FLOOD RESILIENCE AND MITIGATION

2021 Update Report

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1. OVERVIEW: THE CITY'S FLOOD RESILIENCE PROGRAM

The 2013 southern Alberta floods were the costliest disaster in Canadian history until it was surpassed by the 2016 Fort McMurray wildfires. Shortly after the 2013 floods, The City of Calgary formed the Expert Management Panel on Flood on River Flood Mitigation. The intent of the Expert Management Panel was to identify and recommend opportunities to reduce the risk of future river flooding in Calgary.

Following recommendations from the 2014 Expert Management Panel report, a permanent flood resilience team was established to oversee and develop the Flood Resilience Program. The role of the flood resilience team was to coordinate implementation of the 27 actions from the Expert Management Panel, develop the long-term flood strategy for The City, and to develop actions and monitor the flood plan's progress that support Calgary's flood resilience.

Significant progress has been made to reduce Calgary's flood risk since 2013. The City of Calgary, with financial assistance from the Government of Alberta and the Government of Canada, has invested in over $150M in new flood mitigation infrastructure within Calgary as of September 2021, and has reduced Calgary's flood risk by approximately 55 per cent, or approximately $90M in average annualized damages based on The City's 2015 damage assessment.

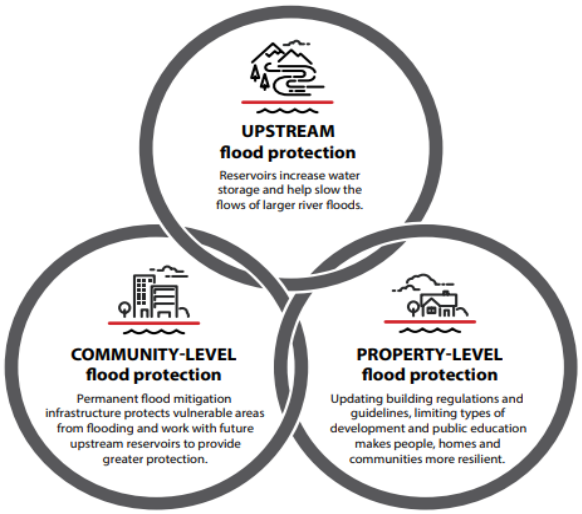
More information on The City's Flood Resilience Program, its background, and the progress that's been made by The City since 2015 can be found in Attachment 3.

2. 2021 ANNUAL UPDATE

The purpose of this document is to update City Council on activities undertaken by The City of Calgary under the Flood Resilience Program in the past year. 2021 served as a significant year where a number of key milestones were achieved:

- Began construction of the Downtown Flood Barrier and Upper Plateau Separation projects
- Integrated the Sunnyside Flood Barrier project into the Memorial Parkway Program
- Continued progress on the Calgary River Valleys Plan update
- Successfully participated in the regulatory hearing for the Government of Alberta's Springbank Offstream Reservoir project, which is now beginning construction

This document also outlines anticipated developments or actions to advance under the Flood Resilience Program in 2022. Topics discussed in this document are based on the Flood Resilience Program's strategic approach to flood resilience. This relies on a multi-layered approach that combines upstream, community-level, and property-level mitigation measures working together to manage



THE CITY OF CALGARY CONTINUES TO UTILIZE A LAYERED STRATEGIC APPROACH TO FLOOD MITIGATION THAT RELIES ON A COMBINATION OF UPSTREAM, COMMUNITY-LEVEL, AND PROEPRTY-LEVEL MITIGATION ACTIONS TO REDUCE CALGARY'S

Calgary's flood risk. Land use planning, emergency response and forecasting capabilities also play a key role in The City's strategic approach. However, the unpredictability of actual flood events means that emergency response measures and land use planning must work with permanent flood mitigation to ensure Calgary remains resilient the risk of flooding.

This holistic approach is intended to make Calgary resilient to a flood similar to 2013 while working towards a collective goal of achieving a 1-in-200 year level of service throughout Calgary.

3. UPSTREAM MITIGATION

Upstream flood storage, in the form of reservoirs on the Bow and Elbow Rivers, remain a key component of The City's long-term flood resilience strategy. Reservoirs provide benefits over community mitigation structures like barriers since they can store flood water, releasing it slowly over time after the initial event has passed. In some cases, reservoirs can provide additional water supply storage and drought mitigation benefits.

