

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Klondike River
0.5% Annual Exceedance Probability (AEP) with Factor of Safety
for Climate Change**

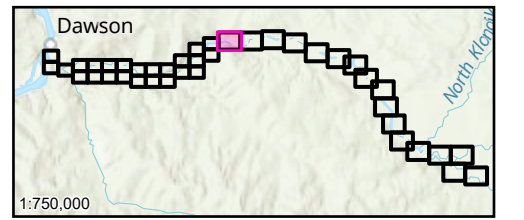
Client/Project:
**Government of Yukon
Department of Environment
Water Resources Branch**

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2026-03-06
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2026-03-06

- River Flow Direction
- WSC Stations
- HPW Drainage Culverts
- Highway Kilometer Post
- Cross-Section Number
WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections
Used in Hydraulic Model
- Toe of Ice Jam
- Tr'ondék Hwëch'in Settlement
Land
- Approximate 50% AEP Open
Water Flood Inundation
- Inundation Under Modelled
Open Water Runs
- Inundation Under Modelled
Breakup Ice Jam Runs
- Inundation Extent From
Subsurface Seepage
- Composite Open Water and
Ice Jam Inundation Extent
- Potential Presence of Ice
Debris During Jam Scenario
- Ice Jamming Extents

Map Publication Date: 03/06/2026
0 100 200 300 400 m
(At original document size of 11x 17) 1:7,500



- 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 August, 2024 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 Composite Flood Hazard Maps is based on the methods, assumptions, limitations, and analysis documented in the Dawson City and Klondike Valley Flood Mapping Study produced for Yukon Government. Composite Hazard Maps are 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.