

# REGIONAL DISTRICT OF KOOTENAY BOUNDARY

Union of BC Municipalities

September 20, 2023



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# BUILDING HOUSING (SAFELY) IN FLOODPLAINS

## Outline

Boundary Region

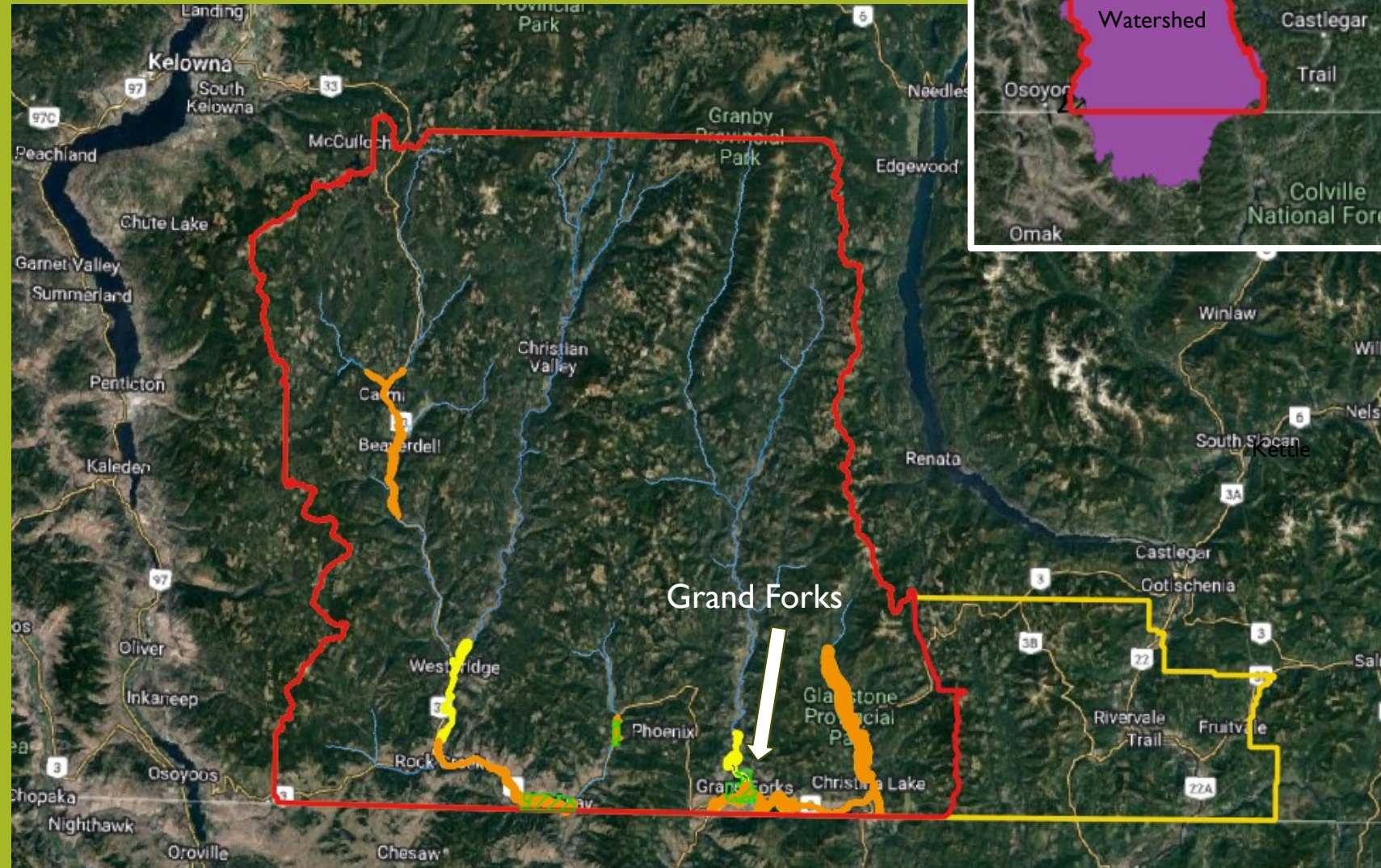
How we got here

Floodplain mapping

Bylaws and implementation

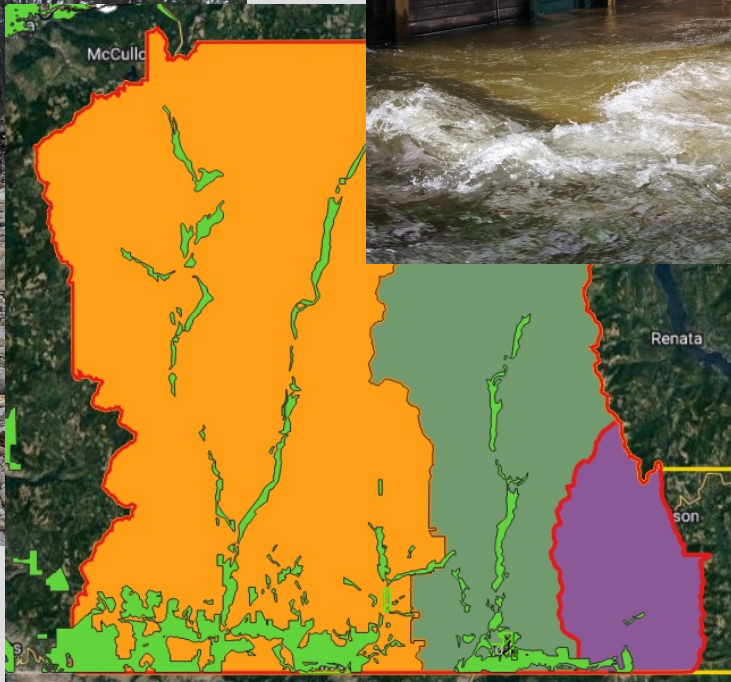
City of Grand Forks

Regional District of Kootenay Boundary





Lynch Creek (2021)



ALR



McRae Creek (2018)



Gladstone Fire (2021)



Rock Creek Fire (2015)



# Boundary Region Flood and Geohazard Risk Assessment Final Report



17 May 2021



nhc



Photo source: NIC, 2021

## Regional District of Kootenay Boundary – Floodplain Mapping for Boundary Region Kettle River – Carson Townsite to Cascade Falls

Prepared by:

Northwest Hydraulic Consultants Ltd.  
30 Gostick Place  
North Vancouver, BC V7M 3G3  
Tel: (604) 980-6011  
[www.nhweb.com](http://www.nhweb.com)

Prepared for:

