



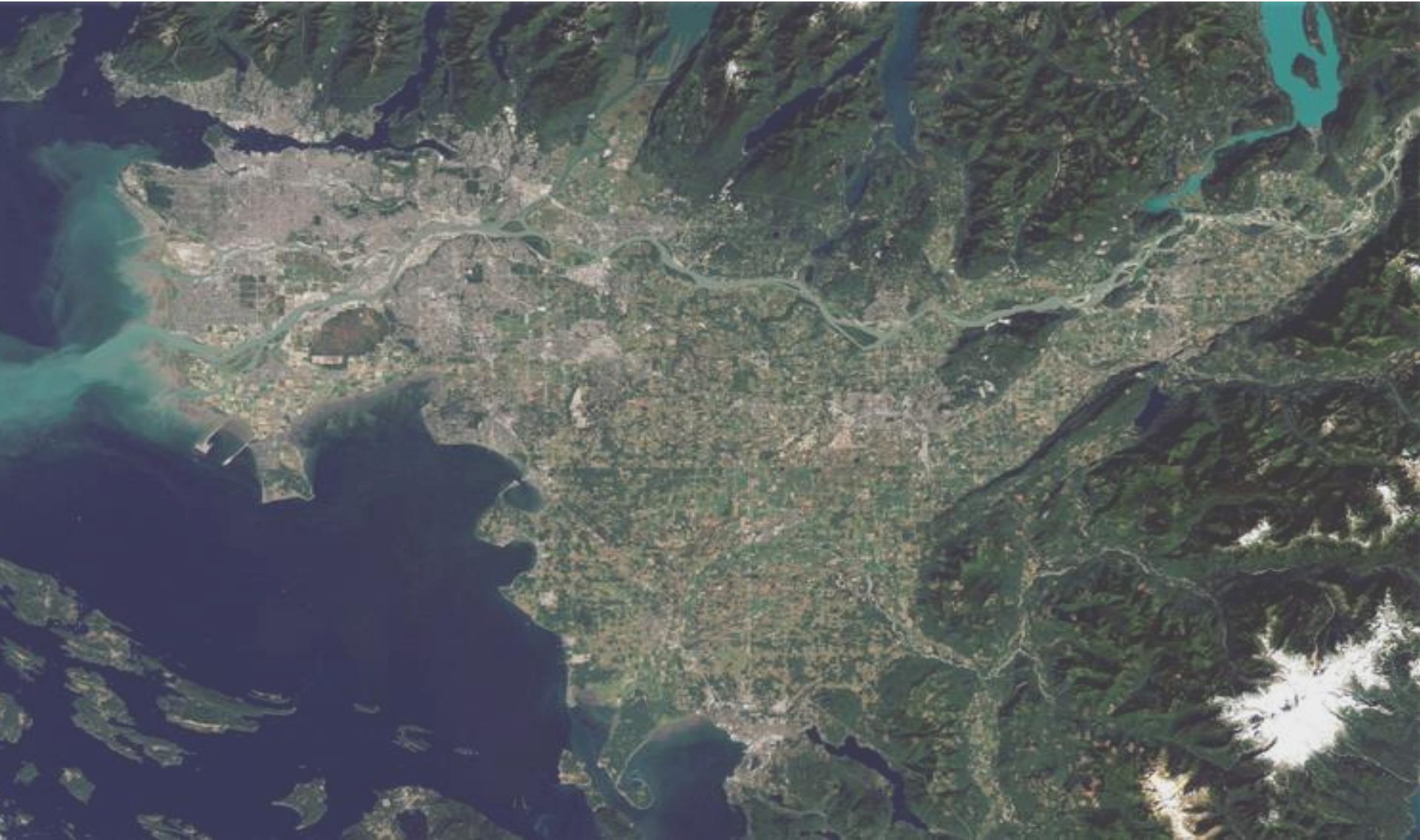
Fraser Basin Council

Flood Hazard, Risk and Risk Reduction in the Lower Mainland – Towards a Regional Flood Strategy

Steve Litke | Fraser Basin Council

Understanding Risk BC 2020 – Kickoff Session | September 14, 2020

Lower Mainland Region



Flood Hazards

1894 Flood – Chilliwack



BC Archives




BC Archives


Lower Mainland Flood Management Strategy


Fraser River Flood Scenarios Map


A Map Showing Estimated
Flood Extents for:

