



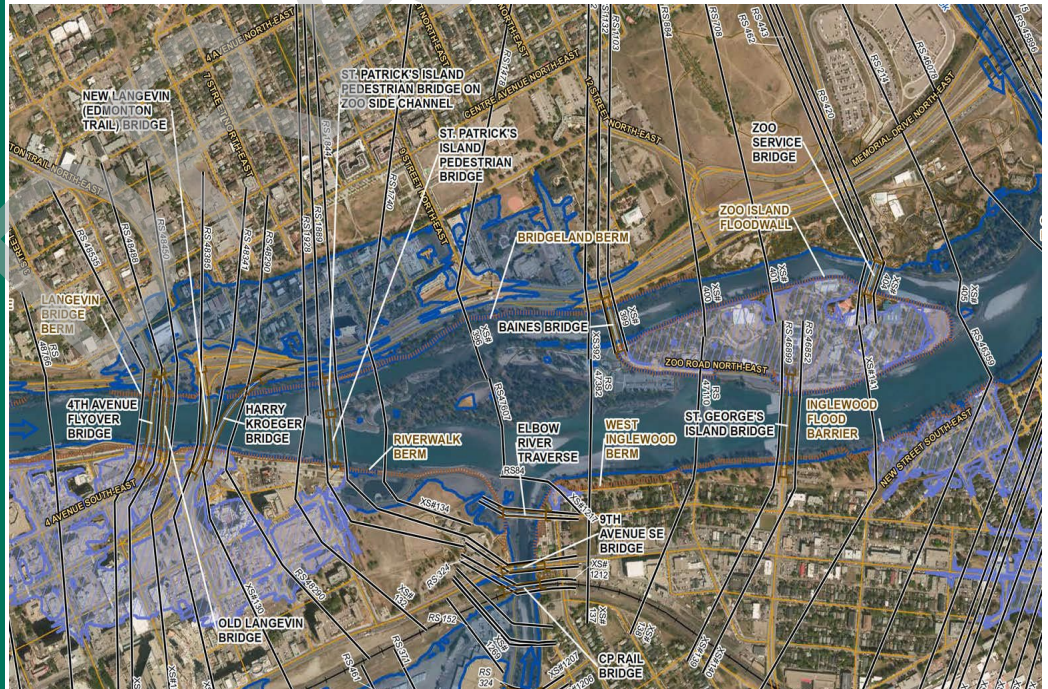
June 2022

BOW AND ELBOW RIVER HAZARD STUDY

Open Water Flood Inundation Mapping Report

Submitted to:
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REPORT



Report Number: 1536673_R0003, Rev.0

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Executive Summary

Alberta Environment and Parks (AEP) commissioned Golder Associates Ltd. (Golder) in September 2015 to undertake the Bow and Elbow River Hazard Study. The primary purpose of the study is to identify and assess river and flood hazards along the Bow River (from Bears paw Dam to the Highwood River confluence) and the Elbow River (from Bragg Creek to the Bow River confluence), including lengths of Bragg and Lott Creeks. The study is conducted under the provincial Flood Hazard Identification Program (FHIP), the goals of which include enhancement of public safety and reduction of future flood damages through the identification of river and flood hazards. Project stakeholders include the Government of Alberta, local authorities, and the public. Key municipal stakeholders include the City of Calgary, Foothills County, and Rocky View County. The project includes working with Tsuut'ina Nation.

The study includes multiple components and deliverables. This report documents the methodology and results of the open water flood inundation mapping component, including the inundation maps for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750-, and 1,000-year open water floods.

The open water flood inundation maps were prepared using ArcGIS. The simulated flood water levels at the cross sections were used to create a continuous water surface. The edge of inundation was delineated by subtracting the LiDAR DTM from the water surface. The following types of flood inundation were mapped:

- Direct inundation areas, where there is a direct overland connection between the main river channels and inundated areas on the floodplains. This includes areas where inundation is caused by either single or multiple overtopping points along topographic (e.g., natural high banks), infrastructure (e.g., roads) or dedicated flood control structure (e.g., flood berms) features.
- Areas of potential flooding behind dedicated flood control structures, illustrating residual flood risk if structures like flood berms fail or do not perform as expected.

Based on the simulation results, the main residential and/or commercial development areas expected to be flooded along the Bow River have been identified as follows:

- Bowness along Bow Crescent NW and in areas within the bend of the Bow River upstream of Hextall Bridge at return periods above 5 years.
- Montgomery west of Home Road NW at return periods above 200 years.
- Parkdale between the Bow River and Bowness Road NW at return periods above 200 years.
- West Hillhurst, Hillhurst and West Hillhurst between the Bow River and Kensington Road NW, as well as areas between 10th Street NW and 14th Street NW up to 8th Avenue NW (up to and including Riley Park), at return periods above 200 years.
- Sunalta between the Bow River and Bow Trail NW at return periods above 500 years.
- Sunnyside at return periods above 100 years.



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- Low-lying areas near the Bow River at Eau Claire, Chinatown, Downtown, and Downtown East Village at return periods above 100 years. At higher return periods, flooding increasingly affects areas farther away from the Bow River. At return periods above 750 years, areas up to and past 6th Avenue SW are affected.
- Bridgeland and Riverside between the Bow River and Centre Avenue NE at return periods above 75 years.
- Inglewood, including areas both to the northwest and to southeast of the CP rail line, at return periods above 100 years.
- Alyth and Bonnybrook, including low-lying areas around the Bonnybrook Wastewater Treatment Plant at return periods above 200 years. At higher return periods, flooding increasingly affects areas farther away from the Bow River. At return periods above 750 years areas up to and past 15th A Street SE are affected.
- The La Farge Pipe Plant and Landscape Centre on 13th Street SE at return periods above 35 years. Starting at return periods above 350 years, areas both east and west of Deerfoot Trail are affected, including areas on Glendeer Circle SE, 12th Street SE, 11th Street SE and 10th Street SE.
- Douglasdale and Douglas Glen west of 24th Street SE as well as Shepard Industrial at return periods above 350 years. Particularly affected are low-lying areas in Quarry Park.
- Fish Creek Wastewater Treatment Plant at return periods above 350 years.
- Wolf Willow at return periods above 100 years.
- Burnco Indus gravel pit return periods above 10 years.

Areas expected to be flooded along the Elbow River have been identified as follows:

- Low-lying areas in Bragg Creek north of the Bragg Creek confluence along Bracken Road at return periods above 100 years. Widespread flooding in Bragg Creek would occur when the new flood control structures are overtopped at return periods above 200 years.
- Redwood Meadows and the Tsuut'ina Rodeo Grounds at return periods above 200 years.
- Low-lying areas east of Discovery Ridge Lane SW in Discovery Ridge at return periods above 10 years.
- Elbow Park in areas within the bend of the Elbow River downstream of Elboya Bridge and along Riverdale Avenue SW at return periods above 10 years, and in areas east of 8th Street SW at return periods above 50 years.
- Elboya between the Elbow River and Lansdowne Avenue SW at return periods above 10 years, including Stanley Park in neighbouring Parkhill.
- Rideau Park and Roxboro at return periods above 10 years.



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- Cliff Bungalow and Mission in areas within the bend of the Elbow River downstream of Mission Bridge at return periods above 5 years. At return periods above 20 years, low-lying areas along 4th Street SW and Cliff Street SW are affected. Flooding increasingly affects larger areas of the neighbourhoods at higher return periods, with widespread flooding affecting both neighbourhoods at return periods above 750 years.
- Erlton north of 28th Avenue SW at return periods above 10 years.
- Calgary Stampede Grounds at return periods above 10 years
- Beltline east of 7th Street SW at return periods above 20 years, partially due to overland flooding along Cliff Street SW. At return periods above 200 years, low-lying areas of Beltline and Lower Mount Royal east of 14th Street SW are affected. At return periods above 350 years, Sunalta areas west of 14th Street SW are affected.

Areas expected to be flooded along Bragg Creek have been identified as follows:

- The confluence area downstream of Bracken Road at return periods above 100 years.

Areas expected to be flooded along Lott Creek have been identified as follows:

- Parts of developed areas south of Lott Creek Drive near the Elbow Springs Golf Club at return periods above 20 years.

The full set of open water flood inundation maps are provided in a separate document, referred to as the Open Water Flood Inundation Map Library.

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Acknowledgements

This component of the Bow and Elbow River Hazard Study was led by Dr. Wolf Ploeger. Overall project management was provided by Dr. Wolf Ploeger and Gaven Tang, with direction by Dr. Dejiang Long. The flood inundation mapping was completed by Peter Thiede, Gaven Tang, Sean Kurash, Brian Pendergast, and Wolf Ploeger.

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APPENDICES

APPENDIX A

Computed Open Water Flood Levels

OPEN WATER FLOOD INUNDATION MAP LIBRARY

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1.0 INTRODUCTION

1.1 Study Objectives

Alberta Environment and Parks (AEP) commissioned Golder Associates Ltd. (Golder) in September 2015 to undertake the Bow and Elbow River Hazard Study (the study). The primary purpose of the study is to identify and assess river and flood hazards along the Bow River (from Bears paw Dam to the Highwood River confluence) and the Elbow River (from Bragg Creek to the Bow River confluence), including lengths of Bragg and Lott Creeks.

The study is conducted under the provincial Flood Hazard Identification Program (FHIP), the goals of which include enhancement of public safety and reduction of future flood damages through the identification of river and flood hazards. Project stakeholders include the Government of Alberta, local authorities, and the public. Key municipal stakeholders include the City of Calgary, Foothills County, and Rocky View County. The project includes working with Tsuut'ina Nation.

The study includes multiple components and deliverables. This report documents the methodology and results of the open water flood inundation mapping component, including the inundation maps for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750-, and 1,000-year open water floods.

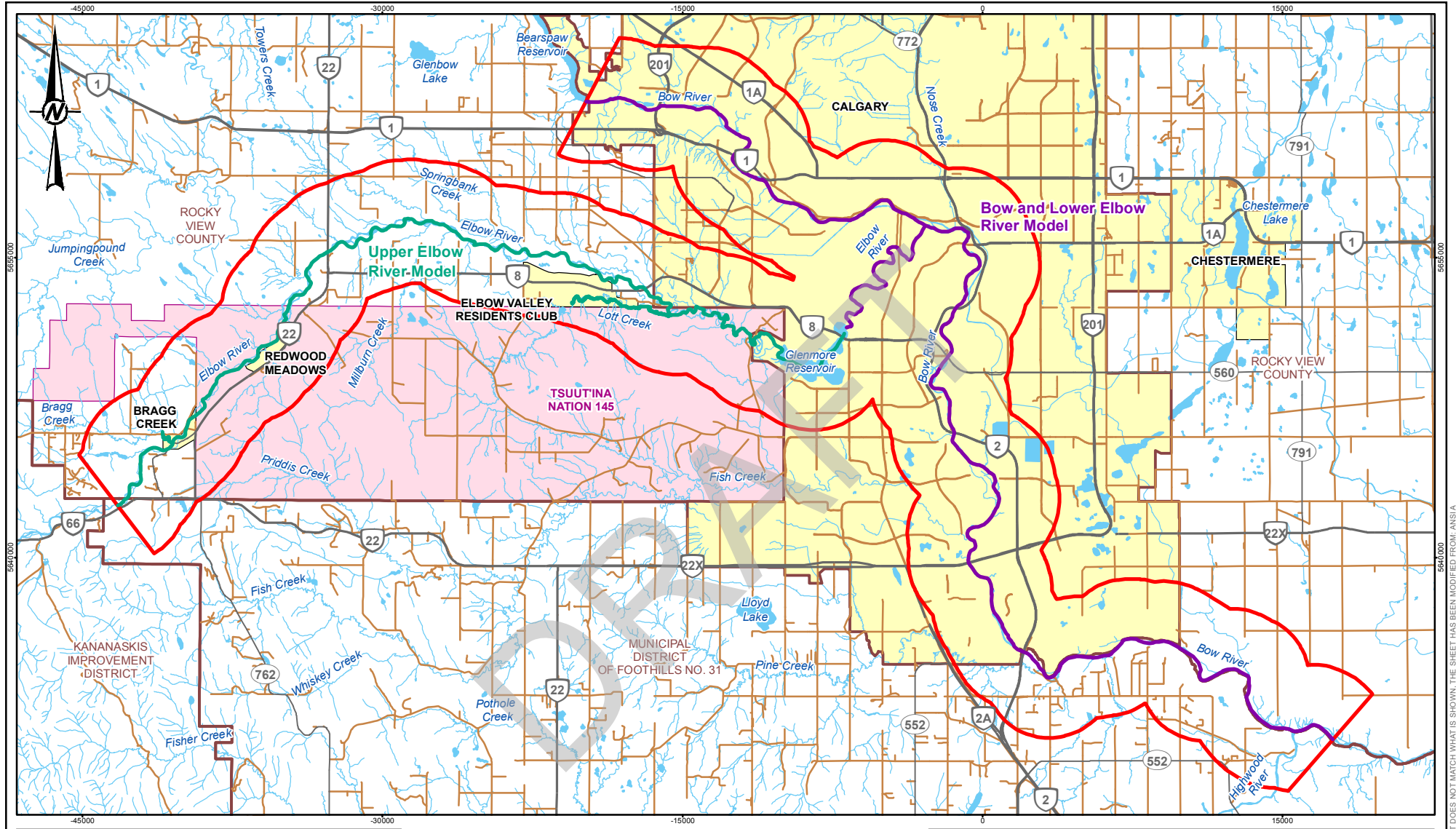
1.2 Study Area and Reaches

The study area includes approximately 72 km of the Bow River between Bears paw Dam and the Highwood River confluence, approximately 66 km of the Elbow River from Bragg Creek to the Bow River confluence in Calgary, approximately 1 km of Bragg Creek upstream of the Elbow River confluence, and approximately 7 km of Lott Creek upstream of the Elbow River confluence (see Figure 1 and Table 1).

The study area includes the following local authorities and communities: Bragg Creek, Calgary, Elbow Valley Residents Club, Foothills County, Redwood Meadows, Rocky View County, and Tsuut'ina Nation.

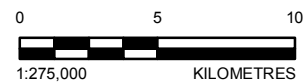
Table 1: River Reaches within the Study Area

River	Reach Description	Length (km)
Bow River	Bears paw Dam to Highwood River confluence	72
Elbow River	Upstream of Bragg Creek to confluence with Bow River	66
Bragg Creek	Upstream of Centre Avenue in Bragg Creek to confluence with Elbow River	1
Lott Creek	Upstream of Elbow Valley Residence Club to confluence with Elbow River	7



- LEGEND**
- PRIMARY HIGHWAY
 - SECONDARY HIGHWAY
 - LOCAL ROAD
 - WATERCOURSE
 - ▭ MUNICIPAL DISTRICT BOUNDARY
 - ▭ URBAN AREA
 - ▭ WATERBODY
 - ▭ FIRST NATION RESERVE
 - ▭ RIVER HAZARD STUDY AREA

- HYDRAULIC MODEL**
- BOW AND LOWER ELBOW
 - UPPER ELBOW



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YYYY-MM-DD	2018-11-05
DESIGNED	W.PLOEGER
PREPARED	P.THIEDE
REVIEWED	W. PLOEGER
APPROVED	W. PLOEGER

REFERENCE(S)
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 DATUM: NAD 83 CSRS PROJECTION: 3TM 114

PROJECT
BOW AND ELBOW RIVER HAZARD STUDY

TITLE
STUDY AREA

PROJECT NO. 1536673	CONTROL 2000	REV. 0	FIGURE 1
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2.0 AVAILABLE DATA

2.1 Flood Frequency Flows

Flood frequency flow estimates along the Bow and Elbow Rivers within the study area, and for Bragg and Lott Creeks, were calculated as part of a larger hydrology assessment undertaken to support this study (Golder 2020). These estimates were used in the hydraulic modelling component of the project to determine flood profiles for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750-, and 1,000-year open water floods (Golder 2022). The naturalized flood frequency flow estimates relevant to this study are summarized in Table 2.

2.2 DTM Data and Aerial Imagery

As per FHIP specifications, a digital terrain model (DTM) used to describe floodplain topography must have a ± 0.15 m minimum vertical accuracy, at 95% confidence.

The City of Calgary provided AEP with a city-wide DTM for use in this study that exceeds minimum provincial accuracy specifications. The Calgary-specific DTM is based on data acquired September 28, 2012, to June 14, 2013, and updated along the Bow and Elbow Rivers September 9, 2013, to October 7, 2013. Select areas with elevation changes along both the Bow and Elbow Rivers were captured May 2015. A one-mile buffer outside Calgary city limits was captured September 28 to October 19, 2015. The vertical accuracy is approximately ± 0.05 m, at 95% confidence, and horizontal accuracy is approximately ± 0.10 m on hard surfaces.

Outside of Calgary city limits, AEP commissioned a new DTM based on LiDAR data acquired in October 2015. Independent ground truth surveys were completed for quality assurance and control, and the accuracy of the new DTM along the Elbow River was determined to be within ± 0.15 m, at 95% confidence.

Aerial imagery for the entire study area was collected by GeodesyGroup Inc. (GeodesyGroup) on May 6, 2016. The imagery has a 0.30 m Ground Sampling Distance (GSD) resolution and was delivered as 4-band orthophotos and stereo images. The orthophotos were used as a base imagery in all open water flood inundation maps.

More detailed of the DTM data and aerial imagery are provided in the survey and base data collection report prepared for this study (Golder 2017).

2.3 HEC-RAS Models

Two one-dimensional hydraulic models were created for the study area using HEC-RAS (Version 5.0.3): the Bow and Lower Elbow Model, covering the Bow River between Bearspaw Dam and the Highwood River confluence and the Elbow River below Glenmore Dam; and the Upper Elbow Model, covering the Elbow River above Glenmore Dam, and Bragg and Lott Creeks. The models were calibrated for both low and high flow conditions using recorded flow and water level data and surveyed highwater marks. Model parameters based on the high flow calibration were used to calculate flood profiles for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750-, and 1,000-year open water floods. A detailed description of the models is provided in the hydraulic model creation and calibration report prepared for this study (Golder 2022).



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Table 2: Naturalized Flood Frequency Flow Estimates

Location	Peak Flood Flow for Various Return Periods (m ³ /s)												
	2-Year	5-Year	10-Year	20-Year	35-Year	50-Year	75-Year	100-Year	200-Year	350-Year	500-Year	750-Year	1,000-Year
Bow River below Bearspaw Dam	401	627	845	1,120	1,400	1,610	1,880	2,090	2,710	3,330	3,790	4,400	4,880
Bow River below Elbow River	464	739	996	1,310	1,630	1,860	2,150	2,390	3,050	3,710	4,190	4,820	5,310
Bow River below Nose Creek	465	746	1,010	1,330	1,650	1,890	2,180	2,420	3,090	3,760	4,240	4,880	5,370
Bow River below Fish Creek	469	762	1,040	1,380	1,730	1,980	2,310	2,580	3,340	4,120	4,700	5,480	6,100
Bow River below Pine Creek	472	770	1,050	1,400	1,760	2,020	2,350	2,620	3,390	4,180	4,770	5,560	6,180
Bow River above Highwood River	478	780	1,070	1,420	1,780	2,040	2,380	2,660	3,440	4,240	4,830	5,630	6,260
Bow River below Highwood River	582	867	1,140	1,500	1,870	2,150	2,530	2,840	3,750	4,690	5,420	6,390	7,180
Elbow River below Glenmore Dam	70	157	253	379	509	610	738	841	1,140	1,440	1,660	1,930	2,150
Elbow River above Springbank Creek	67.5	155	250	377	508	607	736	840	1,140	1,440	1,660	1,930	2,150
Elbow River below Springbank Creek	70.4	157	253	379	509	610	738	841	1,140	1,440	1,660	1,930	2,150
Elbow River below Glenmore Dam	70.4	157	253	379	509	610	738	841	1,140	1,440	1,660	1,930	2,150
Bragg Creek	5.59	12.0	18.0	25.2	32.0	37.0	43.2	48.1	61.4	74.3	83.5	94.6	103
Lott Creek	2.45	7.14	11.6	16.7	21.3	24.4	28.1	30.8	37.7	43.6	47.5	52.0	55.2



2.4 Flood Control Structures

A detailed description of the 20 flood control structures existing within the study area at the time of survey is provided in the survey and base data collection report prepared for this study (Golder 2017). Additional flood control structures have been constructed in Bragg Creek and Calgary since that time, some of which have upgraded or replaced previous flood control structures. This includes five flood barriers along the Elbow River in the Bragg Creek area (one of which replaced an earlier flood barrier), two flood barriers along Bragg Creek, and nine flood barriers along the Bow River in Calgary (including both new barriers and upgrades to previous barriers). A summary of all flood control structures in the study area at this time is provided in Table 3.

Table 3: Flood Control Structures in the Study Area

River	No.	Side of River ⁽¹⁾	Length (m)	Name	Description	Type
Bow River	1	Left	384	Montgomery Berm ⁽²⁾	Montgomery Boulevard, Bow View Manor Nursing Home	Earthfill Barrier
	2	Left	929	West Hillhurst Berm	20 th Street NW to 14 th Street NW	Earthfill Barrier
	3	Left	590	Kensington Berm	14 th Street NW to Poppy Plaza	Earthfill Barrier
	4	Left	1,950	Sunnyside Barrier	Poppy Plaza to Centre Street	Earthfill Barrier with Concrete Floodwall Elements
	5	Right	597	West Eau Clair Flood Barrier ⁽²⁾	Peace Bridge to Jaipur Bridge	Pathway and Concrete Wall
	6	Right	622	Downtown Flood Barrier ⁽²⁾	Eau Clair Promenade	Pathway and Concrete Wall
	7	Left/Right	24/24	Centre Street Bridge Barrier ⁽²⁾	System of demountable barriers on north and south end of Centre Street Bridge lower deck	Demountable Flood Barrier
	8	Left	462	Memorial Drive Berm	Memorial Drive downstream of Centre Street Bridge	Earthfill Barrier
	9	Left	236	Langevin Bridge Berm	Memorial Drive at 4 th Avenue Flyover Bridge	Earthfill Barrier
	10	Left	1,786	Riverwalk Berm ⁽²⁾	Centre Street Bridge to Elbow River	Pathway
	11	Right	1,240	Bridgeland Berm	New Langevin Bridge to 12 th Street NE	Earthfill Barrier
	12	Left/Right	1,896	Zoo Island Floodwall ⁽²⁾	Zoo Island Flood Protection	Sheet Pile Wall
	13	Right	835	West Inglewood Berm	Elbow River to 13 th Street SE	Earthfill Barrier
	14	Right	460	Inglewood Flood Barrier	13 th Street SE to 15 th Street SE	Concrete Wall
	15	Right	385	Pearce Estate Park Berm	Pearce Estate Park	Pathway on Top of Earthfill Barrier
	16	Right	465	South Inglewood Berm	End of 8 th Avenue SE	Pathway on top of Riprap Embankment
	17	Right	957	Bonnybrook Flood Berm ⁽²⁾	Bonnybrook Waste Water Treatment Plant flood protection	Earthfill Barrier
	18	Right	2581	Heritage Drive Flood Barrier ⁽²⁾	East of Deerfoot Trail and north of Glenmore Trail	Sheet Pile Wall and berm
	19	Right	372	Glenmore Trail Berm ⁽²⁾	Along the La Farge access road	Earthfill Barrier



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Table 3: Flood Control Structures in the Study Area

River	No.	Side of River ⁽¹⁾	Length (m)	Name	Description	Type
	20	Left	977	Quarry Park Berm	Elevated ground along new development at Quarry Park	Earthfill Barrier
Elbow River	21	Left	800	West Barrier South ⁽³⁾	Along Bracken Road upstream of Bragg Creek confluence	Earthfill Barrier and Concrete Wall
	22	Left	358	West Barrier North ⁽³⁾	Along Elbow River left bank downstream of Bragg Creek confluence	Riprap Embankment, Earthfill Barrier and Concrete Wall
	23	Right	1663	East Barrier South ⁽³⁾	Along Elbow River right bank from White Avenue to Balsam Avenue Bridge	Earthfill Barrier and Concrete Wall
	24	Right	905	East Barrier North ⁽³⁾	Along Elbow River right bank from Balsam Avenue Bridge to Burnside Drive	Riprap Embankment, Earthfill Barrier and Concrete Wall
	25	Left	650	Yoho Tinda Barrier ⁽³⁾	Yoho Tinda Road	Riprap Embankment, Earthfill Barrier and Concrete Wall
	26	Right	1,139	Redwood Meadows Golf and Country Club Berm	Intermittent barrier that partly ties into higher ground on the upstream end of the barrier	Earthfill Barrier
	27	Right	3,050	Redwood Meadows Berm	Covers the full length along the Redwood Meadows community	Earthfill Barrier
	28	Right	77	Erlton Flood Control Weir	Buried weir to control flood flows into 22 nd Avenue SW	Reinforced Below Grade Weir
	29	Left	676	Stampede Floodwall	Along the south end of Stampede race track	Earthfill Barrier and Concrete Wall
	30	Right	188	Deane House Flood Barrier	From 9 th Avenue SE to the Bow and Elbow River confluence	Earthfill Barrier and Concrete Wall
Bragg Creek	31	Left	100	Bragg Creek North Setback Barrier ⁽³⁾	Along Bragg Creek upstream of Bracken Road Bridge	Earthfill Barrier
	32	Right	118	Bragg Creek South Setback Barrier ⁽³⁾	Along Bragg Creek upstream of Bracken Road Bridge	Earthfill Barrier

Notes:

- 1) Right and left side of the river are relative to an observer looking downstream.
- 2) New or upgraded flood control structure not included in hydraulic model, but considered for flood inundation mapping.
- 3) New or upgraded flood control structure included in hydraulic model based on detailed design or as-built information.

The seven flood control structures constructed in the Bragg Creek area after the initial project survey work was completed were included in the Upper Elbow model because their impact on flood levels was considered to be significant. Note that one of these new flood berms replaced the previous Bracken Road Berm.

Nine new or upgraded flood control structures in Calgary were not included in the Bow and Lower Elbow model because their impact on flood levels was not assumed to be significant, but the protection they provide is being reflected in flood inundation mapping. This includes the Montgomery Berm, West Eau Clair Flood Barrier, Downtown Flood Barrier, Centre Street Bridge Barrier, Riverwalk Berm, Zoo Island Floodwall, Bonnybrook Flood Berm, Heritage Drive Flood Barrier, and Glenmore Trail Berm. Although not complete at this time, planned upgrades to the Sunnyside Barrier (which includes incorporating the existing Kensington Berm) are also being reflected in flood inundation mapping. The illustrated protection provided by this upgraded flood control structure reflects a future scenario and will only be in place once construction is complete.



3.0 FLOOD INUNDATION MAPS

3.1 Methodology

The open water flood inundation maps were prepared using the following information:

- water levels calculated for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750- and 1,000-year floods at individual model cross sections;
- the LiDAR-derived DTM; and
- dedicated flood control structure survey data and information.

Flood inundation maps illustrate direct and potential flood inundation areas. Direct flood inundation is caused when there is a direct overland connection between the main river channels and flooded areas on the floodplains. This includes areas where inundation is caused by either single or multiple overtopping points along topographic (e.g., natural high banks), infrastructure (e.g., roads) or dedicated flood control structure (e.g., flood berms) features. The potential flood inundation being mapped in this study focuses on areas of potential flooding behind dedicated flood control structures, illustrating residual flood risk if structures like flood berms fail or do not perform as expected. The methodologies used to delineate more complicated flood inundation areas are described below:

- Scenario 1 – Single Overtopping Point: At locations where inundated areas are connected to the main channel at a single overtopping or “spill” point, the inundation extent was re-evaluated using a constant water level equal to that at the spill point.
- Scenario 2 – Multiple Overtopping Points: If there are multiple overtopping points related to a single overflow area, the inundation extent was based on the hydraulic gradient in the main channel between the overtopping points. The inundation extent upstream of the most upstream overtopping point and downstream of the most downstream overtopping point, was evaluated using the estimated water level at these bounding spill points.
- Scenario 3 – Single Overtopping Point Causing Overtopping Downstream: Under Scenario 1, the area behind a single overtopping location can be eventually become fully inundated, like a pool with a constant flood level similar to the level at the spill point. This can cause a second overtopping further downstream, with flow returning to the main channel, because at that point the water level in the pool may be higher than in the main channel. In this case, the inundation extent was re-evaluated using a linear interpolation between the water level at the upstream spill point and the ground elevation at the downstream re-entry point.
- Scenario 4 – Potential Flood Inundation due to Flood Control Structure Failure: In areas where permanent and dedicated flood control structures have been identified and are not overtopped, the protected areas behind the structures are mapped as potentially flooded. The inundation extent is determined by assuming that the flood control structure is ineffective, based on the hydraulic gradient in the main channel.



3.2 Direct Flood Inundation Areas

3.2.1 General Procedure

The following procedure was used in ArcGIS to develop inundation extents for all mapped flood events:

- 1) Assign water levels at each section for all flood events to the cross section polyline features as attributes. The result is one polyline feature that includes the simulated water levels for all flood events.
- 2) Create a continuous water surface elevation TIN between cross sections.
- 3) Manually adjust the water surface elevation TIN in special areas (for Scenarios 2, 3, 4, and 5, as outlined in Section 3.2.2). Adjustments are made by using 3D break lines to separate manually adjusted TIN sub-elements from the automatically generated TIN, and appropriately interpolated water surface elevations between select cross sections are applied (see Figure 2).
- 4) Convert the adjusted TIN into a water surface elevation raster with the same resolution and cell alignment as the DTM raster.
- 5) Subtract the DTM raster from the water surface elevation raster to define wet areas.
- 6) Assign "NoData" to dry raster cells (with water depths smaller than 0.01 m).
- 7) Convert the wet areas into a flood inundation polygon dataset, and flag features not directly connected to the main river channels (Scenario 1).
- 8) Simplify polygons by deleting those with areas smaller than 25 m² and filling holes smaller than 25 m².
- 9) Smooth polygons outlines using the PAEK algorithm with a threshold of 15 m.

In addition to this general procedure, the following guidelines were applied:

- Backwater inundation for relatively large tributaries was included and based on the simulated water levels at the main channel at the confluences of those tributaries. This applies to Nose Creek, Fish Creek, and Pine Creek (all tributaries that join the Bow River in Calgary).
- Areas expected to be inundated during a flood which were not delineated automatically, because the DTM represents the elevations of the water surface instead of the channel bed or pond bottom, were manually added to the inundation areas. This applies to some small areas along Bragg Creek, Lott Creek, Nose Creek, Fish Creek, and Pine Creek, as well as along the edge of Glenmore Reservoir and various smaller ponds and flooded gravel pits along the Bow River, Elbow River, and Lott Creek. In these areas, the extent of open water visible on the May 2016 aerial imagery was used to manually define a minimum inundation extent. These manual modifications were required for the 2-year and 5-year floods.

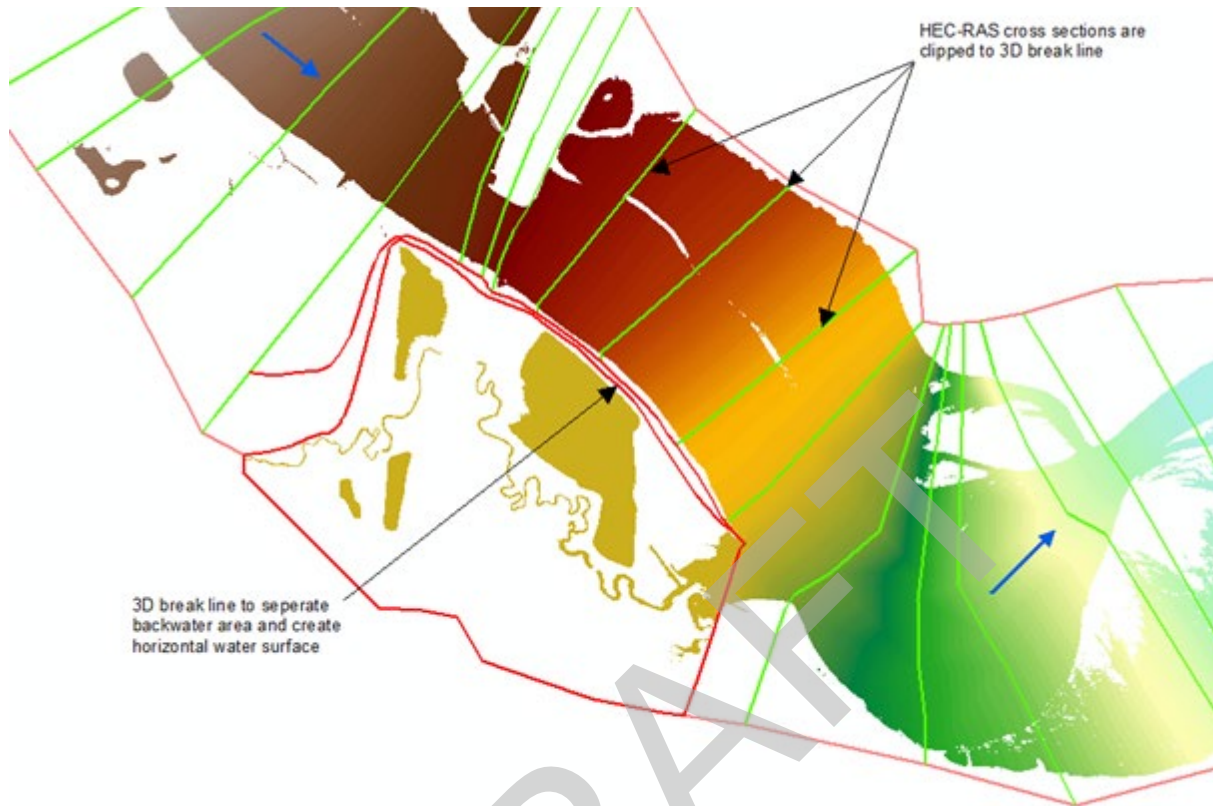


Figure 2: Example of Manual Edits to Water Surface Elevation TIN along the Bow River

3.2.2 Summary of Manual Edits 2-Year Flood

A summary of manual edits applied to the inundation extent for the 2-year flood is provided in Table 4.

Table 4: Special Areas for the 2-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 136 to XS 137, left bank	1	1037.78	Backwater from single spill point
2	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1036.24	Backwater from single spill point at creek confluence
3	Bow River	XS 188 to XS 192, left bank	1	1024.25	Backwater from single spill point
4	Bow River	XS 210 to XS 216, left bank	1	1016.65	Backwater from single spill point
5	Bow River	XS 240 to XS 243, left bank	1	1008.32	Backwater from single spill point
6	Bow River	XS 244 to XS 246, right bank	1	1006.76	Backwater from single spill point
7	Bow River	XS 245 to XS 246, left bank	1	1006.41	Backwater from single spill point
8	Bow River	XS 246 to XS 249, right bank	1	1005.03	Backwater from single spill point
9	Bow River	XS 262 to XS 265, left bank	1	999.12	Backwater from single spill point
10	Bow River	XS 277 to XS 280, right bank	1	994.11	Backwater from single spill point
11	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	982.37	Backwater from single spill point at creek confluence
12	Bow River	XS 297 to XS 301, left bank	1	982.49	Backwater from single spill point
13	Bow River	XS 314 to XS 317, left bank	1	970.02	Backwater from single spill point



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Table 4: Special Areas for the 2-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
14	Bow River	XS 321 to XS 325, left bank	1	966.85	Backwater from single spill point
15	Bow River	XS 360 to XS 363, left bank	1	952.05	Backwater from single spill point
16	Elbow River	XS 517 to XS 525, right bank	4	1274.24 to 1269.47	Potential flood inundation due to flood control structure failure

5-Year Flood

A summary of manual edits applied to the inundation extent for the 5-year flood is provided in Table 5.

Table 5: Special Areas for the 5-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 136 to XS 137, left bank	1	1038.39	Backwater from single spill point
2	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1036.90	Backwater from single spill point at creek confluence
3	Bow River	XS 146 to XS 152, right bank	1	1034.13	Backwater from single spill point
4	Bow River	XS 210 to XS 216, left bank	1	1017.29	Backwater from single spill point
5	Bow River	XS 240 to XS 242, left bank	1	1009.39	Backwater from single spill point
6	Bow River	XS 245 to XS 248, right bank	1	1006.27	Backwater from single spill point
7	Bow River	XS 255 to XS 259, right bank	1	1001.8	Backwater from single spill point
8	Bow River	XS 263 to XS 265, left bank	1	999.57	Backwater from single spill point
9	Bow River	XS 293 to XS 295, left bank	1	983.06	Backwater from single spill point
10	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	982.86	Backwater from single spill point at creek confluence
11	Bow River	XS 297 to XS 301, left bank	1	985.64	Backwater from single spill point
12	Bow River	XS 314 to XS 317, left bank	1	970.90	Backwater from single spill point
13	Bow River	XS 321 to XS 325, left bank	1	967.43	Backwater from single spill point
14	Bow River	XS 356 to XS 359, left bank	1	953.93	Backwater from single spill point
15	Elbow River	XS 509 to XS 514, right bank	1	1276.31	Backwater from single spill point
16	Elbow River	XS 517 to XS 526, right bank	4	1274.59 to 1269.09	Potential flood inundation due to flood control structure failure
17	Elbow River	XS 668 to XS 670, right bank	1	1203.97	Backwater from single spill point
18	Elbow River	XS 668 to XS 672, left bank	1	1202.83	Backwater from single spill point

10-Year Flood

A summary of manual edits applied to the inundation extent for the 10-year flood event is provided in Table 6.

