

Notes

1. For important limitations, please see *Hydraulic Modelling and Mapping in BC's Lower Mainland – Final Report* prepared for Fraser Basin Council by Northwest Hydraulic Consultants Ltd. (2019).
2. This map is for information only and intended for flood scenario comparison and flood mitigation planning. The map may also be informative for emergency planning. It is not to be used for designating floodplains, establishing flood construction levels, designing dikes or other structures.
3. *Base Run used for reference is Freshet 1894 Event. See digital PDF map to display this reference layer. Refer to *Base Flood Scenario Map – Freshet 1894 Event* for Base Run details.
4. In cases where dike crests overlap, it is assumed that these dikes remain intact. Since most dikes would likely fail under such circumstances, actual inundation extents and depths may significantly exceed those shown.
5. Dike crest elevations are based on a combination of survey data and Lidar. The quality of the data varies and the hydraulic model and associated mapping will require updating once more accurate dike crest information becomes available.
6. Climate change projections of river flows and sea level rise include a high degree of uncertainty.
7. The Digital Elevation Model was based on 2016 Lidar acquired by EMBC and 2017 bathymetric survey data acquired by FBC for this project.
8. Flood depths do not include a freeboard allowance.
9. NHC's **Disclaimer**, see *Hydraulic Modelling and Mapping in BC's Lower Mainland – Final Report* (2019), also applies to this map.

Location	Boundary Condition (Peak Flow/Level)	AEP
Fraser River at Hope	22,935 m ³ /s	0.2% (CC 2100)
Harrison Lake Inlet	2,452 m ³ /s	0.2% (CC 2100)
Tributaries	1,644 m ³ /s	0.2% (CC 2100)
Ocean Level	3.00 m	50% Summer + 1 m SLR

Depth (m)

- 0 - 0.1 most buildings are dry; underground infrastructure may be flooded
- 0.1 - 0.3 most buildings are dry; walking in moving water or driving is potentially dangerous; underground infrastructure may be flooded
- 0.3 - 0.5 most buildings are dry; walking in moving or still water or driving is dangerous; underground infrastructure may be flooded
- 0.5 - 1.0 water on ground floor; underground infrastructure flooded; electricity failed; vehicles are commonly carried off roadways
- 1.0 - 2.0 ground floor flooded; residents and workers evacuate
- 2.0 - 3.0 ground floor flooded; first floor covered by water; residents and workers evacuate
- > 3.0 first floor and often higher levels covered by water; residents and workers evacuate

- Dike
- First Nation Reserve Boundary
- Municipal Boundary
- River, Lake, Ocean or Other Waterbody

Basemap from Esri and Natural Resources Canada



nhc
northwest hydraulic consultants
30 Gostick Place
North Vancouver, B.C. V7M 3G3
Canada
Office: 604.980.6011
Fax: 604.980.9264
www.nhcweb.com

SCALE - 1:170,000
0 2 4 6 8 10 KM

Coordinate System: NAD 1983 UTM ZONE 10N
Units: METRES; Vertical Datum: CGVD2013

Engineer	NLB	GIS	MSN	Reviewer	MCM
----------	-----	-----	-----	----------	-----

Job Number	3003429	Date	29-APR-2019
------------	---------	------	-------------

LOWER FRASER RIVER 2D FLOOD MODEL

BASE FLOOD SCENARIO MAP
FRESHET CLIMATE CHANGE
YEAR 2100
0.2% AEP WITH 1 M SLR
MAXIMUM DEPTH
WITH BASE RUN* FOR REFERENCE