:12,000	Inset Map 1:5,000
0 250 500 m	0 50 100 m

Date Created: 28 Apr 2023  
 Coordinate System: NAD83, UTM 10N  
 Vertical Datum: CGVD 2013

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 Checked By: TL