Table 6: Special Areas for the 10-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 45 to XS 48, right bank	1	1064.01	Pool from single spill point
2	Bow River	XS 112 to XS 114, left bank	4	1045.10 to 1044.60	Potential flood inundation due to flood control structure failure
3	Bow River	XS 136 to XS 137, left bank	1	1038.95	Backwater from single spill point
4	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1038.87 to 1037.55	Potential flood inundation due to flood control structure failure
5	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1037.27	Backwater from single spill point at creek confluence



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Table 6: Special Areas for the 10-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
6	Bow River	XS 146 to XS 152, right bank	1	1034.68	Backwater from single spill point
7	Bow River	XS 210 to XS 212, left bank	1	1019.25	Backwater from single spill point
8	Bow River	XS 245 to XS 247, right bank	1	1006.79	Backwater from single spill point
9	Bow River	XS 248 to XS 250, left bank	1	1005.38	Backwater from single spill point
10	Bow River	XS 255 to XS 257, right bank	1	1002.49	Backwater from single spill point
11	Bow River	XS 258 to XS 262, right bank	3	1002.30 (first overtopping), 1001.96 (second overtopping)	Overtopping point downstream of XS 258 causes second overtopping downstream near XS 260, followed by further pooling downstream
12	Bow River	XS 259 to XS 262, left bank	1	1000.97	Backwater from single spill point
13	Bow River	XS 262 to XS 273, left bank	3	1000.51 (first overtopping), 998.55 (second overtopping)	Overtopping point near XS 263 causes second overtopping downstream near XS 272, followed by further pooling downstream
14	Bow River	XS 275 to XS 281, left bank	1	995.18	Pooling from single spill point
15	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	983.17	Backwater from single spill point at creek confluence
16	Bow River	XS 297 to XS 301, left bank	1	983.37	Backwater from single spill point
17	Bow River	XS 314 to XS 317, left bank	1	971.48	Backwater from single spill point
18	Bow River	XS 321 to XS 324, left bank	1	967.92	Backwater from single spill point
19	Elbow River	XS 509 to XS 514, right bank	1	1276.76	Backwater from single spill point
20	Elbow River	XS 516 to XS 526, right bank	4	1275.27 to 1269.42	Potential flood inundation due to flood control structure failure
21	Elbow River	XS 1227 to XS 1230, right bank	1	1048.97	Backwater from single spill point

20-Year Flood

A summary of manual edits applied to the inundation extent for the 20-year flood is provided in Table 7.

Table 7: Special Areas for the 20-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 37 to XS 40, right bank	3	1067.97 (first overtopping), 1067.50 (second overtopping)	Overtopping point near XS 38 causes second overtopping downstream of XS 39
2	Bow River	XS 111 to XS 115, left bank	4	1045.85 to 1045.06	Potential flood inundation due to flood control structure failure
3	Bow River	XS 135 to XS 137, left bank	1	1039.45	Backwater from single spill point
4	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1039.36 to 1038.03	Potential flood inundation due to flood control structure failure
5	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1037.74	Backwater from single spill point at creek confluence
6	Bow River	XS 146 to XS 151, right bank	1	1035.89	Backwater from single spill point
7	Bow River	XS 210 to XS 212, left bank	1	1019.75	Backwater from single spill point
8	Bow River	XS 213 to XS 215, right bank	1	1018.44	Backwater from single spill point
9	Bow River	XS 221 to XS 225, right bank	1	1015.57	Backwater from single spill point
10	Bow River	XS 231 to XS 234, left bank	1	1013.26	Backwater from single spill point
11	Bow River	XS 248 to XS 250, right bank	1	1005.75	Backwater from single spill point



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Table 7: Special Areas for the 20-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
12	Bow River	XS 258 to XS 262, right bank	3	1002.59 (first overtopping), 1001.96 (second overtopping)	Overtopping point downstream of XS 258 causes second overtopping downstream near XS 260, followed by further pooling downstream
13	Bow River	XS 259 to XS 261, left bank	1	1001.42	Backwater from single spill point
14	Bow River	XS 262 to XS 273, left bank	3	1000.82 (first overtopping), 998.55 (second overtopping)	Overtopping point near XS 265 causes second overtopping downstream near XS 272, followed by further pooling downstream
15	Bow River	XS 275 to XS 280, left bank	1	995.73	Backwater from single spill point
16	Bow River	XS 294 to XS 302, right bank (Pine Creek)		983.43	Backwater from single spill point at creek confluence
17	Bow River	XS 297 to XS 301, left bank	1	983.66	Backwater from single spill point
18	Bow River	XS 304 to XS 312, right bank	1	975.58	Backwater from single spill point
19	Bow River	XS 332 to XS 334, left bank	1	964.54	Backwater from single spill point
20	Bow River	XS 337 to XS 350, left bank	3	963.63 (first overtopping), 959.00 (second overtopping)	Overtopping point near XS 337 causes second overtopping downstream near XS 350
21	Elbow River	XS 441 to XS 448, left bank	4	1309.01 to 1306.68	Potential flood inundation due to flood control structure failure
22	Elbow River	XS 447 to XS 472, right bank	4	1307.05 to 1297.19	Potential flood inundation due to flood control structure failure
23	Elbow River	XS 453 to XS 455, left bank	4	1305.05 to 1304.43	Potential flood inundation due to flood control structure failure
24	Elbow River	XS 509 to XS 514, right bank XS	1	1276.96	Backwater from single spill point
25	Elbow River	XS 516 to XS 527, right bank	4	1275.49 to 1269.29	Potential flood inundation due to flood control structure failure
26	Elbow River	XS 527 to XS 531, right bank	1	1267.135	Backwater from single spill point
27	Elbow River	XS 555 to XS 613, right bank	4	1257.49 to 1238.21	Potential flood inundation due to flood control structure failure
28	Elbow River	XS 870 to XS 874, right bank	1	1102.38	Backwater from single spill point
29	Elbow River	XS 1038 to XS 1041, right bank	1	1054.34	Backwater from single spill point
30	Bragg Creek	XS 1282 to XS 1284, left bank	4	1306.27 to 1305.83	Potential flood inundation due to flood control structure failure

35-Year Flood

A summary of manual edits applied to the inundation extent for the 35-year flood is provided in Table 8.

Table 8: Special Areas for the 35-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 42 to XS 44, right bank	1	1066.03	Backwater from single spill point
2	Bow River	XS 63 to XS 65, left bank	4	1060.17 to 1059.43	Potential flood inundation due to flood control structure failure
3	Bow River	XS 105 to XS 115, left bank	4	1046.91 to 1045.55	Potential flood inundation due to flood control structure failure
4	Bow River	XS 133 to XS 135, left bank	4	1041.29 to 1040.02	Potential flood inundation due to flood control structure failure



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Table 8: Special Areas for the 35-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
5	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1039.78 to 1038.43	Potential flood inundation due to flood control structure failure
6	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1038.11	Backwater from single spill point at creek confluence
7	Bow River	XS 146 to XS 147, right bank	4	1038.07 to 1038.02	Potential flood inundation due to flood control structure failure
8	Bow River	XS 146 to XS 151, right bank	1	1036.4	Backwater from single spill point
9	Bow River	XS 151 to XS 153, left bank	3	1035.61 (first overtopping), 1035.35 (second overtopping)	Overtopping point between XS 151 and XS 152 causes second overtopping downstream around XS 153
10	Bow River	XS 190 to XS 198, right bank	4	1025.85 to 1023.63	Potential flood inundation due to flood control structure failure
11	Bow River	XS 193 to XS 199, right bank	1	1024.04	Backwater from single spill point
12	Bow River	XS 196 to XS 197, right bank	4	1024.43 to 1024.24	Potential flood inundation due to flood control structure failure
13	Bow River	XS 202 to XS 206, right bank	4	1023.39 to 1021.94	Potential flood inundation due to flood control structure failure
14	Bow River	XS 210 to XS 211, left bank	1	1020.28	Backwater from single spill point
15	Bow River	XS 221 to XS 224, right bank	1	1016.27	Backwater from single spill point
16	Bow River	XS 231 to XS 234, right bank	1	1013.73	Backwater from single spill point
17	Bow River	XS 259 to XS 262, right bank	1	1002.17	Pooling from single spill point
18	Bow River	XS 265 to XS 272, left bank	3	1000.36 (first overtopping), 998.55 (second overtopping)	Overtopping point at XS 265 causes second overtopping downstream around XS 272
19	Bow River	XS 275 to XS 280, left bank	1	996.21	Backwater from single spill point
20	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	983.68	Backwater from single spill point at creek confluence
21	Bow River	XS 297 to XS 301, left bank	1	983.97	Backwater from single spill point
22	Bow River	XS 304 to XS 312, right bank	1	975.83	Backwater from single spill point
23	Bow River	XS 324 to XS 328, right bank	1	967.17	Backwater from single spill point
24	Bow River	XS 332 to XS 334, left bank	1	964.88	Backwater from single spill point
25	Bow River	XS 392 to XS 395, left bank	4	1041.43 to 1040.74	Potential flood inundation due to flood control structure failure
26	Elbow River	XS 440 to XS 449, left bank	4	1309.94 to 1306.16	Potential flood inundation due to flood control structure failure
27	Elbow River	XS 441 to XS 476, right bank	4	1309.40 to 1295.91	Potential flood inundation due to flood control structure failure
28	Elbow River	XS 452 to XS 456, left bank	4	1305.64 to 1304.23	Potential flood inundation due to flood control structure failure
29	Elbow River	XS 491 to XS 495, left bank	4	1289.96 to 1287.54	Potential flood inundation due to flood control structure failure
30	Elbow River	XS 509 to XS 514, right bank	1	1277.13	Backwater from single spill point
31	Elbow River	XS 515 to XS 528, right bank	4	1276.33 to 1269.15	Potential flood inundation due to flood control structure failure
32	Elbow River	XS 525 to XS 529, right bank	1	1268.95	Backwater from single spill point
33	Elbow River	XS 556 to XS 617, right bank	4	1257.35 to 1237.34	Potential flood inundation due to flood control structure failure
34	Bragg Creek	XS 1282 to XS 1286, left bank	4	1306.55 to 1306.25	Potential flood inundation due to flood control structure failure



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50-Year Flood

A summary of manual edits applied to the inundation extent for the 50-year flood is provided in Table 9.

Table 9: Special Areas for the 50-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 63 to XS 65, left bank	4	1060.47 to 1059.76	Potential flood inundation due to flood control structure failure
2	Bow River	XS 100 to XS 118, left bank	4	1048.47 to 1045.11	Potential flood inundation due to flood control structure failure
3	Bow River	XS 110 to XS 118, left bank	1	1046.17	Backwater from single spill point
4	Bow River	XS 120 to XS 122, right bank	1	1044.65	Backwater from single spill point
5	Bow River	XS 122 to XS 125, left bank	4	1044.24 to 1043.41	Potential flood inundation due to flood control structure failure
6	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1040.04 to 1038.61	Potential flood inundation due to flood control structure failure
7	Bow River	XS 141 to XS 143, right bank	4	1039.10 to 1038.38	Potential flood inundation due to flood control structure failure
8	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1038.24	Backwater from single spill point at creek confluence
9	Bow River	XS 146 to XS 147, right bank	4	1038.19 to 1038.14	Potential flood inundation due to flood control structure failure
10	Bow River	XS 151 to XS 153, left bank	3	1035.92 (first overtopping) 1035.35 (second overtopping)	Overtopping point between XS 151 and XS 152 causes second overtopping downstream around XS 153
11	Bow River	XS 190 to XS 197, right bank	4	1025.87 to 1024.48	Potential flood inundation due to flood control structure failure
12	Bow River	XS 192 to XS 198, right bank	1	1024.36	Backwater from single spill point
13	Bow River	XS 196 to XS 197, right bank	4	1024.66 to 1024.48	Potential flood inundation due to flood control structure failure
14	Bow River	XS 202 to XS 206, right bank	4	1023.66 to 1022.11	Potential flood inundation due to flood control structure failure
15	Bow River	XS 210 to XS 211, left bank	1	1020.46	Backwater from single spill point
16	Bow River	XS 259 to XS 262, left bank	1	1002.32	Pooling from single spill point
17	Bow River	XS 275 to XS 280, left bank	1	996.74	Backwater from single spill point
18	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	983.82	Backwater from single spill point at creek confluence
19	Bow River	XS 297 to XS 301, left bank	1	984.12	Backwater from single spill point
20	Bow River	XS 304 to XS 309, right bank	1	978.23	Backwater from single spill point
21	Bow River	XS 324 to XS 328, right bank	1	967.42	Backwater from single spill point
22	Bow River	XS 332 to XS 334, left bank	1	965.11	Backwater from single spill point
23	Bow River	XS 393 to XS 396, left bank	4	1041.63 to 1041.03	Potential flood inundation due to flood control structure failure
24	Elbow River	XS 440 to XS 449, left bank	4	1310.24 to 1306.39	Potential flood inundation due to flood control structure failure
25	Elbow River	XS 441 to XS 481, right bank	4	1309.65 to 1294.26	Potential flood inundation due to flood control structure failure
26	Elbow River	XS 449 to XS 450, left bank	4	1306.39 to 1306.07	Potential flood inundation due to flood control structure failure
27	Elbow River	XS 489 to XS 496, left bank	4	1290.52 to 1287.12	Potential flood inundation due to flood control structure failure



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Table 9: Special Areas for the 50-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
28	Elbow River	XS 50910 to XS 514, right bank	1	1277.24	Backwater from single spill point
29	Elbow River	XS 513 to XS 522, right bank	4	1277.66 to 1272.79	Potential flood inundation due to flood control structure failure
30	Elbow River	XS 517 to XS 522, right bank	1	1272.84	Backwater from single spill point
31	Elbow River	XS 555 to XS 617, right bank	4	1257.91 to 1237.45	Potential flood inundation due to flood control structure failure
32	Elbow River	XS 870 to XS 872, right bank	1	1103.80	Backwater from single spill point
33	Elbow River	XS 1237 (25 th Ave SW side channel) and XS 1170 to XS 1172 (Elbow River)	other	1047.63	Pooling in 25 th Ave SW side channel causes overtopping into the Elbow River
34	Bragg Creek and Elbow River	XS 1282 to XS 456, left bank	4	1306.83 to 1304.49	Potential flood inundation due to flood control structure failure
35	Bragg Creek	XS 1283 to XS 1286, right bank	4	1306.73 to 1306.55	Potential flood inundation due to flood control structure failure

75-Year Flood

A summary of manual edits applied to the inundation extent for the 75-year flood is provided in Table 10.

Table 10: Special Areas for the 75-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 63 to XS 65, left bank	4	1060.83 to 1060.16	Potential flood inundation due to flood control structure failure
2	Bow River	XS 99 to XS 121, left bank	4	1049.09 to 1045.30	Potential flood inundation due to flood control structure failure
4	Bow River	XS 119 to XS 122, left bank	1	1044.85	Backwater from single spill point
5	Bow River	XS 112 to XS 122, right bank	1	1045.16	Backwater from single spill point
6	Bow River	XS 122 to XS 133, right bank	3	1044.66 (first overtopping) 1042.22 (second overtopping)	Overtopping point at XS 122 causes second overtopping downstream around XS 133
7	Bow River	XS 130 to XS 397 (Zoo Side Channel), left bank	4	1042.43 to 1040.63	Potential flood inundation due to flood control structure failure
8	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1040.36 to 1038.85	Potential flood inundation due to flood control structure failure
9	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1038.44	Backwater from single spill point at creek confluence
10	Bow River	XS 141 to XS 157, right bank	3 (modified) and 4	1038.85 (first overtopping) to 1038.20 (highpoint) to 1036.00 (second overtopping)	Potential overtopping point near XS 142 causes second overtopping downstream between XS 156 and XS 157. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area. Area is set to potential flood inundation due to flood control structure failure.
11	Bow River	XS 189 to XS 197, right bank	4	1026.28 to 1024.74	Potential flood inundation due to flood control structure failure
12	Bow River	XS 191 to XS 198, right bank	1	1024.74	Backwater from single spill point
13	Bow River	XS 196 to XS 200, right bank	4	1024.92 to 1024.34	Potential flood inundation due to flood control structure failure



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Table 10: Special Areas for the 75-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
14	Bow River	XS 202 to XS 206, right bank	4	1023.96 to 1022.35	Potential flood inundation due to flood control structure failure
15	Bow River	XS 210 to XS 211, left bank	1	1020.66	Backwater from single spill point
16	Bow River	XS 259 to XS 262, right bank	1	1002.51	Pooling from single spill point
17	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	983.99	Backwater from single spill point at creek confluence
18	Bow River	XS 297 to XS 301, left bank	1	984.28	Backwater from single spill point
19	Bow River	XS 304 to XS 308, right bank	1	978.78	Backwater from single spill point
20	Bow River	XS 324 to XS 328, right bank	1	967.81	Backwater from single spill point
21	Bow River	XS 332 to XS 334, left bank	1	965.36	Backwater from single spill point
22	Bow River	XS 333 to XS 338, right bank	1	965.57	Pooling from single spill point
23	Elbow River and Bragg Creek	XS 440 to XS 1283, left bank (Elbow River), right bank (Bragg Creek)	4	1310.62 to 1307.14	Potential flood inundation due to flood control structure failure
24	Elbow River	XS 441 to XS 484, right bank	4	1309.96 to 1294.01	Potential flood inundation due to flood control structure failure
25	Elbow River	XS 449 to XS 450, left bank	4	1306.67 to 1306.37	Potential flood inundation due to flood control structure failure
26	Elbow River	XS 489 to XS 498, left bank	4	1290.79 to 1287.29	Potential flood inundation due to flood control structure failure
27	Elbow River	XS 495 to XS 497, right bank	1	1286.96	Backwater from single spill point
28	Elbow River	XS 500 to XS 504, right bank	1	1284.05	Backwater from single spill point
29	Elbow River	XS 511 to XS 514, right bank	1	1277.36	Backwater from single spill point
30	Elbow River	XS 513 to XS 520, right bank	4	1277.77 to 1274.26	Potential flood inundation due to flood control structure failure
31	Elbow River	XS 515 to XS 520, right bank	1	1274.35	Backwater from single spill point
32	Elbow River	XS 554 to XS 621, right bank	4	1258.40 to 1236.27	Potential flood inundation due to flood control structure failure
33	Elbow River	XS 855 to XS 862, right bank	3	1108.93 (pooling), 1107.50 (overtopping)	Pooling downstream of XS 855 causes overtopping between XS 861 and XS 862
34	Elbow River	XS 1252 to XS 1253 (Cliff Street side channel) and XS 1132 to XS 1137 (Elbow River)	other	1051.59 to 1050.80	Pooling in Cliff Street side channel causes overtopping into the Elbow River
35	Elbow River	XS 1237 (25 th Ave SW side channel) and XS 1170 to XS 1172 (Elbow River)	other	1047.91	Pooling in 25 th Ave SW side channel causes overtopping into the Elbow River
36	Elbow River	XS 1210 to XS 1212, left bank	1	1041.39	Backwater from single spill point
37	Elbow River	XS 1216 to XS 1217, right bank	4	1040.49 to 1040.63	Potential flood inundation due to flood control structure failure
38	Bragg Creek and Elbow River	XS 1281 to XS 456, left bank	4	1307.65 to 1304.76	Potential flood inundation due to flood control structure failure



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

100-Year Flood

A summary of manual edits applied to the inundation extent for the 100-year flood is provided in Table 11.

Table 11: Special Areas for the 100-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 97 to XS 121, left bank	4	1049.86 to 1045.70	Potential flood inundation due to flood control structure failure
2	Bow River	XS 119 to XS 122, left bank	1	1045.17	Backwater from single spill point
3	Bow River	XS 112 to XS 122, right bank	1	1046.42	Backwater from single spill point
4	Bow River	XS 126 to XS 133, right bank	3	1043.63 (first overtopping) 1042.22 (second overtopping)	Overtopping point at XS 126 causes second overtopping downstream around XS 133
5	Bow River	XS 126 to XS 397 (Zoo side channel), left bank	3	1043.41 (first overtopping) 1041.80 (second overtopping)	Overtopping point at XS 126 causes second overtopping downstream around XS 387
6	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1040.61 to 1039.03	Potential flood inundation due to flood control structure failure
7	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1038.57	Backwater from single spill point at creek confluence
8	Bow River	XS 142 to XS 157, right bank	3 (modified) and 4	1039.03 (first overtopping) to 1038.20 (highpoint) to 1036.00 (second overtopping)	Potential overtopping point near XS 142 causes second overtopping downstream between XS 156 and XS 157. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area. Area is set to potential flood inundation due to flood control structure failure.
9	Bow River	XS 188 to XS 195, right bank	4	1026.70 to 1025.16	Potential flood inundation due to flood control structure failure
10	Bow River	XS 189 to XS 191, right bank	1	1026.12	Backwater from single spill point
11	Bow River	XS 190 to XS 196, right bank	1	1025.14	Backwater from single spill point
12	Bow River	XS 196 to XS 200, right bank	4	1025.12 to 1024.58	Potential flood inundation due to flood control structure failure
13	Bow River	XS 202 to XS 206, right bank	4	1024.20 to 1022.54	Potential flood inundation due to flood control structure failure
14	Bow River	XS 210 to XS 211, left bank	1	1020.82	Backwater from single spill point
15	Bow River	XS 223 to XS 228, left bank	4	1017.28 to 1016.40	Potential flood inundation due to flood control structure failure
16	Bow River	XS 259 to XS 262, right bank	1	1002.65	Pooling from single spill point
17	Bow River	XS 294 to XS 302, right bank (Pine Creek)	1	984.11	Backwater from single spill point at creek confluence
18	Bow River	XS 324 to XS 326, right bank	1	968.03	Backwater from single spill point
19	Bow River	XS 332 to XS 334, left bank	1	965.81	Backwater from single spill point
20	Bow River	XS 333 to XS 338, right bank	1	965.75	Pooling from single spill point
21	Elbow River and Bragg Creek	XS 440 to XS 1283, left bank (Elbow River), right bank (Bragg Creek)	4	1310.89 to 1307.46	Potential flood inundation due to flood control structure failure
22	Elbow River	XS 441 to XS 485, right bank	4	1310.19 to 1293.23	Potential flood inundation due to flood control structure failure
23	Elbow River	XS 449 to XS 450, left bank	4	1306.89 to 1306.60	Potential flood inundation due to flood control structure failure
24	Elbow River	XS 489 to XS 469, left bank	4	1290.99 to 1287.43	Potential flood inundation due to flood control structure failure



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table 11: Special Areas for the 100-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
25	Elbow River	XS 495 to XS 497, right bank	1	1287.28	Backwater from single spill point
26	Elbow River	XS 500 to XS 504, right bank	1	1284.19	Backwater from single spill point
27	Elbow River	XS 511 to XS 514, right bank	1	1277.45	Backwater from single spill point
28	Elbow River	XS 512 to XS 519, right bank	4	1278.39 to 1274.91	Potential flood inundation due to flood control structure failure
29	Elbow River	XS 515 to XS 519, right bank	1	1274.98	Backwater from single spill point
30	Elbow River	XS 553 to XS 621, right bank	4	1259.06 to 1236.34	Potential flood inundation due to flood control structure failure
31	Elbow River	XS 855 to XS 862, right bank	3	1109.01 (pooling 1107.50 (overtopping))	Pooling downstream of XS 855 causes overtopping between XS 861 and XS 862
32	Elbow River	XS 1252 to XS 1253 (Cliff Street side channel) and XS 1132 to XS 1137 (Elbow River)	other	1051.74 to 1050.93	Pooling in Cliff Street side channel causes overtopping into the Elbow River
33	Elbow River	XS 1237 (25 th Ave SW side channel) and XS 1170 to XS 1172 (Elbow River)	other	1048.12	Pooling in 25 th Ave SW side channel causes overtopping into the Elbow River
34	Elbow River	XS 1210 to XS 1212, left bank	1	1041.57	Backwater from single spill point
35	Elbow River	XS 1216 to XS 1217, right bank	4	1040.71 to 1040.87	Potential flood inundation due to flood control structure failure
36	Bragg Creek and Elbow River	XS 1281 to XS 456, left bank	4	1307.83 to 1304.94	Potential flood inundation due to flood control structure failure

200-Year Flood

A summary of manual edits applied to the inundation extent for the 200-year flood is provided in Table 12.

Table 12: Special Areas for the 200-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 73 to XS 75, left bank	1	1058.32	Backwater from single spill point
2	Bow River	XS 106 to (Bow River) to XS 390 (Prince's Island side channel). Right bank	4	1048.64 to 1046.43	Potential flood inundation due to flood control structure failure
3	Bow River	XS 107 to (Bow River) to XS 390 (Prince's Island side channel). Right bank	1	1047.22	Backwater from single spill point
4	Bow River	XS 137 to XS 142, left bank (Zoo Island)	4	1041.29 to 1039.53	Potential flood inundation due to flood control structure failure
5	Bow River	XS 138 to XS 141, right bank	1	1040.26	Backwater from single spill point
6	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1038.99	Backwater from single spill point at creek confluence
7	Bow River	XS 142 to XS 157, right bank	3 (modified)	1039.53 (first overtopping) to 1038.20 (highpoint) to 1036.00 (second overtopping)	Overtopping point near XS 142 causes second overtopping downstream between XS 156 and XS 157. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area.
8	Bow River	XS 223 to XS 227, left bank	4	1018.00 to 1017.41	Potential flood inundation due to flood control structure failure
9	Bow River	XS 259 to XS 262, right bank	1	1002.99	Pooling from single spill point



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table 12: Special Areas for the 200-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
10	Bow River	XS 294 to XS 295, right bank (Pine Creek)	1	984.41	Backwater from single spill point
11	Bow River	XS 332 to XS 334, left bank	1	966.01	Backwater from single spill point
12	Bow River	XS 396 to XS 401 (Zoo side channel), left bank	3	1041.80 (first overtopping) 1041.60 (second overtopping)	Overtopping point near XS 397 causes second overtopping downstream between XS 399 and XS 400
13	Elbow River and Bragg Creek	XS 440 to XS 1282, left bank (Elbow River), right bank (Bragg Creek)	4	1311.34 to 1308.06	Potential flood inundation due to flood control structure failure
14	Elbow River	XS 441 to XS 503, right bank	4	1310.82 to 1284.51	Potential flood inundation due to flood control structure failure
15	Elbow River	XS 449 to XS 450, left bank	4	1307.49 to 1307.26	Potential flood inundation due to flood control structure failure
16	Elbow River	XS 453 to XSW 456, left bank	3	1306.84 (first overtopping) 1306.14 (second overtopping)	Overtopping point near XS 453 causes second overtopping downstream near XS 456
17	Elbow River	XS 486 to XS 496, left bank	4	1293.32 to 1287.75	Potential flood inundation due to flood control structure failure
18	Elbow River	XS 487 to XS 491, right bank	1	1291.17	Backwater from single spill point
19	Elbow River	XS 500 to XS 503, right bank	1	1284.51	Backwater from single spill point
20	Elbow River	XS 511 to XS 514, right bank	1	1277.70	Backwater from single spill point
21	Elbow River	XS 512 to XS 518, right bank	4	1278.63 to 1275.41	Potential flood inundation due to flood control structure failure
22	Elbow River	XS 514 to XS 518, right bank	1	1275.65	Backwater from single spill point
23	Elbow River	XS 516 to XS 522, right bank	1	1273.47	Backwater from single spill point
24	Elbow River	XS 554 to XS 622, right bank	4	1258.97 to 1235.92	Potential flood inundation due to flood control structure failure
25	Elbow River	XS 1252 to XS 1253 (Cliff Street side channel) and XS 1132 to XS 1137 (Elbow River)	other	1052.06 to 1051.25	Pooling in Cliff Street side channel causes overtopping into the Elbow River
26	Bragg Creek	XS 1281 to XS 1283, left bank	1	1307.39	Backwater from single spill point

350-Year Flood

A summary of manual edits applied to the inundation extent for the 350-year flood is provided in Table 13.

Table 13: Special Areas for the 350-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1039.56	Backwater from single spill point at creek confluence
2	Bow River	XS 150 to XS 157, right bank	3	1038.43 (first overtopping) to 1036.00 (second overtopping)	Pooling downstream of XS 150 causes second overtopping downstream between XS 156 and XS 157
3	Bow River	XS 223 to XS 224, left bank	4	1018.63 to 1018.47	Potential flood inundation due to flood control structure failure
4	Bow River	XS 259 to XS 262, right bank	1	1003.33	Pooling from single spill point



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
5	Bow River	XS 281 to XS 285, left bank	3	997.22 (first overtopping) 995.80 (second overtopping)	Overtopping point near XS 281 causes second overtopping downstream between XS 284 and XS 285
6	Bow River	XS 294 to XS 295, right bank (Pine Creek)	1	988.59	Backwater from single spill point
7	Bow River	XS 332 to XS 334, left bank	1	966.23	Backwater from single spill point
8	Bow River	XS 378 to XS 381 (Prince's Island side channel), right bank	1	1048.22	Backwater from single spill point
9	Bow River	XS 395 to XS 398 (Zoo side channel), left bank	1	1042.62	Backwater from single spill point
10	Elbow River	XS 488 to XS 496, left bank	3	1292.73 (first overtopping) 1288.42 (second overtopping)	Overtopping point near XS 488 causes second overtopping downstream near XS 496
11	Elbow River	XS 516 to XS 520, right bank	1	1275.34	Backwater from single spill point
12	Elbow River	XS 1252 to XS 1253 (Cliff Street side channel) and XS 1132 to XS 1137 (Elbow River)	other	1052.31 to 1051.42	Pooling in Cliff Street side channel causes overtopping into the Elbow River

500-Year Flood

A summary of manual edits applied to the inundation extent for the 500-year flood is provided in Table 14.

Table 14: Special Areas for the 500-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 89 to XS 96, left bank	1	1052.81	Backwater from single spill point
2	Bow River	XS 95 (Bow River) to XS 1254 (Cliff Street side channel)	other	1052.81 to 1050.97	Pooling on the Bow causes overtopping into the Cliff Street side channel
3	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1039.94	Backwater from single spill point at creek confluence
4	Bow River	XS 150 to XS 157, right bank	3	1038.87 (first overtopping) to 1036.00 (second overtopping)	Pooling downstream of XS 150 causes second overtopping downstream between XS 156 and XS 157
5	Bow River	XS 220 to XS 224, right bank	1	1019.02	Backwater from single spill point
6	Bow River	XS 222 to XS 225, left bank	1	1018.90	Backwater from single spill point
7	Bow River	XS 260 to XS 261, right bank	1	1003.39	Pooling from single spill point
8	Bow River	XS 285 to XS 293, right bank	3 (modified)	994.23 (first overtopping) to 993.35 (highpoint) to 991.79 (second overtopping)	Overtopping point near XS 286 causes second overtopping downstream between XS 292 and XS 293. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area.
9	Bow River	XS 294 to XS 295, right bank (Pine Creek)	1	989.01	Backwater from single spill point
10	Bow River	XS 332 to XS 334, left bank	1	966.33	Backwater from single spill point
11	Bow River	Around XS 380 (Prince's Island side channel), right bank	1	1048.75	Backwater from single spill point
12	Bow River	XS 395 to XS 398 (Zoo side channel), left bank	1	1043.09	Backwater from single spill point



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

750-Year Flood

A summary of manual edits applied to the inundation extent for the 750-year flood is provided in Table 15.

Table 15: Special Areas for the 750-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 78 to XS 79, left bank	3	1058.22 (first overtopping) to 1057.55 (second overtopping)	Overtopping at XS 78 causes second overtopping downstream near XS 79
2	Bow River	XS 90 to XS 94, right bank	1	1053.07	Backwater from single spill point
3	Bow River	XS 95 (Bow River) to XS 1254 (Cliff Street side channel)	other	1052.97 to 1051.16	Pooling on the Bow causes overtopping into the Cliff Street side channel
4	Bow River	XS 101 to XS 104, right bank	1	1050.03	Backwater from single spill point
5	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1040.65	Backwater from single spill point at creek confluence
6	Bow River	XS 150 to XS 157, right bank	3	1039.40 (first overtopping) to 1036.67 (second overtopping)	Pooling downstream of XS 150 causes second overtopping downstream between XS 156 and XS 157
7	Bow River	XS 211 to XS 214, right bank	1	1021.29	Backwater from single spill point
8	Bow River	XS 260 to XS 261, right bank	1	1004.03	Pooling from single spill point
9	Bow River	XS 285 to XS 293, right bank	3 (modified)	994.86 (first overtopping) to 993.35 (highpoint) to 991.79 (second overtopping)	Overtopping point near XS 286 causes second overtopping downstream between XS 292 and XS 293. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area.
10	Bow River	XS 294 to XS 295, right bank (Pine Creek)	1	989.66	Backwater from single spill point
11	Bow River	XS 332 to XS 334, left bank	1	966.50	Backwater from single spill point
12	Bow River	XS 395 to XS 398 (Zoo side channel), left bank	1	1043.63	Backwater from single spill point

1,000-Year Flood

A summary of manual edits applied to the inundation extent for the 1,000-year flood is provided in Table 16.

Table 16: Special Areas for the 1000-Year Flood

No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
1	Bow River	XS 64 to XS 67, left bank	1	1062.80	Backwater from single spill point
2	Bow River	XS 95 (Bow River) to XS 1254 (Cliff Street side channel)	other	1053.53 to 1051.31	Pooling on the Bow causes overtopping into the Cliff Street side channel
3	Bow River	XS 101 to XS 102, right bank	1	1050.63	Backwater from single spill point
4	Bow River	XS 138 to XS 144, left bank (Nose Creek)	1	1041.08	Backwater from single spill point at creek confluence
5	Bow River	XS 150 to XS 157, right bank	3	1039.74 (first overtopping) to 1036.67 (second overtopping)	Pooling downstream of XS 150 causes second overtopping downstream between XS 156 and XS 157
6	Bow River	XS 260 to XS 262, right bank	1	1004.41	Pooling from single spill point



No	River	Location / Cross Sections	Scenario	Flood Level (m)	Comment
7	Bow River	XS 285 to XS 293, right bank	3 (modified)	994.85 (first overtopping) to 993.35 (highpoint) to 991.79 (second overtopping)	Overtopping point near XS 286 causes second overtopping downstream between XS 292 and XS 293. A highpoint was identified near the middle of the edited area, causing higher water elevations in the first half (upstream) of the area.
8	Bow River	XS 294 to XS 295, right bank (Pine Creek)	1	990.62	Backwater from single spill point
9	Bow River	XS 332 to XS 334, left bank	1	966.84	Backwater from single spill point
10	Bow River	XS 395 to XS 398 (Zoo side channel), left bank	1	1044.03	Backwater from single spill point

Note that for all the above tables, the right bank is defined as the bank on the right side when looking downstream, and the left bank is defined as the bank on the left when looking downstream.

3.3 Potential Flood Control Structure Failure Inundation

Inundation due to potential flood control structure failure is mapped based on main channel water levels. Isolated areas behind flood control structures are only mapped as flood control structure failure if the flood water level in the main river channel is higher than the natural ground or the toe of the control structure as shown in Figure 3.

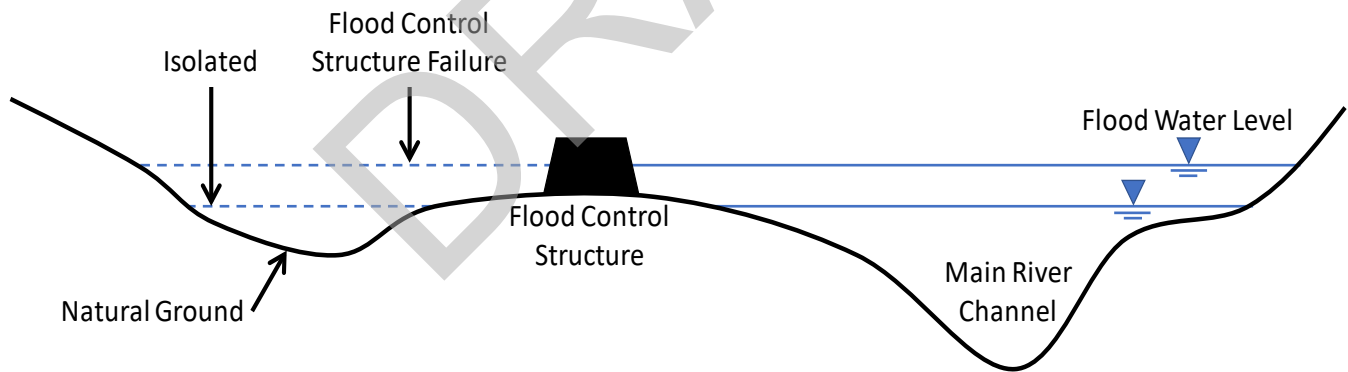


Figure 3: Illustration of Flood Control Structure Failure Inundation

3.4 Inundation Mapping using Special Approaches

3.4.1 Redwood Meadows Golf and Country Club

The flood inundation extent behind the Redwood Meadows Golf & Country Club Berm (from XS 514 to XS 529) is classified as potential flood control structure failure (Scenario 4) for the 5-year to 200-year floods. For these floods, the water level at the downstream end of the berm at XS 529 is used as a constant water level to map direct inundation for the area behind the berm using a constant water level (Scenario 1). For higher floods and increasing water levels, the area directly inundated behind the berm from downstream is growing in size. Upstream of the



direct inundation, areas that would be inundated if the berm would fail are mapped as potential flood control structure failure inundation (Scenario 4).

3.4.2 Inglewood and Wolf Willow

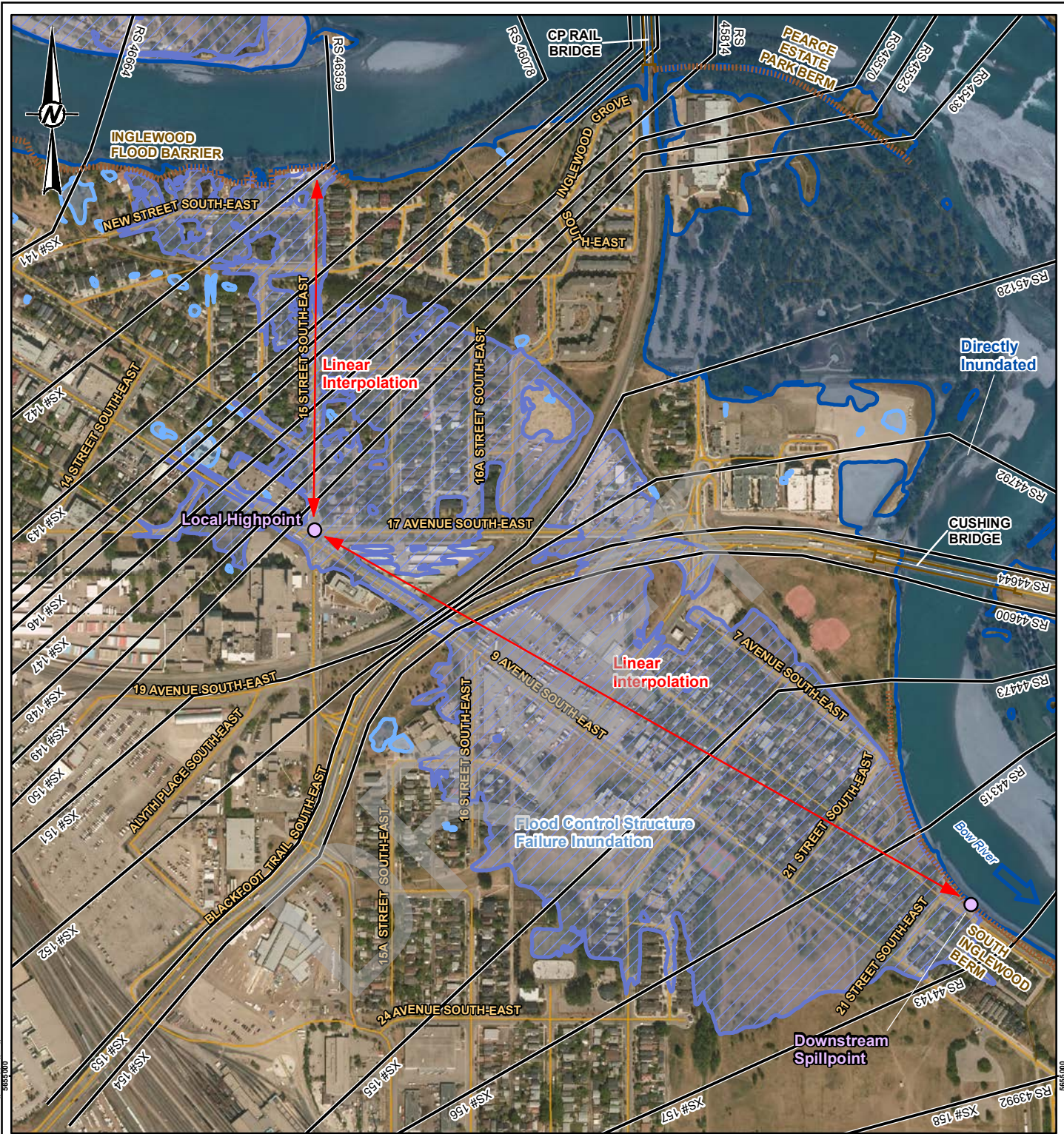
The flood inundation extents immediately behind the West Inglewood Berm and the Inglewood Flood Barrier (from XS 140 to XS 143) is classified as potential flood control structure failure (Scenario 4) for the 50-year, 75-year and 100-year floods. For the 200-year and higher floods, overtopping is expected along their entire length.

