



FLOOD RECOVERY

CITY OF ABBOTSFORD



MESSAGE FROM THE MAYOR



It's incredible to believe almost two years have passed since the historic flood hit our City and left devastating impacts on our community. While most of our daily lives have returned to normal, there are families and farming

operations in Sumas Prairie that are still recovering, and who worry of a repeat event as the rainy season approaches each year. As a City and a Council, we share these concerns, which is why we've been working diligently on repairs and continue to advocate for long-term solutions here in B.C. and in Washington State.

Over the past 22 months, we have reinforced our existing flood infrastructure and repaired the City-owned sites damaged during the November 2021 flooding event, which include completing permanent repairs to the main Sumas Dike breach and raising the dikes in key places for additional resilience. As a result of this work, we feel we are in a better position than we were in 2021. However, there is still a lot of important work that needs to be done to ensure our families, farmers, businesses, and our provincial food system remain secure and that Highway 1, our national highway and province's key transportation corridor, is protected.

The potential for future extreme weather events is a significant concern for all of us

in the Fraser Valley, and in April 2023, the City of Abbotsford joined the Province, City of Chilliwack and leaders from Semá:th, Mathxwí and Leq'á:mel First Nations to establish the Sumas River Flood Mitigation Collaborative Framework, which will enable us to find and implement long-term flood mitigation solutions that best protect all the people in this area from future flooding events. This important work is coupled with the Transboundary Flood Initiative where just last week, an agreement was signed by representatives of nine governments – including B.C. Premier David Eby and Washington Governor Jay Inslee – and by Semá:th, Mathxwí and Leq'á:mel First Nations, the Nooksack Indian Tribe, Lummi Nation, the City of Abbotsford and Whatcom County, Washington. This is led by the Province and Washington State and will look at solutions that work for communities on both sides of the border.

While these conversations are essential, we must also take action and this is why the City has moved forward with advocating for the most urgent components of our \$3.004 billion long-term flood mitigation plan, which was endorsed by Council in June 2022. In July 2023, the City submitted a \$1.6 billion application for Federal Disaster Mitigation and Adaption Funding, which will support Barrowtown Pump Station resiliency, construction of a Sumas River conveyance system (pump station), and the creation of a habitat enhancement/flood storage area. We are hopeful we will receive that funding soon so we can get started with the work.

The City of Abbotsford also recently put forward a Resolution for consideration, which was endorsed without opposition, at the Union of BC Municipalities annual convention, asking for the provincial government to be re-established as the diking authority in British Columbia. Municipalities have been calling on the Province to resume responsibility as the diking authority since 2015 and 2021's flooding disaster only highlighted the importance of senior levels of government making comprehensive, long-term investments in renewing the infrastructure that's located across our communities.

As we approach the two-year mark since the historic flood, we want residents of Abbotsford to know that we won't let this event become a distant memory. We will keep working hard to ensure our City's urgent needs are heard by senior levels of government and will continue advocating for the funding required for this critical work and for the protection of our residents and our community.

Ross Siemens

Ross Siemens
Mayor

INFRASTRUCTURE RECOVERY UPDATE

REPAIRS WITH IMPROVEMENTS

Recovery infrastructure repairs on the hundreds of City-owned sites damaged in the flood have been steady over the last 22 months. More than two thirds of the repair projects have been completed to date, remediation plans are in place and work plans have been developed for the remaining larger projects.

DIKES

All the dike breaches from the 2021 flood event have been repaired and have been reinforced in key areas.

- **MAIN SUMAS DIKE**
Permanent repairs, which included the installation of a 150-metre long concrete/bentonite vertical panel wall in the centre of the dike, were fully completed late last year. The majority of the 17 kilometre-stretch between Barrowtown Pump Station and Vye Road was raised up to 0.5 metres.
- **ATKINSON BRIDGE AND HIGHWAY 1 AND ON NORTH PARALLEL ROAD BREACH** (near Barrowtown)
Subsurface investigations (drilling) will take place in fall/winter 2023 to assess the adequacy of emergency dike repairs for permanent operations for the breach.
- **COLE ROAD DIKE**
This breach was fixed with an emergency repair and now a design investigation is underway to upgrade it with a permanent solution. Geotechnical investigations have been completed and we are now proceeding with design.
- **SUMAS RIVER BANK/DIKE STABILIZATION SITES**
We now have Dike Maintenance Act approvals, Fisheries and Oceans Canada permits and Provincial Water Sustainability Act permits. All projects are moving through the tender process, and construction will commence in the coming weeks.

LANDSLIDES

Repairs are complete on the Cranberry Court and Sumas Mountain Road landslide sites, and repairs for the other sites are in the works.

- **OLD YALE ROAD (MAJUBA HILL) LANDSLIDE**
Repairs are being redesigned to include a full retaining wall and this work has a target completion date of the end of the year.
- **AUGUSTON SEWER ACCESS ROAD LANDSLIDE**
Designs are complete for the landslides on this segment of road (off Straiton Road). We are currently undertaking environmental assessments and consultation with First Nations. Water Sustainability Act permits will be submitted to the Province in the coming weeks.
- **IVY COURT, CARIBOO COURT, ASH STREET, MCKEE ROAD AND LATIMER ROAD LANDSLIDES**
The City received provincial grant funding and staff are packaging these locations for tender. We are also working through environmental assessments, will be consulting with First Nations and are working on Water Sustainability Act permits to be submitted.

WATERWAYS

The City completed sediment and debris removal in several waterways and additional sediment removal work is expected to be completed this fall and winter.

