

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



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

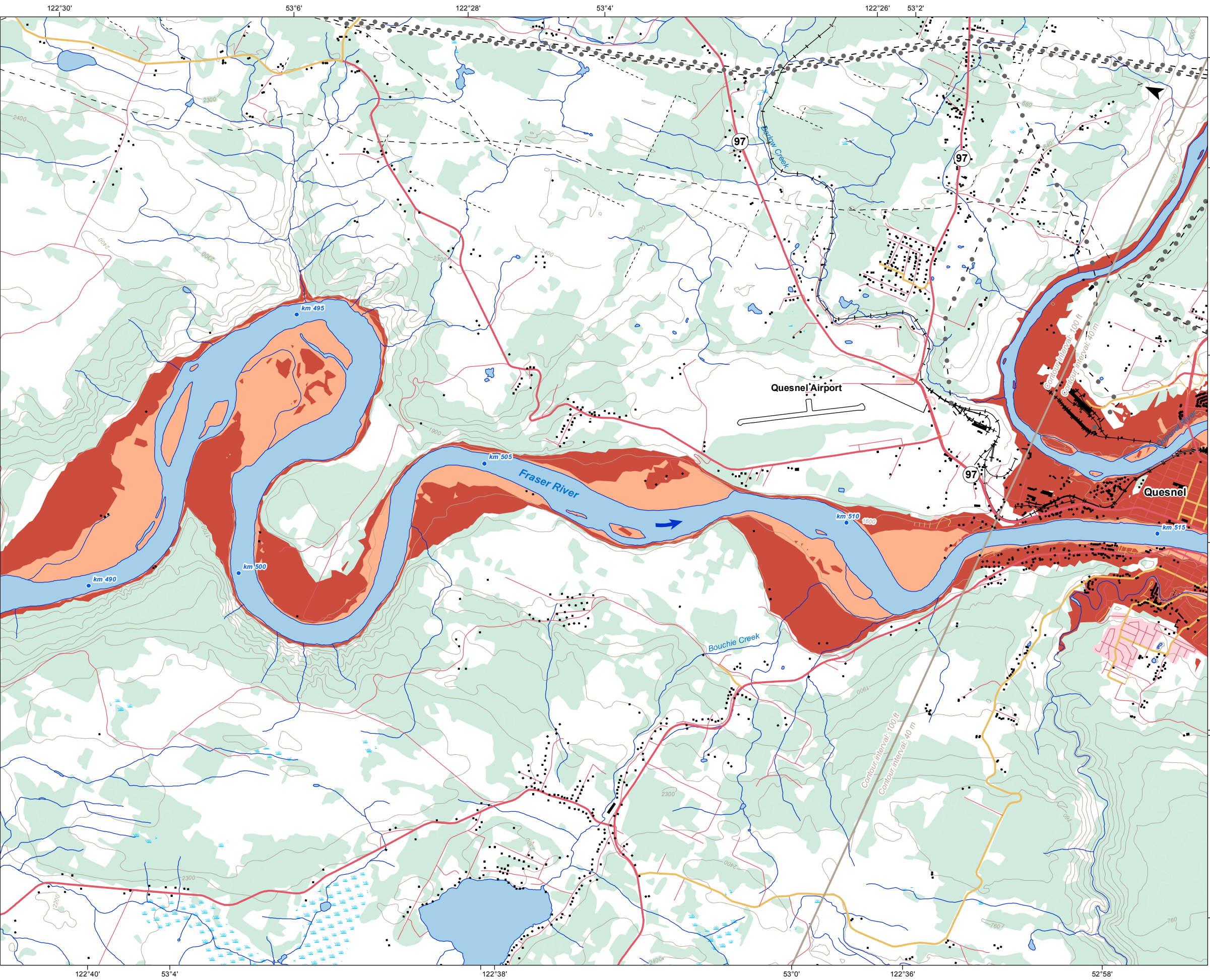
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Projection UTM, Zone 10, NAD83

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December 2015



PROJECT



- Fair Weather Water Surface Area
- Inundation Area: PMF at Nechako Reservoir
- Inundation Limits: Skins Lake Dam #3 Breach, PMF Scenario¹
- Inundation Limits: Kenney Dam Breach, PMF Scenario¹
- Water Flow

INFRASTRUCTURE AND BOUNDARIES

- Building
- Tower
- Highway
- Collector
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- Dike
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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.

