






**PROJECT**  
 Atlas Sheet

**INFRASTRUCTURE AND BOUNDARIES**  
 Highway  
 Railway  
 Provincial Boundary

**\*IMPORTANT** - Note that the only maps contained in this file package are those highlighted in **Yellow** below.

1. **Inundation Overview Map (BC Province) - Front page**
2. Skins Lake Spillway (Maps 1 thru 9)
3. **Fort Fraser (Maps 10 thru 12)**
4. Vanderhoof (Maps 13 thru 18)
5. Prince George (Maps 19 thru 27)
6. Quesnel (Maps 28 thru 34)
7. Williams Lake (Maps 35 thru 46)
8. Lillooet (Maps 47 thru 57)
9. Hope (Maps 58 thru 60)]
10. Chilliwack (Maps 61 thru 70)
11. New Westminster (Maps 71 thru 74)

**RioTinto**

**SNC-LAVALIN**

RTA-Nechako  
Hydrotechnical Study

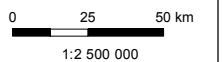
**Inundation Map for Kenney Dam and Skins Lake Dam #3 under PMF Conditions at Nechako Reservoir**

Sources:  
Atlas of Canada, 1:7,000,000, NRCan, 2007

Project: 629097  
File: snc629097\_loca\_tab\_151130.mxd

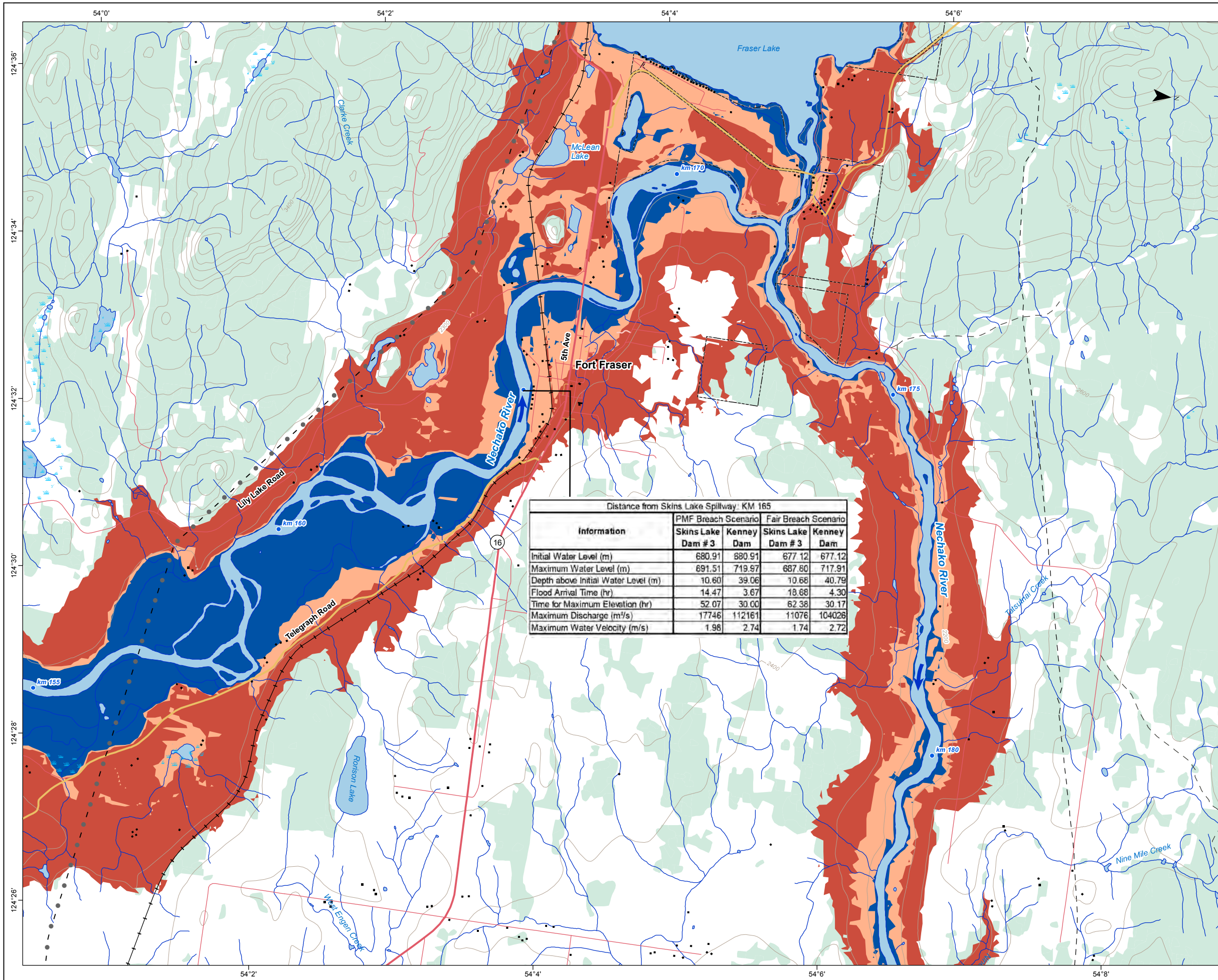
**WORKING DOCUMENT**

Projection UTM, Zone 10, NAD83



**December 2015**





Distance from Skins Lake Spillway: KM 165

Information	PMF Breach Scenario		Fair Breach Scenario	
	Skins Lake Dam #3	Kenney Dam	Skins Lake Dam #3	Kenney Dam
Initial Water Level (m)	680.91	680.91	677.12	677.12
Maximum Water Level (m)	691.51	719.97	687.80	717.91
Depth above Initial Water Level (m)	10.60	39.06	10.68	40.79
Flood Arrival Time (hr)	14.47	3.67	18.68	4.30
Time for Maximum Elevation (hr)	52.07	30.00	62.38	30.17