- **CLAYBURN CREEK**
The City received grant money from the Province for an engineering study on mitigation measures in order to develop a Clayburn Creek overflow/long-term flood mitigation plan. Sediment removal was completed at Old Clayburn Road Bridge, as were repairs to Wright Street sediment trap. The B.C. Ministry of Environment is leading the work for Clayburn Creek bank repairs and designs are underway. Critical repairs are to be completed in 2023 (sediment removal at Old Yale Road, Wright Street Sediment trap repair), remaining work in 2024.
- **MCKAY CREEK (AT SUMAS RIVER) SUMAS CANAL (AT HIGHWAY 1) AND KILGARD CREEK (ALONG SUMAS MOUNTAIN ROAD)**
Sediment removal has been done by the B.C. Ministry of Environment and planting will be completed this fall.

SEDIMENT REMOVAL: SEDIMENT REMOVAL TAKING PLACE AT THE SUMAS RIVER AT COLE ROAD





WATERWAYS CONTINUED

- **SAAR CREEK AND ARNOLD SLOUGH**

Removal of debris work was awarded and is currently underway.

- **SUMAS RIVER SEDIMENT TRAPS**

This work has been awarded for the cleaning of four sediment traps between the US border and Cole Road and is currently underway.

- **SUMAS LAKE BOTTOM CANAL SEDIMENT REMOVAL**

A survey of the Canal has been completed and we are working through a program to complete the work in 2024.



BRIDGES

Repair of eight damaged bridges is underway following approval of the Water Sustainability Act by the Province.

BRIDGES BEING REPAIRED:

- Bateman Road Bridge over Willband Creek
- Angus Campbell Road Bridge over Marshall Creek
- Wells Line Road Bridge over Saar Creek
- Bowman Road Bridge over Arnold Slough
- No. 4 Road over Sumas Canal
- No. 5 Road Bridge over Sumas Canal
- South Parallel Road Bridge over Marshall Creek
- South Parallel Road Bridge over Sumas River



BARROWTOWN PUMP STATION

There are several projects in the works for Barrowtown Pump Station.

OVERHAUL PROJECT

- This overhaul project is to remove the pumps and replace seals, bearings and recoat impellers. Will be starting the procurement process this fall.
- There are limited time windows to complete these works as the pumps are out for up to eight weeks so only two can be done at a time in a small window each year.
- Project cost estimate is between \$600K - \$800K, with funding coming from insurance funding (roughly \$320K) and a grant we received in 2022 (part of the \$5.8 million Recovery Grant).

BACKUP POWER GENERATOR PROJECT

- We received \$6.5 million in federal and provincial funding to install a backup power generator to maintain pumping operations and increase flood resiliency in the event of a power failure.
- Due to supply chain issues, there was a delay in delivery of the generator; however, it is now anticipated to be delivered to site before the end of this year. Estimated project completion is 2024.

FLOOD-PROTECTION UPGRADES PROJECT (construction of a flood wall)

- Design is currently underway for a new flood wall at Barrowtown.
- The Province is providing the City with \$3.2 million for flood-protection upgrades for this project.
- Additional funding in the order of \$5 million will be required to complete the wall construction and the City is currently submitting an application under the Fraser Valley Flood Mitigation Program. If funding is secured, the flood wall is anticipated to be complete before fall 2024.

WHAT ABOUT THE **NOOKSACK RIVER?**

On October 27, 2023, an agreement was signed by representatives of nine governments – including B.C. Premier David Eby and Washington Governor Jay Inslee – and by Semá:th, Mathxwí and Leq'á:mel First Nations, the Nooksack Indian Tribe, Lummi Nation, the City of Abbotsford and Whatcom County, Wash. Led by the Province and Washington State, discussions are ongoing at the various tables of the Transboundary Flooding Initiative. At these tables, the City continues to advocate for agencies to better understand:

- how our diking and drainage system works and how it's not designed to take on or manage water from the Nooksack River;
- the associated flooding impacts on structures, water quality and biodiversity, and the economy;
- and the need to establish a flow split at Everson (Nooksack overflow location), sharing of the risk between the US and Canada.

AGREEMENT PHOTO: TRANSBOUNDARY FLOOD INITIATIVE AGREEMENT SIGNING



As part of the Transboundary Flood Initiative an agreement was signed by representatives of nine governments to look at solutions that work for communities on both sides of the border. Participating governments include B.C. Government, Washington State, Semá:th, Mathxwí and Leq'á:mel First Nations, the Nooksack Indian Tribe, Lummi Nation, Whatcom County and the City of Abbotsford.

DID YOU **KNOW?**

- The City received a grant through the Community Preparedness Fund from the Union of BC Municipalities (UBCM) for the modernization and enhanced mobility of our Emergency Operations Centre (EOC). This \$30K in funding will allow for the purchase of updated radio equipment that is needed for maintaining communications with EOC in the event of a major disaster or event.
- During the 2021 flood, hundreds of staff from the City of Abbotsford and Abbotsford Police Department supported throughout the duration of the EOC and since then 19 more staff have taken EOC training for the first time or refresher courses, to enhance our overall preparedness for working in an emergency situation.
- The City has been advocating for better forecasting information from the Province, and better linkage between the River Forecast Centers and weather forecasting agencies between both sides of the border.
- The City of Abbotsford received \$150,000 from the Province through the Emergency Preparedness Fund for a High Water Warning System and will be installing 20 new cameras, five water level sensors and the associated infrastructure to enhance the City's remote monitoring capabilities in both Matsqui and Sumas Prairies.

EOC PHOTO: THE EMERGENCY OPERATIONS CENTRE DURING THE 2021 FLOOD