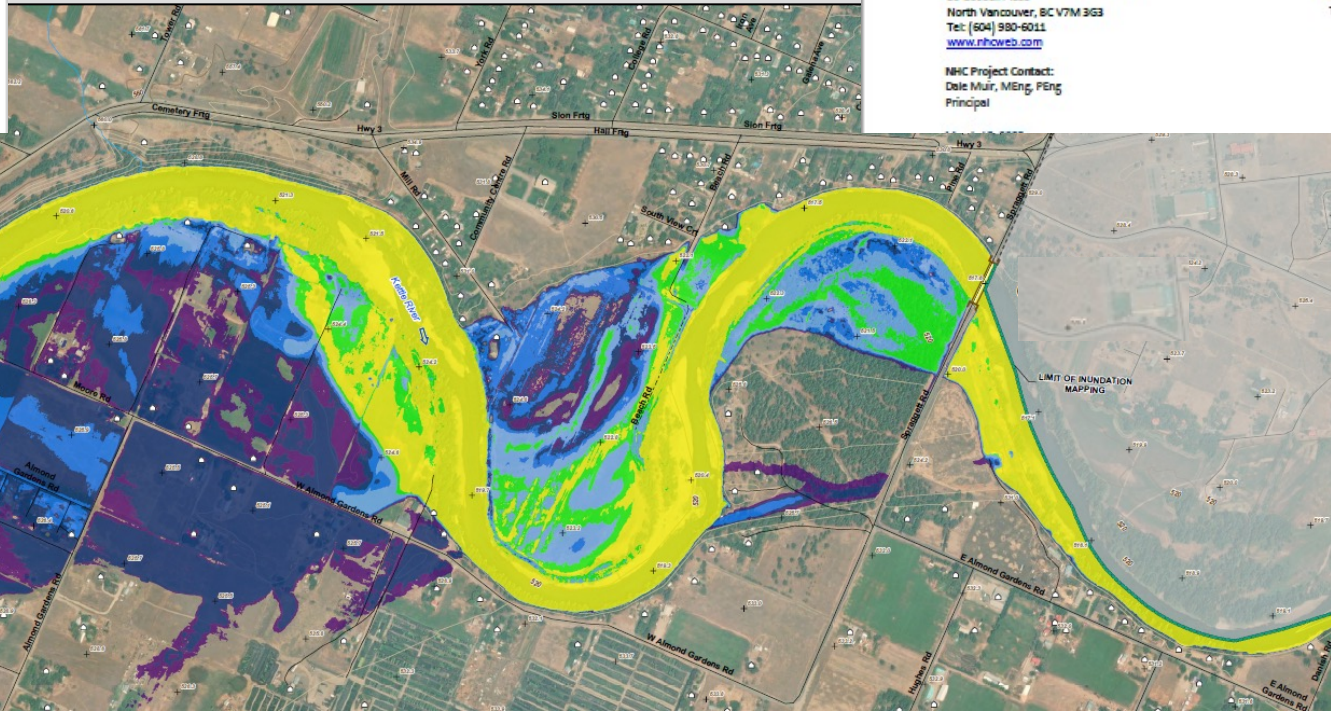
Regional District of Kootenay Boundary  
#202 – 843 Rossland Avenue  
Trail, BC V1R 4S8

NHC Project Contact:  
Dale Muir, MEng, PEng  
Principal

Palmer™



ebbwater CONSULTING



- FLOW DIRECTION
  - - - NATIONAL BOUNDARY
  - - - MUNICIPAL BOUNDARY
  - + SPOT ELEVATION (metres)
  - CIVIC ADDRESS
  - ≡ BRIDGE
  - ≡ STREAM
  - ≡ TRAIL
  - ≡ MAJOR ROAD
  - ≡ MINOR ROAD
  - ≡ MAJOR CONTOUR AT 20 METRE INTERVAL  
Labeled with elevation in metres
  - ≡ MINOR CONTOUR AT 5 METRE INTERVAL
  - ≡ LIMIT OF INUNDATION MAPPING
- INUNDATION EVENT
- 10-YEAR + CG INUNDATION BOUNDARY
  - 20-YEAR + CG INUNDATION BOUNDARY
  - 50-YEAR + CG INUNDATION BOUNDARY
  - 100-YEAR + CG INUNDATION BOUNDARY
  - 200-YEAR + CG INUNDATION BOUNDARY
  - 500-YEAR + CG INUNDATION BOUNDARY