Maximum Discharge (m <sup>3</sup> /s)	17746	112161	11076	104026
Maximum Water Velocity (m/s)	1.98	2.74	1.74	2.72

- PROJECT**
- Fair Weather Water Surface Area
  - Inundation Area: PMF at Nechako Reservoir
  - Inundation Limits: Skins Lake Dam #3 Breach, PMF Scenario<sup>1</sup>
  - Inundation Limits: Kenney Dam Breach, PMF Scenario<sup>1</sup>
  - Water Flow

- INFRASTRUCTURE AND BOUNDARIES**
- Building
  - Tower
  - Highway
  - Collector
  - Local
  - Road
  - Trail
  - Railway
  - Power Transmission Line
  - Dike
  - Municipal Boundary

1. Because of the method, procedure and assumptions used to develop inundated areas, limits of inundation shown and flood wave times are approximate, and should be used only as a guideline for establishing evacuation zones. Actual areas inundated will depend on actual failure conditions and may differ from areas shown on map.
2. The extend of inundation shown is established based on maximum water level resulting from the failure of Kenney Dam under Probable Maximum Flood conditions.
3. Times shown in information boxes are from strat of Dam failure Kenney Dam.
4. All water elevations are shown in metres.

Note<sup>1</sup>: The PMF Breach Scenario assumes that the PMF occurs at the Nechako Reservoir catchment. The flow in the whole river system is 1:2 year flood.  
 Note<sup>2</sup>: The Fair Weather Breach Scenario assumes that the dam breach is initiated at the average flow in the whole river system.