Upstream mitigation remains primarily the responsibility of the Government of Alberta. The City of Calgary is a key stakeholder in upstream mitigation initiatives and closely monitors progress on these items. The City will continue to provide updates to Council on key developments around this work and provide recommendations on how to best proceed as necessary.

Th City's critical upstream mitigation priorities include:

- The Springbank Offstream Reservoir on the Elbow River, also known as SR1;
- The Government of Alberta's seasonal operating agreement with TransAlta Corporation on operations of the Ghost Reservoir and Kananaskis Reservoir system for flood mitigation and water supply purposes from May to July each year; and
- The construction of a new reservoir upstream of Calgary on the Bow River. The Government of Alberta is currently conducting the Bow River Reservoir Options study to examine the feasibility of three potential reservoir sites.

3.1 SPRINGBANK OFFSTREAM RESERVOIR

The Springbank Offstream Reservoir project was initially announced by the Government of Alberta in 2014, to mitigate flood risk on the Elbow River following the 2013 Alberta floods. The project, located 18 kilometres upstream of Calgary, will divert and store water during a high flow event and slowly release it back into the Elbow River after flows subside. Working together with new storage gates The City of Calgary installed at the Glenmore Reservoir in 2020, a flood similar to 2013 will be fully mitigated on the Elbow River once the Springbank Offstream Reservoir project is completed.

In March 2021, the Natural Resources Conservation Board held a public hearing on the Environmental Impact of the Springbank Offstream Reservoir, where The City served as key stakeholder and subject matter expert providing information in support of the project. The Natural Resources Conservation Board approved the project, announcing that it believed the project was in the public interest in June 2021. Following its regulatory approval, the Government of Alberta announced that it had acquired all of the land necessary and construction began in early 2022.

Action for 2022:

The City of Calgary remains in contact with the Government of Alberta regarding the Springbank Offstream Reservoir as construction begins and operating plans are developed in 2022. The City is a member of the project's various committees and regularly meets with its counterparts at the Government of Alberta. The City will continue to attend technical operations committee and land use advisory committee meetings throughout 2022 and is working to ensure that any potential concerns are adequately considered by the Government of Alberta.

The City has identified some items that it is seeking clarity from the Government of Alberta on:

- Outstanding design elements for the reservoir;
- How and when the Springbank Offstream Reservoir will be considered in regulatory Flood Hazard Area mapping;
- Land use and stewardship opportunities; and
- Future operational considerations and coordination with the operations of the Glenmore Reservoir.

3.2 BOW RIVER RESERVOIR STUDY

The Government of Alberta announced that it would study the feasibility of a potential new reservoir on the Bow River in November 2018. The Phase 1 conceptual study of the Bow River Reservoir Options project was completed in Spring 2020 and identified three potential sites for further study (Figure 1). The Government of Alberta announced Phase 2 of the study in 2020 to evaluate the relative feasibility of the three possible sites and potentially recommend one to undergo detailed design and regulatory approvals.