SHEET 1 ↓

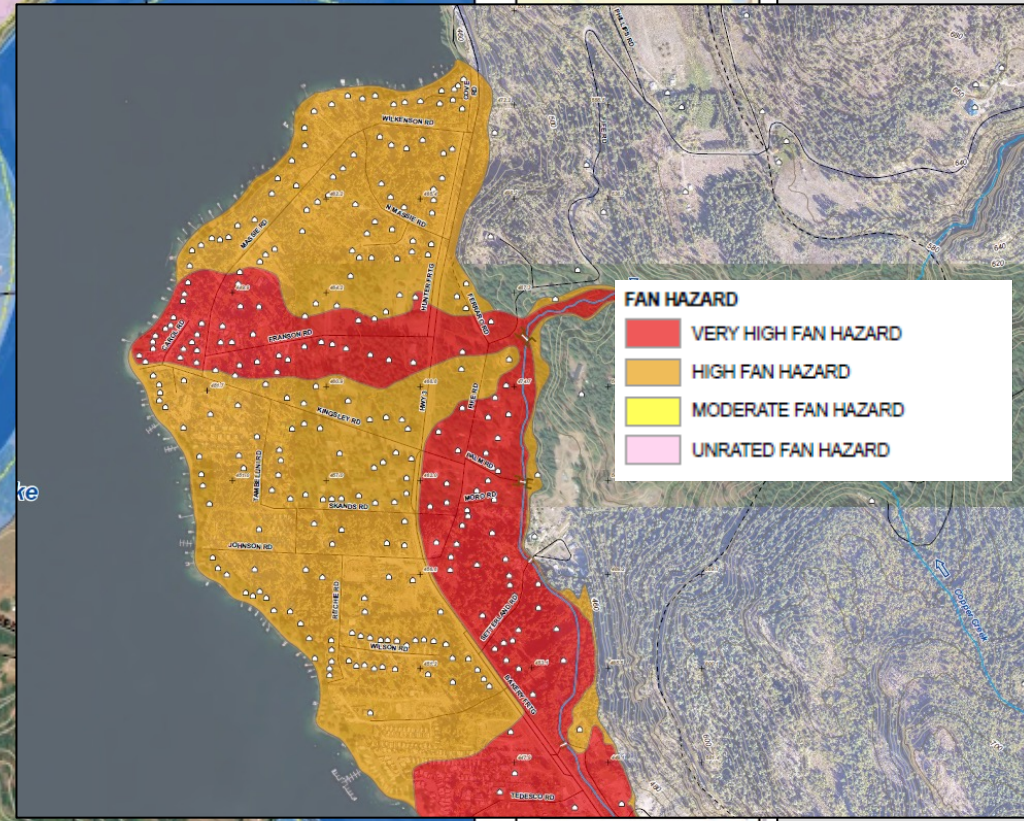