**RioTinto**   
 RTA-Nechako  
 Hydrotechnical Study

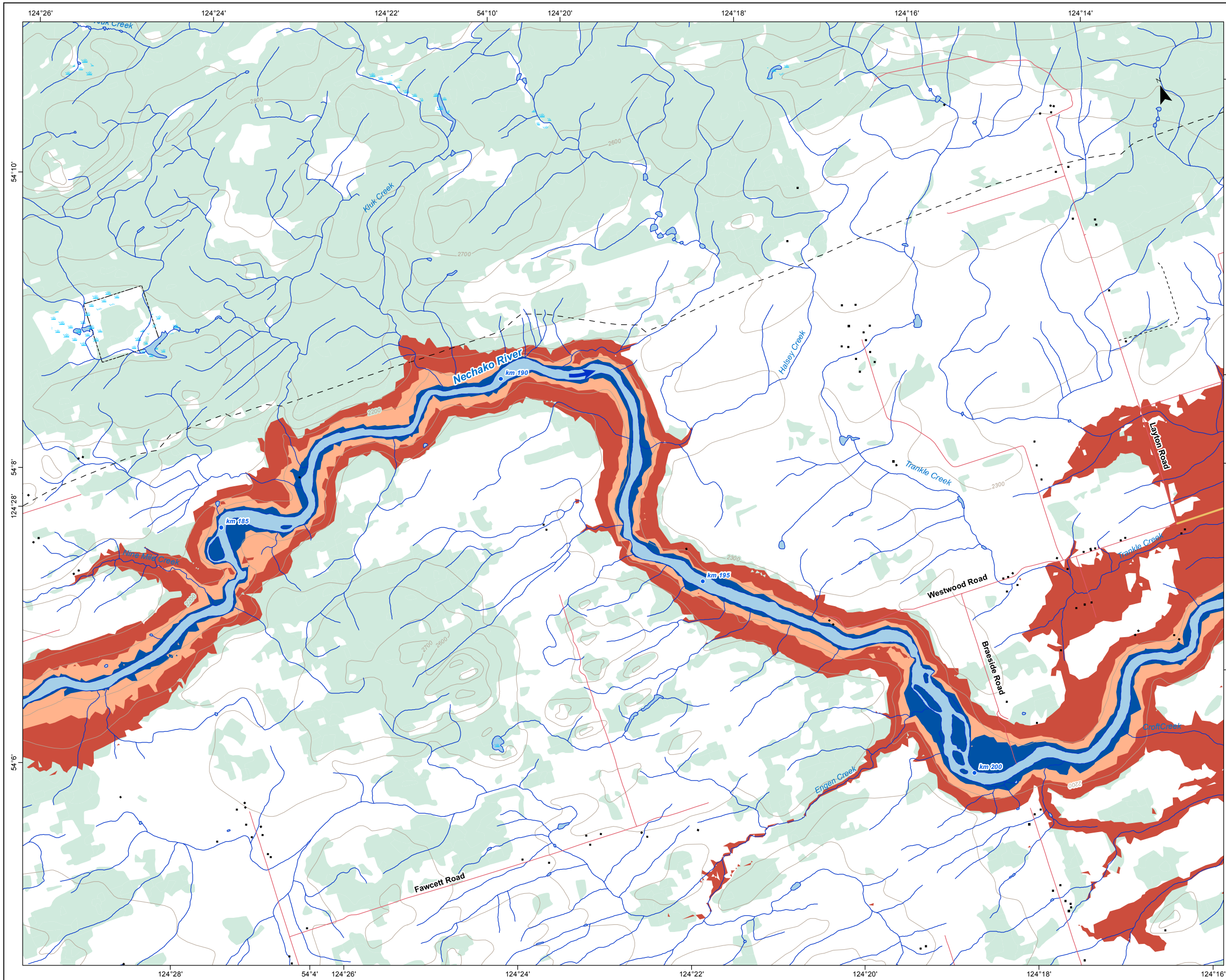
**Inundation Map for Kenney Dam and Skins Lake Dam #3 under PMF Conditions at Nechako Reservoir**