Note¹: 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.
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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

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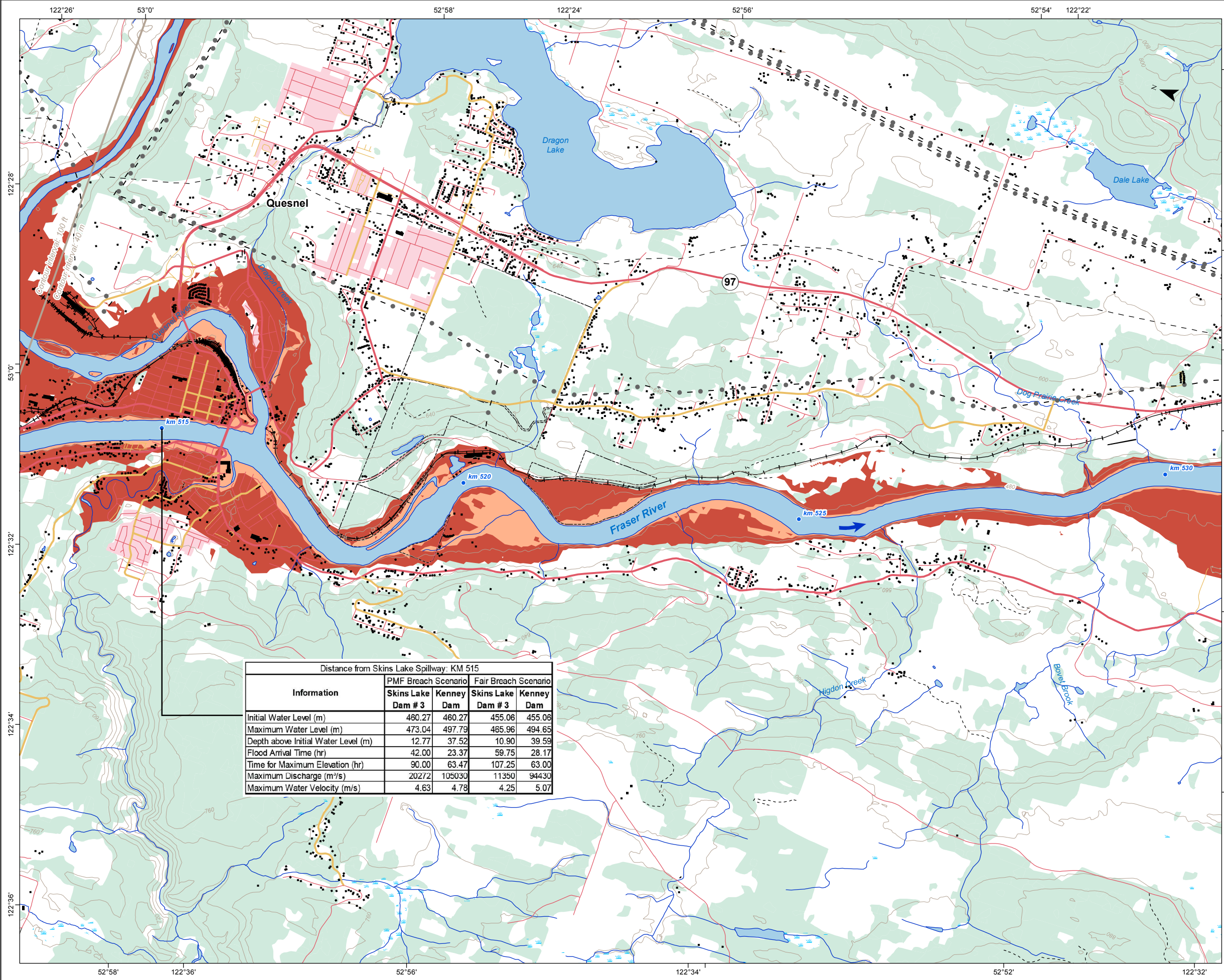
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Projection UTM, Zone 10, NAD83