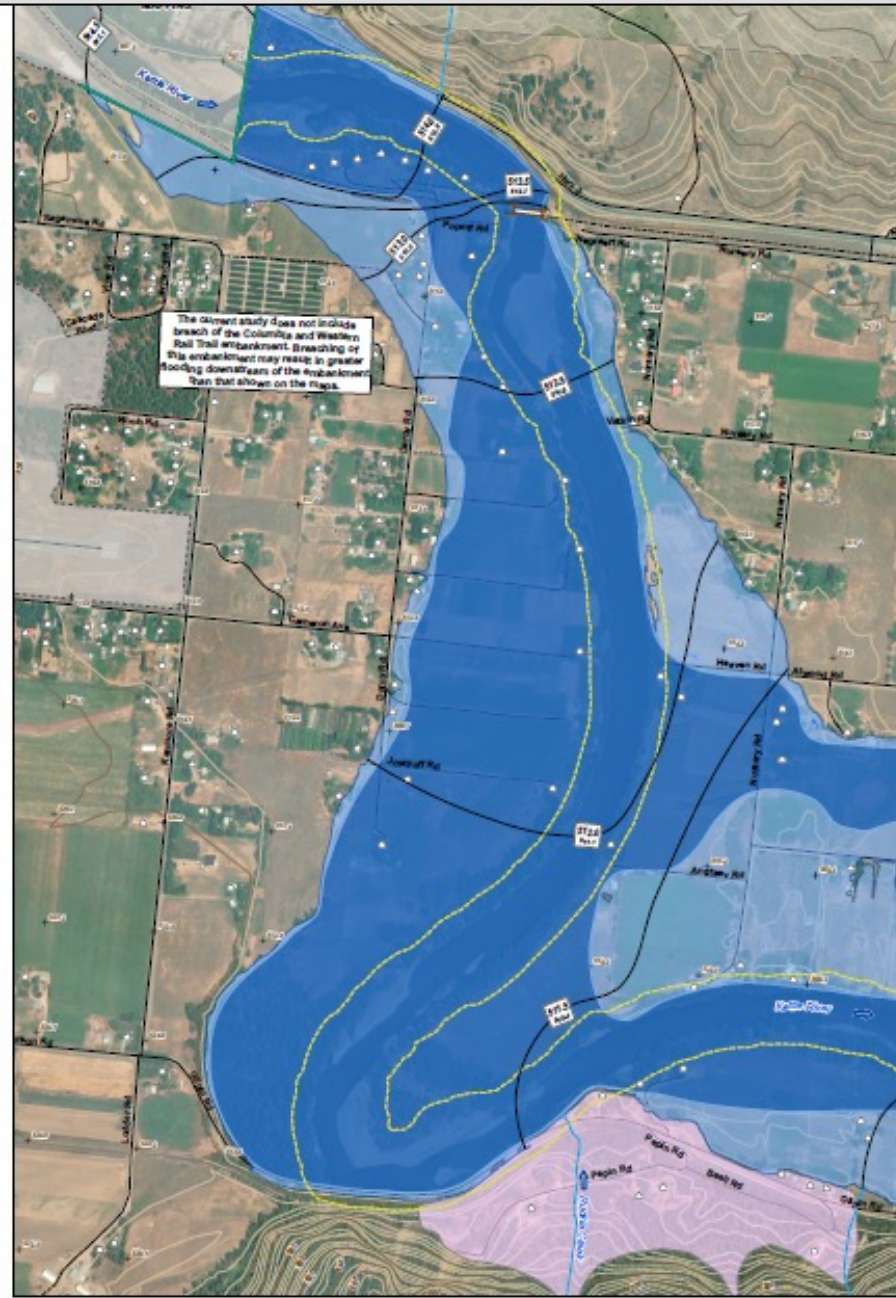
Government of Canada / Gouvernement du Canada

