



## Sumas River Watershed Flood Mitigation Plan Frequently Asked Questions

### Background information

#### 1. What is the SRWFMP planning initiative (and what does it do)?

- **ANSWER:** The Sumas River Watershed Flood Mitigation Plan (SRWFMP) planning initiative is a collaborative effort between Indigenous governments, municipal governments and the provincial government to develop a plan that addresses flooding risks and restores ecosystems in the Sumas River Watershed. The involved parties recognize that safeguarding the Sumas Prairie and its vital communities, ecosystems, agriculture industry and critical infrastructure requires not only technical and infrastructural solutions, but also a steadfast commitment to honouring the many enduring ties of the Stó:lō Nations. By integrating these diverse perspectives and expertise, the SRWFMP aims to set a new benchmark for resilience—ensuring that flood risk mitigation is as comprehensive and dynamic as the challenges being faced.

#### 2. How does the water flow? (*how the water moves from Nooksack River/Fraser River to Sumas Prairie*)

- **ANSWER:** Under non-flood conditions, the Sumas River flows by gravity to the Fraser River through the Sumas River flood gates at Barrowtown Dam. The Sumas Drainage Canal, which cannot drain by gravity due to low elevation, is pumped to the Fraser River downstream of the Sumas River flood gates at Barrowtown Dam. When Fraser River levels rise, typically during spring freshet, the floodgates are closed to prevent backflow from the Fraser River into the Sumas River. When there is a Nooksack overflow event, water from the Nooksack River enters the Sumas watershed. The water travels to Canada over land and floods the western portion of Sumas Prairie. The worst-case scenario occurs if the floodgates close due to high Fraser River levels. In this case, the Sumas Dike may be overtopped, and worst case breached, leading to flooding in Sumas Prairie East.

#### 3. How many floods have there been, and what areas did they affect?

- **ANSWER:** There have been 26 recorded Nooksack River flooding events since 1935, including the 2021 flood that breached the Sumas Dike. Most of these events resulted in varying degrees of flooding to Sumas Prairie East and West. Since 1948, the Sumas Watershed has experienced seven major flooding events.

#### 4. What is the historic and current flood risk?

- **ANSWER:** There has always been flood risk in the Sumas area. For generations, First Nations lived with the seasonal rise and fall of Sumas Lake. The risk posed



by floods increased when the lake was drained and the land occupied for farming, living, and transportation.

**5. What are the potential impacts of future flooding events?**

- **ANSWER:** If no action is taken, flood risk will increase in the future because of increasing flood hazard severity from climate change. We cannot be sure about the potential future impacts of flooding because of many uncertainties (i.e., understanding the flood hazard and development changes that would affect exposure and vulnerability), but if no action is taken, we anticipate that overall impacts will increase significantly.

**6. What are hydrological modeling and risk assessments, how do they work, and why do they matter? (high-level, plain language)**

- **ANSWER (Hydraulic Model):** Hydraulic modeling is a mathematical approximation of reality that simulates water levels in response to different conditions, and allows for “what-if” scenarios to be visualized to test mitigation options. We can then include flood infrastructure to the model to understand the impact of the infrastructure on reducing the depth and extent of flooding in different scenarios. We developed a hydraulic model to simulate various flood scenarios to estimate flood extent, depth and duration within Sumas Prairie. The model uses water inflow information from the Sumas River and Nooksack River watersheds, and also considers downstream conditions on the lower Sumas River/Fraser River. Flood scenarios simulated using the calibrated model include an approximation of the 200-year return period flood event, which is the typical design event for provincially regulated flood protection works in most parts of BC. Other scenarios simulate smaller and larger floods to support risk assessment work.
- **ANSWER (Risk Assessment):** The risk assessment uses the results from the hydraulic modeling and combines them with receptors (things that may be harmed by flood waters) to describe the impacts of flooding, such as the risk to life, financial losses from damaged and destroyed structures, agricultural damages and disruption, and impacts of contaminants to natural systems. We can then use the risk assessment to evaluate different options and how they impact risk including pump stations, managed retreat, raising houses, and more.

## Flood Mitigation & Ecosystem Restoration

**1. How much do the actions under consideration differ from the preferred options that Abbotsford presented in the summer of 2022?**

- **ANSWER:** There are a number of similarities between the concept plan and those outlined by the City of Abbotsford in its preferred option. However, this plan includes enhanced ecosystem restoration and has been updated based on new hydraulic modelling and risk assessments and the best available forecasting of climate change.



**2. Will the lake be returned?**

- **ANSWER:** No, the return of the lake is not being considered.

**3. How will riparian protection zones be established and enhanced ecosystem improvements be implemented?**

- **ANSWER:** This will need to be explored through changes to Provincial regulations and how it is implemented on all agricultural lands throughout BC.

## Food Security

**1. What will be the impact of flood mitigation actions on the ability of farms to produce food? Will there be a need to relocate agricultural operations/structures?**

- **ANSWER:** We acknowledge the significant agricultural productivity of Sumas Prairie lands and the role it plays with provincial food security. Plans are to safeguard as much agricultural production as possible, while implementing flood mitigation solutions and ecosystem restoration. When more finite plans are created, we will work directly with those residents who may be impacted by flood mitigation features and ecosystem restoration.

