



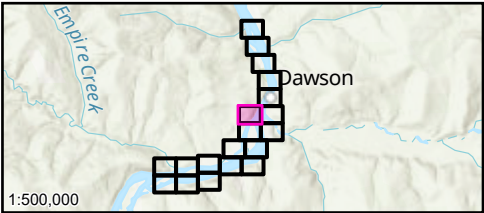
Figure No. **YR-0.5CC-13** Sheet 13 of 19
Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
0.5% Annual Exceedance Probability (AEP) with Factor of Safety
for Climate Change**

Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713
Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- | | |
|---|---|
| River Flow Direction | Surveyed Cross-Sections
Used in Hydraulic Model |
| Ground Elevations of Interest | Tr'ondëk Hwëch'in Settlement
Land |
| HPW Drainage Culverts | Inundation Under Modelled
Open Water Runs |
| Cross-Section Number WSE
(m) Along Cross-Section | Inundation Under Modelled
Breakup Ice Jam Runs |
| Highway | Approximate 50% AEP Open
Water Flood Inundation |
| Local Road | Composite Open Water and
Ice Jam Inundation Extent |
| Major Contour (5m) | Ice Coverage in Breakup Jam
Scenarios |
| Minor Contour (1m) | |

Map Publication Date: 7/29/2025
0 50 100 150 200 250 m
(At original document size of 11x 17) 1:5,000



Notes
1. Coordinate System: NAD 1983 CSRS UTM Zone 7N Vertical Datum: CGVD2013, Geoid: CGG2013a
2. Data Sources: GeoYukon, Canada Lands Survey (CLS) CCM 982, CANVEC
3. Flood hazard extents shown on these maps are based on LIDAR collected in July, 2019 and topographical and bathymetric data that was collected in June and September 2024.
4. 50% AEP inundation lines are based on the 50% AEP flow estimate simulation in the hydraulic model which has been calibrated for higher AEP flood events and therefore should be considered approximate.
5. The content of these Draft Maps is based on the methods, assumptions, limitations, and analysis documented in the Dawson City and Klondike Valley Flood Mapping Study (Stantec 2025) produced for Yukon Government. Composite Hazard Maps are based on the assumptions and analysis presented in Stantec 2025 which were based on the available data which is current to the time the maps were produced. Such data contains inherent limitations given that the climatic conditions and geomorphic conditions are constantly evolving and cannot be predicted with certainty.