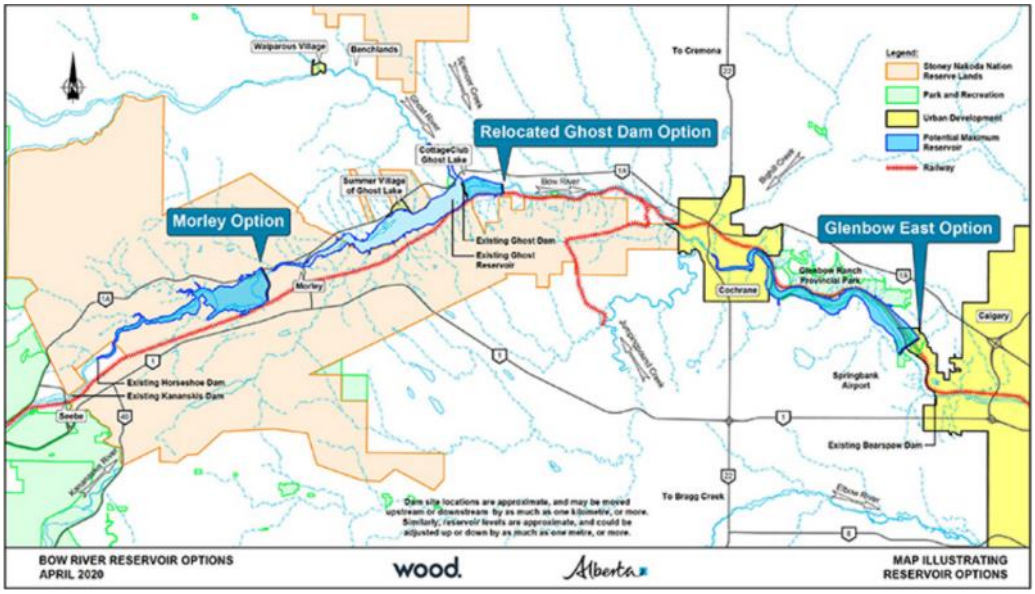


FIGURE 1 (CREDIT: GOVERNMENT OF ALBERTA) THE BOW RIVER RESERVOIR OPTIONS STUDY IS EVALUTING THE RELATIVE FEASIBILITY OF THREE POTENTIAL SITES FOR A NEW RESERVOIR ON THE BOW RIVER UPSTREAM OF CALGARY

City staff maintained regular direct contact with the Government of Alberta's Phase 2 project team and consultant through 2021 and participated in the Bow River Working Group providing advisory input to the Phase 2 work. In addition, City staff joined the initial online information sessions for stakeholders and the public regarding Phase 2, outlining the purpose of the study and gathering feedback from participants on potential evaluation criteria.

One site in the study, the Glenbow East option, has potential impacts on Calgary, including the developability of lands in the northwest part of Calgary both currently being developed and identified for future development. The City of Calgary has also identified impacts to existing and future park lands, including the recently completed Haskayne Park. In 2021, The City of Calgary raised these potential concerns with Government of Alberta staff.

A new reservoir on the Bow River will provide significant reductions in flood risk throughout Calgary and the surrounding region. A reservoir could also provide benefits in terms of water supply storage, given the historic occurrence of drought in the region and climate change shifting rainfall patterns to earlier in the year. As part of the Bow River Reservoir Options study, potential water supply benefits provided by a new reservoir are also being examined.

In addition to the Government of Alberta's work to study the feasibility of a new reservoir on the Bow River, the City team was pleased to see that the Government of Alberta-TransAlta operating agreement was renewed by the two parties in 2021 and remains in effect until 2026. It is unsure whether the operating agreement will continue once a new reservoir is approved, or if the agreement will be renewed beyond 2026 when it expires.

Action for 2022:

A new reservoir on the Bow River remains an important component of upstream storage for flood mitigation, water supply, and climate change resilience for Calgary and downstream communities on the Bow River. Phase 2 remains underway by the Government of Alberta as of 2022. The study is expected to be completed in 2023, with a report to be publicly released by the Minister of Alberta Environment and Parks. Through the Government of Alberta's Bow River Working Group, The City of Calgary remains a key stakeholder and is providing information and feedback into to the Phase 2 study as necessary. Each of the three options under consideration have complex stakeholder and technical considerations.

The Government of Alberta has stated that a potential new reservoir on the Bow River is likely at least 14 years away from being constructed. Prior to potential construction, the Government of Alberta has identified discussions with impacted landowners, cost estimates, environmental and regulatory evaluation requirements for the project, and other ongoing and potentially competing developments related to the three potential sites as uncertainties that could affect the project's overall timelines. In 2022, The City of Calgary will continue to monitor the progress of the Bow River Reservoir Options study, contributing through the Bow River Working Group process as necessary.

4. COMMUNITY MITIGATION PROJECTS

The City's is committed to mitigating the flood risk of all communities from at least a 2013-level flood. Working in tandem with future upstream reservoir on the Bow River, community flood barriers in

vulnerable areas of Calgary reduce the residual flood risk of a 2013-level flood to ultimately protect the safety of Calgarians and critical infrastructure. Until a new upstream reservoir is built on the Bow River, community flood barriers also protect the communities from smaller floods that are more likely to happen.