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Distance from Skins Lake Spillway: KM 515				
Information	PMF Breach Scenario		Fair Breach Scenario	
	Skins Lake Dam # 3	Kenney Dam	Skins Lake Dam # 3	Kenney Dam
Initial Water Level (m)	480.27	460.27	455.06	455.06
Maximum Water Level (m)	473.04	497.79	465.96	494.65
Depth above Initial Water Level (m)	12.77	37.52	10.90	39.59
Flood Arrival Time (hr)	42.00	23.37	59.75	28.17
Time for Maximum Elevation (hr)	90.00	63.47	107.25	63.00
Maximum Discharge (m³/s)	20272	105030	11350	94430
Maximum Water Velocity (m/s)	4.63	4.78	4.25	5.07

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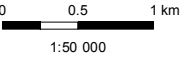
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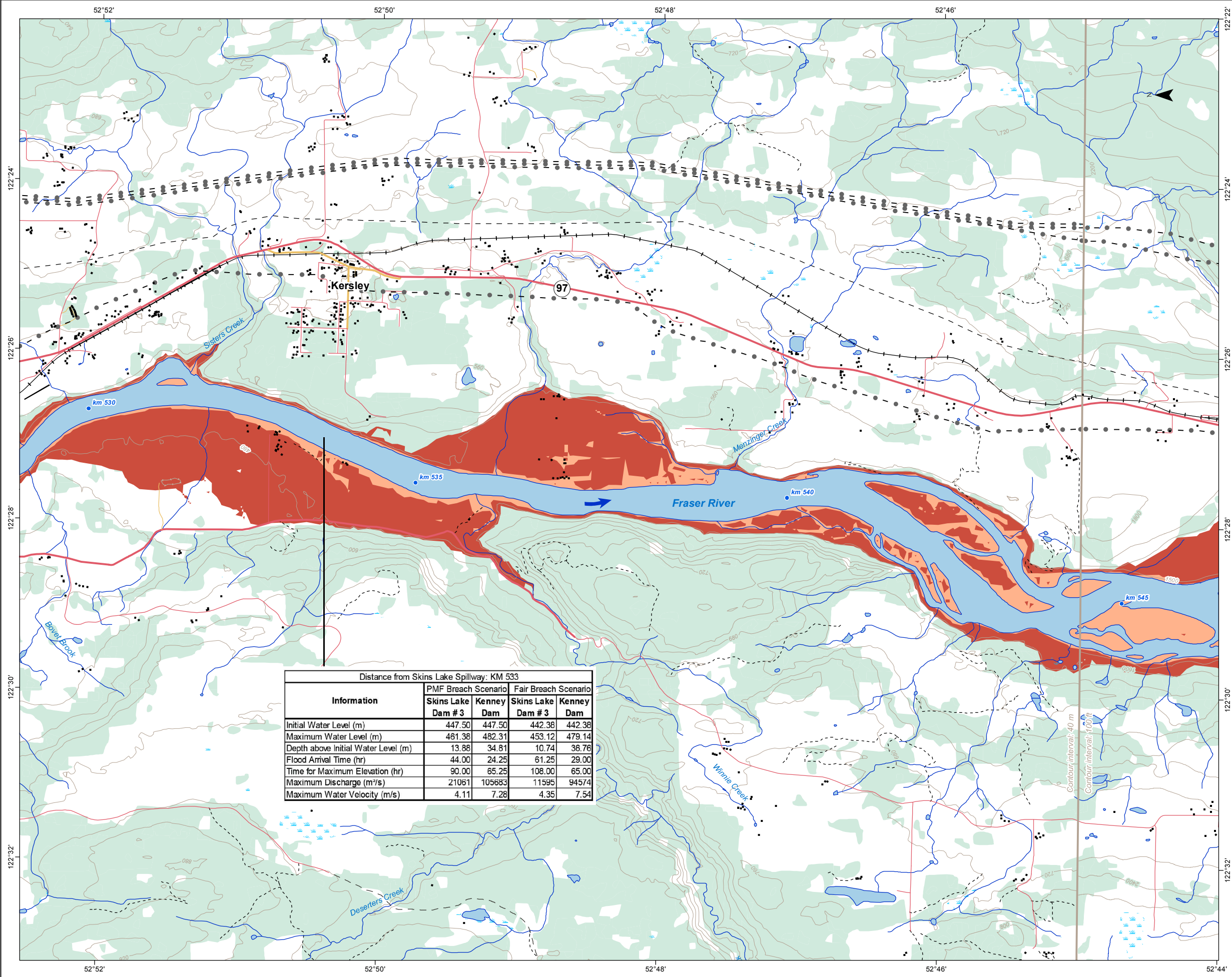
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Distance from Skins Lake Spillway: KM 533				
Information	PMF Breach Scenario		Fair Breach Scenario	
	Skins Lake Dam # 3	Kenney Dam	Skins Lake Dam # 3	Kenney Dam
Initial Water Level (m)	447.50	447.50	442.38	442.38
Maximum Water Level (m)	461.38	482.31	453.12	479.14
Depth above Initial Water Level (m)	13.88	34.81	10.74	36.76
Flood Arrival Time (hr)	44.00	24.25	61.25	29.00
Time for Maximum Elevation (hr)	90.00	65.25	108.00	65.00
Maximum Discharge (m³/s)	21061	105683	11595	94574
Maximum Water Velocity (m/s)	4.11	7.28	4.35	7.54