Public Safety Canada

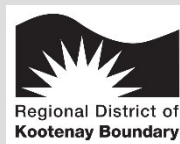
BRITISH COLUMBIA

UBCM Union of BC Municipalities

# FLOODPLAIN & ALLUVIAL FAN HAZARD MAPS



Coordinate System: NAD 1983 CSRS UTM ZONE 19N			
Units: METERS, Vertical Datum: CGVD2011			
Engineer:	VCCM	RLM	Revised: DPM
Job Number:	3005874	Date:	13-MAR-2023
REGIONAL DISTRICT OF KOOTENAY BOUNDARY			
FLOODPLAIN MAPPING OF THE KETTLE RIVER CARSON TO CASCADE FALLS SHEET 3 OF 7			



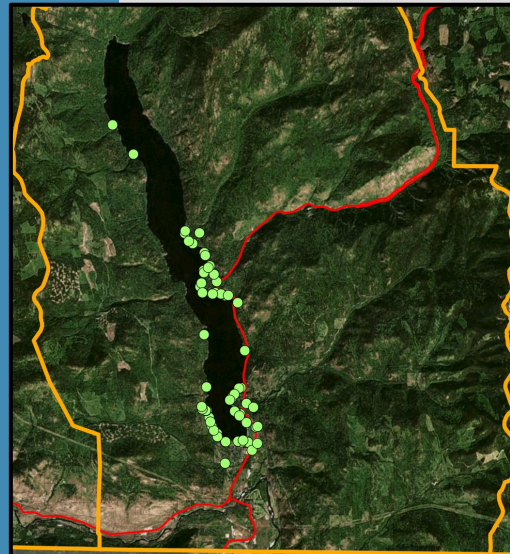
# IMPLEMENTATION

- Floodplain Bylaw
- Zoning
- Official Community Plans
- Restrictive Covenants



## ADDITIONAL CONSIDERATION

- Ecosystem Services
- Riparian area protection
- Water and septic systems
- Funding



