City of Courtenay
Flood Risk Assessment
Hazard Map

Long-term Future - Rare Event
Flood Depth

Overview Map

Map Notes
1. Map produced by Ebbwater Consulting Inc. on 28 April 2023.
2. The long-term future climate change scenario considers 2 m Sea Level Rise (SLR) and a 30% increase in riverine flows compared to present-day (nominally 2020) conditions. A rare event has a 0.2% 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 license 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

Long-term Future - Rare 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 (0 250 500 m)	Inset Map 1:5,000 (0 50 100 m)
Date Created: 28 Apr 2023	Coordinate System: NAD83, UTM 10N Vertical Datum: CGVD 2013
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ANSI D - Map No. S1–3	

INSET MAP