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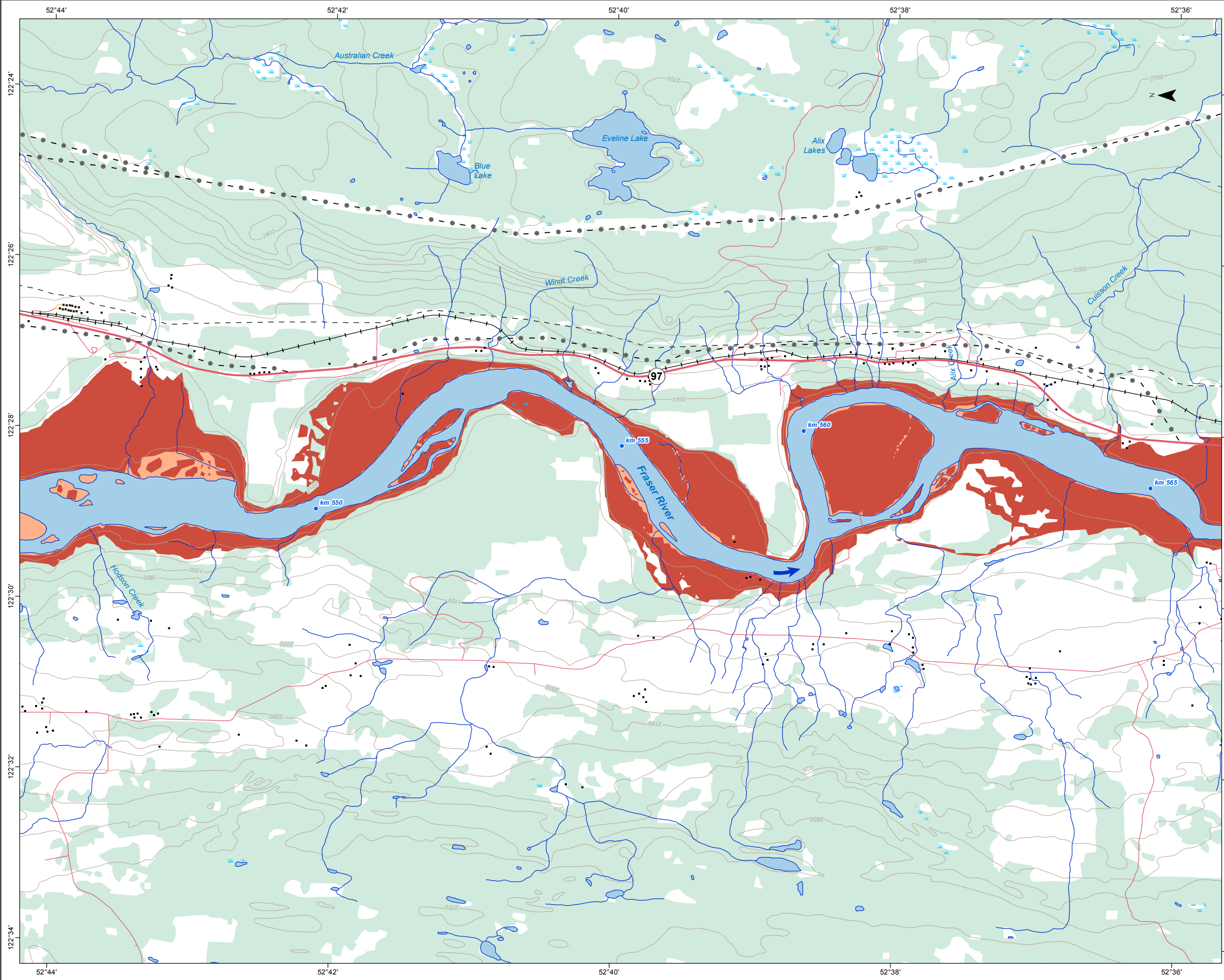