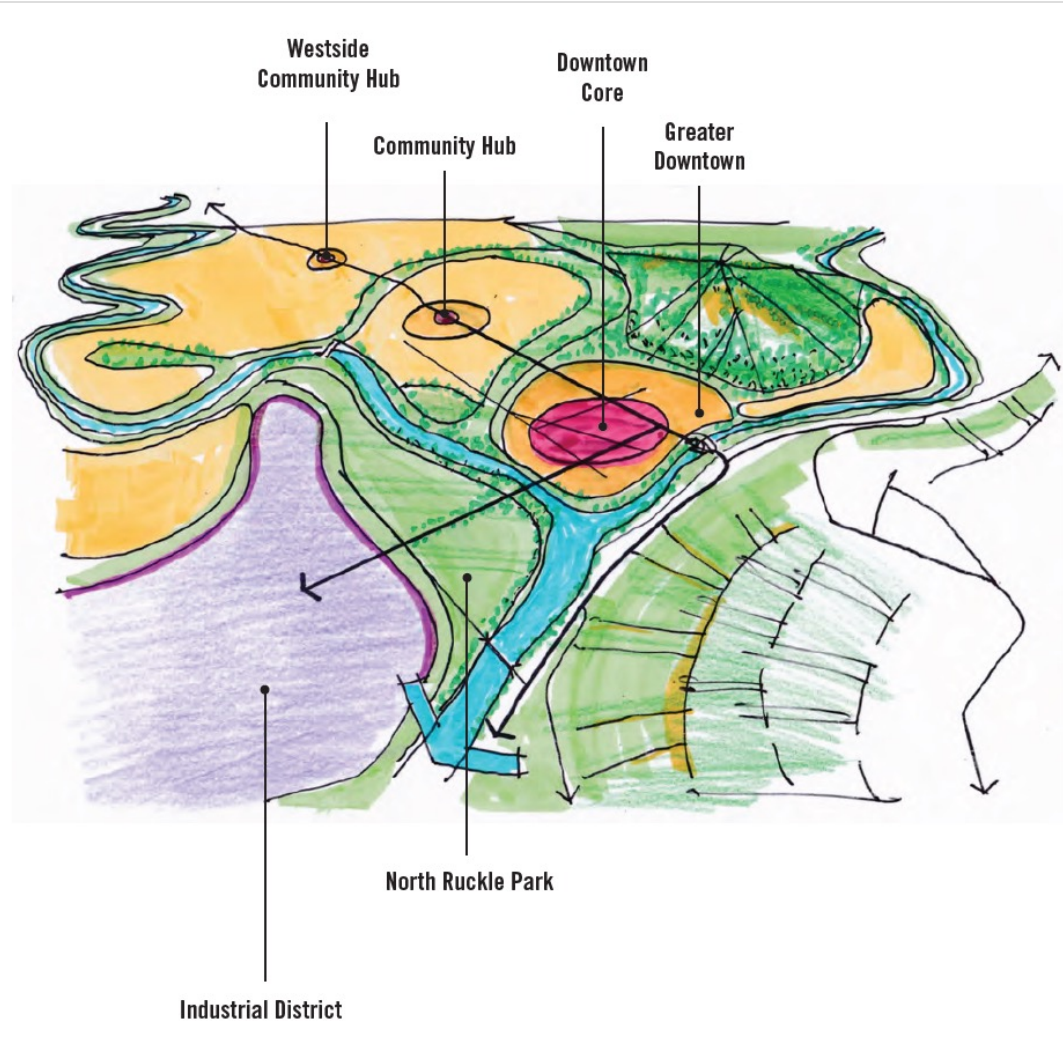
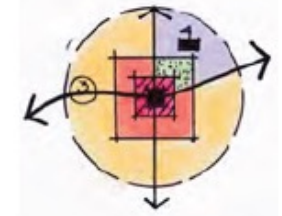
Development Permits Issued Near Waterways  
Christina Lake Area 2013 - 2023