Significant progress has been made in the last nine years, and work on individual flood barrier projects are in various stages of design, community engagement and construction. The City, with funding assistance from the Government of Alberta and the Government of Canada, has made over $150 million in flood mitigation infrastructure investments throughout Calgary since 2013. While much of Calgary's flood risk has been reduced, some key projects remain underway. In 2021, significant progress, as outlined below, was made on three major flood mitigation projects in Calgary:

- Downtown Flood Barrier;
- Sunnyside Flood Barrier; and
- Upper Plateau Separation.

These three projects, once complete, will reduce the risk of river flooding from the Bow River on Calgary's downtown and in the community of Sunnyside, where flooding has been a historically recurring issue. A fourth potential community mitigation infrastructure project in Bowness, will be reconsidered and re-evaluated once the Government of Alberta has advanced work on its upstream reservoir study on the Bow River and released updated Flood Hazard Area maps.

4.1 DOWNTOWN FLOOD BARRIER

Construction of the Downtown Flood Barrier started in 2021. Once complete, it will connect to the West Eau Claire and Centre Street Lower Bridge flood barriers that were previously completed to create a single, continuous piece of flood mitigation stretching from the Peace Bridge to the Reconciliation Bridge. This barrier will mitigate flooding from the Bow River in Calgary's Downtown up to a 1:200 year flood.

Action for 2022:

Construction of the flood barrier is expected to be completed in 2022. The remaining public realm improvements are scheduled to be completed in 2023. This project is being constructed with funding from the Government of Alberta's Alberta Community Resilience Program and Infrastructure Canada's Investing in Canada Infrastructure Program.

CONSTRUCTION ON THE DOWNTOWN FLOOD BARRIER BEGAN IN 2021

4.2 SUNNYSIDE FLOOD BARRIER

The Sunnyside Flood Barrier project was approved by City Council in 2020 with a 1:100 year design. In response to community feedback, the flood barrier was integrated into the larger Memorial Parkway

Program that was presented to and approved by City Council in February 2022. Initially scheduled for completion in 2024, the Sunnyside Flood Barrier project is now anticipated to be completed in 2025 and will occur in parallel with other elements within the Memorial Parkway Program. The barrier will stretch from 14 Street Northwest to Centre Street North and avert an estimated $270 million in flood damages over the next 100 years, or an average of approximately $2.7 million annually.

Action for 2022:

Throughout 2022, The City of Calgary will be refining detailed design for the flood barrier and ensuring consistency with the Memorial Parkway Public Realm Master Plan's vision and design guidelines. The flood barrier, once completed, will work with other completed infrastructure in Sunnyside and upstream mitigation on the Bow River to reduce the risk of flooding, despite potential increased frequency and intensity of such events attributable to the influence of climate change.

As part of the Memorial Parkway Program, The City of Calgary intends to return to City Council with a specific program update in 2023.

4.3 UPPER PLATEAU SEPARATION

THE UPPER PLATEAU SEPARATION WILL PROVIDE AN EXPRESS ROUTE TO MOVE STORMWATER FROM THE COMMUNITIES ON TOP OF THE HILL DIRECTLY TO THE RIVER, BYPASSING SUNNYSIDE AND HELPING PREVENT FLOODING IN THE AREA.

In addition to the risk of river flooding, the communities of Sunnyside and Hillhurst are also at increased risk of localized stormwater flooding due to intense rainfall. These events can compound river flooding in this area. This is in part due to communities located on the hill above sharing a stormwater system. The Upper Plateau Separation project is intended to separate the stormwater system of the hill communities from Hillhurst and Sunnyside's stormwater system, both reducing the volume of water in the system and increasing the system's capacity to minimize the likelihood of rainfall overwhelming infrastructure and causing localized flooding.

Action for 2022:

Construction of the Upper Plateau Separation project began in November 2021, with anticipated completion in 2023. In addition to the Upper Plateau Separation, stormwater system upgrades in Sunnyside and Hillhurst are taking place during this time. More information about these projects can be found in the Community and Local Stormwater Drainage Improvements section below. Construction for the Upper Plateau Separation project will continue throughout 2022.