In case of a flood control structure failure or overtopping for the 75-year and 100-year floods (for the 50-year flood, inundation would be confined to a small area directly behind the Inglewood Flood Barrier), flood water is expected to flow south along 15th Street SE and then southeast along 9th Avenue SE, under Blackfoot Trail (at the underpass), and back to the Bow River between XS 156 and XS 157 (near 22nd Street SE). A local highpoint was identified near the intersection of 15th Street SE and 9th Avenue SE, causing pooling and higher water levels upstream of this location.

The flood inundation extents in the Inglewood neighbourhood for the 75-year to 200-year floods are re-determined using two linear interpolations. The first interpolation is between the water level at the overtopping point upstream (at the flood control structures) and the ground elevation at local highpoint. The second interpolation is between the local highpoint and the ground elevation at the downstream spill point (modified Scenario 3).

For the 350-year to 1,000-year floods, inundation extents in the area upstream of the Blackfoot Trail underpass are derived directly from the model cross sections without modification, since water levels are higher than the local highpoint and no pooling occurs. Inundation extents downstream of the underpass are re-delineated using linear interpolation between XS 150 and the ground elevation at the downstream spill point (Scenario 3). An example of the inundation mapping for Inglewood is shown in Figure 5.

The same approach (a modified version of Scenario 3) is used for the Wolf Willow neighbourhood for the 500-year to 1,000-year floods. The flood inundation extents are re-delineated using two linear interpolations. The first interpolation is between the water level at the overtopping point upstream (near XS 286) and the ground elevation at a local highpoint identified between XS 289 and XS 290. The second interpolation is between this highpoint and the ground elevation at the downstream spill point between XS 292 and XS 293.



LEGEND

- CROSS SECTION
 - BRIDGE
 - LOCAL ROAD
 - PATHWAY
 - FLOOD CONTROL STRUCTURE
 - 75-YEAR FLOOD INUNDATION EXTENT**
 - INUNDATED
 - ISOLATED
 - FAILED
- 0 100 200 300
-
- 1:7,500 METRES

REFERENCE(S)
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 DATUM: NAD 83 CSRS PROJECTION: 3TM 114

CLIENT



PROJECT
BOW AND ELBOW RIVER HAZARD STUDY

TITLE
INUNDATION MAPPING USING SPECIAL APPROACHES - INGLEWOOD

CONSULTANT



YYYY-MM-DD	2020-08-20
DESIGNED	WP
PREPARED	PT
REVIEWED	WP
APPROVED	DL

PROJECT NO.	CONTROL	REV.	FIGURE
1536673	4000	1	4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI/A 25mm



3.5 Areas Affected by Flooding

3.5.1 Flooding of Residential Areas

Bow River

- Bowness along Bow Crescent NW and in areas within the bend of the Bow River upstream of Hextall Bridge at return periods above 5 years.
- Montgomery west of Home Road NW at return periods above 200 years.
- Areas near the Bow River Manor nursing home are affected by flood control structure overtopping at return periods above 200 years. Areas along 17th Avenue NW upstream of Harry Boothman Bridge are affected at return periods above 750 years.
- Parkdale between the Bow River and Bowness Road NW at return periods above 200 years.
- West Hillhurst, Hillhurst and West Hillhurst between the Bow River and 1st Avenue NW, as well as areas between 10th Street NW and 14th Street NW up to 8th Avenue NW (up to and including Riley Park) and areas between 18th Street NW and 29th Street NW up to 6th Avenue NW, at return periods above 200 years.
- Sunalta between the Bow River and Bow Trail NW at return periods above 500 years.
- Sunnyside at return periods above 100 years.
- Bridgeland - Riverside between the Bow River and Centre Avenue NE at return periods above 75 years.
- Inglewood, including areas both to the northwest and southeast of the CP rail line, at return periods above 100 years.
- Quarry Park, Douglasdale, and Douglas Glen west of 24th Street SE at return periods above 350 years.
- Wolf Willow at return periods above 100 years.

Elbow River

- Low-lying areas in Bragg Creek north of the Bragg Creek confluence along Bracken Road at return periods above 100 years. Widespread flooding in Bragg Creek would occur when the new flood control structures are overtopped at return periods above 200 years.
- Redwood Meadows and the Tsuut'ina Rodeo Grounds at return periods above 200 years.
- Low-lying areas east of Discovery Ridge Lane SW in Discovery Ridge at return periods above 10 years.
- Elbow Park in areas within the bend of the Elbow River downstream of Elboya Bridge and along Riverdale Avenue SW at return periods above 10 years, and in areas east of 8th Street SW at return periods above 50 years.
- Elboya between the Elbow River and Lansdowne Avenue SW at return periods above 10 years, including Stanley Park in neighbouring Parkhill.
- Rideau Park and Roxboro at return periods above 10 years.



- Cliff Bungalow and Mission in areas within the bend of the Elbow River downstream of Mission Bridge at return periods above 5 years. At return periods above 20 years, low-lying areas along 4th Street SW and Cliff Street SW are affected. At higher return periods, flooding increasingly affects larger areas of the neighbourhoods. At return periods above 750 years, widespread flooding affects both neighbourhoods.
- Erlton north of 28th Avenue SW at return periods above 10 years.
- Beltline east of 7th Street SW at return periods above 20 years, partially due to overland flooding along Cliff Street SW. At return periods above 200 years, low-lying areas of Beltline and Lower Mount Royal east of 14th Street SW are affected. At return periods above 350 years, Sunalta areas west of 14th Street SW are affected.

Bragg Creek

- The confluence area downstream of Bracken Road at return periods above 100 years.

Lott Creek

No residential areas are expected to be directly affected by open water flooding along Lott Creek for flood events up to a return period of 1,000 years.

3.5.2 Flooding of Commercial and Industrial Areas

Bow River

Based on the simulation results, the main commercial and industrial areas expected to be flooded along the Bow River have been identified as follows:

- Low-lying areas near the Bow River at Eau Claire, Chinatown, Downtown, and Downtown East Village at return periods above 100 years by overtopping of flood control structures. At higher return periods, open water flooding increasingly affects areas farther away from the Bow River. At return periods above 750 years, areas up to and past 9th Avenue SW are affected.
- Alyth and Bonnybrook, including low-lying areas around the Bonnybrook Wastewater Treatment Plant, at return periods above 200 years. At higher return periods, flooding increasingly affects areas farther away from the Bow River. At return periods above 750 years areas up to and past 15th A Street SE are affected.
- The La Farge Pipe Plant and Landscape Centre on 13th Street SE at return periods above 35 years. Starting at return periods above 350 years, areas both east and west of Deerfoot Trail are affected, including areas on Glendeer Circle SE, 12th Street SE, 11th Street SE and 10th Street SE.
- Low-lying areas in Quarry Park and Shepard Industrial at return periods above 350 years.
- Fish Creek Wastewater Treatment Plant at return periods above 350 years.
- Pine Creek Wastewater Treatment Plant at return periods above 350 years.
- Predator Bay Water Ski Club in Foothills County at return periods above 10 years
- Burnco Indus gravel pit in Rocky View County at return periods above 10 years.



Elbow River

- The commercial centre of Bragg Creek at return periods above 200 years.
- The upstream end of the Redwood Meadows Golf and Country Club at return periods above 50 years.
- Tsuut'ina Rodeo Grounds at return periods above 200 years.
- Kamp Kiwanis and the Entheos Conference and Retreat Centre return periods above 75 years.
- River Spirit Golf Club at return periods above 10 years.
- Glencoe Golf and Country Club at return periods above 5 years.
- Elbow Springs Golf Club north of Lott Creek Drive at return periods above 10 years.
- Calgary Golf and Country Club at return periods above 35 years.
- Calgary Stampede Grounds and surrounding commercial areas at return periods above 10 years.

Bragg Creek

No commercial areas are expected to be directly affected by open water flooding along Bragg Creek for flood events up to a return period of 1,000 years.

Lott Creek

- Elbow Springs Golf Club south of Lott Creek Drive at return periods above 20 years.

3.5.3 Flooding of Bridges and Culverts

A bridge is considered to be affected by flooding when water reaches its low chord. Tables 17 to 23 present summaries of the simulated open water flood levels, 100-year flow velocities, and low chord clearances for the 100-year flood at all Bow River, Elbow River, Bragg Creek, and Lott Creek bridges and culverts.



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table 17: Effects on Bridges along the Bow River

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre												Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year				1,000-year
66,108	Stoney Trail Bridge	1,079.0	1,078.0	1,071.5	1,072.2	1,072.7	1,073.3	1,073.8	1,074.1	1,074.5	1,074.7	1,075.5	1,076.1	1,076.6	1,077.2	1,077.8	2.29	3.3	>1000-Year
64,541	85 th Street NW Bridge	1,076.3	1,074.4	1,069.3	1,069.9	1,070.4	1,070.8	1,071.2	1,071.5	1,071.9	1,072.1	1,072.8	1,073.5	1,073.9	1,074.5	1,075.4	4.09	2.3	750-year
63,899	Bowmont Bridge	1,072.0	1,071.7	1,068.0	1,068.8	1,069.3	1,069.9	1,070.4	1,070.7	1,071.2	1,071.4	1,072.2	1,072.9	1,073.4	1,074.0	1,074.5	2.52	0.3	200-year
63,809	CP Rail Twin Bridges	1,073.5	1,072.4	1,067.9	1,068.6	1,069.2	1,069.7	1,070.3	1,070.6	1,071.0	1,071.3	1,072.1	1,072.8	1,073.3	1,073.9	1,074.4	2.78	1.1	350-year
59,938	Hextall Bridge	1,065.9	1,065.1	1,062.1	1,062.7	1,063.2	1,063.8	1,064.3	1,064.6	1,065.0	1,065.4	1,066.4	1,067.0	1,067.4	1,067.9	1,068.3	2.74	-0.3	100-year
59,917	Shouldice Bridge	1,067.6	1,064.8	1,061.9	1,062.4	1,062.9	1,063.5	1,063.9	1,064.2	1,064.6	1,064.9	1,065.7	1,066.4	1,066.8	1,067.3	1,067.8	3.85	-0.1	100-year
59,516	Trans-Canada Highway Bridge	1,067.2	1,065.5	1,061.2	1,061.8	1,062.3	1,062.9	1,063.5	1,063.8	1,064.1	1,064.3	1,065.1	1,065.9	1,066.4	1,067.1	1,067.7	3.60	1.2	350-year
57,063	Harry Boothman Bridge	1,061.3	1,060.0	1,056.3	1,056.9	1,057.3	1,057.8	1,058.3	1,058.6	1,059.0	1,059.3	1,060.2	1,061.0	1,061.5	1,062.0	1,062.3	3.79	0.7	200-year
53,501	Crowchild Trail Bridge	1,056.5	1,054.6	1,050.0	1,050.5	1,051.0	1,051.5	1,052.0	1,052.4	1,052.8	1,053.1	1,053.7	1,054.3	1,054.8	1,055.2	1,055.5	4.05	1.5	500-year
52,040	Mewata Bridge	1,055.9	1,053.9	1,047.3	1,047.8	1,048.2	1,048.6	1,049.0	1,049.3	1,049.6	1,049.9	1,050.4	1,050.4	1,050.4	1,050.6	1,051.0	3.78	4.0	>1000-Year
51,264	Louise Bridge	1,051.3	1,050.6	1,045.4	1,046.0	1,046.5	1,047.1	1,047.6	1,048.0	1,048.4	1,048.6	1,049.1	1,049.8	1,049.8	1,050.2	1,050.5	2.93	2.0	>1000-Year
51,148	North West LRT Bridge	1,050.1	1,048.7	1,044.9	1,045.6	1,046.1	1,046.7	1,047.2	1,047.5	1,047.9	1,048.0	1,048.8	1,049.4	1,049.5	1,050.0	1,050.4	3.57	0.7	200-year
50,745	Peace Bridge	1,049.0	1,048.0	1,044.5	1,045.2	1,045.7	1,046.2	1,046.7	1,047.0	1,047.5	1,047.6	1,048.4	1,049.1	1,049.1	1,049.6	1,050.0	3.03	0.4	200-year
49,960	Prince's Island Bridge	1,050.5	1,050.1	1,043.5	1,044.1	1,044.6	1,045.2	1,045.7	1,046.1	1,046.5	1,046.9	1,047.6	1,048.2	1,048.6	1,049.2	1,049.6	2.90	3.2	>1000-Year
49,266	Centre Street Bridge	1,052.1	1,045.6	1,041.9	1,042.5	1,043.1	1,043.7	1,044.3	1,044.8	1,045.3	1,045.7	1,046.5	1,047.2	1,047.7	1,048.2	1,048.6	3.17	-0.1	100-year
48,501	4 th Avenue Flyover Bridge	1,050.0	1,048.0	1,040.4	1,041.0	1,041.5	1,042.0	1,042.5	1,042.9	1,043.2	1,043.6	1,044.4	1,045.0	1,045.5	1,045.6	1,045.9	3.62	4.4	>1000-Year
48,466	Old Langevin Bridge	1,044.8	1,043.0	1,040.3	1,040.9	1,041.3	1,041.9	1,042.3	1,042.6	1,042.9	1,043.2	1,043.4	1,044.7	1,045.3	1,045.3	1,045.5	4.27	-0.2	100-year
48,357	New Langevin (Edmonton Trail) Bridge	1,047.8	1,046.0	1,040.2	1,040.7	1,041.2	1,041.7	1,042.1	1,042.4	1,042.6	1,042.8	1,042.8	1,043.4	1,043.8	1,044.3	1,044.8	4.25	3.3	>1000-Year



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Table 17: Effects on Bridges along the Bow River

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
48,322	Harry Kroeger Bridge	1,049.9	1,046.6	1,040.1	1,040.6	1,041.0	1,041.5	1,041.9	1,042.2	1,042.4	1,042.6	1,043.4	1,043.5	1,043.6	1,044.5	1,044.8	4.39	4.0	>1000-Year
48,039	St. Patrick's Island Pedestrian Bridge	1,042.8	1,042.3	1,039.6	1,040.1	1,040.5	1,040.9	1,041.3	1,041.5	1,041.8	1,042.0	1,042.2	1,042.3	1,043.1	1,043.6	1,044.0	3.74	0.3	350-year
46,875	St. George's Island Bridge	1,043.1	1,042.8	1,037.3	1,037.9	1,038.4	1,038.9	1,039.3	1,039.5	1,039.8	1,040.1	1,040.8	1,041.1	1,041.5	1,041.9	1,042.2	2.42	2.7	>1000-Year
45,907	CP Rail Bridge	1,039.9	1,038.9	1,036.2	1,036.9	1,037.3	1,037.7	1,038.1	1,038.2	1,038.4	1,038.5	1,038.9	1,039.3	1,039.6	1,040.0	1,040.2	3.05	0.4	350-year
44,622	Cushing Bridge	1,039.6	1,035.9	1,032.8	1,033.5	1,034.0	1,034.5	1,034.9	1,035.1	1,035.4	1,035.6	1,036.1	1,036.9	1,037.3	1,037.8	1,038.1	3.12	0.3	200-year
41,346	CN Rail Bridge (Bonnybrook)	1,037.0	1,035.4	1,027.2	1,028.1	1,028.7	1,029.4	1,030.0	1,030.4	1,030.8	1,031.2	1,032.2	1,033.1	1,033.5	1,034.1	1,034.4	2.58	4.2	>1000-Year
41,283	CP Rail Bridge (Bonnybrook)	1,033.4	1,031.2	1,027.2	1,028.0	1,028.6	1,029.3	1,029.8	1,030.2	1,030.6	1,030.9	1,031.9	1,032.7	1,033.0	1,033.7	1,034.2	3.12	0.3	200-year
41,149	Bonnybrook Bridge	1,035.8	1,032.8	1,027.0	1,027.7	1,028.3	1,028.8	1,029.3	1,029.6	1,029.8	1,030.0	1,030.6	1,031.1	1,031.4	1,031.6	1,031.6	4.08	2.8	>1000-Year
40,475	Calf Robe Bridge	1,035.6	1,032.9	1,025.9	1,026.6	1,027.1	1,027.6	1,028.0	1,028.2	1,028.7	1,028.9	1,029.7	1,030.3	1,030.8	1,031.4	1,031.9	2.19	4.0	>1000-Year
39,960	CN Rail Bridge	1,036.0	1,032.1	1,025.3	1,026.0	1,026.4	1,026.7	1,027.1	1,027.2	1,027.4	1,027.5	1,028.0	1,028.4	1,028.7	1,029.1	1,030.0	3.05	4.6	>1000-Year
37,493	Graves Bridge (Upstream)	1,028.2	1,025.9	1,020.5	1,021.0	1,021.5	1,022.0	1,022.3	1,022.6	1,022.8	1,023.1	1,023.6	1,024.1	1,024.5	1,024.9	1,025.2	3.41	2.8	>1000-Year
37,472	Graves Bridge (Downstream)	1,028.2	1,025.9	1,020.4	1,020.9	1,021.3	1,021.8	1,022.1	1,022.3	1,022.6	1,022.8	1,023.3	1,023.8	1,024.1	1,024.5	1,024.8	3.58	3.1	>1000-Year
34,768	Eric Harvie Bridge	1,020.1	1,019.7	1,015.9	1,016.6	1,017.1	1,017.6	1,018.0	1,018.2	1,018.6	1,018.7	1,019.1	1,019.5	1,019.9	1,020.3	1,020.7	2.99	1.0	500-year
32,758	Ivor Strong Bridge	1,023.5	1,020.3	1,012.2	1,012.9	1,013.4	1,013.9	1,014.3	1,014.5	1,014.8	1,015.1	1,015.9	1,016.1	1,016.1	1,016.2	1,016.9	4.60	5.2	>1000-Year
31,203	Sue Higgins Bridge	1,013.6	1,012.7	1,009.7	1,010.2	1,010.5	1,010.9	1,011.2	1,011.4	1,011.6	1,011.8	1,012.2	1,012.5	1,012.8	1,012.9	1,013.0	3.94	0.9	500-year
26,722	McKenzie Bridge	1,005.6	1,005.0	1,001.3	1,001.8	1,002.1	1,002.4	1,002.6	1,002.9	1,003.2	1,003.4	1,003.9	1,004.2	1,004.5	1,004.7	1,004.9	3.39	1.6	>1000-Year
23,949	Marquis of Lorne Bridge (Upstream)	1,004.7	1,002.1	995.5	996.2	996.8	997.3	997.8	998.1	998.5	998.7	999.4	1,000.1	1,000.6	1,001.3	1,001.8	3.59	3.4	>1000-Year
23,908	Marquis of Lorne Bridge (Downstream)	1,004.2	1,002.5	995.4	996.1	996.6	997.1	997.6	997.9	998.2	998.4	999.0	999.7	1,000.1	1,000.8	1,001.3	3.79	4.1	>1000-Year



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Table 17: Effects on Bridges along the Bow River

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
18,365	Dunbow Road Bridge (Upstream)	995.0	991.6	984.7	985.3	985.7	986.1	986.5	986.8	987.1	987.3	988.0	988.6	989.0	989.5	989.9	3.68	4.3	>1000-Year
18,333	Dunbow Road Bridge (Downstream)	995.0	991.6	984.5	984.9	985.3	985.6	985.9	986.1	986.4	986.6	987.2	987.8	988.1	988.6	989.0	4.46	5.0	>1000-Year

Table 18: Effects on Bridges along the Prince's Island Side Channel

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
476	Jaipur Bridge	1,047.7	1,046.2	1,044.2	1,044.4	1,044.5	1,044.8	1,045.2	1,045.6	1,046.1	1,046.5	1,047.4	1,048.1	1,048.5	1,049.1	1,049.5	1.24	-0.3	100-year
308	Prince's Island Bridge on Side Channel	1,045.5	1,045.0	1,042.9	1,043.1	1,043.7	1,044.4	1,045.0	1,045.5	1,046.0	1,046.4	1,047.2	1,047.9	1,048.4	1,049.0	1,049.4	1.21	-1.4	50-year

Table 19: Effects on Bridges along the Zoo Side Channel

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
1,868	St. Patrick's Island Bridge on Zoo Side Channel	1,043.2	1,042.9	1,039.5	1,040.1	1,040.5	1,041.0	1,041.4	1,041.6	1,041.9	1,042.2	1,042.6	1,043.4	1,043.7	1,044.1	1,044.4	3.59	0.7	350-year
1,119	Baines Bridge	1,042.5	1,041.4	1,038.3	1,038.7	1,039.1	1,039.6	1,040.0	1,040.3	1,040.6	1,040.9	1,041.6	1,042.6	1,043.0	1,043.6	1,044.0	2.88	0.5	200-year
434	Zoo Service Bridge	1,041.4	1,040.4	1,036.8	1,037.4	1,037.8	1,038.3	1,038.7	1,038.9	1,039.2	1,039.4	1,040.0	1,040.6	1,040.9	1,041.5	1,042.0	3.58	1.0	350-year



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Table 20: Effects on Bridges along the Elbow River

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
60,538	Balsam Avenue	1,300.3	1,299.8	1,294.7	1,295.3	1,295.8	1,296.4	1,296.9	1,297.3	1,297.7	1,298.0	1,298.9	1,300.1	1,300.1	1,300.2	1,300.4	3.96	1.8	350-Year
48,182	Highway 22 Bridge	1,209.2	1,207.4	1,204.2	1,204.6	1,204.9	1,205.3	1,205.6	1,205.8	1,206.1	1,206.3	1,206.8	1,207.3	1,207.6	1,207.6	1,207.6	3.13	1.1	500-year
29,253	Highway 8 Bridge	1,106.9	1,105.5	1,102.7	1,103.3	1,103.8	1,104.3	1,104.7	1,105.1	1,105.4	1,105.7	1,106.7	1,107.2	1,107.6	1,107.8	1,108.0	4.24	-0.2	100-year
20,501	Grey Eagle Drive	1,083.5	1,082.4	1,080.5	1,081.2	1,081.6	1,081.9	1,082.1	1,082.3	1,082.4	1,082.5	1,082.8	1,083.0	1,083.2	1,083.3	1,083.5	1.64	-0.1	75-year
18,229	Weaselhead Glenmore Pathway	1,079.5	1,078.5	1,077.0	1,077.3	1,077.5	1,077.8	1,078.1	1,078.2	1,078.4	1,078.5	1,079.0	1,079.4	1,079.7	1,080.0	1,080.3	1.74	0.0	100-year
12,319	Glenmore Trail Bridge	1,082.2	1,080.2	1,076.9	1,076.9	1,076.9	1,076.9	1,077.2	1,077.4	1,077.7	1,077.9	1,078.4	1,078.8	1,079.1	1,079.5	1,079.8	1.98	2.3	>1000-Year
8,851	Sandy Beach Bridge	1,058.2	1,057.9	1,053.7	1,054.5	1,055.2	1,055.9	1,056.5	1,057.0	1,057.4	1,057.8	1,058.6	1,059.4	1,059.8	1,060.3	1,060.7	2.80	0.1	200-year
7,601	Riverdale Avenue Bridge	1,056.1	1,055.8	1,051.7	1,052.6	1,053.3	1,054.1	1,054.7	1,055.2	1,055.6	1,055.9	1,056.5	1,056.8	1,057.1	1,057.4	1,057.7	3.16	-0.1	100-year
7,206	Elboya Bridge	1,054.8	1,054.2	1,051.2	1,052.2	1,052.9	1,053.7	1,054.4	1,054.8	1,055.2	1,055.5	1,056.0	1,056.3	1,056.6	1,056.9	1,057.1	2.50	-1.3	35-year
5,506	Rideau Park Bridge	1,053.2	1,052.9	1,049.7	1,050.5	1,051.1	1,051.7	1,052.3	1,052.6	1,053.0	1,053.2	1,053.8	1,054.3	1,054.6	1,055.0	1,055.2	2.69	-0.3	75-year
4,783	Mission Bridge	1,051.7	1,050.6	1,048.5	1,049.2	1,049.9	1,050.7	1,051.4	1,051.8	1,052.2	1,052.4	1,053.0	1,053.4	1,053.6	1,053.9	1,054.2	1.73	-1.8	20-year
4,043	25th Avenue SW Bridge	1,050.3	1,048.5	1,046.9	1,047.7	1,048.4	1,049.2	1,049.7	1,049.9	1,050.2	1,050.3	1,050.8	1,051.2	1,051.5	1,051.8	1,052.1	2.35	-1.8	20-year
3,483	Lindsay Park	1,049.1	1,048.6	1,045.7	1,046.4	1,047.0	1,047.7	1,048.2	1,048.5	1,048.8	1,049.1	1,049.7	1,050.3	1,050.7	1,051.1	1,051.3	2.88	-0.5	75-year
3,243	Lindsay Park CNR Bridge	1,050.2	1,048.6	1,045.1	1,045.9	1,046.5	1,047.2	1,047.7	1,048.0	1,048.3	1,048.6	1,049.3	1,049.9	1,050.2	1,050.6	1,050.8	2.39	0.0	200-year



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Table 20: Effects on Bridges along the Elbow River

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
2,954	Pattison Bridge	1,047.1	1,045.6	1,044.0	1,044.8	1,045.5	1,046.3	1,047.0	1,047.4	1,047.7	1,048.0	1,048.6	1,049.1	1,049.5	1,049.9	1,050.2	2.03	-2.4	20-year
2,720	Victoria Bridge	1,047.2	1,045.6	1,043.0	1,044.0	1,044.8	1,045.6	1,046.4	1,046.8	1,047.4	1,047.7	1,048.4	1,048.9	1,049.3	1,049.8	1,050.1	1.69	-2.1	20-year
2,677	LRT Bridge	1,047.9	1,046.7	1,042.9	1,043.9	1,044.7	1,045.6	1,046.3	1,046.7	1,047.2	1,047.5	1,048.3	1,048.9	1,049.3	1,049.7	1,050.0	1.70	-0.8	50-year
2,455	Stampede Park Access Bridge	1,046.9	1,045.9	1,042.5	1,043.5	1,044.2	1,045.1	1,045.7	1,046.1	1,046.5	1,046.9	1,047.4	1,048.0	1,048.4	1,048.8	1,048.9	2.69	-1.0	50-year
1,902	Horse Barn Bridge (New)	1,045.5	1,044.7	1,041.4	1,042.3	1,043.0	1,043.7	1,044.3	1,044.6	1,045.0	1,045.3	1,045.8	1,046.1	1,046.4	1,046.9	1,046.9	3.30	-0.6	75-year
1,855	Horse Barn Bridge (Old)	1,045.3	1,044.3	1,041.3	1,042.2	1,042.9	1,043.6	1,044.2	1,044.5	1,044.8	1,045.4	1,045.9	1,046.1	1,046.4	1,046.9	1,046.9	2.65	-1.1	50-year
1,244	Weadick Crossing	1,044.0	1,043.4	1,040.2	1,041.0	1,041.7	1,042.3	1,042.8	1,043.1	1,043.5	1,043.8	1,044.7	1,045.4	1,046.0	1,046.6	1,046.6	3.40	-0.3	75-year
991	Stampede Park (N) Saddledome Access Bridge	1,044.8	1,043.4	1,039.6	1,040.4	1,041.1	1,041.8	1,042.4	1,042.8	1,043.3	1,043.7	1,044.6	1,045.4	1,045.9	1,046.6	1,046.6	2.75	-0.3	100-year
576	MacDonald Bridge	1,042.3	1,041.2	1,038.7	1,039.5	1,040.1	1,040.8	1,041.4	1,041.8	1,042.3	1,042.7	1,043.8	1,044.6	1,045.1	1,045.9	1,045.9	3.42	-1.5	35-year
334	CP Rail Bridge	1,044.7	1,042.0	1,038.4	1,039.1	1,039.7	1,040.2	1,040.7	1,041.1	1,041.6	1,041.8	1,042.9	1,043.5	1,045.0	1,045.7	1,045.7	4.14	0.2	200-year
287	9th Avenue SE Bridge	1,042.6	1,041.4	1,038.3	1,039.0	1,039.5	1,039.9	1,040.3	1,040.6	1,041.0	1,041.1	1,042.9	1,043.6	1,043.8	1,044.1	1,044.3	5.11	0.4	200-year
165	Travers Bridge	1,041.6	1,041.1	1,038.2	1,038.8	1,039.2	1,039.7	1,040.0	1,040.3	1,040.5	1,040.7	1,041.2	1,042.4	1,042.5	1,042.8	1,043.1	3.83	0.4	200-year



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Table 21: Effects on Bridges along Bragg Creek

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
1,065	Centre Avenue	1,316.5	1,315.8	1,312.8	1,313.2	1,313.6	1,313.8	1,314.0	1,314.1	1,314.2	1,314.4	1,314.6	1,314.9	1,315.2	1,315.4	1,315.6	2.6	1.5	>1000-Year
117	Bracken Road	1,307.2	1,306.4	1,304.9	1,305.3	1,305.6	1,306.0	1,306.4	1,306.7	1,307.1	1,307.5	1,308.1	1,308.6	1,308.8	1,309.0	1,309.2	2.7	-0.5	35-Year

Table 22: Effects on Bridges along Lott Creek

Bridge Station (m)	Name	Minimum Deck Elevation (m)	Minimum Low Chord Elevation (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
4,093	Fishermans Lake Pedestrian Bridge	1,110.2	1,109.7	1,108.5	1,108.6	1,108.6	1,108.7	1,108.7	1,108.7	1,108.8	1,108.9	1,109.8	1,110.3	1,110.4	1,110.5	1,110.6	0.9	0.8	200-Year
3,530	Golf Course Bridge 1	1,107.6	1,106.9	1,106.5	1,107.0	1,107.2	1,107.3	1,107.4	1,107.5	1,107.7	1,107.7	1,107.9	1,108.0	1,108.0	1,108.0	1,108.0	0.1	-0.8	5-Year
3,431	Golf Course Bridge 2	1,107.1	1,106.9	1,106.1	1,106.5	1,106.8	1,107.1	1,107.3	1,107.5	1,107.6	1,107.7	1,107.8	1,107.9	1,108.0	1,108.0	1,108.0	1.7	-0.8	20-Year
3,390	Golf Course Bridge 3	1,107.2	1,106.9	1,106.1	1,106.4	1,106.5	1,106.7	1,106.9	1,107.0	1,107.2	1,107.3	1,107.5	1,107.6	1,107.6	1,107.9	1,107.9	2.5	-0.4	50-Year



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Table 23: Effects on Culverts along the Elbow River and Lott Creek

Culvert Station (m)	Name	Minimum Roadway Elevation (m)	Top of Culvert (m)	Simulated Water Levels for Various Flood Events (m), Rounded to the Nearest Decimetre													Average 100-year Flood Flow Velocity (m/s)	100-year Flood Clearance (m)	Flood Event Causing Pressure Flow
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year			
29,253	Highway 8 Bridge	1,107.3	1,105.9	1,102.7	1,103.3	1,103.8	1,104.3	1,104.7	1,105.1	1,105.4	1,105.7	1,106.7	1,107.2	1,107.6	1,107.8	1,108.0	2.5	0.2	200-Year
5,239	Misty Morning Drive Culvert	1,116.7	1,115.9	1,115.4	1,116.3	1,116.6	1,116.8	1,116.9	1,117.0	1,117.0	1,117.1	1,117.2	1,117.3	1,117.3	1,117.4	1,117.4	2.5	-1.2	5-Year
5,015	Elbow Valley Lake Culvert	1,117.0	1,114.6	1,115.2	1,115.5	1,115.6	1,115.8	1,115.9	1,116.0	1,116.0	1,116.2	1,116.6	1,116.9	1,117.0	1,117.1	1,117.1	4.4	-1.6	2-Year
4,581	Lott Creek Hollow Culvert	1,114.6	1,113.9	1,113.6	1,113.6	1,113.7	1,113.7	1,113.7	1,113.8	1,113.8	1,113.9	1,114.9	1,115.0	1,115.1	1,115.2	1,115.2	2.6	0.1	200-Year
4,482	Wolfwillow Lane Culvert	1,114.6	1,113.4	1,113.1	1,113.2	1,113.2	1,113.3	1,113.3	1,113.3	1,113.4	1,113.5	1,114.3	1,114.5	1,114.5	1,114.6	1,114.7	2.2	-0.0	100-Year
4,273	Coulee Ridge Culvert	1,112.2	1,111.8	1,111.2	1,111.3	1,111.3	1,111.4	1,111.4	1,111.4	1,111.4	1,111.5	1,112.0	1,112.3	1,112.4	1,112.5	1,112.6	2.4	0.3	200-Year
3,933	Owl Haven Culvert	1,109.8	1,108.5	1,107.9	1,108.0	1,108.1	1,108.2	1,108.3	1,108.5	1,108.6	1,108.7	1,109.7	1,110.1	1,110.3	1,110.4	1,110.5	1.7	-0.2	75-Year
3,390	Golf Course Bridge 3	1,107.2	1,106.9	1,106.1	1,106.4	1,106.5	1,106.7	1,106.9	1,107.0	1,107.2	1,107.3	1,107.5	1,107.6	1,107.6	1,107.9	1,107.9	2.5	-0.4	50-Year

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4.0 FLOOD WATER LEVEL AND DEPTH DATA

4.1 GIS Data Specifications

The following GIS data is provided for each of the mapped flood events:

- inundation polygons;
- water surface elevation TINs;
- water surface elevation rasters; and
- flood depth rasters.

All GIS data is created in ArcGIS Version 10.7 compatible format in the native study coordinate system [Canadian Spatial Reference System, North American Datum of 1983 (CSRS NAD83), Epoch 2002 and 3-Degree Transverse Mercator projection with the Central Meridian of 114° (3TM 114)]. All raster files have a spatial resolution of 0.5 m.

The inundation polygons and raster files are stored in ArcGIS file geodatabases (Version 10.7). Water surface elevation TINs are stored as ArcGIS Terrain datasets in file geodatabases (Version 10.7).

4.2 General Comments

Water surface elevation TINs cover all areas between cross sections and in special inundation areas within the study area, including through dry areas. Corresponding water surface elevation and flood depth rasters are clipped to the inundation extents for each mapped flood event.

The full set of open water flood inundation maps are provided in a separate document, referred to as the Open Water Flood Inundation Map Library.

5.0 CONCLUSIONS

The calibrated HEC-RAS models and the LiDAR-derived DTMs provided a good basis for simulating flood levels and preparing the inundation maps for the 2-, 5-, 10-, 20-, 35-, 50-, 75-, 100-, 200-, 350-, 500-, 750-, and 1,000-year open water floods, including direct and potential flood control structure failure inundation areas.

Based on the simulation results, residential and commercial/industrial areas along the Bow River, Elbow River, Bragg Creek, and Lott Creek that are expected to be affected by open water flooding up to the 1,000-year flood have been identified. This includes central parts of Calgary as well as residential areas throughout the study area, several golf courses, and two water treatment plants. Detailed descriptions of all affected areas and a list of affected bridges are provided in Section 3.5.