 Scenario C (Present Day)

 Scenario D (Year 2100)
– Further Extent of Flooding

 Existing Waterways

 First Nations Reserves & Treaty Lands

 Municipal Boundaries (white line)

 Highways

 Rail & Shipping Connections

 N
0 5km 10km

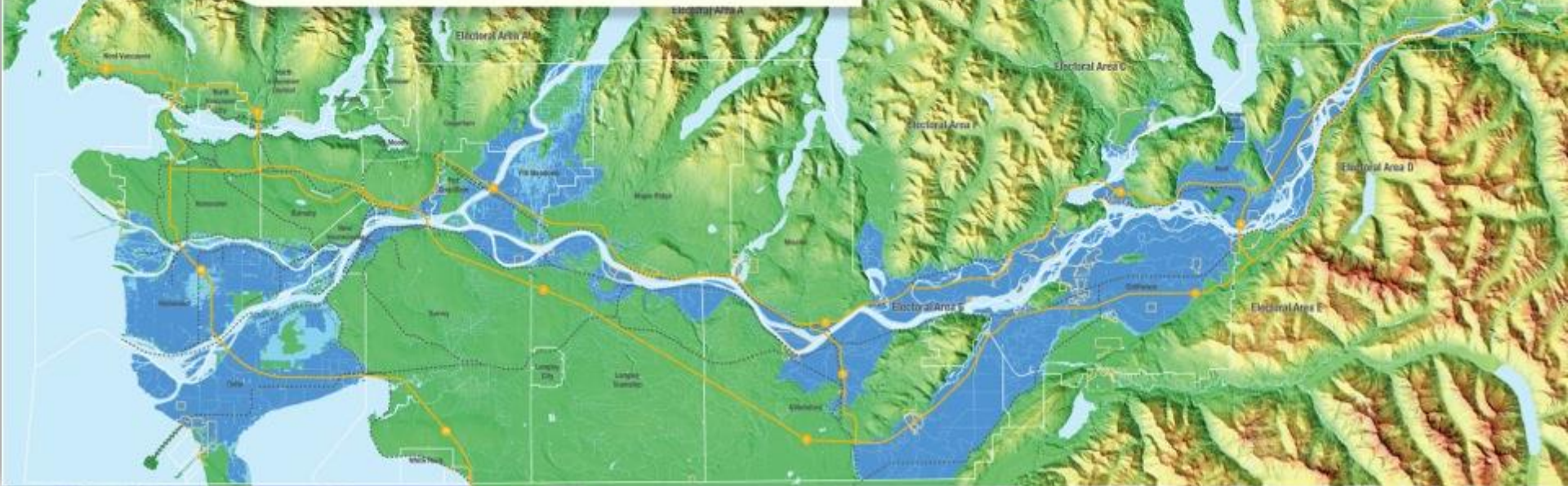
For more detail, including some essential
facilities located in floodplain areas, see
regional and subregional maps in the report
Regional Assessment of Flood Vulnerability.

These maps will also be posted separately
at floodstrategy.ca.

Note on Maps: All maps prepared for this project are for general
illustration purposes at a regional scale. They are not floodplain
maps and do not have official designation of floodplains. For
this reason, they should not be used for site-specific flood
management planning. See the full vulnerability assessment
report for more detailed maps and explanation on use.



Fraser Basin Council



Lower Mainland Flood Management Strategy

Coastal Flood Scenarios Map

A Map Showing Estimated
Flood Extents for:

■ Scenario A (Present Day)

■ Scenario B (Year 2100)
— Further Extent of Flooding

— Existing Waterways

— First Nations Reserves & Treaty Lands

— Municipal Boundaries (white line)

