

**Carmacks Flood Mapping Study  
Composite Flood Hazard Extents  
1% Annual Exceedance Probability (AEP)**

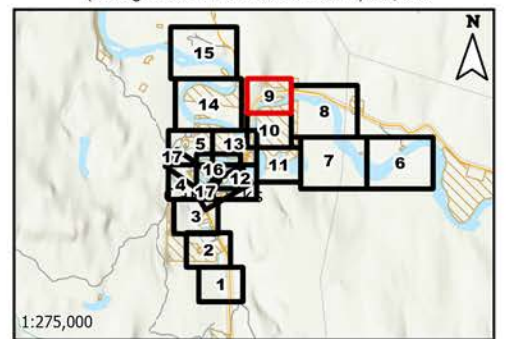
Client/Project:  
Government of Yukon  
Department of Environment  
Water Resources Branch  
Project: 123222320

Project Location: Carmacks, Yukon  
Prepared by MANDERSON on 2024-05-21  
Requested by JMUIRHEAD on 2024-01-07  
Review by JMUIRHEAD on 2024-05-21

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|---|---|
| Flow Direction  | Hydraulic Model Cross-Sections            |
| Point of Interest                                     | Inundation under Modelled Ice Jam Runs    |
| Bridge  | Inundation under Modelled Open Water Runs |
| Highway   | Composite Flood Hazard Extent             |
| Local Road  | Ice Jam Location (toe of jam)             |
| Little Salmon / Carmacks First Nation Settlement Land | 50 % AEP Extent                           |
| Land Parcels  | Hydraulic Model Cross-Sections            |
| Municipal Boundary                                    | Cross-Section Number                      |
| Study Area  | WSE (m) in Main Channel of Cross-Section  |

Sheet 8

Map Publication Date: May 21, 2024  
0 40 80 120 160 200 m  
(At original document size of 11x 17) 1:5,000



- Notes**
- Coordinate System: NAD 1983 UTM Zone 8N  
Vertical Datum: CGVD2013, Geoid: CGG2013a
  - Data Sources: GeoYukon, Canada Lands Survey (CLS) CCM 982, Canvec.
  - Background: World Topographic Map: Northwest Territories, State of Alaska, Esri Canada, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCAN, Parks Canada World Hillshade: Esri, USGS
  - Flood hazard extents shown on these maps are based on LIDAR collected on June 8 - 10 of 2019, and bathymetric/topographic survey collected in July and August of 2023.

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