## Timeline

**1. Why is it taking so long?**

- **ANSWER:** The problem is complex, and working through the complexity together in this collaborative way requires time. The SRWFMP planning initiative seeks to consider diverse needs and values, the multiple influences on flooding (e.g., climate change, human activity, hydrological influences), the many potential flood mitigation strategies, and must contend with the challenges present in implementing changes. Processes like these often take years to complete.

**2. When is the flood mitigation plan going to be finalized? When will a final decision be made and a preferred solution selected? Will we be engaged again after the plan is complete?**

- **ANSWER:** A concept plan was completed in early 2026 and lays out the work needed to get to a final plan (including projected timelines). We are seeking public feedback to inform the final plan. While we cannot say with certainty when the final plan will be ready, we will be engaging with the public throughout the process. We want to hear feedback from the public, and additional studies are necessary before the developed Plan is fully put into action.

**3. What is happening next?**

- **ANSWER:** Once the current phase of public engagement activities are complete, the responses will be analyzed and shared with SRWFMP leadership and staff and support the SRWFMP moving forward with a final plan. There will be further public engagement at subsequent stages of the planning.



## Finances

### 1. Who is going to pay for mitigation actions?

- **ANSWER:** Flood-mitigation funding for the Sumas River Watershed is expected to come from multiple partners, with a strong emphasis on provincial and federal cost-sharing. The Province of British Columbia has already made significant financial commitments, including over \$220 million in recovery, preparedness and mitigation funding for Abbotsford and Sumas Prairie since 2021, and ongoing funding for planning and technical studies through the SRWFMP, including recent multi-million-dollar allocations for design and assessment work. The partners will continue to pursue funding opportunities at the federal level.

### 2. What are the parties involved doing to secure additional provincial and federal support for this work?

- **ANSWER:** The SRWFMP is actively working at both provincial and federal levels to secure long-term funding and engagement. Government leaders represented in SRWFMP have advocated for and worked with the federal government to obtain political and financial support for this important work.

### 3. Will the USA play a role in mitigating risk of the Nooksack River flooding?

- **ANSWER:** U.S. participation is essential and already underway through the Transboundary Flood Initiative (TFI), which involves many of the SRWFMP members and recognizes the shared nature of flood risk in the Nooksack–Sumas system. Through the TFI, Washington State has indicated that they are exploring options to reduce overflow that impacts their communities and makes its way to Canada. However, floodwater will continue to make its way to Canada and this plan addresses how we will mitigate it when it arrives.

### 4. What will happen if the required funding isn't received?

- **ANSWER:** If funding is not provided to implement flood mitigation and ecosystem restoration solutions, Sumas Prairie residents and business, along with major national transportation and energy infrastructure, will remain vulnerable and at risk to future flooding.

## Governance & Participation

### 1. How will my feedback be included throughout the process? Does my participation actually make a difference?

- **ANSWER:** The SRWFMP is meant to balance the needs and values of communities in the Sumas River Watershed, so it is critical that the SRWFMP Steering Committee hears the voices of those communities. Knowledge, experiences, values, perspectives, and feedback shared will be brought to the Steering Committee and will inform the development of the final plan.

### 2. How are these decisions being made? Who is making them?



- **ANSWER:** The challenge of managing flood risk in the Sumas River Watershed is too large for any community or government to solve alone. Five partners are collaborating to develop the SRWFMP: Sumas First Nation (Semá:th), Leq'á:mel First Nation, the City of Abbotsford, the City of Chilliwack, the government of British Columbia. Members of these groups sit at the SRWFMP Steering Committee (as well as other tables and working groups) to guide development of the plan. Decisions are made at the Steering Committee level and informed, as appropriate, by biologists, Indigenous Knowledge holders, engineers, environmental consultants, and technical and subject matter experts. All decisions made by the Steering Committee are then brought to Leadership, which is comprised of elected officials from the parties' governments. Leadership makes the final decisions. Ultimately, any decisions made by the Steering Committee and Leadership will still need to go through necessary permitting procedures if relevant.

**3. Will Indigenous Knowledge and values/practices be incorporated into the eventual solutions? If so, how?**

- **ANSWER:** The SRWFMP Steering Committee is composed of representatives from both cities, the province of BC, and 2 First Nations (Leq'á:mel, Semá:th). Each party representative is an equal partner at the table in this important and collaborative process. The First Nations representatives on the Steering Committee continue to provide their perspectives and knowledge, as they have since the signing of the Framework Agreement in 2023. The SRWFMP planning process uses traditional language, integrates ecological knowledge and history, and adheres to cultural protocols when shaping the plan and the eventual solutions.

**4. How does this project support reconciliation efforts?**

- **ANSWER:** Each First Nation is an equal partner at the table in this important and collaborative process. Further, the SRWFMP's Balancing Principles, which informs how we work together, explicitly makes room for the preservation and enhancement of Indigenous uses and cultural continuity.