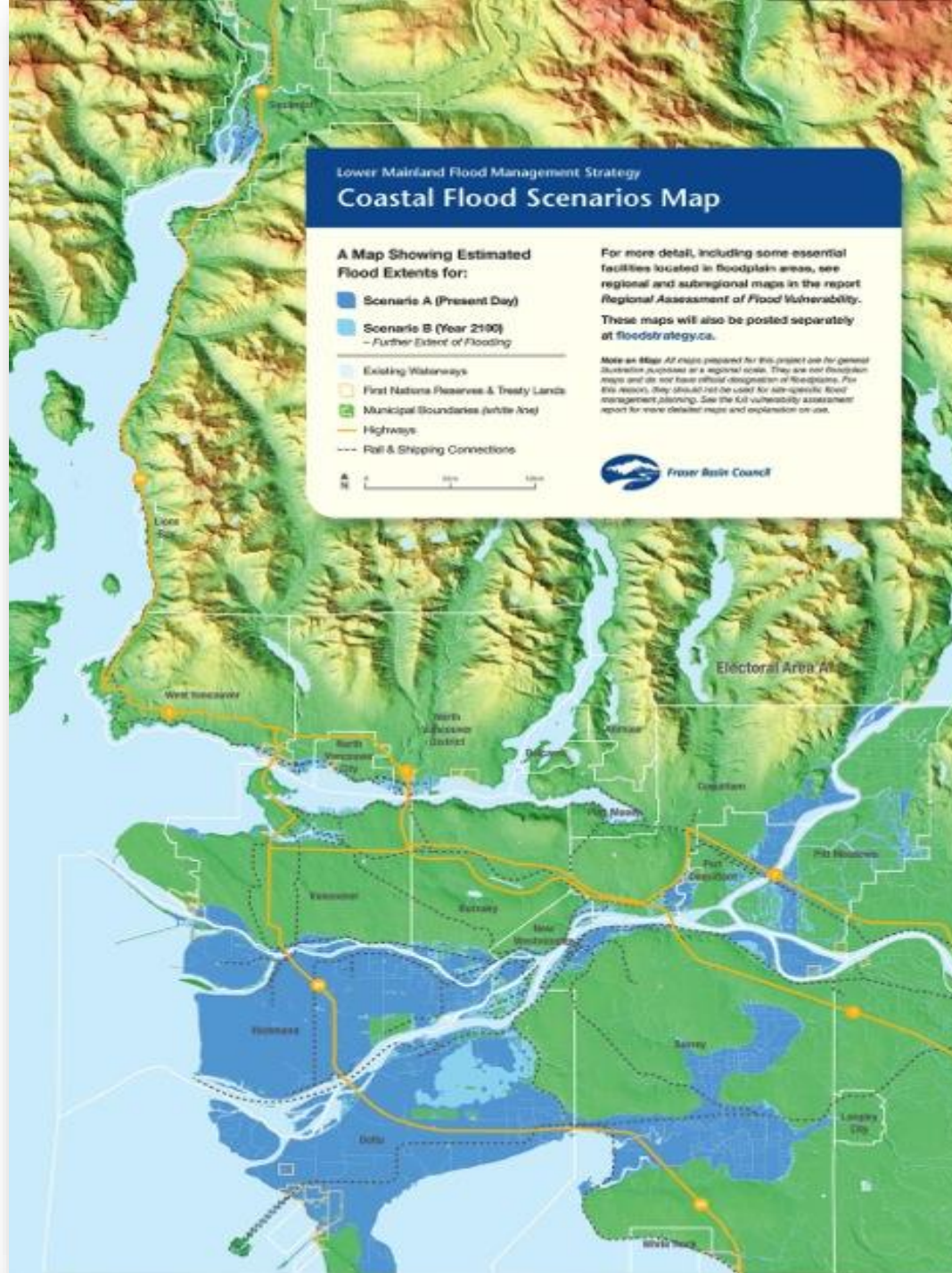
— Highways

— Rail & Shipping Connections