Report Signature Page

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APPENDIX A

Computed Open Water Flood Levels

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BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B6_USBC_Prince	69,677	1074.20	1077.21	1077.77	1078.23	1078.73	1079.18	1079.47	1079.83	1080.08	1080.76	1081.37	1081.80	1082.30	1082.68	XS 1
Bow River	B6_USBC_Prince	69,470	1074.40	1076.98	1077.51	1077.95	1078.43	1078.85	1079.13	1079.47	1079.71	1080.35	1080.92	1081.33	1081.80	1082.16	XS 2
Bow River	B6_USBC_Prince	69,224	1074.20	1076.68	1077.12	1077.48	1077.87	1078.24	1078.50	1078.80	1079.01	1079.57	1080.04	1080.31	1080.68	1080.98	XS 3
Bow River	B6_USBC_Prince	69,034	1074.40	1076.28	1076.72	1077.11	1077.56	1077.97	1078.26	1078.59	1078.83	1079.44	1079.94	1080.29	1080.71	1081.05	XS 4
Bow River	B6_USBC_Prince	68,801	1073.40	1075.60	1076.19	1076.67	1077.18	1077.64	1077.95	1078.30	1078.55	1079.18	1079.68	1080.01	1080.47	1080.82	XS 5
Bow River	B6_USBC_Prince	68,607	1073.00	1075.38	1075.98	1076.45	1076.94	1077.38	1077.66	1077.99	1078.23	1078.84	1079.34	1079.68	1080.10	1080.48	XS 6
Bow River	B6_USBC_Prince	68,262	1072.00	1074.90	1075.55	1076.06	1076.60	1077.07	1077.38	1077.74	1078.01	1078.64	1079.17	1079.53	1079.99	1080.40	XS 7
Bow River	B6_USBC_Prince	67,833	1070.80	1074.52	1075.04	1075.44	1075.83	1076.17	1076.39	1076.65	1076.83	1077.34	1077.81	1078.15	1078.62	1078.93	XS 8
Bow River	B6_USBC_Prince	67,522	1072.00	1074.18	1074.62	1074.97	1075.36	1075.70	1075.94	1076.21	1076.42	1076.98	1077.50	1077.87	1078.36	1078.78	XS 9
Bow River	B6_USBC_Prince	67,197	1071.00	1073.38	1073.93	1074.29	1074.68	1075.03	1075.29	1075.60	1075.83	1076.45	1077.01	1077.42	1077.95	1078.40	XS 10
Bow River	B6_USBC_Prince	66,720	1070.00	1072.51	1073.15	1073.66	1074.14	1074.57	1074.86	1075.21	1075.46	1076.10	1076.71	1077.14	1077.72	1078.21	XS 11
Bow River	B6_USBC_Prince	66,484	1068.80	1072.13	1072.70	1073.13	1073.66	1074.15	1074.48	1074.85	1075.10	1075.79	1076.44	1076.90	1077.50	1078.00	XS 12
Bow River	B6_USBC_Prince	66,280	1068.80	1071.70	1072.29	1072.75	1073.26	1073.69	1073.97	1074.31	1074.57	1075.33	1076.02	1076.50	1077.13	1077.66	XS 13
Bow River	B6_USBC_Prince	66,148	1069.20	1071.54	1072.20	1072.73	1073.30	1073.78	1074.09	1074.46	1074.73	1075.47	1076.14	1076.61	1077.23	1077.75	XS 14; U/S of Stoney Trail Bridge
Bow River	B6_USBC_Prince	66,062	1068.80	1071.50	1072.17	1072.71	1073.28	1073.76	1074.07	1074.44	1074.71	1075.44	1076.11	1076.58	1077.19	1077.71	XS 15; D/S of Stoney Trail Bridge
Bow River	B6_USBC_Prince	65,934	1068.60	1071.40	1072.06	1072.57	1073.12	1073.58	1073.88	1074.23	1074.49	1075.19	1075.84	1076.29	1076.89	1077.40	XS 16
Bow River	B6_USBC_Prince	65,837	1068.00	1071.17	1071.72	1072.13	1072.56	1072.92	1073.16	1073.47	1073.71	1074.39	1075.09	1075.57	1076.28	1076.91	XS 17
Bow River	B6_USBC_Prince	65,687	1067.80	1071.01	1071.54	1071.96	1072.40	1072.77	1073.03	1073.35	1073.60	1074.34	1075.06	1075.55	1076.26	1076.88	XS 18
Bow River	B6_USBC_Prince	65,467	1068.40	1070.75	1071.28	1071.68	1072.11	1072.49	1072.78	1073.15	1073.43	1074.24	1075.01	1075.54	1076.28	1076.92	XS 19
Bow River	B6_USBC_Prince	65,266	1068.30	1070.35	1070.91	1071.36	1071.84	1072.28	1072.60	1073.00	1073.30	1074.16	1074.95	1075.48	1076.23	1076.88	XS 20
Bow River	B6_USBC_Prince	65,103	1067.80	1070.11	1070.70	1071.16	1071.65	1072.12	1072.46	1072.88	1073.19	1074.07	1074.87	1075.42	1076.18	1076.83	XS 21
Bow River	B6_USBC_Prince	64,915	1068.00	1069.83	1070.45	1070.95	1071.48	1071.99	1072.35	1072.79	1073.12	1074.02	1074.83	1075.38	1076.15	1076.82	XS 22
Bow River	B6_USBC_Prince	64,750	1067.21	1069.56	1070.18	1070.69	1071.28	1071.81	1072.19	1072.64	1072.97	1073.88	1074.70	1075.24	1076.02	1076.68	XS 23
Bow River	B6_USBC_Prince	64,557	1066.40	1069.33	1069.90	1070.35	1070.83	1071.24	1071.53	1071.88	1072.11	1072.82	1073.46	1073.87	1074.45	1075.38	XS 24; U/S of 85th Street Bridge
Bow River	B6_USBC_Prince	64,528	1066.40	1069.27	1069.83	1070.26	1070.71	1071.11	1071.38	1071.71	1071.94	1072.58	1073.19	1073.60	1074.07	1074.32	XS 25; D/S of 85th Street Bridge
Bow River	B6_USBC_Prince	64,470	1066.73	1069.17	1069.71	1070.13	1070.58	1070.98	1071.27	1071.61	1071.86	1072.53	1073.18	1073.63	1074.14	1074.46	XS 26
Bow River	B6_USBC_Prince	64,212	1065.82	1068.66	1069.27	1069.74	1070.26	1070.72	1071.05	1071.44	1071.72	1072.47	1073.19	1073.69	1074.25	1074.66	XS 27
Bow River	B6_USBC_Prince	63,991	1064.80	1068.16	1068.86	1069.43	1070.00	1070.50	1070.85	1071.26	1071.55	1072.33	1073.07	1073.59	1074.17	1074.59	XS 28
Bow River	B6_USBC_Prince	63,911	1064.20	1068.04	1068.76	1069.32	1069.90	1070.40	1070.74	1071.15	1071.43	1072.19	1072.92	1073.43	1074.03	1074.48	XS 29; U/S of Bowmont Bridge
Bow River	B6_USBC_Prince	63,892	1064.22	1068.02	1068.72	1069.27	1069.84	1070.35	1070.69	1071.10	1071.38	1072.14	1072.88	1073.38	1073.98	1074.44	XS 30; D/S of Bowmont Bridge
Bow River	B6_USBC_Prince	63,823	1063.20	1067.93	1068.60	1069.15	1069.73	1070.25	1070.60	1071.02	1071.30	1072.07	1072.81	1073.31	1073.91	1074.38	XS 31; U/S of CP Rail Twin Bridges
Bow River	B6_USBC_Prince	63,795	1062.40	1067.95	1068.62	1069.16	1069.72	1070.19	1070.51	1070.89	1071.14	1071.82	1072.38	1072.76	1073.20	1073.52	XS 32; D/S of CP Rail Twin Bridges
Bow River	B6_USBC_Prince	63,720	1064.60	1067.88	1068.57	1069.10	1069.65	1070.11	1070.43	1070.80	1071.05	1071.73	1072.30	1072.69	1073.13	1073.47	XS 33
Bow River	B6_USBC_Prince	63,575	1065.00	1067.68	1068.32	1068.84	1069.40	1069.89	1070.23	1070.62	1070.88	1071.56	1072.12	1072.49	1072.94	1073.28	XS 34
Bow River	B6_USBC_Prince	63,403	1064.84	1067.49	1068.16	1068.69	1069.24	1069.73	1070.06	1070.44	1070.68	1071.33	1071.85	1072.19	1072.63	1072.95	XS 35
Bow River	B6_USBC_Prince	63,152	1063.20	1067.22	1067.82	1068.30	1068.80	1069.22	1069.48	1069.79	1069.98	1070.45	1070.92	1071.24	1071.64	1071.93	XS 36
Bow River	B6_USBC_Prince	62,954	1063.60	1066.95	1067.48	1067.90	1068.32	1068.68	1068.92	1069.19	1069.39	1069.91	1070.38	1070.71	1071.10	1071.41	XS 37
Bow River	B6_USBC_Prince	62,746	1064.20	1066.55	1067.09	1067.51	1067.93	1068.29	1068.53	1068.82	1069.02	1069.57	1070.06	1070.39	1070.81	1071.12	XS 38



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B6_USBC_Prince	62,477	1063.80	1065.95	1066.53	1066.96	1067.42	1067.82	1068.09	1068.41	1068.63	1069.21	1069.71	1070.06	1070.49	1070.82	XS 39
Bow River	B6_USBC_Prince	62,155	1062.60	1065.59	1066.22	1066.66	1067.12	1067.53	1067.81	1068.12	1068.34	1068.91	1069.41	1069.75	1070.18	1070.51	XS 40
Bow River	B6_USBC_Prince	61,879	1061.20	1065.22	1065.82	1066.26	1066.74	1067.15	1067.42	1067.72	1067.93	1068.45	1068.89	1069.21	1069.61	1069.93	XS 41
Bow River	B6_USBC_Prince	61,402	1061.60	1064.46	1065.09	1065.55	1066.00	1066.37	1066.60	1066.88	1067.08	1067.65	1068.17	1068.53	1068.97	1069.34	XS 42
Bow River	B6_USBC_Prince	61,123	1061.60	1064.00	1064.66	1065.17	1065.71	1066.13	1066.39	1066.70	1066.92	1067.53	1068.07	1068.44	1068.90	1069.27	XS 43
Bow River	B6_USBC_Prince	60,868	1060.60	1063.56	1064.31	1064.91	1065.50	1065.94	1066.22	1066.55	1066.77	1067.40	1067.95	1068.32	1068.78	1069.16	XS 44
Bow River	B6_USBC_Prince	60,688	1058.64	1063.37	1064.07	1064.61	1065.14	1065.57	1065.85	1066.18	1066.42	1067.10	1067.67	1068.05	1068.53	1068.91	XS 45
Bow River	B6_USBC_Prince	60,540	1057.39	1063.20	1063.83	1064.33	1064.84	1065.28	1065.56	1065.91	1066.19	1066.96	1067.56	1067.95	1068.43	1068.82	XS 46
Bow River	B6_USBC_Prince	60,382	1060.00	1062.92	1063.51	1063.99	1064.53	1065.00	1065.32	1065.70	1066.01	1066.83	1067.45	1067.85	1068.33	1068.73	XS 47
Bow River	B6_USBC_Prince	60,250	1060.20	1062.66	1063.25	1063.74	1064.30	1064.80	1065.14	1065.51	1065.86	1066.71	1067.34	1067.74	1068.22	1068.62	XS 48
Bow River	B6_USBC_Prince	60,089	1060.00	1062.36	1062.96	1063.45	1064.03	1064.56	1064.89	1065.26	1065.64	1066.52	1067.14	1067.54	1068.03	1068.43	XS 49
Bow River	B6_USBC_Prince	59,957	1060.00	1062.07	1062.67	1063.18	1063.75	1064.26	1064.63	1065.04	1065.44	1066.39	1067.01	1067.40	1067.90	1068.32	XS 50; U/S of Hextall Bridge
Bow River	B6_USBC_Prince	59,929	1060.00	1061.86	1062.43	1062.92	1063.47	1063.94	1064.23	1064.57	1064.91	1065.70	1066.38	1066.78	1067.33	1067.84	XS 51; Between Hextall Bridge and Shouldice Bridge
Bow River	B6_USBC_Prince	59,893	1059.93	1061.77	1062.36	1062.86	1063.41	1063.89	1064.21	1064.55	1064.82	1065.43	1066.02	1066.46	1067.14	1067.75	XS 52; D/S of Shouldice Bridge
Bow River	B6_USBC_Prince	59,651	1058.80	1061.25	1061.90	1062.43	1063.03	1063.52	1063.84	1064.17	1064.43	1065.05	1065.85	1066.37	1067.10	1067.72	XS 53
Bow River	B6_USBC_Prince	59,544	1058.01	1061.15	1061.79	1062.33	1062.94	1063.45	1063.78	1064.11	1064.31	1065.12	1065.89	1066.40	1067.12	1067.73	XS 54; U/S of Trans-Canada Hwy Bridge
Bow River	B6_USBC_Prince	59,488	1056.60	1061.05	1061.63	1062.09	1062.56	1062.98	1063.25	1063.58	1063.79	1064.19	1065.56 ⁽¹⁾	1065.97 ⁽¹⁾	1066.55 ⁽¹⁾	1067.04 ⁽¹⁾	XS 55; D/S of Trans-Canada Hwy Bridge
Bow River	B6_USBC_Prince	59,392	1058.00	1060.97	1061.55	1062.02	1062.51	1062.95	1063.24	1063.60	1063.84	1064.31	1064.99	1065.23	1065.58	1065.85	XS 56
Bow River	B6_USBC_Prince	59,231	1057.40	1060.65	1061.17	1061.59	1062.03	1062.44	1062.76	1063.19	1063.46	1064.22	1064.61	1064.89	1065.34	1065.65	XS 57
Bow River	B6_USBC_Prince	59,071	1057.27	1060.22	1060.63	1060.97	1061.36	1061.76	1062.05	1062.40	1062.69	1063.50	1064.13	1064.59	1065.15	1065.49	XS 58
Bow River	B6_USBC_Prince	58,789	1057.60	1059.57	1060.06	1060.51	1061.02	1061.51	1061.86	1062.27	1062.57	1063.32	1063.94	1064.37	1064.90	1065.24	XS 59
Bow River	B6_USBC_Prince	58,702	1057.00	1059.30	1059.84	1060.31	1060.84	1061.33	1061.68	1062.09	1062.40	1063.14	1063.81	1064.29	1064.84	1065.19	XS 60
Bow River	B6_USBC_Prince	58,530	1056.40	1058.94	1059.55	1060.07	1060.64	1061.15	1061.51	1061.94	1062.25	1063.01	1063.64	1064.14	1064.73	1065.08	XS 61
Bow River	B6_USBC_Prince	58,335	1055.00	1058.63	1059.19	1059.64	1060.14	1060.59	1060.90	1061.27	1061.54	1062.26	1063.06	1063.58	1064.19	1064.52	XS 62
Bow River	B6_USBC_Prince	58,091	1055.60	1058.31	1058.83	1059.26	1059.74	1060.17	1060.47	1060.83	1061.09	1061.67	1062.17	1062.49	1062.88	1063.21	XS 63
Bow River	B6_USBC_Prince	57,831	1055.80	1057.88	1058.39	1058.80	1059.27	1059.69	1059.98	1060.34	1060.61	1061.35	1061.99	1062.41	1062.87	1063.17	XS 64; Montgomery Berm on LOB
Bow River	B6_USBC_Prince	57,610	1055.39	1057.35	1057.91	1058.39	1058.96	1059.43	1059.76	1060.16	1060.46	1061.20	1061.86	1062.29	1062.75	1063.08	XS 65; Montgomery Berm on LOB
Bow River	B6_USBC_Prince	57,480	1055.00	1057.02	1057.59	1058.06	1058.62	1059.10	1059.44	1059.84	1060.13	1060.89	1061.59	1062.05	1062.49	1062.83	XS 66
Bow River	B6_USBC_Prince	57,219	1053.80	1056.54	1057.10	1057.56	1058.06	1058.52	1058.85	1059.24	1059.53	1060.41	1061.19	1061.66	1062.18	1062.53	XS 67
Bow River	B6_USBC_Prince	57,081	1053.51	1056.33	1056.88	1057.33	1057.83	1058.28	1058.60	1059.01	1059.31	1060.20	1061.04	1061.47	1061.99	1062.32	XS 68; U/S of Harry Boothman Bridge
Bow River	B6_USBC_Prince	57,049	1053.00	1056.26	1056.79	1057.22	1057.71	1058.16	1058.48	1058.88	1059.17	1059.99	1060.72	1061.16	1061.59	1061.93	XS 69; D/S of Harry Boothman Bridge
Bow River	B6_USBC_Prince	56,912	1053.00	1056.12	1056.63	1057.05	1057.54	1057.98	1058.31	1058.70	1059.00	1059.81	1060.53	1060.93	1061.35	1061.64	XS 70
Bow River	B6_USBC_Prince	56,731	1053.51	1055.87	1056.32	1056.73	1057.22	1057.69	1058.03	1058.45	1058.77	1059.63	1060.40	1060.84	1061.30	1061.61	XS 71
Bow River	B6_USBC_Prince	56,529	1052.80	1055.46	1055.93	1056.39	1056.95	1057.48	1057.85	1058.31	1058.65	1059.59	1060.43	1060.89	1061.37	1061.68	XS 72
Bow River	B6_USBC_Prince	56,353	1052.78	1054.96	1055.61	1056.15	1056.77	1057.33	1057.71	1058.19	1058.53	1059.47	1060.31	1060.77	1061.24	1061.55	XS 73
Bow River	B6_USBC_Prince	56,076	1051.40	1054.47	1055.09	1055.59	1056.14	1056.62	1056.95	1057.35	1057.66	1058.55	1059.56	1060.11	1060.62	1060.95	XS 74
Bow River	B6_USBC_Prince	55,902	1050.40	1054.26	1054.79	1055.21	1055.67	1056.06	1056.32	1056.63	1056.84	1057.36	1057.75	1058.57	1059.25	1059.64	XS 75



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B6_USBC_Prince	55,631	1051.60	1054.00	1054.48	1054.87	1055.30	1055.68	1055.94	1056.24	1056.45	1056.99	1057.46	1057.75	1058.12	1058.41	XS 76
Bow River	B6_USBC_Prince	55,434	1051.80	1053.74	1054.19	1054.58	1055.02	1055.42	1055.69	1056.01	1056.24	1056.87	1057.42	1057.78	1058.22	1058.53	XS 77
Bow River	B6_USBC_Prince	55,322	1051.00	1053.48	1054.00	1054.42	1054.88	1055.31	1055.60	1055.94	1056.18	1056.85	1057.42	1057.79	1058.24	1058.57	XS 78
Bow River	B6_USBC_Prince	54,971	1050.00	1052.86	1053.32	1053.69	1054.09	1054.45	1054.69	1055.00	1055.25	1055.89	1056.45	1056.82	1057.25	1057.55	XS 79
Bow River	B6_USBC_Prince	54,799	1050.20	1052.60	1053.05	1053.41	1053.80	1054.16	1054.41	1054.72	1054.96	1055.62	1056.19	1056.58	1057.02	1057.33	XS 80
Bow River	B6_USBC_Prince	54,612	1050.40	1052.28	1052.70	1053.03	1053.40	1053.74	1054.00	1054.34	1054.61	1055.36	1055.96	1056.35	1056.80	1057.11	XS 81
Bow River	B6_USBC_Prince	54,403	1049.60	1051.75	1052.09	1052.37	1052.77	1053.21	1053.56	1054.01	1054.34	1055.17	1055.81	1056.22	1056.67	1056.98	XS 82
Bow River	B6_USBC_Prince	54,141	1049.00	1051.17	1051.60	1052.04	1052.60	1053.14	1053.53	1054.00	1054.34	1055.19	1055.85	1056.28	1056.74	1057.07	XS 83
Bow River	B6_USBC_Prince	53,940	1048.20	1050.79	1051.35	1051.86	1052.47	1053.03	1053.43	1053.91	1054.25	1055.12	1055.78	1056.21	1056.68	1057.00	XS 84
Bow River	B6_USBC_Prince	53,690	1047.80	1050.29	1050.87	1051.36	1051.94	1052.47	1052.85	1053.29	1053.61	1054.42	1055.17	1055.69	1056.21	1056.56	XS 85
Bow River	B6_USBC_Prince	53,575	1047.60	1050.08	1050.62	1051.10	1051.64	1052.15	1052.51	1052.93	1053.22	1053.91	1054.59	1055.11	1055.67	1056.01	XS 86
Bow River	B6_USBC_Prince	53,523	1047.40	1049.95	1050.48	1050.95	1051.50	1052.01	1052.37	1052.80	1053.08	1053.70	1054.26	1054.77	1055.24	1055.46	XS 87; U/S of Crowchild Trail Bridge
Bow River	B6_USBC_Prince	53,475	1047.60	1049.77	1050.25	1050.71	1051.25	1051.76	1052.12	1052.54	1052.85	1053.73	1054.55	1055.04	1055.54	1055.83	XS 88; D/S of Crowchild Trail Bridge
Bow River	B6_USBC_Prince	53,299	1047.13	1049.10	1049.78	1050.31	1050.91	1051.46	1051.84	1052.30	1052.63	1053.64	1054.52	1055.02	1055.53	1055.84	XS 89
Bow River	B6_USBC_Prince	53,127	1044.00	1048.96	1049.58	1050.06	1050.57	1051.03	1051.34	1051.70	1051.96	1052.59	1053.17	1053.45	1054.08	1054.57	XS 90
Bow River	B6_USBC_Prince	52,944	1044.63	1048.84	1049.42	1049.89	1050.40	1050.85	1051.17	1051.53	1051.79	1052.42	1052.93	1053.09	1053.70	1054.15	XS 91; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,791	1045.53	1048.59	1049.13	1049.58	1050.07	1050.51	1050.82	1051.19	1051.46	1052.23	1052.87	1053.11	1053.32	1053.52	XS 92; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,701	1045.56	1048.27	1048.81	1049.25	1049.72	1050.16	1050.45	1050.81	1051.06	1051.90	1052.73	1052.95	1053.08	1053.48	XS 93; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,614	1045.00	1048.10	1048.66	1049.11	1049.60	1050.03	1050.33	1050.69	1050.95	1051.65	1052.64	1052.82	1052.94	1053.47	XS 94; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,484	1045.21	1047.97	1048.51	1048.94	1049.40	1049.82	1050.10	1050.43	1050.67	1051.29	1051.73	1052.81	1052.97	1053.53	XS 95; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,228	1045.40	1047.60	1048.10	1048.49	1048.93	1049.32	1049.59	1049.91	1050.14	1050.72	1050.91	1051.32	1052.79	1053.35	XS 96; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,076	1045.12	1047.33	1047.82	1048.20	1048.64	1049.04	1049.30	1049.63	1049.86	1050.43	1050.60 ⁽¹⁾	1051.16 ⁽¹⁾	1051.55 ⁽¹⁾	1051.81 ⁽¹⁾	XS 97; U/S of Mewata Bridge; West Hillhurst Berm on LOB
Bow River	B6_USBC_Prince	52,022	1045.20	1047.20	1047.67	1048.03	1048.45	1048.85	1049.10	1049.42	1049.64	1050.14	1050.49	1051.11	1051.11 ⁽²⁾	1051.27	XS 98; D/S of Mewata Bridge; Kensington Berm on LOB
Bow River	B6_USBC_Prince	51,854	1044.67	1046.74	1047.20	1047.58	1048.03	1048.46	1048.74	1049.09	1049.31	1049.79	1050.08	1050.24	1050.70	1050.95	XS 99; Kensington Berm on LOB
Bow River	B6_USBC_Prince	51,663	1043.40	1046.37	1046.81	1047.19	1047.68	1048.15	1048.47	1048.87	1049.10	1049.68	1050.03	1050.25	1050.46	1050.74	XS 100; Kensington Berm on LOB
Bow River	B6_USBC_Prince	51,449	1043.80	1045.87	1046.34	1046.77	1047.31	1047.82	1048.18	1048.60	1048.83	1049.51	1049.86	1050.10	1050.32	1050.64	XS 101; Kensington Berm on LOB
Bow River	B6_USBC_Prince	51,286	1042.60	1045.44	1045.99	1046.48	1047.06	1047.59	1047.96	1048.40	1048.61	1049.08	1049.76	1049.68 ⁽¹⁾	1050.21	1050.54	XS 102; U/S of Louise Bridge
Bow River	B6_USBC_Prince	51,244	1042.61	1045.08	1045.77	1046.31	1046.90	1047.42	1047.77	1048.18	1048.35	1048.81	1049.27	1049.57	1050.05	1050.41	XS 103; D/S of Louise Bridge
Bow River	B6_USBC_Prince	51,166	1042.37	1044.85	1045.59	1046.11	1046.69	1047.20	1047.54	1047.92	1048.04	1048.79	1049.37	1049.51	1050.01	1050.37	XS 104; U/S of NW LRT Bridge; Sunnyside Berm on LOB
Bow River	B6_USBC_Prince	51,135	1041.80	1044.75	1045.47	1046.00	1046.56	1047.06	1047.40	1047.79	1047.92	1048.72	1049.31	1049.43	1049.94	1050.32	XS 105; D/S of NW LRT Bridge; Sunnyside Berm on LOB
Bow River	B6_USBC_Prince	51,040	1041.40	1044.59	1045.28	1045.83	1046.41	1046.91	1047.25	1047.63	1047.74	1048.64	1049.22	1049.29	1049.77	1050.14	XS 106; Sunnyside Berm on LOB
Bow River	B6_USBC_Prince	50,888	1040.60	1044.61	1045.28	1045.83	1046.40	1046.90	1047.24	1047.70	1047.84	1048.59	1049.14	1049.19	1049.65	1050.03	XS 107; Sunnyside Berm on LOB
Bow River	B6_USBC_Prince	50,773	1041.20	1044.51	1045.16	1045.69	1046.24	1046.72	1047.04	1047.53	1047.64	1048.41	1049.05	1049.06	1049.57	1049.95	XS 108; U/S of Peace Bridge; Sunnyside Berm on LOB
Bow River	B6_USBC_Prince	50,737	1041.53	1044.47	1045.12	1045.64	1046.19	1046.66	1046.98	1047.35	1047.39	1047.92	1048.37	1049.06	1049.56	1049.96	XS 109; D/S of Peace Bridge; Sunnyside Berm on LOB



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B5_Prince	50,647	1039.41	1044.47	1045.12	1045.64	1046.19	1046.66	1046.99	1047.41	1047.48	1048.12	1048.68	1049.08	1049.59	1049.98	XS 110; Sunnyside Berm on LOB
Bow River	B5_Prince	50,538	1041.60	1044.28	1044.87	1045.34	1045.85	1046.31	1046.64	1046.99	1047.43	1048.10	1048.67	1049.08	1049.59	1049.99	XS 111; Sunnyside Berm on LOB
Bow River	B5_Prince	50,356	1040.60	1043.98	1044.60	1045.10	1045.64	1046.13	1046.49	1047.00	1047.35	1048.03	1048.62	1049.04	1049.55	1049.95	XS 112; Sunnyside Berm on LOB
Bow River	B5_Prince	50,157	1041.16	1043.70	1044.34	1044.86	1045.43	1045.96	1046.33	1046.85	1047.20	1047.91	1048.50	1048.93	1049.45	1049.85	XS 113; Sunnyside Berm on LOB
Bow River	B5_Prince	49,977	1039.28	1043.49	1044.10	1044.60	1045.16	1045.67	1046.07	1046.53	1046.89	1047.58	1048.17	1048.61	1049.15	1049.56	XS 114; U/S of Prince's Island Bridge; Sunnyside Berm on LOB
Bow River	B5_Prince	49,948	1039.00	1043.44	1044.04	1044.53	1045.06	1045.55	1045.92	1046.37	1046.72	1047.43	1048.05	1048.50	1049.04	1049.45	XS 115; D/S of Prince's Island Bridge; Sunnyside Berm on LOB
Bow River	B5_Prince	49,799	1039.40	1043.13	1043.75	1044.25	1044.80	1045.32	1045.71	1046.20	1046.57	1047.30	1047.93	1048.40	1048.95	1049.37	XS 116; Sunnyside Berm on LOB
Bow River	B5_Prince	49,673	1039.00	1042.71	1043.40	1043.94	1044.54	1045.11	1045.53	1046.05	1046.44	1047.19	1047.85	1048.31	1048.87	1049.29	XS 117; Sunnyside Berm on LOB
Bow River	B5_Prince	49,553	1039.20	1042.31	1042.93	1043.46	1044.08	1044.67	1045.11	1045.65	1046.05	1046.81	1047.47	1047.95	1048.52	1048.95	XS 118; Sunnyside Berm on LOB
Bow River	B5_Prince	49,465	1039.20	1042.06	1042.69	1043.24	1043.87	1044.47	1044.91	1045.45	1045.85	1046.61	1047.28	1047.77	1048.34	1048.77	XS 119; Sunnyside Berm on LOB
Bow River	B4_Prince_Zoo	49,338	1039.33	1041.97	1042.63	1043.19	1043.84	1044.45	1044.89	1045.44	1045.85	1046.60	1047.26	1047.75	1048.31	1048.75	XS 120; Sunnyside Berm on LOB
Bow River	B4_Prince_Zoo	49,287	1038.20	1041.89	1042.53	1043.09	1043.73	1044.33	1044.76	1045.30	1045.70	1046.51	1047.17	1047.65	1048.20	1048.62	XS 121; U/S of Centre St Bridge; Sunnyside Berm on LOB
Bow River	B4_Prince_Zoo	49,247	1038.33	1041.64	1042.25	1042.76	1043.35	1043.87	1044.24	1044.66	1044.95	1045.61	1046.17	1046.58	1046.94	1047.25	XS 122; D/S of Centre St Bridge; Memorial Drive Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	49,065	1038.80	1041.28	1041.91	1042.45	1043.05	1043.60	1043.99	1044.43	1044.71	1045.44	1046.01	1046.43	1046.79	1047.09	XS 123; Memorial Drive Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,937	1038.60	1041.04	1041.67	1042.20	1042.79	1043.32	1043.70	1044.11	1044.39	1044.98	1045.48	1045.88	1046.10	1046.34	XS 124; Memorial Drive Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,766	1038.08	1040.72	1041.37	1041.90	1042.50	1043.04	1043.41	1043.82	1044.08	1044.78	1045.29	1045.70	1045.87	1046.07	XS 125; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,535	1037.32	1040.37	1040.98	1041.48	1042.04	1042.53	1042.88	1043.22	1043.63	1044.35	1044.96	1045.49	1045.62	1045.86	XS 126; U/S of 4th Ave Flyover Bridge; Langevin Bridge Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,488	1036.60	1040.29	1040.87	1041.34	1041.85	1042.30	1042.61	1042.90	1043.19	1043.35	1044.73	1045.30	1045.30 ⁽²⁾	1045.48	XS 127; Between 4th Ave Flyover Bridge and Old Langevin Bridge; Langevin Bridge Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,450	1036.20	1040.26	1040.83	1041.29	1041.80	1042.24	1042.55	1042.82	1042.98	1043.24	1043.39	1043.56	1044.63	1044.96	XS 128; D/S of Old Langevin Bridge; Langevin Bridge Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,385	1037.20	1040.19	1040.73	1041.17	1041.66	1042.09	1042.39	1042.63	1042.75	1042.75 ⁽²⁾	1043.38	1043.84	1044.34	1044.79	XS 129; U/S of Edmonton Trail Bridge; Langevin Bridge Berm on LOB; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,341	1037.20	1040.10	1040.61	1041.02	1041.49	1041.89	1042.16	1042.43	1042.56	1043.41	1043.51	1043.61	1044.45	1044.80	XS 130; Between Edmonton Trail Bridge and Harry Kroeger Bridge; Riverwalk Berm on ROB
Bow River	B4_Prince_Zoo	48,290	1037.20	1040.03	1040.53	1040.95	1041.40	1041.81	1042.08	1042.40	1042.63	1043.26	1043.76	1044.06	1044.49	1044.79	XS 131; D/S of Harry Kroeger Bridge; Riverwalk Berm on ROB; Bridgeland Berm on LOB
Bow River	B3_Zoo	48,120	1037.40	1039.68	1040.19	1040.61	1041.07	1041.47	1041.74	1042.04	1042.27	1043.15	1043.68	1043.99	1044.44	1044.75	XS 132; Riverwalk Berm on ROB
Bow River	B3_Zoo	48,062	1037.20	1039.56	1040.05	1040.46	1040.91	1041.29	1041.54	1041.82	1042.02	1042.18	1042.31	1043.11	1043.62	1043.95	XS 133; U/S of St Patrick's Island Bridge; Riverwalk Berm on ROB
Bow River	B3_Zoo	48,012	1036.22	1039.52	1040.02	1040.42	1040.86	1041.25	1041.50	1041.77	1041.98	1042.69	1043.10	1043.46	1043.91	1044.23	XS 134; D/S of St Patrick's Island Bridge; Riverwalk Berm on ROB



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B3_Zoo	47,907	1036.60	1039.35	1039.81	1040.19	1040.62	1041.00	1041.25	1041.57	1041.81	1042.48	1042.89	1043.28	1043.74	1044.08	XS 135; Riverwalk Berm on ROB
Bow River	B3_Zoo	47,607	1036.00	1038.30	1038.80	1039.23	1039.64	1040.02	1040.26	1040.55	1040.78	1041.41	1041.78	1042.05	1042.36	1042.58	XS 136
Bow River	B2_Zoo	47,382	1034.20	1037.78	1038.39	1038.87	1039.36	1039.78	1040.04	1040.36	1040.61	1041.29	1041.69	1041.99	1042.34	1042.60	XS 137; West Inglewood Berm on ROB
Bow River	B2_Zoo	47,110	1033.40	1037.51	1038.14	1038.62	1039.13	1039.57	1039.83	1040.14	1040.39	1041.09	1041.49	1041.79	1042.14	1042.41	XS 138; West Inglewood Berm on ROB
Bow River	B2_Zoo	46,899	1033.64	1037.31	1037.92	1038.38	1038.87	1039.28	1039.52	1039.82	1040.06	1040.76	1041.14	1041.50	1041.87	1042.15	XS 139; U/S of St George's Island Bridge; West Inglewood Berm on ROB
Bow River	B2_Zoo	46,852	1034.60	1037.23	1037.83	1038.28	1038.75	1039.16	1039.40	1039.70	1039.93	1040.52	1040.85	1041.19	1041.64	1041.95	XS 140; D/S of St George's Island Bridge; West Inglewood Berm on ROB
Bow River	B2_Zoo	46,664	1034.80	1036.98	1037.56	1037.99	1038.46	1038.87	1039.10	1039.38	1039.60	1040.22	1040.58	1040.95	1041.43	1041.74	XS 141; West Inglewood Berm on ROB
Bow River	B2_Zoo	46,359	1034.40	1036.45	1037.12	1037.55	1038.03	1038.43	1038.61	1038.85	1039.03	1039.53	1040.19	1040.65	1041.18	1041.52	XS 142; Inglewood Flood Barrier on ROB
Bow River	B1_Zoo_DSBC	46,078	1033.40	1036.28	1036.94	1037.35	1037.83	1038.22	1038.38	1038.60	1038.76	1039.26	1039.85	1040.33	1040.90	1041.26	XS 143
Bow River	B1_Zoo_DSBC	45,933	1032.41	1036.24	1036.88	1037.27	1037.74	1038.11	1038.24	1038.44	1038.57	1038.99	1039.56	1039.94	1040.65	1041.08	XS 144
Bow River	B1_Zoo_DSBC	45,915	1032.00	1036.24	1036.88	1037.27	1037.74	1038.10	1038.23	1038.41	1038.53	1038.89	1039.29	1039.57	1039.98	1040.22	XS 145; U/S of CP Bridge
Bow River	B1_Zoo_DSBC	45,896	1031.41	1036.24	1036.88	1037.26	1037.72	1038.07	1038.19	1038.35	1038.46	1038.76	1038.99	1039.11	1039.36	1039.57	XS 146; D/S of CP Bridge
Bow River	B1_Zoo_DSBC	45,814	1031.80	1036.22	1036.85	1037.22	1037.67	1038.02	1038.14	1038.29	1038.39	1038.68	1038.91	1039.05	1039.36	1039.65	XS 147; Pearce Estate Park Berm on ROB
Bow River	B1_Zoo_DSBC	45,570	1031.20	1036.20	1036.83	1037.21	1037.66	1038.01	1038.12	1038.27	1038.39	1038.70	1038.94	1039.08	1039.40	1039.71	XS 148; U/S of Western Headworks Weir; Pearce Estate Park Berm on ROB
Bow River	B1_Zoo_DSBC	45,525	1032.00	1034.45	1035.10	1035.63	1036.16	1036.59	1036.87	1037.17	1037.41	1038.02	1038.60	1039.02	1039.53	1039.86	XS 149; D/S of Western Headworks Weir; Pearce Estate Park Berm on ROB
Bow River	B1_Zoo_DSBC	45,439	1031.40	1034.28	1034.92	1035.43	1035.97	1036.39	1036.67	1036.98	1037.21	1037.82	1038.47	1038.90	1039.43	1039.77	XS 150; Pearce Estate Park Berm on ROB
Bow River	B1_Zoo_DSBC	45,128	1029.49	1033.59	1034.27	1034.81	1035.38	1035.87	1036.18	1036.53	1036.80	1037.48	1038.18	1038.65	1039.22	1039.59	XS 151
Bow River	B1_Zoo_DSBC	44,792	1029.60	1032.95	1033.64	1034.17	1034.72	1035.18	1035.48	1035.80	1036.05	1036.80	1037.67	1038.23	1038.90	1039.31	XS 152
Bow River	B1_Zoo_DSBC	44,644	1028.80	1032.81	1033.46	1033.96	1034.47	1034.88	1035.13	1035.39	1035.59	1036.14	1036.85	1037.28	1037.82	1038.14	XS 153; U/S of Cushing Bridge
Bow River	B1_Zoo_DSBC	44,600	1028.01	1032.78	1033.41	1033.89	1034.38	1034.76	1034.99	1035.22	1035.39	1035.78	1036.10	1036.29	1036.50	1036.64	XS 154; D/S of Cushing Bridge
Bow River	B1_Zoo_DSBC	44,473	1023.88	1032.74	1033.35	1033.80	1034.27	1034.64	1034.86	1035.09	1035.26	1035.68	1036.04	1036.29	1036.59	1036.81	XS 155; South Inglewood Berm on ROB
Bow River	B1_Zoo_DSBC	44,315	1027.73	1032.65	1033.23	1033.67	1034.12	1034.48	1034.71	1034.94	1035.11	1035.56	1036.05	1036.36	1036.75	1037.04	XS 156; South Inglewood Berm on ROB
Bow River	B1_Zoo_DSBC	44,143	1029.20	1032.34	1032.86	1033.24	1033.66	1034.01	1034.24	1034.50	1034.69	1035.20	1035.67	1035.99	1036.36	1036.64	XS 157; South Inglewood Berm on ROB
Bow River	B1_Zoo_DSBC	43,992	1029.80	1031.99	1032.55	1032.97	1033.41	1033.80	1034.05	1034.31	1034.52	1035.04	1035.52	1035.85	1036.24	1036.54	XS 158
Bow River	B1_Zoo_DSBC	43,828	1029.20	1031.51	1032.13	1032.53	1032.97	1033.35	1033.60	1033.87	1034.09	1034.69	1035.28	1035.67	1036.12	1036.45	XS 159
Bow River	B1_Zoo_DSBC	43,607	1028.50	1031.01	1031.69	1032.07	1032.51	1032.88	1033.13	1033.42	1033.66	1034.40	1035.09	1035.51	1035.99	1036.33	XS 160
Bow River	B1_Zoo_DSBC	43,450	1027.60	1030.27	1030.88	1031.41	1031.96	1032.45	1032.77	1033.12	1033.41	1034.20	1034.93	1035.37	1035.86	1036.21	XS 161
Bow River	B1_Zoo_DSBC	43,395	1025.46	1030.51	1031.14	1031.62	1032.15	1032.60	1032.90	1033.23	1033.49	1034.23	1034.93	1035.36	1035.83	1036.17	XS 162
Bow River	B1_Zoo_DSBC	43,234	1027.07	1030.42	1031.05	1031.55	1032.10	1032.56	1032.86	1033.19	1033.46	1034.21	1034.92	1035.35	1035.82	1036.16	XS 163
Bow River	B1_Zoo_DSBC	42,997	1027.60	1030.01	1030.69	1031.22	1031.78	1032.25	1032.56	1032.89	1033.16	1033.94	1034.68	1035.13	1035.60	1035.95	XS 164
Bow River	B1_Zoo_DSBC	42,744	1026.20	1029.73	1030.42	1030.94	1031.48	1031.94	1032.23	1032.55	1032.82	1033.63	1034.39	1034.84	1035.31	1035.65	XS 165
Bow River	B1_Zoo_DSBC	42,565	1026.80	1029.29	1029.88	1030.35	1030.87	1031.35	1031.69	1032.07	1032.38	1033.29	1034.13	1034.59	1035.08	1035.46	XS 166
Bow River	B1_Zoo_DSBC	42,238	1026.20	1028.64	1029.36	1029.92	1030.52	1031.06	1031.41	1031.80	1032.13	1033.09	1033.97	1034.45	1034.95	1035.34	XS 167
Bow River	B1_Zoo_DSBC	42,093	1025.60	1028.32	1029.02	1029.54	1030.09	1030.62	1030.94	1031.33	1031.67	1032.70	1033.62	1034.21	1034.80	1035.24	XS 168
Bow River	B1_Zoo_DSBC	41,978	1025.40	1028.04	1028.72	1029.23	1029.80	1030.33	1030.71	1031.12	1031.48	1032.54	1033.42	1034.04	1034.66	1035.11	XS 169