5. DEVELOPMENT IN FLOOD RISK AREAS AND FLOOD MAPPING

Updating The City's land use planning policies and regulations around development in flood prone areas was initially identified as an area of focus for The City by the 2014 Expert Management Panel. Reviewing and updating The City's land use and planning policies was further recommended as part of the 2017 Flood Plan that was approved by City Council.

In 2014, The City's Land Use Bylaw was updated to remove rules that allowed certain types of buildings built before a certain date to be rebuilt without following current rules around development in the floodplain. Development in the floodway was also subject to The City's discretion and a sliding-scale approach to alterations to existing buildings, requiring greater mitigation for more significant building footprint changes. The City has also separately looked at opportunities to bolster flood resilient land use practices in new communities. This work is being undertaken in addition to infrastructure projects to mitigate risk for established communities.

While these updates were a first step to modernizing how The City approaches development in areas near the river, The City of Calgary began work in 2020 to update the Calgary River Valleys Plan. First approved by council in 1974 the Calgary River Valleys Plan guides long-term development, recreational use, and conservation of Calgary's rivers, creeks, and adjacent lands. Last revised in 1984, the latest update will include a comprehensive review of its existing floodplain policies, exploring ways of approaching development in Flood Hazard Areas while balancing The City's commitment to building and maintaining safe, vibrant, and resilient river communities. A modern Calgary River Valleys Plan will ensure new information on river valley risks and resilience opportunities, including but not limited to new flood hazard data, existing riparian maps, climate change risks, equity, and reconciliation objectives, are integrated within The City's Next Generation Planning system.

Coinciding with this work, the Government of Alberta has been working to update inundation and regulatory Flood Hazard Area mapping across Alberta since 2015. A set of updated draft inundation maps were released by the Government of Alberta in December 2020, which show anticipated flooding for various flood sizes, if no upstream reservoirs were in place. The inundation maps are informing the Government of Alberta's updates to the regulatory Flood Hazard Area maps, which will show zones where The City should restrict development near the river. The City of Calgary has been working with the Government of Alberta to ensure that updated Flood Hazard Area maps accurately represent Calgary's river flood risk, in anticipation of their eventual public release.

Action for 2022:

As of March 2022, updated Flood Hazard Area maps have not been released. The Government of Alberta has committed to municipalities the opportunity to review the maps for technical errors and concerns prior to their public release. We anticipate this municipal review will happen in mid 2022. Following that, the public release of updated Flood Hazard Area maps by the Government of Alberta will ensure that Calgarians have an up-to-date awareness of their risk. Any potential land use or development policy changes will need to reflect The City's current understanding of risk to ensure future development and redevelopment does not inadvertently misinterpret the level of risk in flood-prone areas. The City

continues to work with Government of Alberta so that community risk in Calgary is accurately portrayed. The new mapping will support The City's Calgary River Valleys Plan update, which will integrate flood, riparian, climate resilience, equity, and reconciliation objectives related to Calgary's river valleys into The City's Next Generation Planning system.

6. EDUCATION AND AWARENESS

Work was completed in 2021 to research potential educational tools and approaches to increase citizen awareness about their flood risk and readiness. As part of this, a flood dial tool was introduced on Calgary.ca/floodinfo providing Calgarians with a quick snapshot of the daily river conditions to help them understand current river flows and flood risk. The dial was updated every weekday and details were also shared about the anticipated forecast, snowmelt over the next 24 hours, effect on river flows, how The City is responding to conditions, and what citizens should do to be prepared. The regular schedule for sending Flood Readiness E-newsletters was also modified in 2021 so that information was sent out at critical time when citizens most sought updates, such as when rain was forecast.

A NEW FLOOD DIAL TOOL WAS INTRODUCED IN 2021 TO HELP PROVIDE CALGARIANS WITH A QUICK SNAPSHOT OF DAILY RIVER CONDITIONS

Action for 2022:

The City continues to improve its annual flood awareness campaign and education programming. The river conditions dial was positively received and will continued to be used in 2022 to help citizens understand and be prepared for flooding. In partnership with CEMA, multi-family building level workshops and targeted information card distribution are planned for Spring 2022 to help vulnerable residents in flood risk communities understand their flood risk and assist them in the completion of personal evacuation plans. 2022 will focus heavily on community connections among building residents with the intent of strengthening their resiliency in the event of flood and other disaster scenarios.