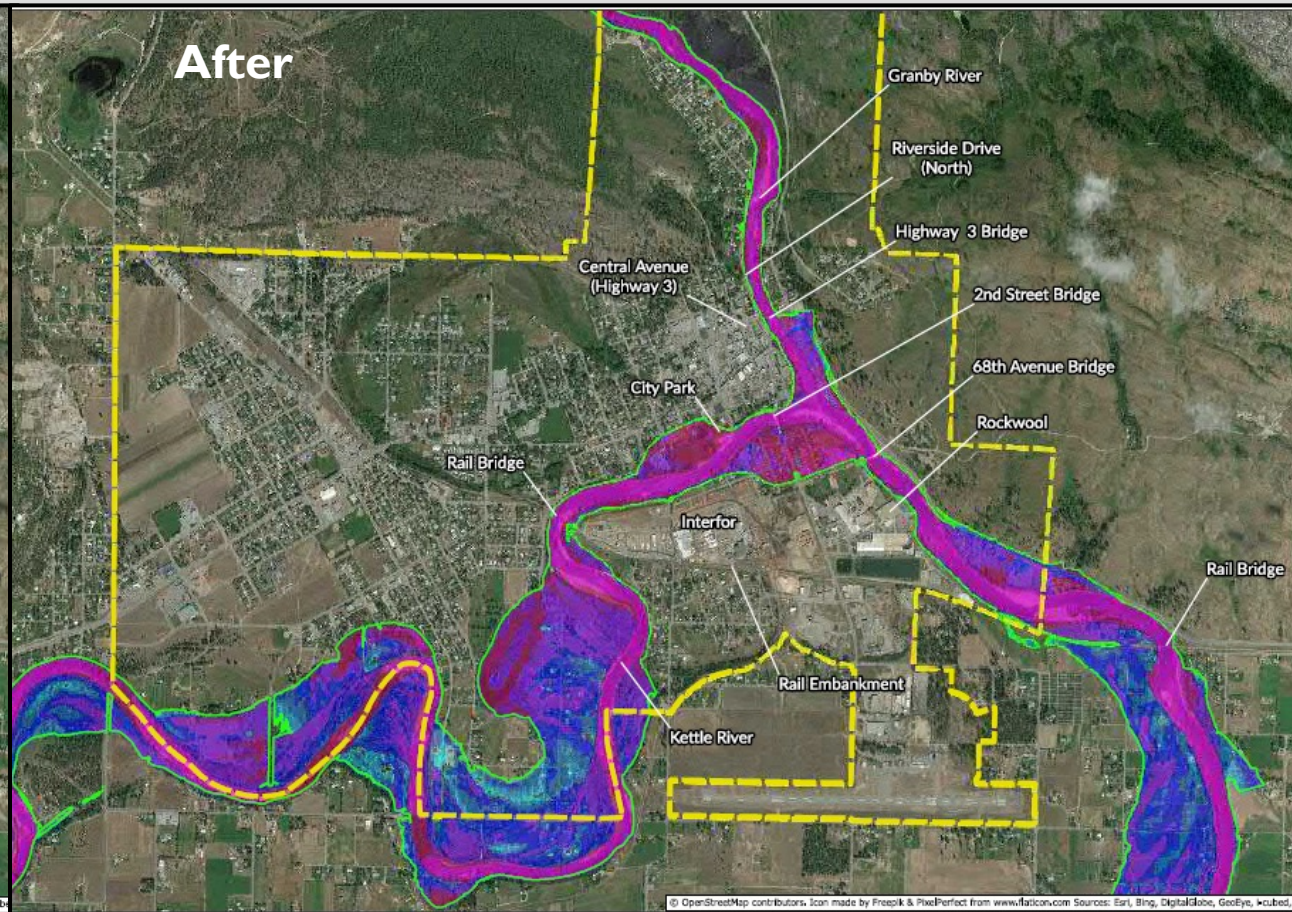
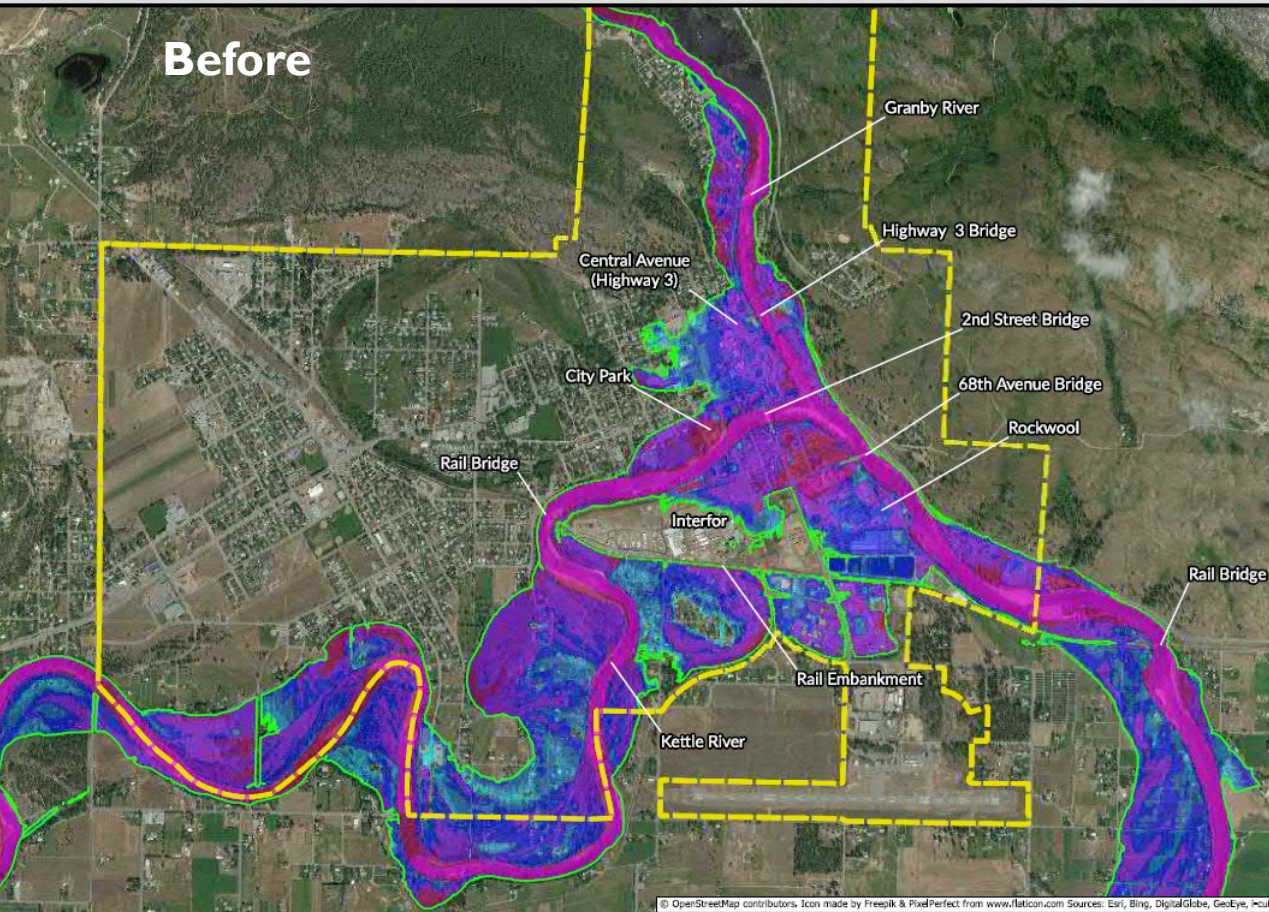


# FLOOD RISK REDUCTION AND HOUSING INFILL IN GRAND FORKS









# Questions?



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