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	41,828	1024.60	1027.78	1028.47	1028.99	1029.59	1030.18	1030.56	1030.97	1031.34	1032.41	1033.29	1033.76	1034.53	1034.95	XS 170
Bow River	B1_Zoo_DSBC	41,638	1024.70	1027.12	1028.10	1028.79	1029.49	1030.12	1030.52	1030.95	1031.33	1032.43	1033.32	1033.81	1034.42	1034.79	XS 171
Bow River	B1_Zoo_DSBC	41,373	1022.18	1027.21	1028.07	1028.71	1029.39	1030.00	1030.39	1030.81	1031.17	1032.22	1033.06	1033.50	1034.05	1034.35	XS 172; U/S of CN Bridge
Bow River	B1_Zoo_DSBC	41,320	1021.00	1027.17	1028.00	1028.61	1029.25	1029.83	1030.19	1030.58	1030.92	1031.93	1032.73	1033.01	1033.72	1034.18	XS 173; Between CN Bridge and CP Bridge
Bow River	B1_Zoo_DSBC	41,187	1023.40	1026.95	1027.71	1028.25	1028.79	1029.29	1029.56	1029.79	1030.02	1030.59	1031.09	1031.43	1031.61	1031.61 ⁽²⁾	XS 174; Between CP Bridge and Bonnybrook Bridge
Bow River	B1_Zoo_DSBC	41,122	1023.80	1026.77	1027.56	1028.10	1028.66	1029.18	1029.45	1029.68	1029.92	1030.53	1031.06	1031.42	1031.87	1032.29	XS 175; D/S of Bonnybrook Bridge
Bow River	B1_Zoo_DSBC	41,038	1023.60	1026.54	1027.30	1027.83	1028.36	1028.82	1029.10	1029.43	1029.68	1030.31	1030.90	1031.29	1031.79	1032.26	XS 176
Bow River	B1_Zoo_DSBC	40,878	1022.40	1026.31	1027.05	1027.56	1028.05	1028.48	1028.74	1029.09	1029.35	1030.01	1030.63	1031.06	1031.60	1032.11	XS 177
Bow River	B1_Zoo_DSBC	40,788	1022.96	1026.19	1026.94	1027.44	1027.93	1028.34	1028.61	1028.96	1029.23	1029.90	1030.54	1030.97	1031.53	1032.05	XS 178
Bow River	B1_Zoo_DSBC	40,663	1023.08	1025.98	1026.74	1027.24	1027.72	1028.14	1028.41	1028.78	1029.05	1029.75	1030.41	1030.85	1031.44	1031.98	XS 179
Bow River	B1_Zoo_DSBC	40,518	1021.87	1025.88	1026.64	1027.12	1027.59	1027.99	1028.24	1028.65	1028.93	1029.65	1030.33	1030.77	1031.37	1031.92	XS 180; U/S of Calf Robe Bridge
Bow River	B1_Zoo_DSBC	40,440	1021.60	1025.78	1026.50	1026.93	1027.33	1027.68	1027.87	1028.13	1028.33	1028.84	1029.36	1029.70	1030.20	1030.82	XS 181; D/S of Calf Robe Bridge
Bow River	B1_Zoo_DSBC	40,371	1020.40	1025.68	1026.38	1026.80	1027.21	1027.60	1027.81	1028.09	1028.32	1028.90	1029.43	1029.83	1030.35	1031.06	XS 182
Bow River	B1_Zoo_DSBC	40,254	1022.20	1025.51	1026.22	1026.63	1027.04	1027.43	1027.64	1027.94	1028.18	1028.77	1029.34	1029.75	1030.32	1031.03	XS 183
Bow River	B1_Zoo_DSBC	40,065	1021.00	1025.33	1026.04	1026.41	1026.77	1027.09	1027.22	1027.45	1027.64	1028.12	1028.65	1029.05	1029.70	1030.57	XS 184
Bow River	B1_Zoo_DSBC	39,997	1020.60	1025.31	1026.02	1026.38	1026.73	1027.05	1027.16	1027.37	1027.54	1027.98	1028.38	1028.68	1029.14	1029.96	XS 185; U/S of CN Bridge
Bow River	B1_Zoo_DSBC	39,942	1019.45	1025.29	1025.98	1026.32	1026.65	1026.93	1027.00	1027.19	1027.33	1027.64	1027.87	1028.01	1028.15	1028.24	XS 186; D/S of CN Bridge
Bow River	B1_Zoo_DSBC	39,841	1021.80	1025.12	1025.80	1026.13	1026.46	1026.78	1026.82	1027.02	1027.17	1027.55	1027.88	1028.11	1028.39	1028.62	XS 187
Bow River	B1_Zoo_DSBC	39,697	1021.00	1024.75	1025.37	1025.75	1026.10	1026.23 ⁽¹⁾	1026.35	1026.54	1026.70	1027.09	1027.45	1027.70	1028.02	1028.29	XS 188
Bow River	B1_Zoo_DSBC	39,587	1021.40	1024.52	1025.10	1025.58	1025.95	1026.02 ⁽¹⁾	1026.09	1026.28	1026.43	1026.82	1027.19	1027.46	1027.80	1028.07	XS 189
Bow River	B1_Zoo_DSBC	39,436	1021.00	1024.41	1024.97	1025.47	1025.83	1025.85 ⁽¹⁾	1025.87	1026.05	1026.19	1026.57	1026.95	1027.21	1027.57	1027.86	XS 190
Bow River	B1_Zoo_DSBC	39,313	1020.20	1024.27	1024.72	1025.13	1025.33 ⁽¹⁾	1025.47 ⁽¹⁾	1025.61	1025.78	1025.93	1026.35	1026.77	1027.05	1027.42	1027.67	XS 191
Bow River	B1_Zoo_DSBC	39,262	1019.80	1024.17	1024.54	1024.87	1025.12	1025.31	1025.51	1025.70	1025.85	1026.29	1026.71	1027.00	1027.37	1027.66	XS 192
Bow River	B1_Zoo_DSBC	39,120	1020.00	1023.81	1024.19	1024.50	1024.69	1024.95	1025.14	1025.35	1025.52	1026.01	1026.46	1026.76	1027.15	1027.43	XS 193
Bow River	B1_Zoo_DSBC	38,865	1020.40	1023.10	1023.60	1023.97	1024.30	1024.62	1024.84	1025.08	1025.28	1025.81	1026.30	1026.61	1027.02	1027.32	XS 194
Bow River	B1_Zoo_DSBC	38,725	1020.00	1022.72	1023.27	1023.69	1024.11	1024.46	1024.69	1024.95	1025.16	1025.71	1026.22	1026.53	1026.95	1027.25	XS 195
Bow River	B1_Zoo_DSBC	38,682	1019.80	1022.61	1023.17	1023.62	1024.07	1024.43	1024.66	1024.92	1025.12	1025.68	1026.19	1026.51	1026.92	1027.23	XS 196; Glenmore Trail Berm on ROB
Bow River	B1_Zoo_DSBC	38,513	1019.80	1022.17	1022.90	1023.40	1023.88	1024.24	1024.48	1024.74	1024.95	1025.53	1026.03	1026.36	1026.79	1027.10	XS 197; Glenmore Trail Berm on ROB
Bow River	B1_Zoo_DSBC	38,366	1018.60	1021.90	1022.64	1023.21	1023.71	1024.07	1024.30	1024.58	1024.80	1025.36	1025.91	1026.25	1026.70	1027.02	XS 198; Glenmore Trail Berm on ROB
Bow River	B1_Zoo_DSBC	38,283	1018.40	1021.76	1022.49	1022.99	1023.45	1023.84	1024.10	1024.40	1024.64	1025.26	1025.81	1026.17	1026.63	1026.96	XS 199
Bow River	B1_Zoo_DSBC	38,197	1017.20	1021.61	1022.31	1022.86	1023.37	1023.77	1024.04	1024.34	1024.58	1025.21	1025.75	1026.11	1026.58	1026.92	XS 200
Bow River	B1_Zoo_DSBC	38,125	1017.80	1021.50	1022.19	1022.70	1023.21	1023.63	1023.92	1024.23	1024.49	1025.13	1025.67	1026.02	1026.51	1026.88	XS 201
Bow River	B1_Zoo_DSBC	37,982	1017.40	1021.33	1022.00	1022.49	1022.99	1023.39	1023.66	1023.96	1024.20	1024.83	1025.36	1025.70	1026.14	1026.48	XS 202
Bow River	B1_Zoo_DSBC	37,683	1017.20	1020.81	1021.38	1021.86	1022.34	1022.75	1023.01	1023.31	1023.54	1024.12	1024.68	1025.07	1025.57	1025.93	XS 203
Bow River	B1_Zoo_DSBC	37,520	1016.20	1020.51	1021.04	1021.50	1021.95	1022.33	1022.56	1022.84	1023.06	1023.61	1024.11	1024.45	1024.90	1025.22	XS 204; U/S of Graves Bridge Upstream
Bow River	B1_Zoo_DSBC	37,480	1016.60	1020.41	1020.88	1021.33	1021.76	1022.12	1022.32	1022.59	1022.79	1023.30	1023.76	1024.06	1024.46	1024.75	XS 205; Between Graves Bridge Upstream and Graves Bridge Downstream
Bow River	B1_Zoo_DSBC	37,447	1016.80	1020.31	1020.75	1021.18	1021.61	1021.94	1022.11	1022.35	1022.54	1023.01	1023.42	1023.68	1024.02	1024.26	XS 206; D/S of Graves Bridge Downstream



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	37,301	1017.74	1019.57	1020.20	1020.74	1021.18	1021.55	1021.69	1021.93	1022.11	1022.59	1022.98	1023.25	1023.59	1023.84	XS 207
Bow River	B1_Zoo_DSBC	37,029	1015.60	1019.34	1020.00	1020.57	1021.01	1021.33	1021.56	1021.80	1021.98	1022.41	1022.82	1023.09	1023.44	1023.69	XS 208
Bow River	B1_Zoo_DSBC	36,882	1015.20	1019.23	1019.88	1020.45	1020.86	1021.19	1021.38	1021.60	1021.77	1022.20	1022.59	1022.85	1023.19	1023.44	XS 209
Bow River	B1_Zoo_DSBC	36,714	1014.95	1019.10	1019.71	1020.24	1020.62	1020.91	1021.09	1021.28	1021.43	1021.80	1022.13	1022.36	1022.65	1022.86	XS 210
Bow River	B1_Zoo_DSBC	36,303	1016.60	1018.64	1019.15	1019.50	1019.86	1020.14	1020.32	1020.52	1020.68	1021.08	1021.45	1021.71	1022.04	1022.29	XS 211
Bow River	B1_Zoo_DSBC	36,008	1015.40	1017.80	1018.50	1019.00	1019.44	1019.77	1019.98	1020.21	1020.38	1020.80	1021.19	1021.45	1021.80	1022.06	XS 212
Bow River	B1_Zoo_DSBC	35,723	1013.80	1017.43	1017.98	1018.40	1018.79	1019.09	1019.24	1019.45	1019.61	1020.06	1020.47	1020.76	1021.15	1021.44	XS 213
Bow River	B1_Zoo_DSBC	35,602	1014.20	1017.27	1017.77	1018.13	1018.48	1018.76	1018.98	1019.28	1019.46	1019.97	1020.42	1020.71	1021.08	1021.40	XS 214
Bow River	B1_Zoo_DSBC	35,419	1014.40	1016.89	1017.48	1017.93	1018.39	1018.75	1019.00	1019.31	1019.50	1020.01	1020.45	1020.75	1021.15	1021.45	XS 215
Bow River	B1_Zoo_DSBC	35,275	1014.60	1016.62	1017.26	1017.77	1018.26	1018.64	1018.90	1019.22	1019.41	1019.93	1020.38	1020.68	1021.08	1021.39	XS 216
Bow River	B1_Zoo_DSBC	35,136	1013.86	1016.51	1017.19	1017.71	1018.21	1018.58	1018.83	1019.15	1019.33	1019.84	1020.27	1020.57	1020.96	1021.27	XS 217
Bow River	B1_Zoo_DSBC	34,888	1012.00	1016.11	1016.82	1017.33	1017.83	1018.21	1018.46	1018.81	1018.96	1019.44	1019.83	1020.11	1020.51	1020.83	XS 218
Bow River	B1_Zoo_DSBC	34,780	1012.10	1015.94	1016.63	1017.09	1017.57	1017.95	1018.20	1018.57	1018.70	1019.09	1019.54	1019.87	1020.33	1020.67	XS 219; U/S of Eric Harvie Bridge
Bow River	B1_Zoo_DSBC	34,758	1012.20	1015.90	1016.58	1017.04	1017.52	1017.88	1018.11	1018.43	1018.61	1019.05	1019.48	1019.79	1020.25	1020.59	XS 220; D/S of Eric Harvie Bridge
Bow River	B1_Zoo_DSBC	34,557	1012.00	1015.55	1016.20	1016.68	1017.15	1017.51	1017.74	1018.07	1018.25	1018.68	1019.13	1019.49	1020.00	1020.38	XS 221
Bow River	B1_Zoo_DSBC	34,396	1012.00	1015.19	1015.87	1016.36	1016.85	1017.21	1017.43	1017.69	1017.89	1018.43	1018.96	1019.36	1019.91	1020.31	XS 222
Bow River	B1_Zoo_DSBC	34,071	1012.00	1014.41	1015.10	1015.60	1016.08	1016.48	1016.73	1017.03	1017.28	1018.00	1018.63	1019.08	1019.69	1020.10	XS 223; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	33,853	1011.20	1013.91	1014.51	1015.02	1015.55	1016.01	1016.31	1016.68	1016.98	1017.81	1018.47	1018.93	1019.58	1020.00	XS 224; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	33,754	1011.60	1013.87	1014.52	1015.03	1015.57	1016.01	1016.30	1016.65	1016.94	1017.76	1018.43	1018.89	1019.54	1019.96	XS 225; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	33,557	1011.00	1013.37	1014.12	1014.73	1015.34	1015.83	1016.14	1016.51	1016.81	1017.66	1018.35	1018.83	1019.49	1019.92	XS 226; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	33,266	1009.60	1012.77	1013.45	1014.02	1014.62	1015.18	1015.60	1016.07	1016.46	1017.41	1018.16	1018.65	1019.33	1019.76	XS 227; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	33,111	1009.60	1012.67	1013.45	1014.06	1014.67	1015.22	1015.60	1016.04	1016.40	1017.32	1018.03	1018.52	1019.21	1019.65	XS 228; Quarry Park Berm on LOB
Bow River	B1_Zoo_DSBC	32,923	1009.75	1012.37	1013.11	1013.70	1014.25	1014.74	1015.07	1015.47	1015.78	1016.74	1017.42	1017.91	1018.74	1019.27	XS 229
Bow River	B1_Zoo_DSBC	32,791	1007.81	1012.17	1012.85	1013.39	1013.87	1014.26	1014.52	1014.83	1015.08	1015.87	1016.13	1016.13 ⁽²⁾	1016.20	1016.87	XS 230; U/S of Ivor Strong Bridge
Bow River	B1_Zoo_DSBC	32,732	1007.21	1012.04	1012.71	1013.24	1013.68	1014.03	1014.25	1014.51	1014.70	1015.18	1015.64	1015.95	1016.34	1017.01	XS 231; D/S of Ivor Strong Bridge
Bow River	B1_Zoo_DSBC	32,582	1007.90	1011.80	1012.46	1012.98	1013.46	1013.82	1014.06	1014.32	1014.52	1015.03	1015.54	1015.89	1016.34	1016.66	XS 232
Bow River	B1_Zoo_DSBC	32,471	1008.39	1011.66	1012.38	1012.87	1013.36	1013.73	1013.97	1014.25	1014.46	1015.01	1015.52	1015.87	1016.30	1016.62	XS 233
Bow River	B1_Zoo_DSBC	32,331	1007.00	1011.57	1012.28	1012.76	1013.23	1013.60	1013.84	1014.12	1014.32	1014.86	1015.37	1015.72	1016.17	1016.50	XS 234
Bow River	B1_Zoo_DSBC	32,129	1006.44	1011.24	1011.90	1012.34	1012.74	1013.06	1013.30	1013.58	1013.81	1014.41	1014.96	1015.35	1015.86	1016.23	XS 235
Bow River	B1_Zoo_DSBC	31,930	1007.63	1010.75	1011.37	1011.79	1012.23	1012.64	1012.92	1013.24	1013.49	1014.12	1014.69	1015.08	1015.59	1015.96	XS 236
Bow River	B1_Zoo_DSBC	31,629	1007.60	1010.14	1010.72	1011.12	1011.53	1011.88	1012.11	1012.37	1012.57	1013.08	1013.52	1013.83	1014.22	1014.52	XS 237
Bow River	B1_Zoo_DSBC	31,348	1006.60	1009.84	1010.37	1010.71	1011.08	1011.39	1011.59	1011.81	1011.99	1012.42	1012.76	1012.99	1013.27	1013.43	XS 238
Bow River	B1_Zoo_DSBC	31,220	1006.20	1009.68	1010.18	1010.51	1010.87	1011.18	1011.37	1011.59	1011.77	1012.20	1012.52	1012.75	1012.89	1013.01	XS 239; U/S of Sue Higgins Bridge
Bow River	B1_Zoo_DSBC	31,186	1006.20	1009.62	1010.09	1010.38	1010.70	1010.96	1011.13	1011.32	1011.50	1011.84	1012.14	1012.34	1012.57	1012.74	XS 240; D/S of Sue Higgins Bridge
Bow River	B1_Zoo_DSBC	30,974	1007.60	1009.06	1009.50	1009.87	1010.18	1010.47	1010.62	1010.79	1010.93	1011.24	1011.50	1011.66	1011.85	1011.98	XS 241
Bow River	B1_Zoo_DSBC	30,757	1005.80	1008.47	1009.03	1009.46	1009.81	1010.06	1010.22	1010.40	1010.57	1010.89	1011.15	1011.34	1011.54	1011.68	XS 242
Bow River	B1_Zoo_DSBC	30,425	1005.20	1008.04	1008.50	1008.81	1009.21	1009.41	1009.54	1009.70	1009.83	1010.11	1010.35	1010.49	1010.70	1010.85	XS 243
Bow River	B1_Zoo_DSBC	30,208	1004.80	1007.72	1008.11	1008.39	1008.67	1008.89	1009.05	1009.20	1009.32	1009.65	1009.89	1010.05	1010.22	1010.35	XS 244



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Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	29,989	1005.20	1007.22	1007.58	1007.90	1008.24	1008.54	1008.75	1008.94	1009.12	1009.53	1009.80	1009.95	1010.15	1010.27	XS 245
Bow River	B1_Zoo_DSBC	29,647	1003.63	1006.33	1006.87	1007.25	1007.63	1007.94	1008.15	1008.41	1008.63	1009.08	1009.40	1009.54	1009.73	1009.84	XS 246
Bow River	B1_Zoo_DSBC	29,388	1001.61	1006.04	1006.47	1006.75	1007.01	1007.24	1007.39	1007.57	1007.69	1008.02	1008.38	1008.72	1008.95	1009.15	XS 247
Bow River	B1_Zoo_DSBC	29,125	1003.40	1005.73	1006.14	1006.38	1006.62	1006.82	1006.97	1007.14	1007.28	1007.70	1008.14	1008.45	1008.87	1009.12	XS 248
Bow River	B1_Zoo_DSBC	28,848	1002.40	1004.67	1005.07	1005.47	1005.82	1006.12	1006.35	1006.59	1006.80	1007.35	1007.89	1008.22	1008.60	1008.88	XS 249
Bow River	B1_Zoo_DSBC	28,519	1002.00	1003.75	1004.37	1004.84	1005.32	1005.72	1005.97	1006.26	1006.49	1007.10	1007.67	1008.00	1008.40	1008.67	XS 250
Bow River	B1_Zoo_DSBC	28,184	1000.00	1003.07	1003.70	1004.21	1004.75	1005.18	1005.45	1005.76	1006.00	1006.63	1007.14	1007.47	1007.89	1008.15	XS 251
Bow River	B1_Zoo_DSBC	28,004	1000.00	1002.81	1003.43	1003.92	1004.42	1004.84	1005.09	1005.38	1005.60	1006.15	1006.67	1006.95	1007.33	1007.60	XS 252
Bow River	B1_Zoo_DSBC	27,853	999.89	1002.62	1003.27	1003.77	1004.26	1004.66	1004.91	1005.18	1005.38	1005.91	1006.37	1006.65	1007.04	1007.28	XS 253
Bow River	B1_Zoo_DSBC	27,554	998.60	1002.28	1002.93	1003.42	1003.86	1004.21	1004.41	1004.62	1004.79	1005.24	1005.57	1005.78	1006.11	1006.31	XS 254
Bow River	B1_Zoo_DSBC	27,205	999.60	1001.82	1002.46	1002.90	1003.29	1003.63	1003.80	1004.01	1004.18	1004.60	1004.98	1005.20	1005.67	1005.89	XS 255
Bow River	B1_Zoo_DSBC	26,987	999.00	1001.57	1002.18	1002.59	1002.98	1003.35	1003.49	1003.68	1003.85	1004.26	1004.57	1004.75	1005.04	1005.23	XS 256
Bow River	B1_Zoo_DSBC	26,732	997.80	1001.26	1001.78	1002.11	1002.42	1002.60	1002.89	1003.19	1003.40	1003.90	1004.24	1004.46	1004.73	1004.92	XS 257; U/S of McKenzie Bridge
Bow River	B1_Zoo_DSBC	26,716	997.60	1001.28	1001.89	1002.30	1002.69	1003.01	1003.23	1003.47	1003.65	1004.11	1004.44	1004.66	1004.94	1005.14	XS 258; D/S of McKenzie Bridge
Bow River	B1_Zoo_DSBC	26,640	998.00	1001.15	1001.71	1002.08	1002.43	1002.72	1002.90	1003.10	1003.25	1003.61	1003.95	1004.18	1004.48	1004.71	XS 259
Bow River	B1_Zoo_DSBC	26,380	998.40	1000.70	1001.20	1001.52	1001.82	1002.06	1002.23	1002.42	1002.56	1002.92	1003.26	1003.50	1003.87	1004.19	XS 260
Bow River	B1_Zoo_DSBC	26,122	997.46	1000.22	1000.79	1001.12	1001.42	1001.66	1001.83	1002.01	1002.16	1002.53	1002.89	1003.16	1003.58	1003.93	XS 261
Bow River	B1_Zoo_DSBC	25,893	995.60	999.92	1000.49	1000.80	1001.10	1001.35	1001.52	1001.70	1001.86	1002.24	1002.63	1002.93	1003.39	1003.77	XS 262
Bow River	B1_Zoo_DSBC	25,672	996.20	999.56	1000.07	1000.38	1000.68	1000.95	1001.12	1001.34	1001.51	1001.93	1002.36	1002.70	1003.21	1003.62	XS 263
Bow River	B1_Zoo_DSBC	25,469	996.71	999.17	999.70	1000.03	1000.36	1000.66	1000.85	1001.08	1001.25	1001.68	1002.13	1002.49	1003.04	1003.48	XS 264
Bow River	B1_Zoo_DSBC	25,383	996.80	999.00	999.49	999.79	1000.09	1000.36	1000.56	1000.79	1000.98	1001.46	1001.97	1002.37	1002.96	1003.42	XS 265
Bow River	B1_Zoo_DSBC	25,245	995.80	998.85	999.40	999.71	1000.01	1000.30	1000.50	1000.74	1000.92	1001.40	1001.92	1002.33	1002.93	1003.40	XS 266
Bow River	B1_Zoo_DSBC	25,114	994.40	998.63	999.16	999.46	999.76	1000.05	1000.26	1000.51	1000.69	1001.22	1001.78	1002.22	1002.85	1003.34	XS 267
Bow River	B1_Zoo_DSBC	24,988	994.60	998.31	998.77	999.09	999.44	999.78	1000.02	1000.29	1000.50	1001.07	1001.67	1002.13	1002.79	1003.29	XS 268
Bow River	B1_Zoo_DSBC	24,842	994.40	997.90	998.32	998.67	999.10	999.51	999.78	1000.09	1000.31	1000.92	1001.56	1002.05	1002.74	1003.24	XS 269
Bow River	B1_Zoo_DSBC	24,696	994.80	997.48	997.99	998.43	998.92	999.37	999.66	999.98	1000.21	1000.85	1001.51	1002.00	1002.70	1003.21	XS 270
Bow River	B1_Zoo_DSBC	24,343	993.20	996.34	997.07	997.61	998.15	998.62	998.95	999.33	999.63	1000.46	1001.23	1001.78	1002.53	1003.06	XS 271
Bow River	B1_Zoo_DSBC	24,109	992.40	995.79	996.51	997.05	997.65	998.20	998.55	998.98	999.31	1000.15	1000.94	1001.49	1002.24	1002.78	XS 272
Bow River	B1_Zoo_DSBC	23,977	992.60	995.53	996.24	996.78	997.34	997.81	998.11	998.46	998.72	999.41	1000.11	1000.61	1001.34	1001.83	XS 273; U/S of Marquis of Lorne Bridge Upstream
Bow River	B1_Zoo_DSBC	23,924	992.60	995.39	996.07	996.58	997.12	997.57	997.86	998.16	998.40	999.03	999.66	1000.13	1000.84	1001.31	XS 274; Between Marquis of Lorne Bridge Upstream and Marquis of Lorne Bridge Downstream
Bow River	B1_Zoo_DSBC	23,884	992.40	995.27	995.92	996.41	996.92	997.33	997.59	997.84	998.02	998.45	998.78	998.96	999.14	999.41	XS 275; D/S of Marquis of Lorne Bridge Downstream
Bow River	B1_Zoo_DSBC	23,844	992.40	995.21	995.86	996.34	996.84	997.25	997.51	997.75	997.93	998.36	998.69	998.87	999.04	999.13	XS 276
Bow River	B1_Zoo_DSBC	23,684	992.20	994.86	995.54	996.05	996.57	996.99	997.26	997.52	997.74	998.30	998.74	999.01	999.30	999.41	XS 277
Bow River	B1_Zoo_DSBC	23,547	991.40	994.44	995.18	995.72	996.28	996.72	997.00	997.23	997.41	997.78	998.10	998.32	998.60	998.82	XS 278
Bow River	B1_Zoo_DSBC	23,324	991.68	994.14	994.93	995.50	996.04	996.49	996.78	997.01	997.20	997.58	997.89	998.08	998.31	998.48	XS 279



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Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	22,932	990.00	993.42	994.18	994.76	995.32	995.83	996.17	996.59	996.85	997.27	997.59	997.78	998.02	998.20	XS 280
Bow River	B1_Zoo_DSBC	22,646	989.41	993.09	993.83	994.38	994.95	995.45	995.77	996.24	996.57	997.00	997.30	997.48	997.71	997.88	XS 281
Bow River	B1_Zoo_DSBC	22,515	988.60	992.82	993.56	994.07	994.59	995.06	995.35	995.70	995.91	996.51	996.96	997.15	997.42	997.62	XS 282
Bow River	B1_Zoo_DSBC	22,249	988.60	992.25	992.99	993.50	994.02	994.47	994.75	995.06	995.29	995.93	996.40	996.71	997.06	997.25	XS 283
Bow River	B1_Zoo_DSBC	21,808	988.80	991.46	992.16	992.68	993.18	993.59	993.86	994.17	994.34	994.86	995.35	995.71	996.21	996.63	XS 284
Bow River	B1_Zoo_DSBC	21,539	987.61	991.10	991.71	992.17	992.63	993.01	993.25	993.54	993.77	994.38	994.96	995.36	995.85	996.21	XS 285
Bow River	B1_Zoo_DSBC	21,174	988.00	990.65	991.15	991.54	991.92	992.26	992.47	992.73	992.93	993.43	993.88	994.19	994.57	994.85	XS 286
Bow River	B1_Zoo_DSBC	20,821	988.20	989.99	990.45	990.83	991.24	991.59	991.81	992.09	992.29	992.82	993.30	993.62	994.02	994.33	XS 287
Bow River	B1_Zoo_DSBC	20,451	987.40	989.00	989.52	989.95	990.42	990.81	991.07	991.38	991.61	992.19	992.68	993.01	993.41	993.72	XS 288
Bow River	B1_Zoo_DSBC	20,090	986.00	988.28	988.83	989.26	989.71	990.08	990.30	990.58	990.79	991.34	991.80	992.11	992.50	992.80	XS 289
Bow River	B1_Zoo_DSBC	19,815	985.40	987.73	988.35	988.81	989.27	989.63	989.85	990.11	990.31	990.84	991.34	991.67	992.09	992.41	XS 290
Bow River	B1_Zoo_DSBC	19,564	984.41	987.23	987.81	988.24	988.72	989.11	989.34	989.62	989.83	990.37	990.89	991.24	991.68	992.01	XS 291
Bow River	B1_Zoo_DSBC	19,337	984.42	986.64	987.23	987.67	988.13	988.50	988.73	989.02	989.24	989.82	990.32	990.67	991.11	991.46	XS 292
Bow River	B1_Zoo_DSBC	19,051	983.60	985.95	986.61	987.09	987.56	987.91	988.13	988.41	988.63	989.25	989.87	990.34	990.91	991.34	XS 293
Bow River	B1_Zoo_DSBC	18,685	982.00	985.19	985.79	986.23	986.70	987.13	987.41	987.76	988.03	988.74	989.41	989.87	990.49	990.97	XS 294
Bow River	B1_Zoo_DSBC	18,436	982.20	984.72	985.26	985.66	986.11	986.52	986.78	987.10	987.34	987.96	988.55	988.96	989.48	989.87	XS 295; U/S of Dunbow Bridge Upstream
Bow River	B1_Zoo_DSBC	18,352	982.01	984.45	984.93	985.26	985.61	985.93	986.13	986.39	986.60	987.21	987.76	988.13	988.60	988.96	XS 296; Between Dunbow Bridge Upstream and Dunbow Bridge Downstream
Bow River	B1_Zoo_DSBC	18,309	982.00	984.38	984.85	985.17	985.51	985.79	985.97	986.18	986.33	986.70	986.97	987.35	987.73	988.01	XS 297; D/S of Dunbow Bridge Downstream
Bow River	B1_Zoo_DSBC	18,123	981.60	984.03	984.43	984.73	985.05	985.35	985.54	985.78	985.96	986.41	986.75	986.95	987.20	987.32	XS 298
Bow River	B1_Zoo_DSBC	17,863	981.60	983.48	983.89	984.22	984.58	984.88	985.08	985.31	985.49	985.97	986.38	986.63	986.93	987.16	XS 299
Bow River	B1_Zoo_DSBC	17,498	979.80	982.74	983.25	983.57	983.88	984.13	984.28	984.44	984.57	984.86	985.12	985.30	985.50	985.64	XS 300
Bow River	B1_Zoo_DSBC	17,226	979.80	982.52	983.05	983.36	983.65	983.90	984.05	984.21	984.34	984.66	984.94	985.13	985.36	985.53	XS 301
Bow River	B1_Zoo_DSBC	16,920	979.40	982.07	982.47	982.72	982.93	983.12	983.24	983.37	983.47	983.72	983.94	984.09	984.28	984.41	XS 302
Bow River	B1_Zoo_DSBC	16,402	978.00	980.68	981.03	981.27	981.53	981.75	981.88	982.03	982.13	982.39	982.62	982.78	982.98	983.13	XS 303
Bow River	B1_Zoo_DSBC	16,136	977.55	979.76	980.23	980.58	980.98	981.25	981.44	981.57	981.66	981.90	982.15	982.31	982.53	982.69	XS 304
Bow River	B1_Zoo_DSBC	15,672	975.40	977.45	978.17	978.68	979.35	979.83	979.93	980.23	980.40	980.91	981.26	981.47	981.75	981.90	XS 305
Bow River	B1_Zoo_DSBC	15,472	972.80	977.31	977.91	978.26	978.62	978.94	979.34	979.54	979.72	980.32	980.51	980.63	980.82	981.05	XS 306
Bow River	B1_Zoo_DSBC	15,202	973.80	977.05	977.64	977.98	978.31	978.58	978.74	978.89	979.01	979.15	979.72	979.91	980.21	980.43	XS 307
Bow River	B1_Zoo_DSBC	14,936	974.20	976.65	977.18	977.56	977.94	978.27	978.48	978.73	978.89	979.28	979.68	979.90	980.19	980.37	XS 308
Bow River	B1_Zoo_DSBC	14,680	974.20	976.34	976.89	977.27	977.60	977.85	978.02	978.20	978.33	978.66	978.95	979.13	979.37	979.55	XS 309
Bow River	B1_Zoo_DSBC	14,373	973.40	975.61	976.19	976.60	977.01	977.36	977.55	977.74	977.85	978.16	978.39	978.56	978.82	979.02	XS 310
Bow River	B1_Zoo_DSBC	14,047	972.60	974.97	975.43	975.73	976.02	976.27	976.42	976.65	976.83	977.14	977.53	977.85	978.20	978.41	XS 311
Bow River	B1_Zoo_DSBC	13,661	971.80	974.16	974.61	974.95	975.23	975.48	975.66	975.89	976.07	976.55	976.96	977.32	977.61	977.85	XS 312
Bow River	B1_Zoo_DSBC	13,385	971.00	973.52	973.94	974.31	974.63	974.94	975.15	975.41	975.61	976.13	976.56	976.89	977.22	977.48	XS 313
Bow River	B1_Zoo_DSBC	13,036	970.40	972.67	973.22	973.62	974.01	974.36	974.58	974.83	975.05	975.55	975.97	976.27	976.67	976.96	XS 314
Bow River	B1_Zoo_DSBC	12,653	969.56	971.84	972.42	972.83	973.25	973.57	973.80	974.11	974.34	974.94	975.41	975.72	976.10	976.38	XS 315
Bow River	B1_Zoo_DSBC	12,330	968.80	971.01	971.67	972.05	972.49	972.95	973.28	973.67	973.96	974.61	975.07	975.38	975.76	976.03	XS 316