7. COMMUNITY AND LOCAL STORMWATER DRAINAGE IMPROVEMENTS

The City's Community Drainage Improvements (CDI) Program invests in Calgary's stormwater management infrastructure to reduce the risk of localized flooding from intense rainfalls, primarily in established neighbourhoods built before 1988. Stormwater flooding in communities close to the Bow and Elbow Rivers can also be compounded by river flooding. While The City's Community Drainage Improvements program focuse on larger scale stormwater system infrastructure upgrades for communities, The City also invests in site-specific local drainage improvements to reduce localized flooding.

In 2021, The City invested approximately $20.2 million in Community Drainage Improvement projects. As part of this work, the following was accomplished in 2021:

- Substantial completion of Sunnyside Lift Station #1 and Woodlands Woodbine Secondary Improvements at St Cyril School site;
- Construction started for Upper Plateau Separation;
- Majority of underground construction completed for NW Inner City Community Drainage Improvements at 19th Street & 8th Avenue NW, Kensington Road, and 5th Avenue NW;
- The majority of underground construction completed for Tuxedo at 18th Avenue NW diversion pipe and 35th Avenue NE trunk upgrade. Construction also started for Tuxedo Park Dry Pond;
- Detailed design progress for NW Inner City Community Drainage Improvements at 10th Street NW, 7th Avenue NW, 1st Avenue NW, and Sunnyhill Lane portion.
- Thirteen new Community Drainage Improvement projects (studies completed and awaiting funding) were reprioritized and handed over from Planning to Delivery for project execution in the next budget cycle. The projects are located in Pineridge, Northwest Inner City, Macleod Tr Meadowview area, Palliser/Oakridge, and Deer Run.

TUXEDO COMMUNITY DRAINAINGE IMPROVEMENTS, FROM L TO R: 18 AVENUE NE TRUNK DIVERSION, 35 AVENUE NE TRUNK UPGRADE, TUXEDO PARK DRY POND.

An additional $1.4 million in local drainage improvements was also completed in 2021. The City continues to prioritize local drainage improvements based on anticipated returns, and seeks project efficiencies with larger Community Drainage Improvements where possible. Specific local drainage improvements were delivered in areas including in the Northwest Inner-City, Tuxedo, and Macleod Community Drainage Improvement study areas.

The City continues to develop the data and tools to better identify and quantify existing local stormwater flood risks in established areas. This work was primarily advanced through the *Community-Scale Localized Flood Risk Mapping and Hydrologic Modelling* (City-wide Stormwater Modelling Project). Significant progress on the initial scope has occurred in 2021. Completion of the second phase of the project, and subsequent budgeting and planning of the final phase, is planned for 2022. This work is part of The City's efforts to modernize its approach to stormwater management and commitment to continual improvement of our service delivery to citizens.

The City also continues to support Corporate and regional planning initiatives to facilitate development, mitigate flood risks, and meet regulatory and environmental requirements. In 2021 this included:

1. Commencing work in 2021 on the Belvedere Master Drainage Plan and the East Calgary Regional Drainage Studies;
2. Continuing support of the Cooperative Stormwater Management Initiative, including construction of the first infrastructure stages in 2021. Comprised of three municipalities and one irrigation district, the Initiative will accommodate stormwater from developments in three municipalities; and
3. Enhancing stormwater management strategies in support of Corporate planning initiatives such as Main Streets, Local Area Planning, and the Established Areas Growth and Change Strategy. This work ensures that opportunities to improve stormwater management, address risks to existing customers, enhance the use of stormwater in the public realm, and support growth are identified and integrated into future development throughout Calgary.

Action for 2022:

The following progress is anticipated in 2022:

- Majority of construction completed for the Upper Plateau Separation project;
- Majority of construction completed for remaining NorthWest Inner City Community Drainage Improvement projects, except Kensington Crescent area which is anticipated to extend into 2023;
- Construction completion for Tuxedo Community Drainage Improvements;
- Consultant procurement, conceptual design and preliminary engagement for the new Community Drainage Improvement projects (Pineridge, NorthWest Inner City, Macleod Trail Meadowview, Palliser/Oakridge, and Deer Run);
- Completion of the Belvedere Master Drainage Plan; and
- Continuation of the East Calgary Regional Drainage Studies.