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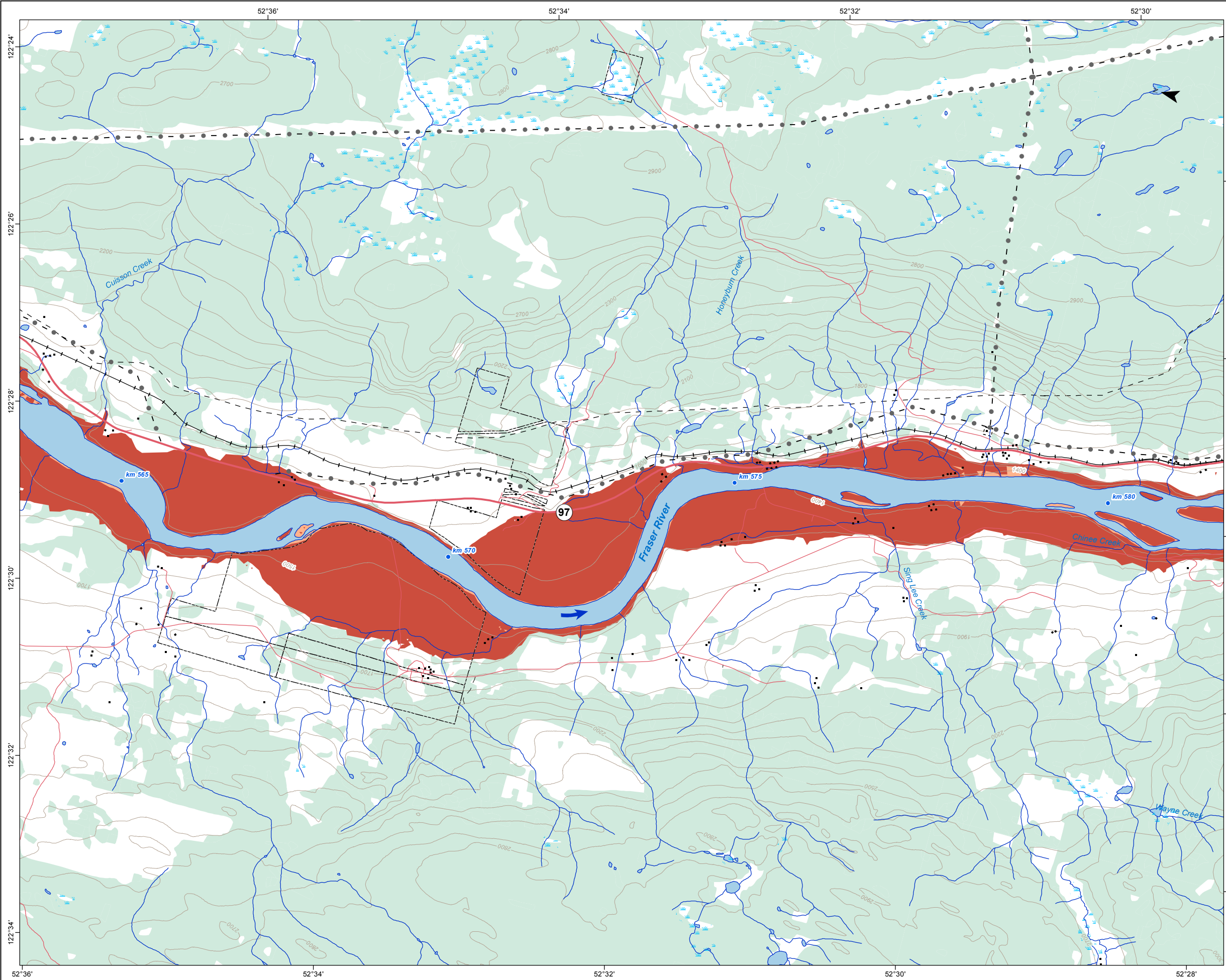