**Sources:**  
 GeoBC, 1:20,000, MFLNRO, 2013  
 CanVec, 1:50,000, NRCAN, 2014  
 City of Prince George, 2014

Project: 629097  
 File: snc629097\_feuil\_inon\_tab\_151214.mxd

**WORKING DOCUMENT** 0 0.5 1 km  
 Projection UTM, Zone 10, NAD83 1:50 000





**PROJECT**

- Fair Weather Water Surface Area
- Inundation Area: PMF at Nechako Reservoir
- Inundation Limits: Skins Lake Dam #3 Breach, PMF Scenario<sup>1</sup>
- Inundation Limits: Kenney Dam Breach, PMF Scenario<sup>1</sup>
- Water Flow

**INFRASTRUCTURE AND BOUNDARIES**

- Building
- Tower
- Highway
- Collector
- Local Road
- Road
- Trail
- ++ Railway
- Power Transmission Line
- Dike
- Municipal Boundary

1. Because of the method, procedure and assumptions used to develop inundated areas, limits of inundation shown and flood wave times are approximate, and should be used only as a guideline for establishing evacuation zones. Actual areas inundated will depend on actual failure conditions and may differ from areas shown on map.
2. The extend of inundation shown is established based on maximum water level resulting from the failure of Kenney Dam under Probable Maximum Flood conditions.
3. Times shown in information boxes are from strat of Dam failure Kenney Dam.
4. All water elevations are shown in metres.

Note<sup>1</sup>: The PMF Breach Scenario assumes that the PMF occurs at the Nechako Reservoir catchment. The flow in the whole river system is 1:2 year flood.  
 Note<sup>2</sup>: The Fair Weather Breach Scenario assumes that the dam breach is initiated at the average flow in the whole river system.

**RioTinto**  **SNC-LAVALIN**

**RTA-Nechako**  
Hydrotechnical Study

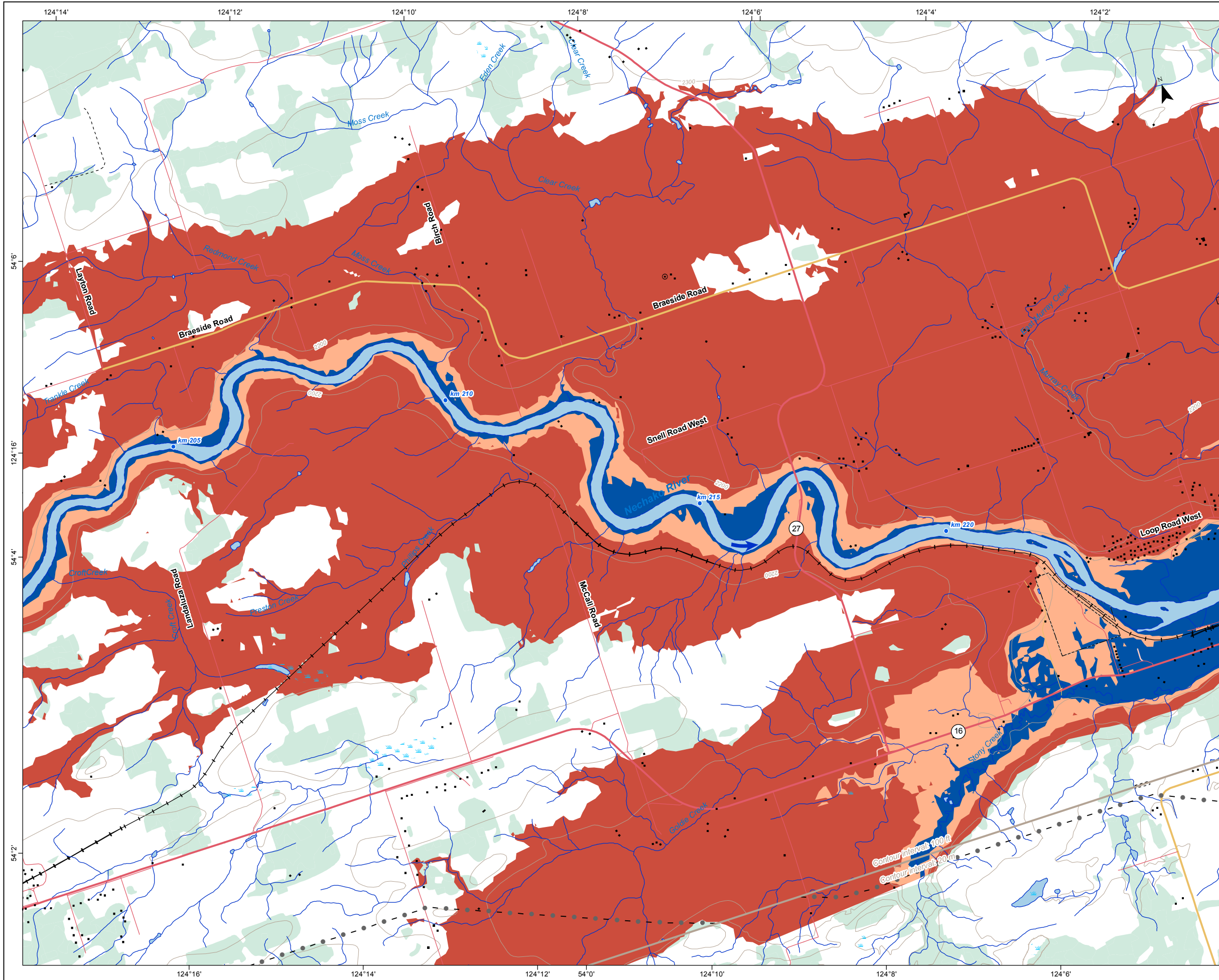
**Inundation Map for Kenney Dam and Skins Lake Dam #3 under PMF Conditions at Nechako Reservoir**