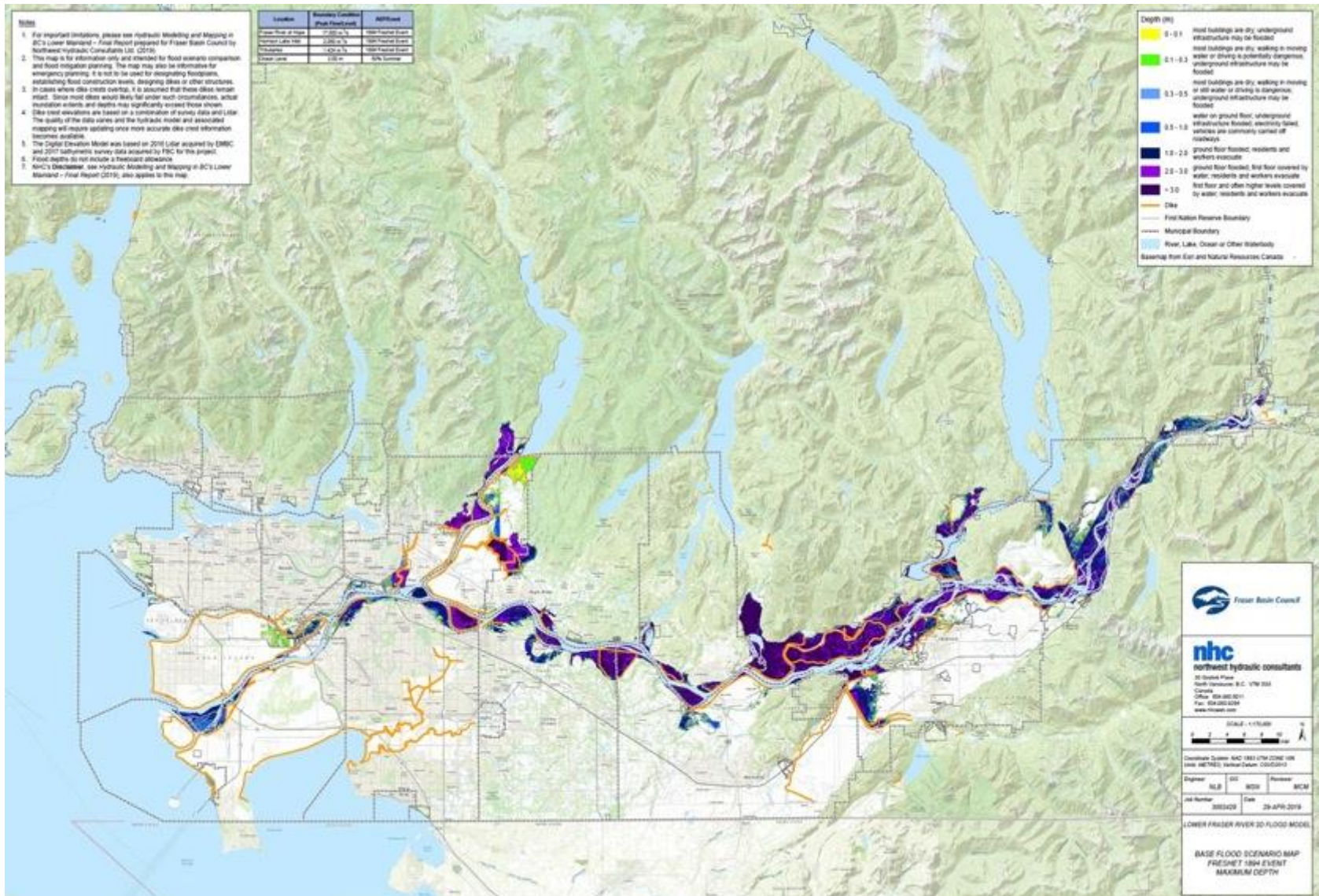
0 10 20 km

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