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	12,035	967.40	969.91	970.81	971.34	971.91	972.42	972.76	973.15	973.44	974.13	974.59	974.89	975.25	975.52	XS 317
Bow River	B1_Zoo_DSBC	11,856	963.60	969.80	970.59	971.07	971.57	972.01	972.29	972.63	972.88	973.54	973.88	974.13	974.43	974.68	XS 318
Bow River	B1_Zoo_DSBC	11,470	965.20	969.26	969.90	970.31	970.75	971.13	971.38	971.66	971.86	972.35	972.95	973.27	973.68	974.00	XS 319
Bow River	B1_Zoo_DSBC	11,115	964.43	968.86	969.46	969.88	970.32	970.70	970.97	971.27	971.50	972.11	972.74	973.03	973.38	973.67	XS 320
Bow River	B1_Zoo_DSBC	10,806	966.00	968.41	968.93	969.34	969.83	970.26	970.55	970.90	971.16	971.84	972.52	972.79	973.14	973.39	XS 321
Bow River	B1_Zoo_DSBC	10,597	965.25	967.65	968.41	968.92	969.47	969.94	970.24	970.60	970.87	971.61	972.33	972.60	972.93	973.19	XS 322
Bow River	B1_Zoo_DSBC	10,271	963.61	967.27	967.90	968.34	968.78	969.12	969.35	969.61	969.81	970.31	970.71	971.11	971.58	971.93	XS 323
Bow River	B1_Zoo_DSBC	9,854	963.80	966.94	967.52	967.90	968.30	968.60	968.81	969.06	969.25	969.75	970.18	970.46	970.80	971.01	XS 324
Bow River	B1_Zoo_DSBC	9,630	963.98	966.47	967.03	967.42	967.86	968.27	968.52	968.82	969.06	969.66	970.18	970.53	970.96	971.28	XS 325
Bow River	B1_Zoo_DSBC	9,444	963.60	966.07	966.62	967.07	967.57	968.02	968.29	968.62	968.86	969.48	970.03	970.40	970.84	971.17	XS 326
Bow River	B1_Zoo_DSBC	9,216	963.19	965.54	966.12	966.61	967.12	967.54	967.81	968.11	968.35	968.96	969.57	969.98	970.44	970.78	XS 327
Bow River	B1_Zoo_DSBC	8,958	962.20	964.82	965.41	965.84	966.26	966.61	966.84	967.09	967.26	967.64	968.00	968.29	968.74	969.04	XS 328
Bow River	B1_Zoo_DSBC	8,772	962.17	964.53	965.12	965.58	966.06	966.47	966.71	966.99	967.19	967.64	968.01	968.27	968.61	968.81	XS 329
Bow River	B1_Zoo_DSBC	8,613	961.80	964.26	964.85	965.29	965.77	966.15	966.37	966.63	966.83	967.30	967.69	967.96	968.29	968.50	XS 330
Bow River	B1_Zoo_DSBC	8,443	961.17	963.85	964.53	964.99	965.49	965.89	966.13	966.40	966.59	967.04	967.44	967.71	968.06	968.28	XS 331
Bow River	B1_Zoo_DSBC	8,262	960.60	963.35	964.08	964.63	965.15	965.55	965.77	966.03	966.22	966.61	966.95	967.24	967.56	967.76	XS 332
Bow River	B1_Zoo_DSBC	8,011	959.60	963.22	963.84	964.29	964.71	965.08	965.31	965.57	965.75	966.05	966.22	966.28	966.45	966.68	XS 333
Bow River	B1_Zoo_DSBC	7,780	960.01	962.98	963.57	964.00	964.43	964.76	964.98	965.22	965.44	965.97	966.24	966.38	966.56	966.69	XS 334
Bow River	B1_Zoo_DSBC	7,581	959.26	962.59	963.25	963.74	964.17	964.50	964.71	964.94	965.15	965.57	965.82	965.85	966.02	966.16	XS 335
Bow River	B1_Zoo_DSBC	7,422	959.18	962.17	962.83	963.41	963.85	964.16	964.36	964.55	964.75	965.02	965.25	965.50	965.75	965.92	XS 336
Bow River	B1_Zoo_DSBC	7,267	959.80	961.77	962.57	963.20	963.63	963.91	964.08	964.18	964.36	964.73	965.11	965.41	965.66	965.82	XS 337
Bow River	B1_Zoo_DSBC	7,068	958.63	961.34	962.19	962.83	963.23	963.56	963.84	963.91	964.18	964.62	965.01	965.33	965.57	965.73	XS 338
Bow River	B1_Zoo_DSBC	6,894	957.00	960.88	961.78	962.42	963.14	963.54	963.83	963.90	964.17	964.60	964.99	965.31	965.55	965.71	XS 339
Bow River	B1_Zoo_DSBC	6,775	956.63	960.48	961.39	962.09	962.66	963.36	963.75	963.80	964.11	964.56	964.96	965.29	965.52	965.68	XS 340
Bow River	B1_Zoo_DSBC	6,635	956.20	960.18	960.85	961.40	961.95	962.46	962.79	963.67	964.05	964.53	964.93	965.26	965.50	965.66	XS 341
Bow River	B1_Zoo_DSBC	6,381	955.60	960.05	960.70	961.20	961.73	962.17	962.45	962.77	963.02	964.16	964.70	965.09	965.33	965.48	XS 342
Bow River	B1_Zoo_DSBC	6,195	956.52	959.83	960.45	960.95	961.48	961.92	962.19	962.52	962.76	963.47	964.56	964.99	965.21	965.36	XS 343
Bow River	B1_Zoo_DSBC	5,978	957.20	959.52	960.19	960.73	961.28	961.74	962.03	962.37	962.63	963.26	963.80	964.42	964.47	964.63	XS 344
Bow River	B1_Zoo_DSBC	5,811	956.98	959.17	959.79	960.27	960.75	961.15	961.41	961.73	961.96	962.51	962.91	963.07	963.99	964.12	XS 345
Bow River	B1_Zoo_DSBC	5,643	956.20	958.96	959.56	960.04	960.50	960.91	961.18	961.51	961.76	962.33	962.73	962.92	963.50	963.64	XS 346
Bow River	B1_Zoo_DSBC	5,387	955.78	958.58	959.13	959.56	960.00	960.41	960.68	961.01	961.26	961.79	962.23	962.53	962.92	963.21	XS 347
Bow River	B1_Zoo_DSBC	5,146	955.80	958.17	958.74	959.21	959.69	960.10	960.38	960.71	960.95	961.44	961.83	962.13	962.57	962.89	XS 348
Bow River	B1_Zoo_DSBC	4,921	955.25	957.59	958.23	958.78	959.29	959.69	959.95	960.27	960.49	961.02	961.46	961.75	962.13	962.42	XS 349
Bow River	B1_Zoo_DSBC	4,658	954.60	957.02	957.65	958.17	958.76	959.26	959.57	959.93	960.20	960.80	961.25	961.55	961.93	962.22	XS 350
Bow River	B1_Zoo_DSBC	4,422	953.42	956.77	957.49	958.04	958.64	959.15	959.48	959.87	960.15	960.76	961.20	961.49	961.87	962.15	XS 351
Bow River	B1_Zoo_DSBC	4,175	951.40	956.43	957.01	957.43	957.88	958.24	958.47	958.75	958.97	959.73	960.21	960.54	960.96	961.27	XS 352
Bow River	B1_Zoo_DSBC	3,900	953.20	955.99	956.55	956.94	957.30	957.61	957.80	958.01	958.16	958.50	959.07	959.38	959.72	959.96	XS 353
Bow River	B1_Zoo_DSBC	3,711	951.98	955.47	956.12	956.57	956.94	957.29	957.52	957.77	957.95	958.41	958.86	959.17	959.58	959.89	XS 354



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A1: Flood Frequency Profiles – Bow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Bow River	B1_Zoo_DSBC	3,529	952.60	954.90	955.65	956.20	956.67	957.08	957.33	957.62	957.81	958.31	958.77	959.09	959.51	959.82	XS 355
Bow River	B1_Zoo_DSBC	3,245	950.80	954.21	954.91	955.44	955.96	956.40	956.68	956.97	957.15	957.64	958.11	958.44	958.86	959.18	XS 356
Bow River	B1_Zoo_DSBC	3,097	950.51	953.74	954.41	954.92	955.43	955.88	956.18	956.42	956.65	957.21	957.73	958.08	958.52	958.85	XS 357
Bow River	B1_Zoo_DSBC	2,905	950.40	953.30	953.97	954.49	955.00	955.42	955.66	955.99	956.26	956.87	957.40	957.76	958.22	958.56	XS 358
Bow River	B1_Zoo_DSBC	2,673	949.00	953.16	953.86	954.39	954.91	955.33	955.59	955.92	956.17	956.74	957.26	957.61	958.06	958.39	XS 359
Bow River	B1_Zoo_DSBC	2,501	949.76	952.93	953.55	954.05	954.56	955.02	955.33	955.69	955.96	956.54	957.06	957.41	957.85	958.18	XS 360
Bow River	B1_Zoo_DSBC	2,326	949.20	952.74	953.33	953.81	954.30	954.74	955.01	955.30	955.55	956.08	956.55	956.86	957.26	957.55	XS 361
Bow River	B1_Zoo_DSBC	2,111	950.43	952.37	953.02	953.56	954.11	954.53	954.81	955.13	955.39	955.91	956.38	956.69	957.09	957.39	XS 362
Bow River	B1_Zoo_DSBC	1,871	949.00	951.92	952.55	953.02	953.50	953.91	954.20	954.46	954.66	955.15	955.58	955.88	956.25	956.53	XS 363
Bow River	B1_Zoo_DSBC	1,506	948.60	951.44	952.01	952.46	952.90	953.26	953.47	953.75	953.92	954.44	954.90	955.20	955.59	955.89	XS 364
Bow River	B1_Zoo_DSBC	1,160	948.60	950.87	951.45	951.94	952.37	952.68	952.87	953.17	953.29	953.83	954.35	954.66	955.07	955.39	XS 365
Bow River	B1_Zoo_DSBC	946	948.14	950.28	950.79	951.34	951.80	952.33	952.52	952.87	952.94	953.56	954.12	954.44	954.87	955.20	XS 366
Bow River	B1_Zoo_DSBC	721	947.48	949.70	950.46	951.14	951.66	952.26	952.44	952.81	952.87	953.50	954.06	954.39	954.82	955.15	XS 367
Bow River	B1_Zoo_DSBC	491	946.01	949.19	950.01	950.69	951.08	951.67	951.67	951.94	952.37	953.04	953.62	953.92	954.32	954.65	XS 368
Bow River	B1_Zoo_DSBC	335	945.00	948.85	949.49	950.00	950.88	951.54	951.54 ⁽²⁾	951.82	952.10	952.87	953.47	953.76	954.17	954.49	XS 369
Bow River	B1_Zoo_DSBC	138	945.85	948.42	948.93	949.31	949.65	949.93	950.42	950.82	951.15	951.92	952.49	952.95	953.47	953.87	XS 370

Notes:

- 1) Simulated water level replaced with Interpolated water level between upstream and downstream cross-sections.
- 2) Simulated water level replaced with higher water level from lower flow profile to avoid profile crossing.

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BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A2: Flood Frequency Profiles – Bow River Side Channels

Branch	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
BS1_Zoo	BS1_Zoo	1,928	1037.98	1039.54	1040.11	1040.55	1041.02	1041.43	1041.70	1042.02	1042.26	1042.72	1043.43	1043.73	1044.17	1044.47	XS 392; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,889	1036.76	1039.54	1040.08	1040.51	1040.96	1041.36	1041.63	1041.94	1042.16	1042.56	1043.37	1043.68	1044.13	1044.44	XS 393; U/S of St Patrick's Island Bridge; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,844	1036.73	1039.46	1039.95	1040.33	1040.73	1041.09	1041.33	1041.62	1041.83	1042.38	1043.20	1043.52	1043.99	1044.32	XS 394; D/S of St Patrick's Island Bridge; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,740	1036.80	1039.36	1039.80	1040.14	1040.52	1040.87	1041.11	1041.39	1041.61	1042.19	1043.13	1043.46	1043.94	1044.27	XS 395; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,478	1036.68	1039.05	1039.50	1039.88	1040.33	1040.74	1041.03	1041.37	1041.63	1042.35	1043.05	1043.38	1043.86	1044.20	XS 396; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,182	1036.46	1038.35	1038.80	1039.18	1039.62	1040.03	1040.31	1040.63	1040.87	1041.58	1042.61	1043.03	1043.58	1043.99	XS 397; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,132	1036.01	1038.26	1038.73	1039.13	1039.60	1040.02	1040.31	1040.64	1040.89	1041.62	1042.63	1043.03	1043.60	1044.00	XS 398; U/S of Baines Bridge; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	1,103	1036.00	1038.14	1038.62	1039.03	1039.51	1039.94	1040.23	1040.56	1040.81	1041.44	1042.47	1042.91	1043.52	1043.95	XS 399; D/S of Baines Bridge; Bridgeland Berm on LOB
BS1_Zoo	BS1_Zoo	884	1036.20	1037.67	1038.22	1038.66	1039.15	1039.58	1039.86	1040.18	1040.42	1041.03	1041.88	1042.26	1042.79	1043.16	XS 400
BS1_Zoo	BS1_Zoo	708	1035.70	1037.16	1037.82	1038.28	1038.78	1039.20	1039.46	1039.77	1040.00	1040.58	1041.38	1041.77	1042.33	1042.72	XS 401
BS1_Zoo	BS1_Zoo	462	1034.01	1036.82	1037.48	1037.93	1038.42	1038.83	1039.06	1039.34	1039.56	1040.12	1040.74	1041.18	1041.87	1042.32	XS 402
BS1_Zoo	BS1_Zoo	443	1034.20	1036.76	1037.41	1037.84	1038.32	1038.72	1038.94	1039.22	1039.42	1039.98	1040.55	1040.90	1041.50	1041.95	XS 403; U/S of Zoo Service Bridge
BS1_Zoo	BS1_Zoo	420	1034.00	1036.72	1037.36	1037.78	1038.24	1038.62	1038.82	1039.07	1039.26	1039.75	1040.14	1040.47	1040.88	1041.14	XS 404; D/S of Zoo Service Bridge
BS1_Zoo	BS1_Zoo	214	1034.60	1036.41	1037.09	1037.53	1038.02	1038.43	1038.62	1038.88	1039.08	1039.65	1040.07	1040.49	1040.97	1041.28	XS 405
BS2_Prince	BS2_Prince	979	1042.20	1044.53	1045.22	1045.78	1046.38	1046.89	1047.24	1047.61	1047.69	1048.14	1048.47	1048.68	1048.99	1049.51	XS 378; U/S of Prince's Island Park Causeway
BS2_Prince	BS2_Prince	930	1042.20	1044.23	1044.43	1044.57	1044.86	1045.29	1045.68	1046.23	1046.63	1047.53	1048.26	1048.77	1049.35	1049.79	XS 379; D/S of Prince's Island Park Causeway
BS2_Prince	BS2_Prince	884	1042.40	1044.22	1044.43	1044.56	1044.85	1045.28	1045.68	1046.23	1046.63	1047.57	1048.25	1048.74	1049.30	1049.73	XS 380
BS2_Prince	BS2_Prince	724	1042.60	1044.21	1044.41	1044.54	1044.82	1045.23	1045.62	1046.17	1046.57	1047.41	1048.21	1048.71	1049.27	1049.70	XS 381
BS2_Prince	BS2_Prince	635	1042.60	1044.21	1044.41	1044.54	1044.81	1045.21	1045.61	1046.15	1046.56	1047.45	1048.19	1048.68	1049.25	1049.68	XS 382
BS2_Prince	BS2_Prince	573	1042.40	1044.21	1044.40	1044.53	1044.81	1045.20	1045.60	1046.14	1046.54	1047.39	1048.09	1048.55	1049.08	1049.50	XS 383
BS2_Prince	BS2_Prince	482	1042.40	1044.21	1044.40	1044.52	1044.79	1045.18	1045.57	1046.10	1046.50	1047.35	1048.05	1048.51	1049.05	1049.49	XS 384; U/S of Jaipur Bridge
BS2_Prince	BS2_Prince	470	1042.40	1044.21	1044.40	1044.52	1044.79	1045.18	1045.56	1046.09	1046.49	1047.29	1047.99	1048.47	1049.03	1049.46	XS 385; D/S of Jaipur Bridge
BS2_Prince	BS2_Prince	417	1042.40	1044.21	1044.40	1044.52	1044.79	1045.17	1045.56	1046.09	1046.50	1047.31	1048.01	1048.48	1049.04	1049.47	XS 386
BS2_Prince	BS2_Prince	371	1042.20	1044.20	1044.39	1044.51	1044.77	1045.14	1045.53	1046.06	1046.47	1047.27	1047.95	1048.43	1049.00	1049.43	XS 387; U/S of Prince's Island Park Weir
BS2_Prince	BS2_Prince	354	1040.80	1042.94	1043.20	1043.70	1044.38	1045.03	1045.50	1046.06	1046.46	1047.24	1047.91	1048.38	1048.94	1049.37	XS 388; D/S of Prince's Island Park Weir
BS2_Prince	BS2_Prince	312	1041.40	1042.86	1043.11	1043.67	1044.35	1044.99	1045.47	1046.03	1046.44	1047.23	1047.91	1048.39	1048.95	1049.38	XS 389; U/S of Prince's Island Bridge
BS2_Prince	BS2_Prince	304	1041.00	1042.87	1043.12	1043.67	1044.35	1044.99	1045.45	1046.02	1046.43	1047.22	1047.90	1048.37	1048.94	1049.37	XS 390; D/S of Prince's Island Bridge
BS2_Prince	BS2_Prince	201	1041.58	1042.45	1043.02	1043.65	1044.34	1044.98	1045.44	1046.00	1046.41	1047.17	1047.84	1048.32	1048.88	1049.31	XS 391



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E14_USBC_Bragg	66,613	1338.79	1340.27	1340.63	1340.91	1341.14	1341.31	1341.44	1341.57	1341.66	1341.88	1342.09	1342.24	1342.40	1342.53	XS 406
Elbow River	E14_USBC_Bragg	66,464	1337.74	1339.24	1339.60	1339.85	1340.05	1340.22	1340.34	1340.47	1340.56	1340.82	1341.05	1341.20	1341.38	1341.52	XS 407
Elbow River	E14_USBC_Bragg	66,317	1336.86	1338.17	1338.50	1338.71	1338.93	1339.10	1339.22	1339.35	1339.45	1339.71	1339.94	1340.09	1340.26	1340.40	XS 408
Elbow River	E14_USBC_Bragg	66,163	1335.21	1336.48	1337.10	1337.33	1337.54	1337.71	1337.82	1337.94	1338.03	1338.27	1338.47	1338.60	1338.75	1338.87	XS 409
Elbow River	E14_USBC_Bragg	66,005	1333.54	1335.45	1335.92	1336.15	1336.33	1336.48	1336.57	1336.68	1336.77	1336.99	1337.19	1337.33	1337.49	1337.62	XS 410
Elbow River	E14_USBC_Bragg	65,839	1333.04	1334.24	1334.61	1334.82	1335.02	1335.20	1335.32	1335.46	1335.55	1335.82	1336.05	1336.21	1336.41	1336.56	XS 411
Elbow River	E14_USBC_Bragg	65,669	1331.26	1332.52	1332.91	1333.14	1333.39	1333.60	1333.74	1333.90	1334.03	1334.37	1334.66	1334.85	1335.08	1335.25	XS 412
Elbow River	E14_USBC_Bragg	65,521	1330.20	1331.62	1332.02	1332.28	1332.57	1332.81	1332.96	1333.15	1333.28	1333.61	1333.92	1334.10	1334.31	1334.49	XS 413
Elbow River	E14_USBC_Bragg	65,387	1329.16	1330.90	1331.240	1331.50	1331.77	1331.96	1332.09	1332.24	1332.35	1332.64	1332.91	1333.09	1333.32	1333.50	XS 414
Elbow River	E14_USBC_Bragg	65,236	1327.73	1329.43	1329.82	1330.07	1330.34	1330.58	1330.72	1330.89	1331.02	1331.37	1331.69	1331.92	1332.20	1332.42	XS 415
Elbow River	E14_USBC_Bragg	65,080	1327.12	1328.25	1328.71	1329.00	1329.24	1329.48	1329.62	1329.81	1329.95	1330.36	1330.75	1331.02	1331.35	1331.61	XS 416
Elbow River	E14_USBC_Bragg	64,928	1326.16	1327.23	1327.54	1327.81	1328.11	1328.40	1328.60	1328.84	1329.03	1329.53	1329.98	1330.29	1330.65	1330.92	XS 417
Elbow River	E14_USBC_Bragg	64,773	1324.74	1326.25	1326.67	1327.03	1327.44	1327.77	1328.01	1328.26	1328.46	1328.98	1329.43	1329.75	1330.10	1330.37	XS 418
Elbow River	E14_USBC_Bragg	64,642	1324.19	1325.30	1325.64	1325.90	1326.20	1326.50	1326.63	1326.92	1327.06	1327.47	1327.84	1328.08	1328.37	1328.58	XS 419
Elbow River	E14_USBC_Bragg	64,495	1322.54	1324.18	1324.60	1324.93	1325.22	1325.47	1325.63	1325.84	1326.00	1326.41	1326.78	1327.03	1327.33	1327.56	XS 420
Elbow River	E14_USBC_Bragg	64,338	1321.77	1323.19	1323.60	1323.92	1324.24	1324.50	1324.68	1324.89	1325.05	1325.47	1325.85	1326.11	1326.42	1326.65	XS 421
Elbow River	E14_USBC_Bragg	64,189	1320.84	1322.07	1322.57	1322.91	1323.24	1323.48	1323.64	1323.84	1324.00	1324.42	1324.81	1325.09	1325.42	1325.69	XS 422
Elbow River	E14_USBC_Bragg	64,040	1318.98	1320.91	1321.38	1321.70	1322.12	1322.40	1322.60	1322.84	1323.03	1323.54	1324.00	1324.32	1324.70	1324.99	XS 423
Elbow River	E14_USBC_Bragg	63,898	1317.78	1320.06	1320.58	1320.94	1321.20	1321.44	1321.61	1321.81	1321.95	1322.32	1322.64	1322.84	1323.08	1323.25	XS 424
Elbow River	E14_USBC_Bragg	63,741	1316.93	1318.69	1319.40	1319.95	1320.30	1320.54	1320.71	1320.89	1321.02	1321.35	1321.64	1321.83	1322.04	1322.20	XS 425
Elbow River	E14_USBC_Bragg	63,594	1315.57	1317.40	1318.09	1318.48	1318.89	1319.11	1319.28	1319.44	1319.56	1319.86	1320.13	1320.32	1320.56	1320.75	XS 426
Elbow River	E14_USBC_Bragg	63,435	1314.65	1316.24	1316.81	1317.16	1317.59	1317.87	1318.03	1318.22	1318.36	1318.76	1319.15	1319.43	1319.77	1320.05	XS 427
Elbow River	E14_USBC_Bragg	63,281	1313.64	1315.04	1315.57	1316.07	1316.49	1316.77	1316.95	1317.18	1317.36	1317.86	1318.33	1318.67	1319.05	1319.36	XS 428
Elbow River	E14_USBC_Bragg	63,143	1313.06	1314.26	1314.76	1315.25	1315.69	1316.04	1316.28	1316.58	1316.81	1317.40	1317.92	1318.28	1318.68	1319.02	XS 429
Elbow River	E14_USBC_Bragg	63,013	1311.46	1313.36	1313.96	1314.42	1314.91	1315.32	1315.61	1315.93	1316.15	1316.74	1317.21	1317.51	1317.86	1318.15	XS 430
Elbow River	E14_USBC_Bragg	62,971	1311.28	1312.99	1313.59	1314.03	1314.46	1314.80	1315.02	1315.25	1315.42	1315.84	1316.26	1316.49	1316.81	1316.96	XS 431
Elbow River	E14_USBC_Bragg	62,896	1311.05	1312.45	1313.09	1313.54	1313.94	1314.23	1314.42	1314.64	1314.80	1315.23	1315.59	1315.83	1316.11	1316.30	XS 432
Elbow River	E14_USBC_Bragg	62,813	1308.13	1312.15	1312.78	1313.19	1313.56	1313.83	1313.99	1314.19	1314.33	1314.70	1315.03	1315.25	1315.49	1315.68	XS 433
Elbow River	E14_USBC_Bragg	62,738	1310.43	1311.85	1312.35	1312.71	1313.05	1313.32	1313.50	1313.70	1313.85	1314.23	1314.56	1314.77	1315.02	1315.20	XS 434
Elbow River	E14_USBC_Bragg	62,655	1309.91	1311.41	1311.86	1312.18	1312.48	1312.72	1312.86	1313.03	1313.15	1313.46	1313.74	1313.94	1314.16	1314.35	XS 435
Elbow River	E14_USBC_Bragg	62,580	1309.80	1310.87	1311.34	1311.69	1311.98	1312.22	1312.36	1312.51	1312.62	1312.93	1313.25	1313.54	1313.77	1314.01	XS 436
Elbow River	E14_USBC_Bragg	62,498	1308.33	1310.29	1310.74	1311.10	1311.37	1311.58	1311.74	1311.92	1312.06	1312.48	1312.94	1313.31	1313.56	1313.83	XS 437
Elbow River	E14_USBC_Bragg	62,413	1308.09	1309.62	1310.11	1310.41	1310.73	1310.97	1311.14	1311.35	1311.53	1312.07	1312.61	1313.02	1313.23	1313.47	XS 438
Elbow River	E14_USBC_Bragg	62,352	1307.64	1309.17	1309.60	1309.88	1310.18	1310.50	1310.72	1310.99	1311.22	1311.86	1312.45	1312.89	1313.08	1313.31	XS 439
Elbow River	E14_USBC_Bragg	62,262	1306.97	1308.03	1308.55	1309.02	1309.50	1309.94	1310.24	1310.62	1310.89	1311.34 ⁽¹⁾	1311.99 ⁽¹⁾	1312.55 ⁽¹⁾	1312.64 ⁽¹⁾	1312.78 ⁽¹⁾	XS 440
Elbow River	E14_USBC_Bragg	62,169	1306.09	1307.50	1308.08	1308.55	1309.01	1309.40	1309.65	1309.96	1310.19	1310.82	1311.53	1312.20	1312.20 ⁽²⁾	1312.24	XS 441; Bracken Road Berm on LOB
Elbow River	E14_USBC_Bragg	62,137	1305.62	1307.27	1307.78	1308.19	1308.62	1308.97	1309.19	1309.44	1309.62	1310.08	1310.48	1310.83	1311.61	1311.80	XS 442; Bracken Road Berm on LOB
Elbow River	E14_USBC_Bragg	62,086	1305.53	1306.95	1307.43	1307.82	1308.19	1308.51	1308.72	1308.98	1309.17	1309.68	1310.14	1310.25	1311.06	1311.32	XS 443; Bracken Road Berm on LOB



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E14_USBC_Bragg	62,036	1305.43	1306.61	1307.05	1307.44	1307.82	1308.15	1308.38	1308.66	1308.87	1309.42	1309.91	1310.16	1310.43	1310.75	XS 444
Elbow River	E14_USBC_Bragg	61,985	1304.95	1306.15	1306.64	1307.09	1307.50	1307.85	1308.09	1308.38	1308.59	1309.14	1309.62	1309.90	1310.19	1310.19 ⁽²⁾	XS 445
Elbow River	E14_USBC_Bragg	61,940	1304.60	1305.70	1306.28	1306.86	1307.30	1307.66	1307.90	1308.19	1308.40	1308.95	1309.43	1309.76	1310.12	1310.12 ⁽²⁾	XS 446
Elbow River	E14_USBC_Bragg	61,887	1304.01	1305.23	1305.94	1306.55	1307.05	1307.41	1307.66	1307.95	1308.16	1308.70	1309.20	1309.67	1310.09	1310.09 ⁽²⁾	XS 447
Elbow River	E14_USBC_Bragg	61,837	1303.29	1304.81	1305.53	1306.11	1306.68	1307.04	1307.31	1307.62	1307.84	1308.40	1308.97	1309.60	1310.05	1310.05 ⁽²⁾	XS 448
Elbow River	E14_USBC_Bragg	61,790	1302.78	1304.42	1304.95	1305.30	1305.79	1306.16	1306.39	1306.67	1306.89	1307.49	1308.01	1308.13	1308.47	1309.32	XS 449
Elbow River	E14_USBC_Bragg	61,730	1302.51	1304.06	1304.60	1304.97	1305.42	1305.82	1306.07	1306.37	1306.60	1307.26	1307.89	1307.89 ⁽²⁾	1308.26	1308.26 ⁽²⁾	XS 450
Elbow River	E13_Bragg_Lott	61,692	1302.35	1303.78	1304.36	1304.78	1305.32	1305.77	1306.06	1306.41	1306.67	1307.39	1308.06	1308.17	1308.26	1308.43	XS 451
Elbow River	E13_Bragg_Lott	61,642	1302.16	1303.31	1304.09	1304.59	1305.16	1305.64	1305.93	1306.27	1306.52	1307.15	1308.04	1308.14	1308.21	1308.37	XS 452
Elbow River	E13_Bragg_Lott	61,597	1300.97	1303.05	1303.85	1304.44	1305.05	1305.53	1305.82	1306.15	1306.40	1306.87 ⁽¹⁾	1307.67 ⁽¹⁾	1307.82 ⁽¹⁾	1308.10	1308.26	XS 453
Elbow River	E13_Bragg_Lott	61,550	1300.63	1302.88	1303.64	1304.25	1304.82	1305.27	1305.52	1305.82	1306.03	1306.58	1307.29 ⁽¹⁾	1307.49 ⁽¹⁾	1307.70 ⁽¹⁾	1307.84 ⁽¹⁾	XS 454
Elbow River	E13_Bragg_Lott	61,497	1300.75	1302.59	1303.29	1303.86	1304.43	1304.86	1305.08	1305.33	1305.51	1305.93	1306.86 ⁽¹⁾	1307.11	1307.29	1307.42	XS 455
Elbow River	E13_Bragg_Lott	61,450	1300.92	1302.34	1302.97	1303.44	1303.92	1304.23	1304.49	1304.76	1304.94	1305.43	1306.48	1306.64	1306.79	1306.92	XS 456
Elbow River	E13_Bragg_Lott	61,400	1300.72	1302.07	1302.61	1302.95	1303.32	1303.82	1304.03	1304.26	1304.43	1304.86	1305.77	1305.95	1306.16	1306.29	XS 457
Elbow River	E13_Bragg_Lott	61,344	1300.10	1301.30	1301.79	1302.30	1302.79	1303.16	1303.38	1303.66	1303.87	1304.40	1304.74	1305.07	1305.56	1305.59	XS 458
Elbow River	E13_Bragg_Lott	61,294	1299.23	1300.79	1301.47	1301.97	1302.48	1302.88	1303.12	1303.40	1303.61	1304.15	1304.57	1304.95	1305.44	1305.44 ⁽²⁾	XS 459
Elbow River	E13_Bragg_Lott	61,242	1299.05	1300.49	1301.18	1301.71	1302.25	1302.71	1302.94	1303.20	1303.40	1303.90	1304.34	1304.78	1305.32	1305.32 ⁽²⁾	XS 460
Elbow River	E13_Bragg_Lott	61,193	1298.56	1300.17	1300.75	1301.18	1301.70	1301.95	1302.26	1302.49	1302.66	1303.09	1303.46	1303.71	1303.90	1304.88	XS 461
Elbow River	E13_Bragg_Lott	61,143	1298.10	1299.91	1300.40	1300.74	1301.02	1301.48	1301.72	1301.95	1302.12	1302.54	1302.91	1303.16	1303.43	1303.54	XS 462
Elbow River	E13_Bragg_Lott	61,094	1298.09	1299.57	1300.06	1300.44	1300.76	1301.01	1301.17	1301.37	1301.51	1301.87	1302.22	1302.44	1302.74	1302.85	XS 463
Elbow River	E13_Bragg_Lott	61,045	1297.60	1299.11	1299.65	1300.09	1300.48	1300.75	1300.92	1301.11	1301.25	1301.62	1302.04	1302.29	1302.69	1302.72	XS 464
Elbow River	E13_Bragg_Lott	61,005	1296.88	1298.82	1299.33	1299.79	1300.25	1300.56	1300.72	1300.90	1301.04	1301.40	1301.87	1302.11	1302.59	1302.59 ⁽²⁾	XS 465
Elbow River	E13_Bragg_Lott	60,952	1296.41	1298.44	1298.95	1299.36	1299.76	1300.11	1300.29	1300.48	1300.63	1301.00	1301.61	1301.86	1302.45	1302.45 ⁽²⁾	XS 466
Elbow River	E13_Bragg_Lott	60,906	1296.97	1298.15	1298.57	1298.92	1299.31	1299.55	1299.71	1299.90	1300.02	1300.50	1301.41	1301.66	1302.31	1302.31 ⁽²⁾	XS 467
Elbow River	E13_Bragg_Lott	60,853	1296.56	1297.69	1298.05	1298.33	1298.68	1298.95	1299.14	1299.29	1299.43	1300.35	1301.36	1301.60	1302.30	1302.30 ⁽²⁾	XS 468
Elbow River	E13_Bragg_Lott	60,806	1295.77	1296.96	1297.47	1297.76	1298.08	1298.35	1298.52	1298.96	1299.35	1300.35	1301.37	1301.63	1302.33	1302.33 ⁽²⁾	XS 469
Elbow River	E13_Bragg_Lott	60,755	1294.50	1296.03	1296.67	1297.16	1297.54	1298.03	1298.42	1298.93	1299.32	1300.32	1301.36	1301.63	1302.34	1302.34 ⁽²⁾	XS 470
Elbow River	E13_Bragg_Lott	60,711	1294.21	1295.51	1296.07	1296.69	1297.30	1297.90	1298.32	1298.84	1299.22	1300.20	1301.26	1301.52	1302.27	1302.27 ⁽²⁾	XS 471
Elbow River	E13_Bragg_Lott	60,665	1294.02	1295.23	1295.84	1296.51	1297.19	1297.80	1298.22	1298.71	1299.08	1300.03	1301.16	1301.44	1302.26	1302.26 ⁽²⁾	XS 472
Elbow River	E13_Bragg_Lott	60,616	1293.65	1295.02	1295.58	1296.07	1296.64	1297.16	1297.52	1297.94	1298.25	1299.12	1300.23	1300.23 ⁽²⁾	1300.32	1301.33	XS 473
Elbow River	E13_Bragg_Lott	60,568	1293.39	1294.65	1295.26	1295.77	1296.36	1296.90	1297.28	1297.72	1298.04	1298.92	1300.08	1300.08 ⁽²⁾	1300.24	1300.40	XS 474; U/S of Balsam Avenue Bridge
Elbow River	E13_Bragg_Lott	60,516	1292.55	1294.59	1295.19	1295.71	1296.30	1296.84	1297.22	1297.66	1297.98	1298.86	1300.02	1300.02 ⁽²⁾	1300.17	1300.34	XS 475; D/S of Balsam Avenue Bridge
Elbow River	E13_Bragg_Lott	60,463	1292.85	1294.30	1294.79	1295.16	1295.55	1295.91	1296.14	1296.47	1296.74	1297.42	1298.03	1299.36	1299.55	1299.68	XS 476
Elbow River	E13_Bragg_Lott	60,414	1292.82	1293.94	1294.39	1294.75	1295.15	1295.50	1295.72	1296.05	1296.29	1296.91	1297.45	1298.60	1298.81	1298.93	XS 477
Elbow River	E13_Bragg_Lott	60,364	1291.40	1293.55	1294.00	1294.34	1294.72	1295.03	1295.27	1295.58	1295.82	1296.41	1297.89 ⁽³⁾	1297.89	1298.13	1298.26	XS 478
Elbow River	E13_Bragg_Lott	60,316	1291.52	1293.21	1293.65	1294.00	1294.41	1294.77	1295.01	1295.30	1295.50	1296.03	1296.56	1297.80	1297.80 ⁽²⁾	1297.91	XS 479
Elbow River	E13_Bragg_Lott	60,267	1291.34	1292.93	1293.36	1293.75	1294.21	1294.61	1294.89	1295.21	1295.45	1296.06	1297.01	1297.84	1297.84 ⁽²⁾	1297.84 ⁽²⁾	XS 480
Elbow River	E13_Bragg_Lott	60,213	1290.63	1292.27	1292.81	1293.23	1293.64	1294.00	1294.26	1294.58	1294.82	1295.48	1295.86	1296.19	1297.24	1297.40	XS 481



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	60,169	1290.43	1292.04	1292.55	1292.97	1293.39	1293.80	1294.07	1294.40	1294.65	1295.33	1295.62	1295.91	1296.95	1297.17	XS 482
Elbow River	E13_Bragg_Lott	60,113	1290.45	1291.6	1292.12	1292.59	1293.10	1293.55	1293.86	1294.23	1294.50	1295.25	1295.54	1296.51	1296.51	1296.66	XS 483
Elbow River	E13_Bragg_Lott	60,065	1289.88	1291.33	1291.89	1292.36	1292.88	1293.33	1293.64	1294.01	1294.29	1295.03	1295.16	1295.17	1296.03	1296.19	XS 484
Elbow River	E13_Bragg_Lott	60,011	1289.54	1290.74	1291.21	1291.63	1292.06	1292.43	1292.69	1292.99	1293.23	1293.84	1295.16	1295.33	1295.52	1295.67	XS 485
Elbow River	E13_Bragg_Lott	59,964	1288.69	1289.96	1290.49	1290.95	1291.45	1291.86	1292.13	1292.46	1292.68	1293.32	1294.69	1294.69 ⁽²⁾	1294.84	1295.01	XS 486
Elbow River	E13_Bragg_Lott	59,915	1288.55	1289.63	1290.05	1290.36	1290.79	1291.18	1291.43	1291.75	1292.03	1292.66	1293.18	1294.26	1294.45	1294.60	XS 487
Elbow River	E13_Bragg_Lott	59,869	1288.11	1289.41	1289.82	1290.17	1290.54	1290.86	1291.05	1291.25	1291.43	1292.01	1292.53	1293.72	1293.94	1294.09	XS 488
Elbow River	E13_Bragg_Lott	59,815	1288.06	1288.84	1289.22	1289.53	1289.91	1290.27	1290.52	1290.79	1290.99	1291.56	1292.04	1293.13	1293.33	1293.47	XS 489
Elbow River	E13_Bragg_Lott	59,764	1287.05	1288.26	1288.85	1289.35	1289.86	1290.25	1290.49	1290.74	1290.92	1291.26	1291.32	1291.62	1292.75	1292.90	XS 490
Elbow River	E13_Bragg_Lott	59,718	1286.07	1288.03	1288.65	1289.16	1289.61	1289.96	1290.17	1290.41	1290.56	1291.13	1291.41	1292.23	1292.61	1292.61 ⁽²⁾	XS 491
Elbow River	E13_Bragg_Lott	59,679	1286.43	1287.87	1288.48	1288.97	1289.40	1289.75	1289.95	1290.17	1290.31	1290.71	1291.10	1291.23	1292.23 ⁽⁴⁾	1292.23	XS 492
Elbow River	E13_Bragg_Lott	59,600	1285.92	1287.51	1288.05	1288.5	1288.90	1289.21	1289.40	1289.65	1289.78	1290.07	1290.46	1290.55	1291.19	1291.19 ⁽²⁾	XS 493
Elbow River	E13_Bragg_Lott	59,521	1285.47	1287.12	1287.61	1287.99	1288.33	1288.61	1288.79	1288.90	1289.07	1289.55	1289.70	1289.72	1289.87	1290.35	XS 494
Elbow River	E13_Bragg_Lott	59,439	1284.76	1286.21	1286.61	1286.93	1287.25	1287.54	1287.75	1288.06	1288.24	1288.50	1288.92	1289.04	1289.49	1289.60	XS 495
Elbow River	E13_Bragg_Lott	59,356	1282.21	1284.84	1285.76	1286.21	1286.61	1286.96	1287.12	1287.29	1287.43	1287.75	1288.02	1288.21	1288.53	1288.53	XS 496
Elbow River	E13_Bragg_Lott	59,292	1282.70	1284.29	1285.31	1285.85	1286.30	1286.68	1286.82	1286.96	1287.07	1287.31	1287.52	1287.65	1287.77	1288.01	XS 497
Elbow River	E13_Bragg_Lott	59,220	1282.09	1283.81	1284.72	1285.32	1285.88	1286.28	1286.42	1286.55	1286.66	1286.92	1287.12	1287.25	1287.40	1287.56	XS 498
Elbow River	E13_Bragg_Lott	59,153	1280.96	1283.03	1283.6	1284.12	1284.68	1285.27	1285.43	1285.62	1285.73	1286.00	1286.24	1286.37	1286.51	1286.57	XS 499
Elbow River	E13_Bragg_Lott	59,110	1280.60	1282.72	1283.51	1284.03	1284.57	1284.92	1285.06	1285.26	1285.36	1285.65	1285.84	1285.96	1286.10	1286.20	XS 500
Elbow River	E13_Bragg_Lott	59,067	1280.42	1282.43	1283.23	1283.73	1284.13	1284.41	1284.56	1284.75	1284.88	1285.17	1285.38	1285.57	1285.70	1285.80	XS 501
Elbow River	E13_Bragg_Lott	59,000	1279.93	1282.06	1282.89	1283.40	1283.81	1284.09	1284.23	1284.41	1284.53	1284.83	1285.03	1285.16	1285.31	1285.42	XS 502
Elbow River	E13_Bragg_Lott	58,920	1279.41	1281.76	1282.56	1283.07	1283.45	1283.78	1283.95	1284.16	1284.27	1284.51	1284.74	1284.88	1285.04	1285.15	XS 503
Elbow River	E13_Bragg_Lott	58,862	1279.47	1281.56	1282.36	1282.92	1283.29	1283.62	1283.79	1283.99	1284.10	1284.36	1284.60	1284.72	1284.87	1284.97	XS 504
Elbow River	E13_Bragg_Lott	58,751	1278.65	1280.93	1281.41	1281.86	1282.32	1282.59	1282.82	1283.06	1283.28	1283.67	1283.89	1284.04	1284.18	1284.33	XS 505
Elbow River	E13_Bragg_Lott	58,684	1278.88	1280.53	1280.93	1281.24	1281.59	1281.89	1282.09	1282.33	1282.46	1282.78	1283.21	1283.34	1283.62	1283.72	XS 506
Elbow River	E13_Bragg_Lott	58,593	1277.99	1279.85	1280.29	1280.57	1280.86	1281.11	1281.29	1281.47	1281.60	1281.93	1282.21	1282.38	1282.61	1282.71	XS 507
Elbow River	E13_Bragg_Lott	58,516	1277.29	1279.22	1279.63	1279.96	1280.31	1280.50	1280.62	1280.77	1280.88	1281.15	1281.37	1281.49	1281.62	1281.81	XS 508
Elbow River	E13_Bragg_Lott	58,433	1277.35	1278.51	1278.98	1279.34	1279.74	1279.92	1280.03	1280.15	1280.25	1280.49	1280.71	1280.86	1281.02	1281.14	XS 509
Elbow River	E13_Bragg_Lott	58,359	1276.55	1277.97	1278.39	1278.69	1279.03	1279.23	1279.35	1279.50	1279.62	1279.91	1280.18	1280.34	1280.52	1280.66	XS 510
Elbow River	E13_Bragg_Lott	58,279	1276.24	1277.21	1277.72	1278.05	1278.34	1278.58	1278.70	1278.83	1278.93	1279.18	1279.39	1279.54	1279.70	1279.83	XS 511; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	58,209	1274.80	1276.58	1277.24	1277.6	1277.85	1278.07	1278.18	1278.30	1278.39	1278.63	1278.83	1278.97	1279.13	1279.26	XS 512; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	58,142	1274.38	1276.23	1276.83	1277.19	1277.40	1277.55	1277.66	1277.77	1277.86	1278.09	1278.30	1278.44	1278.60	1278.73	XS 513; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	58,057	1274.13	1275.75	1276.24	1276.52	1276.72	1276.88	1276.99	1277.12	1277.22	1277.45	1277.65	1277.79	1277.95	1278.08	XS 514; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,984	1273.67	1275.18	1275.63	1275.89	1276.12	1276.33	1276.44	1276.57	1276.67	1276.90	1277.12	1277.27	1277.44	1277.57	XS 515; Redwood Meadows Golf & Country Club Berm on ROB