**Sources:**  
 GeoBC, 1:20,000, MFLNRO, 2013  
 CanVec, 1:50,000, NRCan, 2014  
 City of Prince George, 2014

Project: 629097  
 File: snc629097\_feuil\_inon\_tab\_151214.mxd

**WORKING DOCUMENT**

0 0.5 1 km  
1:50 000



**PROJECT**


- Fair Weather Water Surface Area
- Inundation Area: PMF at Nechako Reservoir
- Inundation Limits: Skins Lake Dam #3 Breach, PMF Scenario<sup>1</sup>
- Inundation Limits: Kenney Dam Breach, PMF Scenario<sup>1</sup>
- Water Flow

**INFRASTRUCTURE AND BOUNDARIES**


- Building
- Tower
- Highway
- Collector
- Local
- Road
- Trail
- Railway
- Power Transmission Line
- Dike
- Municipal Boundary

1. Because of the method, procedure and assumptions used to develop inundated areas, limits of inundation shown and flood wave times are approximate, and should be used only as a guideline for establishing evacuation zones. Actual areas inundated will depend on actual failure conditions and may differ from areas shown on map.
2. The extend of inundation shown is established based on maximum water level resulting from the failure of Kenney Dam under Probable Maximum Flood conditions.
3. Times shown in information boxes are from strat of Dam failure Kenney Dam.
4. All water elevations are shown in metres.

Note<sup>1</sup>: The PMF Breach Scenario assumes that the PMF occurs at the Nechako Reservoir catchment. The flow in the whole river system is 1:2 year flood.  
 Note<sup>2</sup>: The Fair Weather Breach Scenario assumes that the dam breach is initiated at the average flow in the whole river system.



**RTA-Nechako**  
Hydrotechnical Study



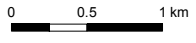
**Inundation Map for Kenney Dam and Skins Lake Dam #3 under PMF Conditions at Nechako Reservoir**

Sources:  
 GeoBC, 1:20,000, MFLNRO, 2013  
 CanVec, 1:50,000, NRCAN, 2014  
 City of Prince George, 2014

Project: 629097  
 File: snc629097\_feuil\_inon\_tab\_151214.mxd

**WORKING DOCUMENT**

Projection UTM, Zone 10, NAD83



1:50 000

December 2015

Sheet 12 of 74