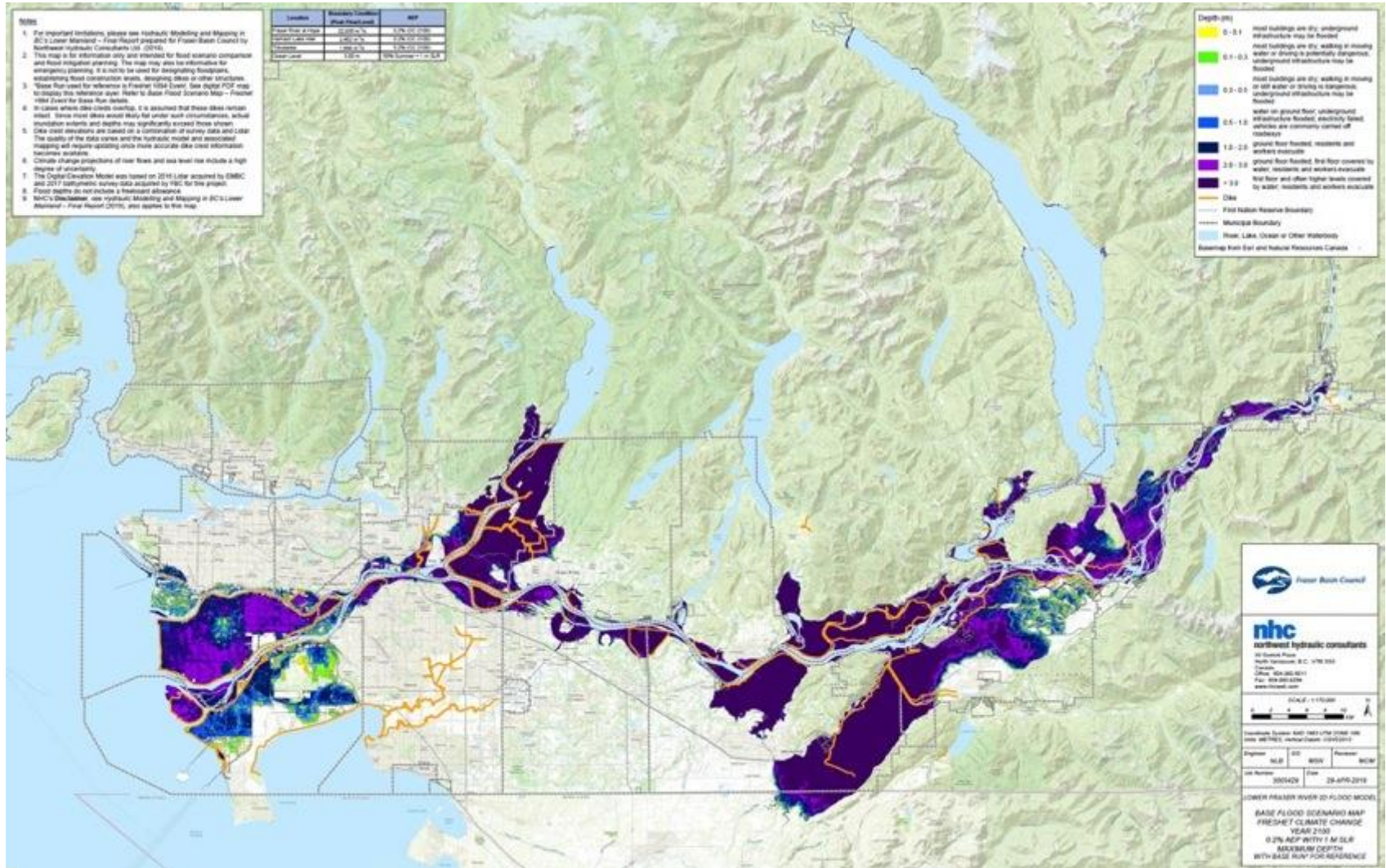
Recurrence of 1894 Flood (>500-yr)