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	57,899	1272.83	1274.60	1275.02	1275.27	1275.49	1275.69	1275.81	1275.93	1276.02	1276.28	1276.50	1276.66	1276.82	1276.94	XS 516; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,831	1272.72	1274.24	1274.59	1274.84	1275.01	1275.15	1275.26	1275.41	1275.53	1275.84	1276.06	1276.22	1276.40	1276.52	XS 517; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,738	1272.28	1273.39	1273.7	1273.94	1274.22	1274.48	1274.67	1274.91	1275.08	1275.41	1275.63	1275.83	1276.00	1276.13	XS 518; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,685	1271.47	1272.99	1273.37	1273.66	1273.98	1274.27	1274.48	1274.74	1274.91	1275.25	1275.44	1275.65	1275.82	1275.94	XS 519; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,597	1270.43	1272.56	1272.95	1273.25	1273.56	1273.83	1274.02	1274.26	1274.46	1274.97	1274.97	1275.19	1275.21	1275.33	XS 520; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,512	1269.86	1271.85	1272.16	1272.42	1272.71	1272.99	1273.20	1273.31	1273.37	1273.66	1274.36	1274.36 ⁽²⁾	1274.65	1274.74	XS 521; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,437	1269.47	1271.08	1271.54	1271.86	1272.23	1272.56	1272.79	1273.10	1273.31	1273.46	1273.66	1273.78	1273.91	1274.00	XS 522; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,356	1269.10	1270.58	1270.97	1271.24	1271.55	1271.84	1272.04	1272.29	1272.49	1272.96	1273.12	1273.22	1273.35	1273.48	XS 523; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,286	1268.91	1269.89	1270.29	1270.60	1270.96	1271.30	1271.53	1271.81	1272.03	1272.56	1272.84	1272.96	1273.12	1273.24	XS 524; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,215	1267.43	1269.47	1269.88	1270.21	1270.59	1270.94	1271.18	1271.47	1271.69	1272.34	1272.34 ⁽²⁾	1272.40	1272.54	1272.63	XS 525; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,132	1267.34	1268.73	1269.09	1269.42	1269.82	1270.19	1270.43	1270.60	1270.72	1270.89	1271.76	1271.86	1271.98	1272.06	XS 526; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	57,049	1266.52	1268.04	1268.51	1268.85	1269.29	1269.73	1269.99	1270.15	1270.21	1270.48	1270.65	1270.82	1270.92	1271.03	XS 527; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	56,974	1265.86	1267.11	1267.56	1268.09	1268.65	1269.15	1269.37	1269.59	1269.81	1270.02	1270.20	1270.32	1270.50	1270.61	XS 528; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	56,895	1264.28	1266.43	1267.12	1267.65	1268.18	1268.65	1269.02	1269.41	1269.41 ⁽²⁾	1269.51	1269.70	1269.80	1269.91	1270.01	XS 529; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	56,812	1264.17	1266.10	1266.65	1267.04	1267.37	1267.58	1267.72	1268.16	1268.69	1268.93	1269.10	1269.21	1269.32	1269.39	XS 530; Redwood Meadows Golf & Country Club Berm on ROB
Elbow River	E13_Bragg_Lott	56,740	1264.18	1265.77	1266.24	1266.60	1267.00	1267.34	1267.58	1267.79	1267.84	1268.08	1268.29	1268.44	1268.60	1268.71	XS 531
Elbow River	E13_Bragg_Lott	56,654	1263.84	1264.96	1265.37	1265.70	1266.03	1266.31	1266.46	1266.73	1267.13	1267.47	1267.72	1267.86	1267.98	1268.09	XS 532
Elbow River	E13_Bragg_Lott	56,576	1262.77	1264.36	1264.79	1265.12	1265.49	1265.79	1266.00	1266.24	1266.42	1266.84	1267.20	1267.38	1267.57	1267.70	XS 533
Elbow River	E13_Bragg_Lott	56,500	1261.65	1263.90	1264.30	1264.63	1264.96	1265.26	1265.46	1265.68	1265.82	1266.19	1266.49	1266.70	1266.89	1267.01	XS 534
Elbow River	E13_Bragg_Lott	56,417	1261.09	1263.03	1263.49	1263.87	1264.27	1264.58	1264.76	1264.96	1265.11	1265.49	1265.81	1266.01	1266.25	1266.38	XS 535
Elbow River	E13_Bragg_Lott	56,330	1260.96	1262.40	1262.97	1263.39	1263.73	1264.01	1264.19	1264.41	1264.56	1264.95	1265.27	1265.47	1265.69	1265.85	XS 536
Elbow River	E13_Bragg_Lott	56,254	1260.02	1261.96	1262.55	1262.95	1263.30	1263.61	1263.82	1264.05	1264.21	1264.61	1264.95	1265.18	1265.44	1265.64	XS 537
Elbow River	E13_Bragg_Lott	56,177	1260.20	1261.49	1262.07	1262.41	1262.73	1262.99	1263.16	1263.36	1263.51	1263.88	1264.19	1264.36	1264.54	1264.64	XS 538
Elbow River	E13_Bragg_Lott	56,111	1259.91	1261.20	1261.74	1262.07	1262.41	1262.67	1262.85	1263.06	1263.22	1263.57	1263.85	1264.04	1264.17	1264.28	XS 539
Elbow River	E13_Bragg_Lott	56,061	1259.25	1260.91	1261.43	1261.76	1262.09	1262.36	1262.55	1262.77	1262.91	1263.29	1263.64	1263.88	1264.01	1264.13	XS 540
Elbow River	E13_Bragg_Lott	56,013	1259.38	1260.70	1261.17	1261.51	1261.82	1262.08	1262.25	1262.43	1262.55	1262.84	1263.03	1263.20	1263.54	1263.65	XS 541
Elbow River	E13_Bragg_Lott	55,962	1258.93	1260.42	1260.88	1261.21	1261.52	1261.74	1261.89	1262.06	1262.19	1262.57	1262.87	1262.92	1263.05	1263.16	XS 542
Elbow River	E13_Bragg_Lott	55,909	1258.61	1259.96	1260.41	1260.76	1261.13	1261.33	1261.46	1261.61	1261.73	1262.02	1262.30	1262.52	1262.66	1262.76	XS 543
Elbow River	E13_Bragg_Lott	55,868	1258.40	1259.52	1260.05	1260.47	1260.86	1261.06	1261.20	1261.36	1261.48	1261.80	1262.07	1262.23	1262.42	1262.54	XS 544



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Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	55,827	1258.06	1259.09	1259.79	1260.22	1260.56	1260.77	1260.90	1261.06	1261.18	1261.48	1261.73	1261.89	1262.05	1262.17	XS 545
Elbow River	E13_Bragg_Lott	55,775	1256.34	1258.84	1259.52	1259.95	1260.21	1260.40	1260.54	1260.69	1260.81	1261.13	1261.41	1261.60	1261.80	1261.94	XS 546
Elbow River	E13_Bragg_Lott	55,727	1256.77	1258.60	1259.22	1259.55	1259.80	1259.99	1260.12	1260.28	1260.40	1260.74	1261.02	1261.18	1261.36	1261.49	XS 547
Elbow River	E13_Bragg_Lott	55,683	1256.67	1258.38	1259.00	1259.26	1259.50	1259.70	1259.84	1260.01	1260.14	1260.51	1260.81	1260.98	1261.17	1261.31	XS 548
Elbow River	E13_Bragg_Lott	55,640	1256.58	1258.05	1258.72	1258.95	1259.20	1259.42	1259.57	1259.76	1259.90	1260.30	1260.62	1260.81	1261.01	1261.16	XS 549
Elbow River	E13_Bragg_Lott	55,594	1256.35	1257.60	1258.38	1258.64	1258.91	1259.16	1259.32	1259.53	1259.68	1260.10	1260.44	1260.63	1260.83	1260.99	XS 550
Elbow River	E13_Bragg_Lott	55,549	1254.95	1257.28	1258.07	1258.38	1258.69	1258.96	1259.14	1259.35	1259.51	1259.95	1260.31	1260.52	1260.73	1260.89	XS 551
Elbow River	E13_Bragg_Lott	55,499	1255.27	1256.89	1257.61	1257.99	1258.39	1258.69	1258.88	1259.10	1259.28	1259.74	1260.13	1260.34	1260.57	1260.74	XS 552
Elbow River	E13_Bragg_Lott	55,464	1254.70	1256.63	1257.38	1257.79	1258.20	1258.47	1258.66	1258.89	1259.06	1259.52	1259.89	1260.07	1260.30	1260.48	XS 553
Elbow River	E13_Bragg_Lott	55,404	1253.93	1256.20	1256.97	1257.41	1257.73	1258.01	1258.19	1258.40	1258.56	1258.97	1259.36	1259.76	1260.10	1260.31	XS 554
Elbow River	E13_Bragg_Lott	55,351	1254.09	1255.95	1256.69	1257.12	1257.49	1257.73	1257.91	1258.11	1258.27	1258.68	1259.04	1259.28	1259.43	1259.48	XS 555; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,309	1254.35	1255.74	1256.43	1256.79	1257.11	1257.35	1257.50	1257.69	1257.83	1258.20	1258.53	1258.75	1259.01	1259.22	XS 556; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,257	1254.14	1255.42	1256.03	1256.41	1256.75	1256.98	1257.13	1257.31	1257.44	1257.80	1258.12	1258.35	1258.71	1259.11	XS 557; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,210	1253.82	1255.04	1255.56	1255.97	1256.27	1256.50	1256.64	1256.80	1256.93	1257.29	1257.61	1257.84	1258.11	1258.27	XS 558; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,158	1253.46	1254.64	1255.14	1255.58	1255.88	1256.09	1256.24	1256.43	1256.58	1256.98	1257.35	1257.61	1257.91	1258.07	XS 559; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,108	1252.37	1254.11	1254.70	1255.20	1255.52	1255.77	1255.95	1256.17	1256.33	1256.78	1257.18	1257.46	1257.78	1257.96	XS 560; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,067	1252.47	1253.81	1254.39	1254.87	1255.20	1255.45	1255.61	1255.82	1255.97	1256.39	1256.76	1257.00	1257.29	1257.69	XS 561; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	55,029	1251.87	1253.44	1253.94	1254.26	1254.67	1254.97	1255.16	1255.34	1255.47	1255.84	1256.18	1256.42	1256.69	1256.90	XS 562; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,996	1251.45	1252.81	1253.28	1253.70	1254.03	1254.35	1254.58	1254.82	1255.00	1255.42	1255.79	1256.04	1256.33	1256.54	XS 563; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,924	1250.18	1252.11	1252.83	1253.34	1253.77	1254.10	1254.30	1254.53	1254.70	1255.14	1255.52	1255.79	1256.09	1256.31	XS 564; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,869	1249.52	1251.61	1252.41	1252.91	1253.38	1253.68	1253.85	1254.05	1254.19	1254.57	1254.89	1255.10	1255.36	1255.56	XS 565; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,826	1249.29	1251.24	1252.19	1252.62	1253.06	1253.32	1253.50	1253.70	1253.85	1254.23	1254.58	1254.81	1255.08	1255.30	XS 566; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,796	1249.09	1251.05	1252.06	1252.49	1252.92	1253.19	1253.37	1253.58	1253.73	1254.12	1254.47	1254.70	1254.98	1255.24	XS 567; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,758	1248.40	1250.66	1251.62	1252.29	1252.70	1252.96	1253.12	1253.30	1253.43	1253.77	1254.06	1254.26	1254.49	1254.68	XS 568; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,697	1248.49	1250.31	1251.03	1251.88	1252.31	1252.59	1252.76	1252.95	1253.06	1253.37	1253.66	1253.86	1254.10	1254.31	XS 569; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,661	1248.47	1250.10	1250.79	1251.59	1252.05	1252.33	1252.50	1252.67	1252.78	1253.09	1253.39	1253.61	1253.87	1254.10	XS 570; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,626	1248.01	1249.92	1250.59	1251.18	1251.69	1252.01	1252.17	1252.34	1252.46	1252.80	1253.12	1253.38	1253.67	1253.93	XS 571; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,582	1248.27	1249.48	1250.35	1250.82	1251.30	1251.68	1251.86	1252.04	1252.18	1252.55	1252.93	1253.22	1253.54	1253.83	XS 572; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,545	1247.26	1249.30	1250.20	1250.66	1251.06	1251.42	1251.60	1251.80	1251.94	1252.35	1252.77	1253.08	1253.41	1253.71	XS 573; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,499	1247.47	1249.06	1249.90	1250.41	1250.77	1251.10	1251.29	1251.50	1251.66	1252.12	1252.58	1252.92	1253.27	1253.59	XS 574; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,451	1247.34	1248.81	1249.53	1249.99	1250.34	1250.67	1250.87	1251.12	1251.31	1251.86	1252.38	1252.73	1253.10	1253.42	XS 575; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,410	1246.86	1248.59	1249.21	1249.66	1250.04	1250.39	1250.63	1250.92	1251.14	1251.72	1252.26	1252.63	1252.99	1253.32	XS 576; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,364	1247.13	1248.37	1248.89	1249.29	1249.72	1250.10	1250.35	1250.65	1250.87	1251.45	1251.97	1252.33	1252.87	1253.30	XS 577; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,311	1246.65	1248.05	1248.59	1248.97	1249.38	1249.72	1249.94	1250.20	1250.38	1250.85	1251.26	1251.54	1251.86	1252.09	XS 578; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,260	1245.98	1247.75	1248.28	1248.62	1248.98	1249.27	1249.46	1249.67	1249.83	1250.22	1250.55	1250.76	1251.01	1251.23	XS 579; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,206	1245.86	1247.49	1248.01	1248.33	1248.65	1248.91	1249.08	1249.27	1249.41	1249.77	1250.07	1250.26	1250.49	1250.70	XS 580; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,156	1245.58	1247.26	1247.76	1248.05	1248.33	1248.55	1248.69	1248.86	1248.98	1249.27	1249.54	1249.76	1250.00	1250.15	XS 581; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,109	1245.57	1247.05	1247.51	1247.81	1248.07	1248.27	1248.40	1248.54	1248.65	1248.91	1249.13	1249.27	1249.43	1249.62	XS 582; Redwood Meadows Berm on ROB



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	54,059	1245.05	1246.85	1247.26	1247.56	1247.80	1247.99	1248.12	1248.27	1248.38	1248.65	1248.89	1249.06	1249.24	1249.39	XS 583; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	54,006	1245.29	1246.52	1246.92	1247.19	1247.41	1247.59	1247.72	1247.87	1247.97	1248.24	1248.47	1248.62	1248.80	1248.93	XS 584; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,961	1244.82	1246.13	1246.62	1246.86	1247.08	1247.27	1247.39	1247.54	1247.64	1247.89	1248.11	1248.25	1248.41	1248.54	XS 585; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,918	1244.32	1245.79	1246.27	1246.53	1246.76	1246.94	1247.07	1247.21	1247.30	1247.55	1247.75	1247.89	1248.04	1248.16	XS 586; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,874	1244.38	1245.49	1245.85	1246.13	1246.43	1246.59	1246.70	1246.82	1246.91	1247.14	1247.33	1247.47	1247.62	1247.73	XS 587; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,834	1243.78	1245.21	1245.62	1245.88	1246.16	1246.31	1246.41	1246.53	1246.62	1246.83	1247.03	1247.16	1247.31	1247.42	XS 588; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,792	1243.44	1244.91	1245.40	1245.63	1245.85	1246.00	1246.10	1246.21	1246.29	1246.51	1246.71	1246.84	1246.99	1247.11	XS 589; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,751	1243.15	1244.60	1245.08	1245.32	1245.51	1245.67	1245.77	1245.90	1245.99	1246.22	1246.43	1246.57	1246.73	1246.86	XS 590; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,698	1242.85	1244.19	1244.64	1244.92	1245.13	1245.30	1245.41	1245.54	1245.63	1245.87	1246.08	1246.22	1246.38	1246.51	XS 591; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,647	1242.20	1243.90	1244.31	1244.60	1244.83	1245.00	1245.12	1245.24	1245.34	1245.58	1245.80	1245.94	1246.10	1246.23	XS 592; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,604	1242.15	1243.58	1243.98	1244.24	1244.46	1244.63	1244.75	1244.88	1244.98	1245.24	1245.46	1245.61	1245.79	1245.92	XS 593; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,577	1241.64	1243.43	1243.80	1244.06	1244.28	1244.46	1244.58	1244.72	1244.82	1245.09	1245.32	1245.47	1245.65	1245.79	XS 594; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,529	1241.89	1243.11	1243.45	1243.74	1243.98	1244.18	1244.31	1244.46	1244.57	1244.84	1245.08	1245.23	1245.41	1245.55	XS 595; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,483	1241.69	1242.77	1243.16	1243.47	1243.72	1243.92	1244.05	1244.20	1244.31	1244.58	1244.81	1244.97	1245.14	1245.28	XS 596; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,435	1241.28	1242.55	1242.92	1243.20	1243.43	1243.62	1243.74	1243.89	1243.99	1244.24	1244.46	1244.60	1244.77	1244.90	XS 597; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,397	1240.90	1242.34	1242.69	1242.94	1243.16	1243.34	1243.45	1243.56	1243.65	1243.88	1244.07	1244.21	1244.36	1244.48	XS 598; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,343	1240.85	1241.82	1242.17	1242.46	1242.66	1242.81	1242.91	1243.03	1243.11	1243.32	1243.50	1243.63	1243.78	1243.89	XS 599; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,297	1239.48	1241.30	1241.64	1241.92	1242.15	1242.32	1242.43	1242.54	1242.62	1242.84	1243.03	1243.16	1243.31	1243.42	XS 600; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,252	1239.81	1240.78	1241.15	1241.46	1241.71	1241.89	1241.99	1242.12	1242.21	1242.43	1242.63	1242.76	1242.91	1243.02	XS 601; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,212	1239.16	1240.57	1240.94	1241.21	1241.43	1241.59	1241.69	1241.81	1241.89	1242.11	1242.30	1242.42	1242.57	1242.68	XS 602; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,162	1239.20	1240.32	1240.65	1240.86	1241.06	1241.20	1241.30	1241.41	1241.49	1241.70	1241.89	1242.01	1242.16	1242.27	XS 603; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,120	1238.95	1240.04	1240.34	1240.53	1240.71	1240.85	1240.94	1241.04	1241.13	1241.34	1241.53	1241.66	1241.81	1241.92	XS 604; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,073	1238.72	1239.77	1240.00	1240.16	1240.32	1240.45	1240.55	1240.66	1240.74	1240.95	1241.15	1241.28	1241.43	1241.55	XS 605; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,037	1238.60	1239.52	1239.72	1239.87	1240.03	1240.16	1240.26	1240.37	1240.46	1240.68	1240.87	1241.01	1241.16	1241.28	XS 606; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	53,003	1238.16	1239.19	1239.43	1239.59	1239.76	1239.90	1240.00	1240.12	1240.21	1240.43	1240.63	1240.76	1240.91	1241.03	XS 607; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,971	1237.84	1238.97	1239.22	1239.38	1239.55	1239.69	1239.79	1239.91	1240.00	1240.22	1240.41	1240.54	1240.69	1240.80	XS 608; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,909	1237.29	1238.66	1238.91	1239.07	1239.23	1239.37	1239.46	1239.58	1239.67	1239.88	1240.07	1240.20	1240.34	1240.45	XS 609; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,832	1237.03	1238.08	1238.38	1238.57	1238.75	1238.89	1238.97	1239.06	1239.14	1239.33	1239.49	1239.62	1239.74	1239.84	XS 610; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,807	1236.89	1237.89	1238.18	1238.36	1238.51	1238.65	1238.73	1238.84	1238.90	1239.08	1239.24	1239.35	1239.48	1239.57	XS 611; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,790	1236.79	1237.72	1238.01	1238.20	1238.35	1238.48	1238.57	1238.67	1238.74	1238.91	1239.06	1239.16	1239.29	1239.39	XS 612; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,775	1236.64	1237.51	1237.82	1238.04	1238.21	1238.34	1238.42	1238.52	1238.59	1238.77	1238.92	1239.03	1239.14	1239.26	XS 613; Redwood Meadows Berm on ROB
Elbow River	E13_Bragg_Lott	52,752	1235.89	1237.25	1237.62	1237.84	1238.03	1238.17	1238.26	1238.36	1238.44	1238.63	1238.79	1238.89	1239.02	1239.17	XS 614
Elbow River	E13_Bragg_Lott	52,724	1235.48	1237.05	1237.39	1237.58	1237.75	1237.90	1238.00	1238.11	1238.18	1238.36	1238.51	1238.62	1238.74	1238.87	XS 615
Elbow River	E13_Bragg_Lott	52,692	1235.58	1236.71	1237.04	1237.26	1237.45	1237.60	1237.70	1237.83	1237.91	1238.10	1238.27	1238.38	1238.51	1238.65	XS 616
Elbow River	E13_Bragg_Lott	52,659	1234.72	1236.40	1236.74	1236.97	1237.18	1237.34	1237.45	1237.57	1237.66	1237.87	1238.04	1238.16	1238.29	1238.43	XS 617
Elbow River	E13_Bragg_Lott	52,610	1234.75	1236.16	1236.53	1236.76	1236.96	1237.11	1237.21	1237.33	1237.41	1237.62	1237.79	1237.91	1238.03	1238.12	XS 618
Elbow River	E13_Bragg_Lott	52,570	1234.41	1235.97	1236.32	1236.55	1236.76	1236.92	1237.02	1237.13	1237.21	1237.42	1237.59	1237.70	1237.82	1237.92	XS 619
Elbow River	E13_Bragg_Lott	52,518	1233.43	1235.71	1236.04	1236.26	1236.46	1236.60	1236.69	1236.80	1236.88	1237.07	1237.24	1237.35	1237.48	1237.59	XS 620



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	52,446	1233.98	1235.27	1235.52	1235.72	1235.95	1236.08	1236.17	1236.27	1236.34	1236.53	1236.71	1236.81	1236.93	1237.02	XS 621
Elbow River	E13_Bragg_Lott	52,386	1233.44	1234.37	1234.75	1235.03	1235.29	1235.47	1235.57	1235.67	1235.74	1235.92	1236.08	1236.18	1236.30	1236.39	XS 622
Elbow River	E13_Bragg_Lott	52,303	1232.54	1233.68	1234.04	1234.30	1234.53	1234.71	1234.80	1234.89	1234.97	1235.17	1235.33	1235.44	1235.56	1235.67	XS 623
Elbow River	E13_Bragg_Lott	52,220	1232.06	1233.16	1233.43	1233.62	1233.81	1233.95	1234.03	1234.13	1234.21	1234.40	1234.56	1234.67	1234.80	1234.89	XS 624
Elbow River	E13_Bragg_Lott	52,124	1231.30	1232.40	1232.66	1232.86	1233.04	1233.20	1233.30	1233.41	1233.49	1233.68	1233.85	1233.96	1234.09	1234.18	XS 625
Elbow River	E13_Bragg_Lott	52,035	1230.35	1231.67	1231.97	1232.17	1232.36	1232.51	1232.61	1232.73	1232.81	1233.00	1233.17	1233.28	1233.41	1233.51	XS 626
Elbow River	E13_Bragg_Lott	51,947	1229.69	1230.82	1231.08	1231.25	1231.42	1231.58	1231.68	1231.80	1231.89	1232.09	1232.26	1232.36	1232.48	1232.57	XS 627
Elbow River	E13_Bragg_Lott	51,877	1228.61	1230.21	1230.50	1230.67	1230.84	1230.98	1231.07	1231.17	1231.25	1231.43	1231.59	1231.69	1231.81	1231.90	XS 628
Elbow River	E13_Bragg_Lott	51,758	1228.09	1229.17	1229.52	1229.71	1229.89	1230.03	1230.12	1230.22	1230.29	1230.47	1230.63	1230.73	1230.84	1230.92	XS 629
Elbow River	E13_Bragg_Lott	51,673	1227.44	1228.56	1228.84	1228.98	1229.14	1229.26	1229.34	1229.43	1229.50	1229.69	1229.85	1229.96	1230.08	1230.17	XS 630
Elbow River	E13_Bragg_Lott	51,579	1226.74	1227.45	1227.68	1227.86	1228.03	1228.19	1228.28	1228.40	1228.48	1228.69	1228.87	1228.99	1229.11	1229.20	XS 631
Elbow River	E13_Bragg_Lott	51,458	1224.12	1226.27	1226.64	1226.87	1227.07	1227.20	1227.28	1227.38	1227.45	1227.64	1227.82	1227.94	1228.07	1228.17	XS 632
Elbow River	E13_Bragg_Lott	51,341	1223.42	1225.35	1225.63	1225.79	1225.92	1226.08	1226.20	1226.33	1226.43	1226.68	1226.89	1227.02	1227.16	1227.27	XS 633
Elbow River	E13_Bragg_Lott	51,232	1222.68	1224.46	1224.80	1225.06	1225.39	1225.60	1225.72	1225.86	1225.96	1226.20	1226.39	1226.51	1226.64	1226.74	XS 634
Elbow River	E13_Bragg_Lott	51,173	1222.55	1224.09	1224.48	1224.74	1225.10	1225.31	1225.43	1225.57	1225.66	1225.89	1226.06	1226.17	1226.30	1226.40	XS 635
Elbow River	E13_Bragg_Lott	51,067	1222.29	1223.45	1223.71	1223.87	1224.04	1224.19	1224.30	1224.44	1224.53	1224.77	1224.97	1225.09	1225.22	1225.31	XS 636
Elbow River	E13_Bragg_Lott	50,932	1220.27	1221.97	1222.38	1222.64	1222.89	1223.11	1223.24	1223.40	1223.51	1223.78	1223.96	1224.08	1224.20	1224.29	XS 637
Elbow River	E13_Bragg_Lott	50,854	1219.60	1221.36	1221.67	1221.91	1222.18	1222.39	1222.50	1222.64	1222.73	1222.95	1223.14	1223.25	1223.39	1223.49	XS 638
Elbow River	E13_Bragg_Lott	50,733	1219.31	1220.46	1220.97	1221.33	1221.58	1221.76	1221.86	1221.97	1222.06	1222.27	1222.45	1222.57	1222.70	1222.80	XS 639
Elbow River	E13_Bragg_Lott	50,623	1218.32	1219.82	1220.38	1220.76	1220.97	1221.12	1221.23	1221.34	1221.43	1221.64	1221.83	1221.96	1222.09	1222.20	XS 640
Elbow River	E13_Bragg_Lott	50,539	1217.62	1219.24	1219.71	1220.04	1220.28	1220.42	1220.52	1220.63	1220.71	1220.92	1221.09	1221.21	1221.33	1221.43	XS 641
Elbow River	E13_Bragg_Lott	50,443	1216.95	1218.70	1219.14	1219.45	1219.72	1219.89	1219.98	1220.09	1220.16	1220.36	1220.53	1220.64	1220.77	1220.86	XS 642
Elbow River	E13_Bragg_Lott	50,338	1216.40	1217.79	1218.54	1218.89	1219.12	1219.29	1219.38	1219.48	1219.55	1219.72	1219.85	1219.93	1220.02	1220.09	XS 643
Elbow River	E13_Bragg_Lott	50,294	1215.59	1217.36	1218.13	1218.46	1218.76	1218.94	1219.05	1219.17	1219.26	1219.45	1219.59	1219.67	1219.76	1219.82	XS 644
Elbow River	E13_Bragg_Lott	50,203	1214.84	1216.61	1217.46	1217.78	1218.08	1218.27	1218.39	1218.52	1218.61	1218.80	1218.93	1219.02	1219.11	1219.18	XS 645
Elbow River	E13_Bragg_Lott	50,099	1214.05	1216.22	1216.89	1217.23	1217.53	1217.71	1217.82	1217.94	1218.03	1218.25	1218.41	1218.51	1218.60	1218.67	XS 646
Elbow River	E13_Bragg_Lott	50,008	1214.06	1215.90	1216.38	1216.60	1216.80	1216.97	1217.07	1217.18	1217.25	1217.44	1217.60	1217.70	1217.80	1217.88	XS 647
Elbow River	E13_Bragg_Lott	49,908	1213.61	1215.27	1215.92	1216.12	1216.32	1216.47	1216.57	1216.68	1216.76	1216.96	1217.13	1217.24	1217.36	1217.44	XS 648
Elbow River	E13_Bragg_Lott	49,806	1213.06	1214.51	1215.33	1215.60	1215.74	1215.88	1215.97	1216.08	1216.15	1216.34	1216.51	1216.61	1216.73	1216.82	XS 649
Elbow River	E13_Bragg_Lott	49,713	1211.99	1213.80	1214.09	1214.49	1214.93	1215.16	1215.30	1215.44	1215.54	1215.76	1215.94	1216.05	1216.19	1216.29	XS 650
Elbow River	E13_Bragg_Lott	49,613	1211.78	1212.98	1213.57	1214.02	1214.46	1214.74	1214.91	1215.07	1215.17	1215.37	1215.50	1215.57	1215.67	1215.76	XS 651
Elbow River	E13_Bragg_Lott	49,536	1210.31	1212.35	1212.94	1213.34	1213.75	1214.08	1214.24	1214.38	1214.49	1214.77	1215.02	1215.18	1215.34	1215.45	XS 652
Elbow River	E13_Bragg_Lott	49,433	1210.27	1211.71	1212.23	1212.65	1213.08	1213.41	1213.58	1213.76	1213.86	1214.11	1214.25	1214.36	1214.49	1214.59	XS 653
Elbow River	E13_Bragg_Lott	49,340	1209.40	1211.12	1211.72	1212.18	1212.57	1212.83	1213.01	1213.14	1213.26	1213.48	1213.72	1213.84	1213.97	1214.08	XS 654
Elbow River	E13_Bragg_Lott	49,240	1209.29	1210.61	1211.24	1211.72	1212.20	1212.30	1212.41	1212.63	1212.73	1212.93	1213.05	1213.19	1213.32	1213.42	XS 655
Elbow River	E13_Bragg_Lott	49,140	1208.76	1209.75 ⁽⁵⁾	1210.22 ⁽⁵⁾	1210.63 ⁽⁵⁾	1211.44 ⁽⁵⁾	1211.60 ⁽⁵⁾	1211.82 ⁽⁵⁾	1211.92 ⁽⁵⁾	1212.01 ⁽⁵⁾	1212.17 ⁽⁵⁾	1212.34 ⁽⁵⁾	1212.44 ⁽⁵⁾	1212.50 ⁽⁵⁾	1212.58 ⁽⁵⁾	XS 656
Elbow River	E13_Bragg_Lott	49,041	1208.40	1209.29 ⁽⁵⁾	1209.70 ⁽⁵⁾	1210.05 ⁽⁵⁾	1210.44 ⁽⁵⁾	1210.85 ⁽⁵⁾	1210.97 ⁽⁵⁾	1211.14 ⁽⁵⁾	1211.25 ⁽⁵⁾	1211.52 ⁽⁵⁾	1211.67 ⁽⁵⁾	1211.73 ⁽⁵⁾	1211.92 ⁽⁵⁾	1211.99 ⁽⁵⁾	XS 657
Elbow River	E13_Bragg_Lott	48,939	1207.09	1208.78 ⁽⁵⁾	1209.13 ⁽⁵⁾	1209.38 ⁽⁵⁾	1209.65 ⁽⁵⁾	1209.89 ⁽⁵⁾	1210.01 ⁽⁵⁾	1210.09 ⁽⁵⁾	1210.18 ⁽⁵⁾	1210.50 ⁽⁵⁾	1210.88 ⁽⁵⁾	1211.00 ⁽⁵⁾	1211.15 ⁽⁵⁾	1211.19 ⁽⁵⁾	XS 658