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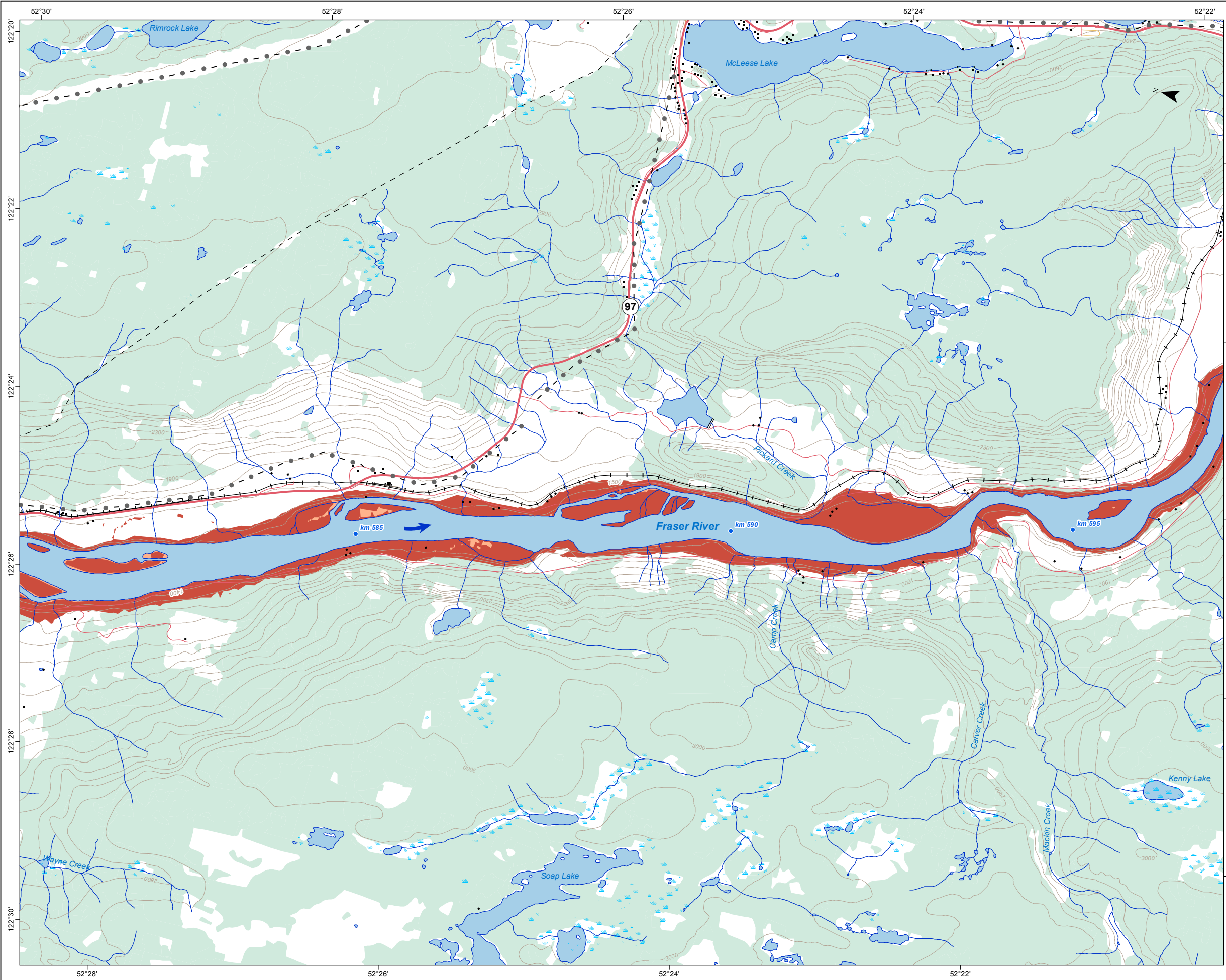
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