The Community Drainage Improvement prioritization list, as of March 2022, is provided in Appendix 1.

8. CLOSE

2021 was a critical juncture for The City of Calgary's Flood Resilience Program and reducing Calgary's long-term flood risk. In addition to the major activities identified for 2022, The City of Calgary continues

to review and update its flood emergency response plans annually, invest in its modelling and forecasting capabilities, advise on redevelopment applications to minimize flood risk to new buildings, and identify opportunities to advance Calgary and citizens' flood resilience.

Climate change is shifting precipitation patterns and increasing the intensity of storms. Combined with Calgary's continued growth and development, The City of Calgary's Flood Resilience Program continues to ensure flood resilience remains a high priority, and that the risk of flooding is reduced now and remains low in the future.

APPENDIX 1: COMMUNITY DRAINAGE IMPROVEMENT (CDI) PROGRAM PRIORITIZATION LIST

April 2022

Project Name	Cost Estimate[1] ($000's)	Project Status	Construction Date[2]
Woodlands/Woodbine - Braeside Dry Pond	*$6,225*	*Completed*	2018-2019
Woodlands/Woodbine - Bebo Grove Wet Pond & 24th Street SW Diversion	*$20,747*	*Completed*	2018-2020
Woodlands/Woodbine - Local Improvements [7]	*$3,808*	*Completed,* Final Phase in Construction [7]	2018-2022
North West Inner-City - Lift Station #1 – Sunnyside[3]	*$12,794*	*Completed*	2019-2021
North West Inner-City - Lift Station #2 – Sunnyside[4]	*$10,557*	*Completed*	2018-2020
North West Inner-City - Upper Plateau Separation [4,6]	$48,563	In Construction	2021-2023
North West Inner-City - 19 St, 7th Avenue, 1st Avenue, Sunnyhill Lane [5, 8]	$14,615	In Construction, Ph 2 in Design	2021-2022
North West Inner-City - 10th Street NW[5, 8]	$12,751	In Construction	2021-2022
North West Inner-City - Kensington [8]	$23,998	In Construction, Ph 2 in Design	2021-2023
Tuxedo - 18 Ave NE High Point Diversion[8]	$2,721	In Construction	2021-2022
Tuxedo - 35 Ave NE Trunk [8]	$3,491	In Construction	2021-2022
Tuxedo - Tuxedo Park Dry Pond and Trunk Upgrades[8]	$17,924	In Construction	2021-2022
Pineridge Dry Pond B & Storage Duct	$7,623	Consultant Procurement	2023-2025
North West Inner-City - Hillhurst Stm Lift Station 4 & Stm Trnks [5]	$17,967	Consultant Procurement	2024-2026
North West Inner-City - 14 St NW [5]	$16,124	Consultant Procurement	2026-2028
North West Inner-City - 17 St & 23rd Ave NW (CDI)	$4,112	Consultant Procurement	2026-2028
Palliser Oakridge Drainage Improvements	$42,295	Consultant Procurement	2023-2028
Macleod Tr Meadowview Park Dry Pond	$2,368	Consultant Procurement	2027-2028
Deer Run/ Haysboro - R.T. Alderman Dry Pond	$6,100	Consultant Procurement	2026-2028
Deer Run/ Haysboro - Deer Ridge StmTrnk Diversion	$5,275	Consultant Procurement	2026-2028
Deer Run/ Haysboro - Bow Bottom Trail Storage	$7,660	Consultant Procurement	2026-2028
Total	**$287,719**		

1 -- Cost Estimates for projects in consultant procurement stage are based on 2020 pricing assumptions
2 -- Schedules subject to change based on external funding availability, new studies, and dependencies on other projects
3 -- With funding from Alberta Community Resilience Program (ACRP) and the New Building Canada Fund (NBCF)
4 -- With funding from ACRP
5 -- These projects are linked via dependency to projects within the area
6 -- With funding from Investing in Canada Infrastructure Program (ICIP)
7 – WWCDI Local Improvements Inlet Control Device (ICD) installations to be completed by August 2022
8 – With funding from Municipal Stimulus Program (MSP)