Climate Change Scenario

Simulation of 500-yr Fraser flow + 1 m SLR

Note: with no dike upgrades



Flood Risks

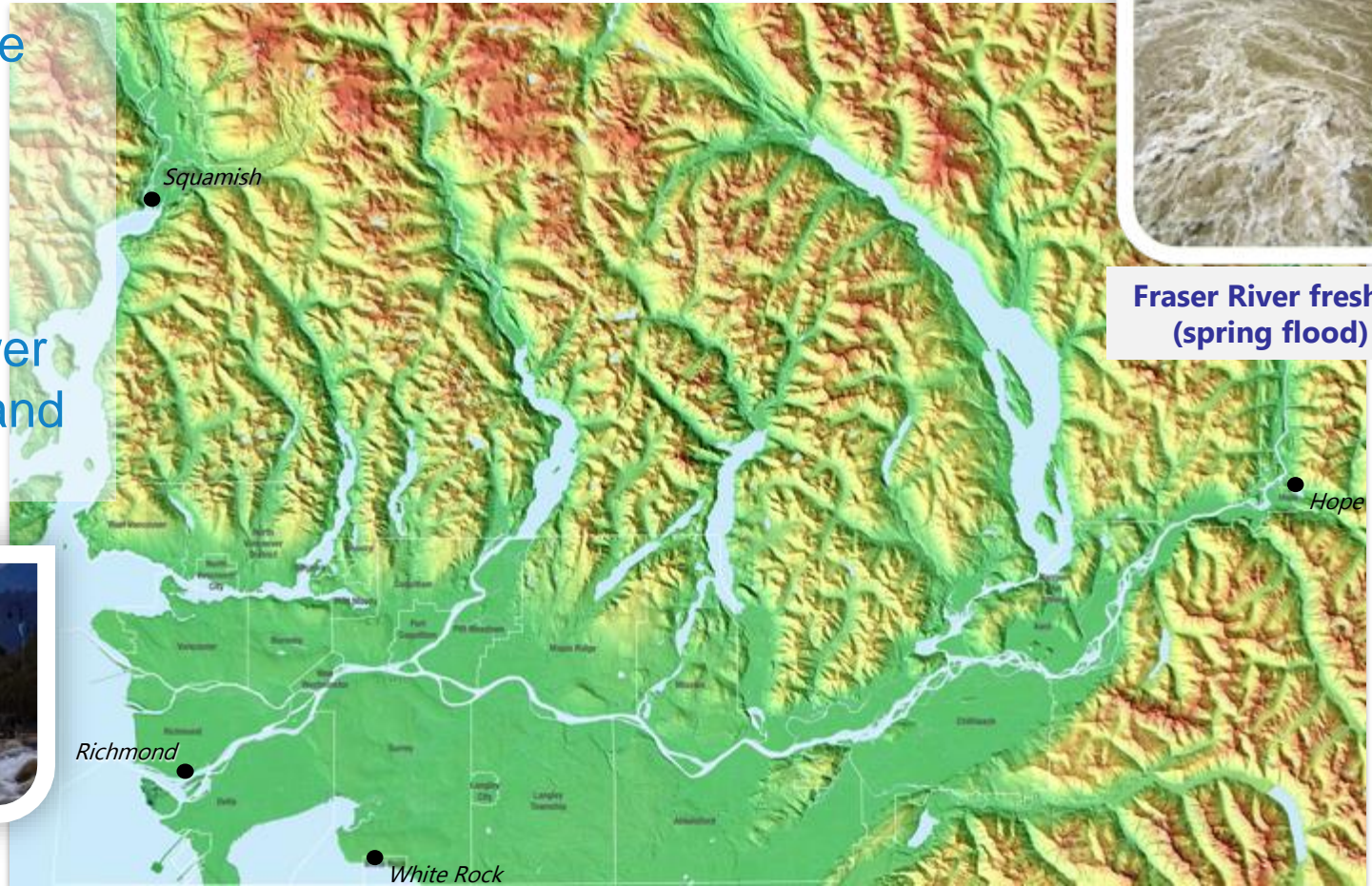


Flood Risks

- Public safety and population health
- Critical infrastructure and essential services
- Building-related losses (e.g. homes, businesses)
- Other financial and economic impacts
- Environmental impacts
- Agriculture and food security impacts
- Social and cultural impacts
- Impacts to First Nations communities, values and interests
- Other

Lower Mainland Flood Management Strategy

Aims to reduce flood risk and increase resilience for communities along the Lower Fraser River and South Coast



**Fraser River freshet
(spring flood)**



**Coastal storm surge
(winter flood)**

Lower Mainland Flood Management Strategy

- Improving understanding of hazard and risk
- Strengthening regional-scale coordination and collaboration
- Advancing holistic, integrated approaches to risk reduction
- Analyzing sound science and diverse perspectives
- Encouraging risk reduction options that deliver broad regional and community benefits
- Building on current strengths and emerging innovations
- Addressing gaps and capacity needs
- Securing long-term, dedicated, sustainable funding

Thank You!

For more information:

Attend the URBC 2020 Session on September 22 at 9:00am

[FloodWise.ca](https://www.floodwise.ca)

Steve Litke – 604-488-5358

slitke@fraserbasin.bc.ca