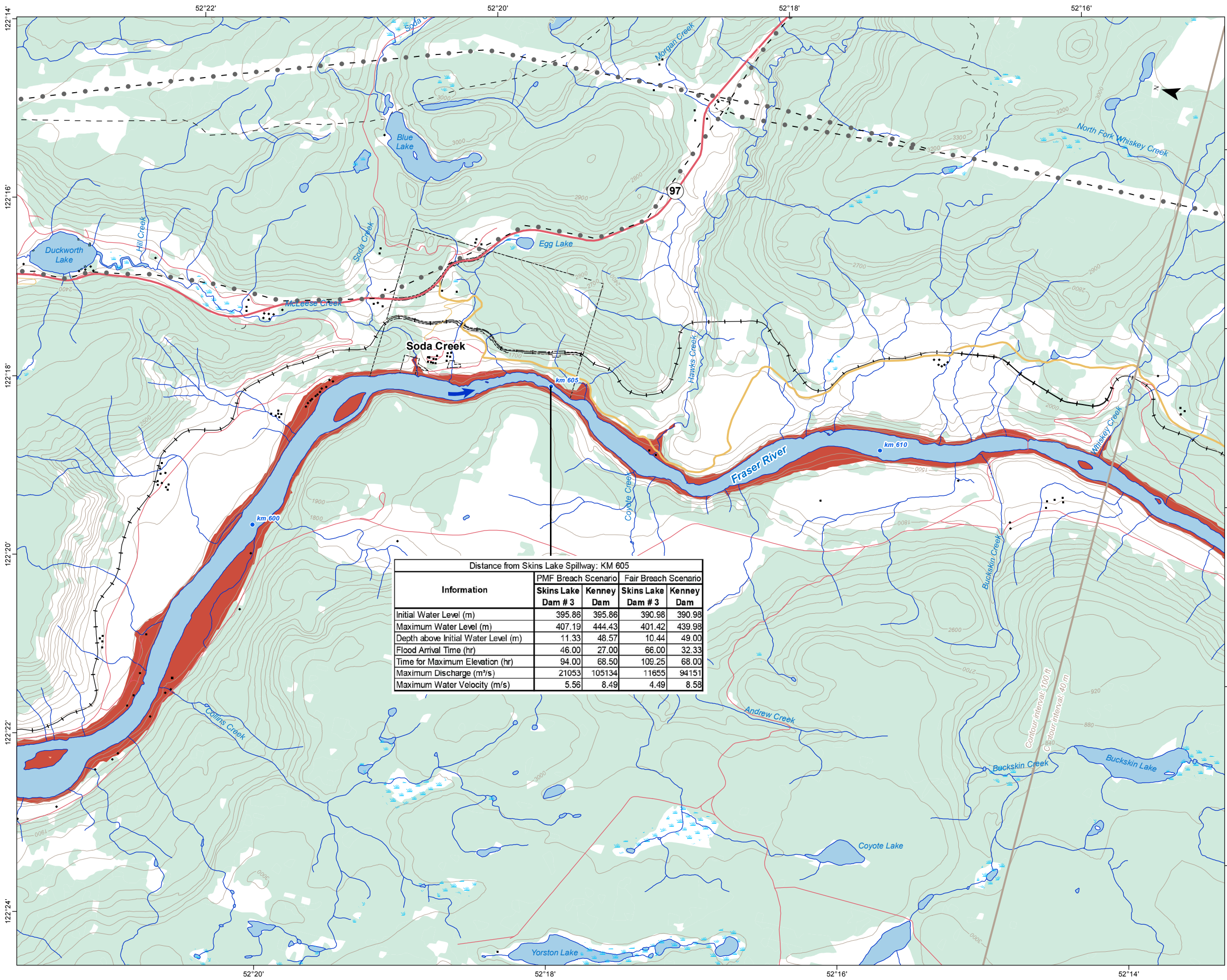
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