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	48,843	1207.06	1208.30 ⁽⁵⁾	1208.78 ⁽⁵⁾	1209.15 ⁽⁵⁾	1209.44 ⁽⁵⁾	1209.63 ⁽⁵⁾	1209.80 ⁽⁵⁾	1209.96 ⁽⁵⁾	1210.07 ⁽⁵⁾	1210.35 ⁽⁵⁾	1210.56 ⁽⁵⁾	1210.68 ⁽⁵⁾	1210.78 ⁽⁵⁾	1210.84 ⁽⁵⁾	XS 659
Elbow River	E13_Bragg_Lott	48,740	1206.37	1207.69 ⁽⁵⁾	1208.03 ⁽⁵⁾	1208.30 ⁽⁵⁾	1208.63 ⁽⁵⁾	1208.84 ⁽⁵⁾	1209.03 ⁽⁵⁾	1209.17 ⁽⁵⁾	1209.44 ⁽⁵⁾	1209.63 ⁽⁵⁾	1209.93 ⁽⁵⁾	1210.04 ⁽⁵⁾	1210.16 ⁽⁵⁾	1210.27 ⁽⁵⁾	XS 660
Elbow River	E13_Bragg_Lott	48,651	1205.75	1206.97 ⁽⁵⁾	1207.55 ⁽⁵⁾	1207.77 ⁽⁵⁾	1208.02 ⁽⁵⁾	1208.25 ⁽⁵⁾	1208.46 ⁽⁵⁾	1208.62 ⁽⁵⁾	1208.73 ⁽⁵⁾	1209.15 ⁽⁵⁾	1209.39 ⁽⁵⁾	1209.59 ⁽⁵⁾	1209.72 ⁽⁵⁾	1209.80 ⁽⁵⁾	XS 661
Elbow River	E13_Bragg_Lott	48,556	1205.07	1206.43 ⁽⁵⁾	1206.97 ⁽⁵⁾	1207.32 ⁽⁵⁾	1207.70 ⁽⁵⁾	1208.06 ⁽⁵⁾	1208.31 ⁽⁵⁾	1208.48 ⁽⁵⁾	1208.54 ⁽⁵⁾	1208.78 ⁽⁵⁾	1208.98 ⁽⁵⁾	1209.09 ⁽⁵⁾	1209.09 ^(2,5)	1209.09 ^(2,5)	XS 662
Elbow River	E13_Bragg_Lott	48,449	1204.35	1205.63 ⁽⁵⁾	1206.03 ⁽⁵⁾	1206.33 ⁽⁵⁾	1206.65 ⁽⁵⁾	1207.02 ⁽⁵⁾	1207.24 ⁽⁵⁾	1207.40 ⁽⁵⁾	1207.61 ⁽⁵⁾	1207.89 ⁽⁵⁾	1208.13 ⁽⁵⁾	1208.27 ⁽⁵⁾	1208.27 ^(2,5)	1208.28 ⁽⁵⁾	XS 663
Elbow River	E13_Bragg_Lott	48,348	1204.13	1205.08 ⁽⁵⁾	1205.40 ⁽⁵⁾	1205.68 ⁽⁵⁾	1205.99 ⁽⁵⁾	1206.33 ⁽⁵⁾	1206.55 ⁽⁵⁾	1206.74 ⁽⁵⁾	1206.85 ⁽⁵⁾	1207.14 ⁽⁵⁾	1207.40 ⁽⁵⁾	1207.56 ⁽⁵⁾	1207.77 ⁽⁵⁾	1207.94 ⁽⁵⁾	XS 664
Elbow River	E13_Bragg_Lott	48,255	1203.43	1204.51 ⁽⁵⁾	1204.84 ⁽⁵⁾	1205.11 ⁽⁵⁾	1205.40 ⁽⁵⁾	1205.65 ⁽⁵⁾	1205.80 ⁽⁵⁾	1206.00 ⁽⁵⁾	1206.15 ⁽⁵⁾	1206.54 ⁽⁵⁾	1206.91 ⁽⁵⁾	1207.16 ⁽⁵⁾	1207.45 ⁽⁵⁾	1207.68 ⁽⁵⁾	XS 665
Elbow River	E13_Bragg_Lott	48,203	1203.14	1204.22 ⁽⁵⁾	1204.61 ⁽⁵⁾	1204.93 ⁽⁵⁾	1205.29 ⁽⁵⁾	1205.60 ⁽⁵⁾	1205.82 ⁽⁵⁾	1206.08 ⁽⁵⁾	1206.28 ⁽⁵⁾	1206.82 ⁽⁵⁾	1207.27 ⁽⁵⁾	1207.60 ⁽⁵⁾	1207.60 ^(2,5)	1207.60 ^(2,5)	XS 666; U/S of Highway 22 Bridge
Elbow River	E13_Bragg_Lott	48,165	1202.66	1203.78 ⁽⁵⁾	1204.23 ⁽⁵⁾	1204.59 ⁽⁵⁾	1205.03 ⁽⁵⁾	1205.36 ⁽⁵⁾	1205.58 ⁽⁵⁾	1205.84 ⁽⁵⁾	1206.05 ⁽⁵⁾	1206.58 ⁽⁵⁾	1207.07 ⁽⁵⁾	1207.42 ⁽⁵⁾	1207.42 ^(2,5)	1207.42 ^(2,5)	XS 667; D/S of Highway 22 Bridge
Elbow River	E13_Bragg_Lott	48,133	1202.31	1203.77 ⁽⁵⁾	1204.28 ⁽⁵⁾	1204.67 ⁽⁵⁾	1205.10 ⁽⁵⁾	1205.46 ⁽⁵⁾	1205.71 ⁽⁵⁾	1206.00 ⁽⁵⁾	1206.23 ⁽⁵⁾	1206.86 ⁽⁵⁾	1207.42 ⁽⁵⁾	1207.42 ^(2,5)	1207.42 ^(2,5)	1207.42 ^(2,5)	XS 668
Elbow River	E13_Bragg_Lott	48,025	1201.62	1203.57	1204.06	1204.38	1204.65	1204.87	1205.01	1205.18	1205.30	1205.61	1205.86	1206.03	1206.22	1206.35	XS 669
Elbow River	E13_Bragg_Lott	47,928	1201.38	1203.18	1203.65	1203.89	1204.12	1204.30	1204.42	1204.56	1204.66	1204.92	1205.13	1205.28	1205.44	1205.57	XS 670
Elbow River	E13_Bragg_Lott	47,829	1201.17	1202.57	1202.97	1203.18	1203.38	1203.53	1203.63	1203.74	1203.83	1204.06	1204.26	1204.39	1204.55	1204.66	XS 671
Elbow River	E13_Bragg_Lott	47,731	1200.12	1201.60	1202.02	1202.32	1202.57	1202.76	1202.88	1203.03	1203.12	1203.36	1203.57	1203.71	1203.87	1203.99	XS 672
Elbow River	E13_Bragg_Lott	47,630	1199.49	1200.94	1201.41	1201.74	1201.98	1202.15	1202.26	1202.39	1202.51	1202.75	1202.96	1203.10	1203.26	1203.38	XS 673
Elbow River	E13_Bragg_Lott	47,533	1198.99	1200.02	1200.54	1200.92	1201.25	1201.53	1201.68	1201.83	1201.95	1202.18	1202.38	1202.53	1202.67	1202.78	XS 674
Elbow River	E13_Bragg_Lott	47,435	1197.71	1199.56	1200.10	1200.38	1200.61	1200.79	1200.91	1201.06	1201.15	1201.45	1201.66	1201.80	1201.96	1202.08	XS 675
Elbow River	E13_Bragg_Lott	47,332	1197.48	1199.14	1199.71	1199.97	1200.17	1200.33	1200.44	1200.56	1200.65	1200.89	1201.08	1201.21	1201.35	1201.47	XS 676
Elbow River	E13_Bragg_Lott	47,239	1196.86	1198.59	1198.99	1199.26	1199.52	1199.69	1199.80	1199.92	1200.01	1200.23	1200.42	1200.54	1200.68	1200.79	XS 677
Elbow River	E13_Bragg_Lott	47,148	1196.41	1198.04	1198.50	1198.75	1198.98	1199.16	1199.26	1199.39	1199.47	1199.68	1199.86	1199.98	1200.12	1200.23	XS 678
Elbow River	E13_Bragg_Lott	47,049	1195.88	1197.67	1198.18	1198.39	1198.58	1198.73	1198.83	1198.94	1199.02	1199.21	1199.38	1199.49	1199.62	1199.71	XS 679
Elbow River	E13_Bragg_Lott	46,949	1195.61	1197.36	1197.84	1198.02	1198.19	1198.34	1198.43	1198.54	1198.62	1198.79	1198.95	1199.06	1199.18	1199.27	XS 680
Elbow River	E13_Bragg_Lott	46,849	1195.42	1196.89	1197.27	1197.46	1197.64	1197.80	1197.89	1198.02	1198.10	1198.28	1198.44	1198.54	1198.65	1198.73	XS 681
Elbow River	E13_Bragg_Lott	46,748	1195.06	1196.28	1196.63	1196.88	1197.10	1197.25	1197.35	1197.47	1197.55	1197.73	1197.88	1197.98	1198.09	1198.18	XS 682
Elbow River	E13_Bragg_Lott	46,661	1194.10	1195.83	1196.21	1196.48	1196.67	1196.80	1196.89	1196.99	1197.06	1197.23	1197.39	1197.49	1197.61	1197.70	XS 683
Elbow River	E13_Bragg_Lott	46,577	1193.97	1195.34	1195.68	1195.98	1196.14	1196.29	1196.37	1196.47	1196.54	1196.73	1196.90	1197.00	1197.12	1197.21	XS 684
Elbow River	E13_Bragg_Lott	46,474	1193.55	1194.71	1195.02	1195.21	1195.40	1195.55	1195.65	1195.76	1195.85	1196.06	1196.24	1196.34	1196.45	1196.54	XS 685
Elbow River	E13_Bragg_Lott	46,374	1192.49	1193.92	1194.35	1194.57	1194.79	1194.96	1195.06	1195.17	1195.25	1195.43	1195.60	1195.70	1195.82	1195.91	XS 686
Elbow River	E13_Bragg_Lott	46,275	1191.81	1193.42	1193.75	1193.97	1194.18	1194.35	1194.45	1194.56	1194.65	1194.85	1195.04	1195.16	1195.28	1195.39	XS 687
Elbow River	E13_Bragg_Lott	46,165	1191.19	1192.97	1193.29	1193.49	1193.68	1193.85	1193.95	1194.06	1194.13	1194.34	1194.52	1194.64	1194.77	1194.87	XS 688
Elbow River	E13_Bragg_Lott	46,074	1190.27	1192.27	1192.51	1192.66	1192.81	1192.96	1193.05	1193.16	1193.24	1193.41	1193.55	1193.64	1193.75	1193.83	XS 689
Elbow River	E13_Bragg_Lott	45,996	1190.28	1191.42	1191.79	1191.98	1192.16	1192.30	1192.38	1192.47	1192.53	1192.68	1192.81	1192.89	1192.99	1193.06	XS 690
Elbow River	E13_Bragg_Lott	45,896	1189.34	1190.76	1191.21	1191.45	1191.63	1191.76	1191.83	1191.91	1191.97	1192.12	1192.24	1192.32	1192.41	1192.48	XS 691
Elbow River	E13_Bragg_Lott	45,800	1188.98	1190.26	1190.71	1190.97	1191.18	1191.30	1191.38	1191.45	1191.51	1191.65	1191.76	1191.83	1191.91	1191.97	XS 692
Elbow River	E13_Bragg_Lott	45,705	1188.47	1189.81	1190.21	1190.43	1190.63	1190.76	1190.83	1190.91	1190.95	1191.07	1191.17	1191.24	1191.32	1191.37	XS 693
Elbow River	E13_Bragg_Lott	45,611	1188.15	1189.32	1189.64	1189.83	1190.01	1190.13	1190.20	1190.27	1190.32	1190.43	1190.53	1190.60	1190.68	1190.73	XS 694
Elbow River	E13_Bragg_Lott	45,514	1187.34	1188.74	1189.06	1189.23	1189.41	1189.53	1189.60	1189.68	1189.73	1189.88	1189.98	1190.04	1190.12	1190.18	XS 695
Elbow River	E13_Bragg_Lott	45,419	1186.27	1188.25	1188.61	1188.82	1189.00	1189.13	1189.21	1189.30	1189.37	1189.53	1189.65	1189.73	1189.82	1189.89	XS 696



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	45,309	1186.11	1187.62	1188.17	1188.39	1188.57	1188.72	1188.81	1188.90	1188.97	1189.13	1189.27	1189.35	1189.44	1189.51	XS 697
Elbow River	E13_Bragg_Lott	45,216	1185.12	1187.02	1187.63	1187.90	1188.08	1188.23	1188.32	1188.43	1188.51	1188.69	1188.82	1188.91	1189.00	1189.07	XS 698
Elbow River	E13_Bragg_Lott	45,115	1184.51	1186.53	1187.01	1187.24	1187.40	1187.52	1187.60	1187.69	1187.75	1187.91	1188.04	1188.12	1188.22	1188.28	XS 699
Elbow River	E13_Bragg_Lott	45,016	1184.25	1186.09	1186.53	1186.71	1186.85	1186.95	1187.02	1187.10	1187.16	1187.29	1187.42	1187.50	1187.60	1187.67	XS 700
Elbow River	E13_Bragg_Lott	44,931	1183.93	1185.37	1185.79	1185.94	1186.09	1186.20	1186.27	1186.35	1186.41	1186.56	1186.69	1186.78	1186.88	1186.95	XS 701
Elbow River	E13_Bragg_Lott	44,835	1182.54	1184.68	1185.08	1185.28	1185.43	1185.55	1185.62	1185.71	1185.77	1185.94	1186.06	1186.14	1186.24	1186.30	XS 702
Elbow River	E13_Bragg_Lott	44,722	1182.51	1184.00	1184.45	1184.71	1184.89	1185.03	1185.11	1185.20	1185.27	1185.46	1185.62	1185.70	1185.80	1185.87	XS 703
Elbow River	E13_Bragg_Lott	44,643	1181.72	1183.53	1184.01	1184.20	1184.39	1184.52	1184.61	1184.71	1184.78	1184.97	1185.14	1185.26	1185.40	1185.49	XS 704
Elbow River	E13_Bragg_Lott	44,541	1181.15	1182.89	1183.35	1183.56	1183.73	1183.87	1183.96	1184.06	1184.14	1184.35	1184.53	1184.65	1184.83	1184.92	XS 705
Elbow River	E13_Bragg_Lott	44,448	1180.45	1182.32	1182.69	1182.92	1183.12	1183.29	1183.39	1183.50	1183.59	1183.84	1184.00	1184.10	1184.23	1184.32	XS 706
Elbow River	E13_Bragg_Lott	44,344	1180.02	1181.59	1182.01	1182.29	1182.54	1182.73	1182.84	1182.97	1183.07	1183.32	1183.57	1183.69	1183.81	1183.90	XS 707
Elbow River	E13_Bragg_Lott	44,243	1178.92	1180.94	1181.45	1181.73	1181.97	1182.15	1182.27	1182.40	1182.50	1182.76	1183.08	1183.16	1183.28	1183.37	XS 708
Elbow River	E13_Bragg_Lott	44,141	1178.43	1180.59	1180.98	1181.20	1181.41	1181.57	1181.69	1181.82	1181.92	1182.19	1182.43	1182.64	1182.75	1182.84	XS 709
Elbow River	E13_Bragg_Lott	44,042	1178.45	1180.17	1180.51	1180.74	1180.96	1181.13	1181.24	1181.38	1181.48	1181.72	1181.94	1182.09	1182.25	1182.37	XS 710
Elbow River	E13_Bragg_Lott	43,929	1178.14	1179.48	1179.83	1180.05	1180.26	1180.43	1180.55	1180.67	1180.76	1180.98	1181.17	1181.30	1181.42	1181.52	XS 711
Elbow River	E13_Bragg_Lott	43,842	1177.43	1178.96	1179.27	1179.47	1179.66	1179.80	1179.90	1180.01	1180.08	1180.28	1180.48	1180.58	1180.69	1180.78	XS 712
Elbow River	E13_Bragg_Lott	43,744	1177.38	1178.43	1178.69	1178.87	1179.05	1179.19	1179.28	1179.37	1179.44	1179.64	1179.83	1179.95	1180.06	1180.14	XS 713
Elbow River	E13_Bragg_Lott	43,641	1176.79	1177.54	1177.82	1178.03	1178.23	1178.39	1178.50	1178.61	1178.69	1178.87	1179.02	1179.13	1179.23	1179.31	XS 714
Elbow River	E13_Bragg_Lott	43,543	1175.70	1176.98	1177.31	1177.51	1177.69	1177.84	1177.94	1178.07	1178.14	1178.30	1178.44	1178.53	1178.63	1178.71	XS 715
Elbow River	E13_Bragg_Lott	43,445	1175.41	1176.57	1176.94	1177.13	1177.28	1177.40	1177.49	1177.60	1177.66	1177.83	1177.95	1178.03	1178.12	1178.19	XS 716
Elbow River	E13_Bragg_Lott	43,319	1174.34	1175.97	1176.23	1176.39	1176.54	1176.66	1176.75	1176.85	1176.91	1177.07	1177.20	1177.29	1177.38	1177.46	XS 717
Elbow River	E13_Bragg_Lott	43,248	1174.00	1175.39	1175.76	1175.97	1176.15	1176.30	1176.39	1176.49	1176.55	1176.70	1176.83	1176.91	1177.01	1177.09	XS 718
Elbow River	E13_Bragg_Lott	43,137	1173.17	1174.63	1175.19	1175.45	1175.66	1175.81	1175.91	1176.00	1176.07	1176.25	1176.39	1176.47	1176.57	1176.65	XS 719
Elbow River	E13_Bragg_Lott	43,039	1172.10	1173.82	1174.35	1174.65	1174.88	1175.05	1175.17	1175.29	1175.37	1175.58	1175.74	1175.84	1175.95	1176.04	XS 720
Elbow River	E13_Bragg_Lott	42,937	1171.29	1173.31	1173.73	1173.98	1174.23	1174.41	1174.54	1174.68	1174.77	1174.97	1175.13	1175.23	1175.34	1175.42	XS 721
Elbow River	E13_Bragg_Lott	42,838	1171.27	1172.80	1173.15	1173.39	1173.65	1173.85	1173.98	1174.12	1174.22	1174.44	1174.61	1174.71	1174.83	1174.91	XS 722
Elbow River	E13_Bragg_Lott	42,736	1170.60	1172.04	1172.40	1172.66	1172.89	1173.08	1173.20	1173.34	1173.44	1173.68	1173.85	1173.96	1174.07	1174.16	XS 723
Elbow River	E13_Bragg_Lott	42,638	1169.87	1171.25	1171.64	1171.86	1172.10	1172.29	1172.41	1172.56	1172.66	1172.91	1173.08	1173.17	1173.28	1173.37	XS 724
Elbow River	E13_Bragg_Lott	42,536	1169.06	1170.47	1170.99	1171.25	1171.48	1171.66	1171.77	1171.90	1171.99	1172.24	1172.43	1172.55	1172.69	1172.79	XS 725
Elbow River	E13_Bragg_Lott	42,439	1168.11	1169.91	1170.38	1170.66	1170.89	1171.05	1171.15	1171.27	1171.36	1171.54	1171.68	1171.78	1171.90	1171.99	XS 726
Elbow River	E13_Bragg_Lott	42,343	1167.70	1169.30	1169.61	1169.85	1170.09	1170.26	1170.37	1170.49	1170.57	1170.79	1170.97	1171.09	1171.23	1171.33	XS 727
Elbow River	E13_Bragg_Lott	42,265	1167.51	1168.65	1169.03	1169.31	1169.56	1169.74	1169.86	1170.01	1170.09	1170.29	1170.47	1170.60	1170.73	1170.84	XS 728
Elbow River	E13_Bragg_Lott	42,142	1166.23	1167.94	1168.46	1168.74	1168.96	1169.12	1169.22	1169.34	1169.42	1169.63	1169.81	1169.93	1170.06	1170.17	XS 729
Elbow River	E13_Bragg_Lott	42,043	1165.53	1167.38	1167.87	1168.11	1168.32	1168.50	1168.60	1168.70	1168.77	1168.96	1169.13	1169.25	1169.39	1169.50	XS 730
Elbow River	E13_Bragg_Lott	41,942	1165.23	1166.53	1166.96	1167.21	1167.43	1167.65	1167.77	1167.90	1167.99	1168.23	1168.44	1168.59	1168.75	1168.88	XS 731
Elbow River	E13_Bragg_Lott	41,844	1163.94	1165.89	1166.30	1166.55	1166.77	1166.97	1167.10	1167.24	1167.34	1167.60	1167.83	1167.98	1168.15	1168.29	XS 732
Elbow River	E13_Bragg_Lott	41,751	1164.03	1165.41	1165.78	1166.06	1166.32	1166.50	1166.62	1166.76	1166.86	1167.12	1167.35	1167.50	1167.68	1167.82	XS 733
Elbow River	E13_Bragg_Lott	41,649	1163.61	1164.95	1165.33	1165.64	1165.90	1166.08	1166.19	1166.32	1166.42	1166.68	1166.90	1167.05	1167.22	1167.35	XS 734



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	41,551	1162.48	1164.49	1164.85	1165.13	1165.37	1165.55	1165.67	1165.80	1165.89	1166.13	1166.35	1166.49	1166.66	1166.79	XS 735
Elbow River	E13_Bragg_Lott	41,448	1162.21	1163.81	1164.15	1164.36	1164.57	1164.74	1164.85	1164.99	1165.09	1165.35	1165.58	1165.74	1165.92	1166.06	XS 736
Elbow River	E13_Bragg_Lott	41,348	1161.56	1163.12	1163.50	1163.75	1163.99	1164.18	1164.30	1164.44	1164.55	1164.83	1165.08	1165.25	1165.44	1165.59	XS 737
Elbow River	E13_Bragg_Lott	41,246	1160.98	1162.39	1162.80	1163.14	1163.44	1163.69	1163.84	1164.01	1164.14	1164.46	1164.73	1164.91	1165.11	1165.27	XS 738
Elbow River	E13_Bragg_Lott	41,149	1159.96	1161.91	1162.36	1162.70	1163.04	1163.30	1163.43	1163.59	1163.69	1163.97	1164.22	1164.38	1164.57	1164.71	XS 739
Elbow River	E13_Bragg_Lott	41,047	1159.52	1161.40	1161.79	1162.09	1162.40	1162.64	1162.78	1162.95	1163.07	1163.33	1163.56	1163.69	1163.87	1163.99	XS 740
Elbow River	E13_Bragg_Lott	40,947	1159.39	1160.82	1161.19	1161.45	1161.71	1161.87	1161.98	1162.10	1162.19	1162.43	1162.61	1162.76	1162.88	1162.99	XS 741
Elbow River	E13_Bragg_Lott	40,847	1159.14	1160.26	1160.59	1160.82	1161.05	1161.24	1161.36	1161.49	1161.58	1161.81	1161.99	1162.11	1162.24	1162.34	XS 742
Elbow River	E13_Bragg_Lott	40,749	1157.80	1159.39	1159.75	1160.05	1160.28	1160.45	1160.56	1160.67	1160.74	1160.93	1161.08	1161.19	1161.30	1161.39	XS 743
Elbow River	E13_Bragg_Lott	40,651	1157.20	1158.76	1159.15	1159.44	1159.71	1159.90	1160.01	1160.11	1160.19	1160.38	1160.54	1160.66	1160.79	1160.89	XS 744
Elbow River	E13_Bragg_Lott	40,547	1157.10	1158.27	1158.68	1158.93	1159.14	1159.33	1159.44	1159.57	1159.67	1159.89	1160.08	1160.20	1160.35	1160.46	XS 745
Elbow River	E13_Bragg_Lott	40,447	1156.62	1157.63	1158.09	1158.36	1158.56	1158.74	1158.86	1158.99	1159.09	1159.32	1159.51	1159.63	1159.78	1159.89	XS 746
Elbow River	E13_Bragg_Lott	40,347	1155.52	1157.12	1157.55	1157.81	1158.08	1158.30	1158.44	1158.60	1158.70	1158.96	1159.13	1159.26	1159.40	1159.51	XS 747
Elbow River	E13_Bragg_Lott	40,246	1154.62	1156.37	1156.84	1157.12	1157.39	1157.58	1157.70	1157.83	1157.92	1158.14	1158.36	1158.45	1158.56	1158.65	XS 748
Elbow River	E13_Bragg_Lott	40,147	1154.43	1156.04	1156.45	1156.71	1156.95	1157.12	1157.22	1157.34	1157.42	1157.61	1157.76	1157.86	1157.97	1158.08	XS 749
Elbow River	E13_Bragg_Lott	40,047	1154.02	1155.72	1156.09	1156.31	1156.51	1156.65	1156.73	1156.83	1156.90	1157.07	1157.23	1157.32	1157.42	1157.50	XS 750
Elbow River	E13_Bragg_Lott	39,946	1153.76	1155.14	1155.53	1155.78	1156.00	1156.16	1156.26	1156.36	1156.44	1156.61	1156.75	1156.84	1156.94	1157.02	XS 751
Elbow River	E13_Bragg_Lott	39,851	1153.19	1154.64	1155.01	1155.27	1155.52	1155.69	1155.79	1155.89	1155.98	1156.13	1156.24	1156.34	1156.42	1156.49	XS 752
Elbow River	E13_Bragg_Lott	39,744	1152.99	1154.05	1154.42	1154.67	1154.89	1155.06	1155.15	1155.27	1155.35	1155.55	1155.69	1155.79	1155.89	1155.97	XS 753
Elbow River	E13_Bragg_Lott	39,645	1152.12	1153.51	1153.78	1153.98	1154.18	1154.34	1154.43	1154.55	1154.63	1154.80	1154.94	1155.03	1155.13	1155.21	XS 754
Elbow River	E13_Bragg_Lott	39,546	1151.72	1152.98	1153.22	1153.38	1153.52	1153.62	1153.70	1153.79	1153.86	1154.00	1154.12	1154.19	1154.30	1154.37	XS 755
Elbow River	E13_Bragg_Lott	39,444	1150.79	1152.21	1152.49	1152.66	1152.84	1152.97	1153.05	1153.14	1153.21	1153.36	1153.51	1153.60	1153.70	1153.77	XS 756
Elbow River	E13_Bragg_Lott	39,400	1150.38	1151.87	1152.19	1152.37	1152.56	1152.71	1152.81	1152.89	1152.95	1153.11	1153.27	1153.36	1153.46	1153.53	XS 757
Elbow River	E13_Bragg_Lott	39,231	1149.23	1151.01	1151.47	1151.77	1152.00	1152.14	1152.23	1152.31	1152.38	1152.56	1152.70	1152.79	1152.88	1152.95	XS 758
Elbow River	E13_Bragg_Lott	39,141	1149.03	1150.48	1150.89	1151.19	1151.45	1151.64	1151.74	1151.89	1151.96	1152.17	1152.32	1152.43	1152.50	1152.56	XS 759
Elbow River	E13_Bragg_Lott	39,043	1148.10	1149.98	1150.40	1150.70	1150.99	1151.18	1151.30	1151.44	1151.52	1151.71	1151.85	1151.95	1152.05	1152.12	XS 760
Elbow River	E13_Bragg_Lott	38,941	1147.64	1149.39	1149.85	1150.16	1150.41	1150.58	1150.68	1150.79	1150.86	1151.03	1151.16	1151.26	1151.35	1151.42	XS 761
Elbow River	E13_Bragg_Lott	38,842	1147.34	1148.88	1149.29	1149.58	1149.77	1149.90	1149.99	1150.08	1150.15	1150.30	1150.43	1150.51	1150.60	1150.67	XS 762
Elbow River	E13_Bragg_Lott	38,745	1147.24	1148.42	1148.81	1149.05	1149.25	1149.38	1149.46	1149.54	1149.60	1149.75	1149.87	1149.95	1150.03	1150.10	XS 763
Elbow River	E13_Bragg_Lott	38,646	1146.02	1147.87	1148.21	1148.40	1148.55	1148.68	1148.75	1148.82	1148.88	1149.02	1149.13	1149.21	1149.29	1149.36	XS 764
Elbow River	E13_Bragg_Lott	38,541	1146.25	1147.25	1147.57	1147.77	1147.93	1148.06	1148.13	1148.22	1148.28	1148.44	1148.56	1148.64	1148.73	1148.81	XS 765
Elbow River	E13_Bragg_Lott	38,442	1145.22	1146.76	1147.04	1147.22	1147.37	1147.50	1147.58	1147.67	1147.74	1147.90	1148.03	1148.11	1148.21	1148.28	XS 766
Elbow River	E13_Bragg_Lott	38,342	1144.90	1146.14	1146.42	1146.59	1146.75	1146.87	1146.95	1147.04	1147.10	1147.26	1147.39	1147.48	1147.58	1147.65	XS 767
Elbow River	E13_Bragg_Lott	38,246	1144.75	1145.67	1145.95	1146.12	1146.29	1146.41	1146.48	1146.57	1146.63	1146.79	1146.93	1147.02	1147.12	1147.20	XS 768
Elbow River	E13_Bragg_Lott	38,144	1143.99	1145.19	1145.48	1145.66	1145.80	1145.90	1145.97	1146.04	1146.10	1146.25	1146.38	1146.47	1146.57	1146.64	XS 769
Elbow River	E13_Bragg_Lott	38,044	1143.27	1144.58	1144.94	1145.15	1145.32	1145.46	1145.54	1145.62	1145.68	1145.83	1145.96	1146.05	1146.15	1146.23	XS 770
Elbow River	E13_Bragg_Lott	37,957	1142.43	1143.94	1144.32	1144.61	1144.83	1144.99	1145.09	1145.20	1145.27	1145.45	1145.59	1145.69	1145.81	1145.90	XS 771
Elbow River	E13_Bragg_Lott	37,869	1141.91	1143.45	1143.87	1144.22	1144.46	1144.63	1144.73	1144.85	1144.93	1145.13	1145.31	1145.43	1145.57	1145.67	XS 772



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
Elbow River	E13_Bragg_Lott	37,771	1141.48	1142.95	1143.39	1143.72	1143.99	1144.20	1144.32	1144.47	1144.58	1144.87	1145.09	1145.23	1145.38	1145.49	XS 773
Elbow River	E13_Bragg_Lott	37,687	1140.87	1142.58	1143.00	1143.31	1143.61	1143.81	1143.94	1144.10	1144.21	1144.49	1144.75	1144.90	1145.04	1145.15	XS 774
Elbow River	E13_Bragg_Lott	37,589	1140.36	1142.00	1142.44	1142.79	1143.12	1143.38	1143.55	1143.73	1143.86	1144.16	1144.39	1144.59	1144.73	1144.83	XS 775
Elbow River	E13_Bragg_Lott	37,512	1140.23	1141.59	1142.06	1142.42	1142.70	1142.92	1143.05	1143.22	1143.34	1143.66	1143.94	1144.10	1144.28	1144.39	XS 776
Elbow River	E13_Bragg_Lott	37,389	1139.29	1141.05	1141.50	1141.80	1142.07	1142.27	1142.40	1142.55	1142.66	1142.94	1143.20	1143.35	1143.52	1143.63	XS 777
Elbow River	E13_Bragg_Lott	37,289	1138.73	1140.51	1140.94	1141.23	1141.48	1141.71	1141.83	1141.96	1142.05	1142.27	1142.47	1142.60	1142.74	1142.85	XS 778
Elbow River	E13_Bragg_Lott	37,189	1138.39	1139.88	1140.40	1140.65	1140.85	1141.02	1141.13	1141.25	1141.33	1141.52	1141.69	1141.80	1141.92	1142.02	XS 779
Elbow River	E13_Bragg_Lott	37,092	1137.69	1139.46	1139.94	1140.13	1140.29	1140.44	1140.53	1140.63	1140.71	1140.89	1141.04	1141.15	1141.27	1141.36	XS 780
Elbow River	E13_Bragg_Lott	36,989	1137.28	1138.94	1139.35	1139.53	1139.71	1139.85	1139.94	1140.04	1140.11	1140.28	1140.44	1140.54	1140.66	1140.76	XS 781
Elbow River	E13_Bragg_Lott	36,908	1136.75	1138.43	1138.88	1139.12	1139.31	1139.45	1139.54	1139.64	1139.72	1139.90	1140.06	1140.17	1140.29	1140.38	XS 782
Elbow River	E13_Bragg_Lott	36,781	1136.16	1137.86	1138.19	1138.43	1138.66	1138.82	1138.91	1139.03	1139.11	1139.31	1139.48	1139.59	1139.72	1139.82	XS 783
Elbow River	E13_Bragg_Lott	36,698	1135.80	1137.39	1137.77	1138.03	1138.26	1138.43	1138.53	1138.65	1138.73	1138.93	1139.10	1139.21	1139.35	1139.45	XS 784
Elbow River	E13_Bragg_Lott	36,605	1135.26	1136.90	1137.35	1137.65	1137.84	1138.00	1138.09	1138.21	1138.29	1138.49	1138.66	1138.79	1138.93	1139.04	XS 785
Elbow River	E13_Bragg_Lott	36,502	1135.01	1136.36	1136.77	1137.00	1137.21	1137.38	1137.50	1137.65	1137.70	1137.96	1138.17	1138.30	1138.46	1138.59	XS 786
Elbow River	E13_Bragg_Lott	36,404	1133.93	1135.86	1136.27	1136.56	1136.83	1137.03	1137.17	1137.33	1137.33 ⁽²⁾	1137.44	1137.62	1137.74	1137.88	1137.98	XS 787
Elbow River	E13_Bragg_Lott	36,299	1133.57	1135.31	1135.77	1136.06	1136.33	1136.53	1136.67	1136.83	1136.92	1136.95	1137.14	1137.27	1137.41	1137.52	XS 788
Elbow River	E13_Bragg_Lott	36,212	1133.03	1134.81	1135.29	1135.54	1135.79	1135.98	1136.12	1136.26	1136.35	1136.60	1136.81	1136.94	1137.10	1137.21	XS 789
Elbow River	E13_Bragg_Lott	36,116	1132.31	1134.42	1134.82	1135.10	1135.37	1135.59	1135.72	1135.87	1135.98	1136.22	1136.43	1136.56	1136.72	1136.83	XS 790
Elbow River	E13_Bragg_Lott	36,012	1132.32	1134.03	1134.43	1134.69	1134.93	1135.11	1135.23	1135.36	1135.45	1135.67	1135.85	1135.97	1136.09	1136.19	XS 791
Elbow River	E13_Bragg_Lott	35,912	1131.53	1133.33	1133.83	1134.18	1134.48	1134.71	1134.85	1134.98	1135.05	1135.23	1135.38	1135.49	1135.60	1135.69	XS 792
Elbow River	E13_Bragg_Lott	35,816	1131.48	1132.77	1133.27	1133.57	1133.86	1134.07	1134.20	1134.34	1134.43	1134.64	1134.80	1134.91	1135.03	1135.12	XS 793
Elbow River	E13_Bragg_Lott	35,710	1130.50	1132.38	1132.93	1133.18	1133.42	1133.60	1133.71	1133.83	1133.91	1134.09	1134.24	1134.35	1134.46	1134.55	XS 794
Elbow River	E13_Bragg_Lott	35,616	1130.36	1131.94	1132.47	1132.72	1132.96	1133.15	1133.26	1133.38	1133.46	1133.64	1133.79	1133.89	1134.00	1134.09	XS 795
Elbow River	E13_Bragg_Lott	35,513	1129.85	1131.35	1131.89	1132.17	1132.45	1132.65	1132.78	1132.92	1133.01	1133.20	1133.36	1133.46	1133.58	1133.67	XS 796
Elbow River	E13_Bragg_Lott	35,414	1129.39	1130.90	1131.41	1131.72	1131.98	1132.18	1132.32	1132.46	1132.55	1132.76	1132.92	1133.02	1133.14	1133.23	XS 797
Elbow River	E13_Bragg_Lott	35,327	1129.04	1130.58	1131.01	1131.31	1131.54	1131.75	1131.88	1132.02	1132.11	1132.32	1132.48	1132.59	1132.70	1132.79	XS 798
Elbow River	E13_Bragg_Lott	35,210	1128.76	1129.98	1130.37	1130.67	1130.93	1131.16	1131.30	1131.45	1131.54	1131.74	1131.90	1132.00	1132.12	1132.21	XS 799
Elbow River	E13_Bragg_Lott	35,105	1128.00	1129.64	1129.98	1130.23	1130.46	1130.66	1130.79	1130.93	1131.02	1131.21	1131.36	1131.46	1131.57	1131.65	XS 800
Elbow River	E13_Bragg_Lott	35,004	1127.74	1129.26	1129.56	1129.77	1129.99	1130.16	1130.28	1130.42	1130.50	1130.70	1130.85	1130.95	1131.06	1131.15	XS 801
Elbow River	E13_Bragg_Lott	34,916	1127.88	1128.77	1129.07	1129.28	1129.49	1129.67	1129.79	1129.91	1129.98	1130.16	1130.31	1130.41	1130.54	1130.62	XS 802
Elbow River	E13_Bragg_Lott	34,816	1126.62	1128.21	1128.56	1128.78	1128.93	1129.04	1129.11	1129.21	1129.28	1129.46	1129.61	1129.71	1129.82	1129.91	XS 803
Elbow River	E13_Bragg_Lott	34,725	1125.56	1127.75	1128.10	1128.35	1128.56	1128.72	1128.84	1128.89	1128.96	1129.12	1129.26	1129.34	1129.43	1129.50	XS 804
Elbow River	E13_Bragg_Lott	34,615	1125.76	1127.30	1127.59	1127.77	1127.90	1128.01	1128.08	1128.25	1128.30	1128.43	1128.52	1128.61	1128.72	1128.80	XS 805
Elbow River	E13_Bragg_Lott	34,516	1125.31	1126.82	1127.11	1127.31	1127.48	1127.59	1127.67	1127.76	1127.83	1128.00	1128.15	1128.25	1128.36	1128.45	XS 806
Elbow River	E13_Bragg_Lott	34,419	1124.45	1126.34	1126.68	1126.93	1127.15	1127.31	1127.44	1127.55	1127.62	1127.80	1127.95	1128.04	1128.15	1128.24	XS 807
Elbow River	E13_Bragg_Lott	34,312	1124.58	1125.81	1126.14	1126.38	1126.60	1126.78	1126.91	1127.01	1127.08	1127.25	1127.39	1127.49	1127.60	1127.68	XS 808
Elbow River	E13_Bragg_Lott	34,238	1124.20	1125.44	1125.76	1126.00	1126.22	1126.40	1126.51	1126.62	1126.72	1126.90	1127.04	1127.14	1127.24	1127.31	XS 809
Elbow River	E13_Bragg_Lott	34,158	1123.34	1124.96	1125.34	1125.63	1125.87	1126.00	1126.09	1126.17	1126.24	1126.40	1126.55	1126.64	1126.74	1126.82	XS 810



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	34,080	1122.89	1124.56	1124.98	1125.28	1125.51	1125.66	1125.75	1125.84	1125.91	1126.08	1126.23	1126.32	1126.43	1126.51	XS 811
Elbow River	E13_Bragg_Lott	34,003	1122.71	1124.25	1124.68	1124.99	1125.27	1125.47	1125.56	1125.65	1125.72	1125.85	1125.98	1126.07	1126.17	1126.25	XS 812
Elbow River	E13_Bragg_Lott	33,920	1122.48	1123.86	1124.23	1124.53	1124.79	1124.98	1125.09	1125.20	1125.26	1125.45	1125.60	1125.70	1125.82	1125.91	XS 813
Elbow River	E13_Bragg_Lott	33,840	1122.12	1123.32	1123.81	1124.11	1124.38	1124.59	1124.72	1124.86	1124.96	1125.19	1125.36	1125.46	1125.59	1125.69	XS 814
Elbow River	E13_Bragg_Lott	33,760	1121.09	1122.96	1123.51	1123.80	1124.04	1124.22	1124.34	1124.49	1124.58	1124.84	1125.03	1125.15	1125.28	1125.38	XS 815
Elbow River	E13_Bragg_Lott	33,681	1120.86	1122.72	1123.23	1123.51	1123.73	1123.90	1124.02	1124.15	1124.23	1124.44	1124.59	1124.69	1124.80	1124.88	XS 816
Elbow River	E13_Bragg_Lott	33,603	1120.69	1122.41	1122.88	1123.17	1123.44	1123.64	1123.77	1123.88	1123.96	1124.14	1124.27	1124.36	1124.46	1124.54	XS 817
Elbow River	E13_Bragg_Lott	33,521	1119.98	1121.99	1122.39	1122.64	1122.85	1123.01	1123.11	1123.25	1123.34	1123.52	1123.69	1123.79	1123.91	1124.00	XS 818
Elbow River	E13_Bragg_Lott	33,442	1119.77	1121.56	1121.95	1122.22	1122.45	1122.60	1122.71	1122.82	1122.90	1123.11	1123.28	1123.40	1123.52	1123.61	XS 819
Elbow River	E13_Bragg_Lott	33,363	1119.61	1121.17	1121.59	1121.87	1122.12	1122.28	1122.38	1122.48	1122.56	1122.75	1122.91	1123.02	1123.14	1123.23	XS 820
Elbow River	E13_Bragg_Lott	33,280	1119.40	1120.79	1121.17	1121.44	1121.68	1121.84	1121.93	1122.03	1122.10	1122.28	1122.43	1122.53	1122.65	1122.74	XS 821
Elbow River	E13_Bragg_Lott	33,200	1118.82	1120.24	1120.57	1120.82	1121.05	1121.20	1121.31	1121.42	1121.50	1121.69	1121.85	1121.95	1122.07	1122.16	XS 822
Elbow River	E13_Bragg_Lott	33,124	1118.11	1119.88	1120.22	1120.44	1120.65	1120.82	1120.93	1121.04	1121.11	1121.30	1121.45	1121.56	1121.67	1121.75	XS 823
Elbow River	E13_Bragg_Lott	32,951	1117.38	1119.16	1119.50	1119.71	1119.91	1120.06	1120.15	1120.26	1120.33	1120.50	1120.66	1120.77	1120.90	1120.99	XS 824
Elbow River	E13_Bragg_Lott	32,883	1117.23	1118.83	1119.23	1119.48	1119.69	1119.81	1119.90	1119.98	1120.05	1120.23	1120.39	1120.50	1120.63	1120.72	XS 825
Elbow River	E13_Bragg_Lott	32,808	1117.16	1118.37	1118.72	1118.93	1119.13	1119.30	1119.40	1119.52	1119.61	1119.83	1120.01	1120.13	1120.27	1120.36	XS 826
Elbow River	E13_Bragg_Lott	32,729	1116.57	1118.12	1118.49	1118.73	1118.94	1119.10	1119.20	1119.32	1119.41	1119.61	1119.79	1119.91	1120.04	1120.16	XS 827
Elbow River	E13_Bragg_Lott	32,650	1116.03	1117.89	1118.31	1118.57	1118.77	1118.91	1119.01	1119.11	1119.20	1119.38	1119.54	1119.63	1119.74	1119.83	XS 828
Elbow River	E13_Bragg_Lott	32,570	1116.10	1117.42	1117.82	1118.06	1118.26	1118.43	1118.53	1118.67	1118.75	1118.93	1119.10	1119.20	1119.32	1119.42	XS 829
Elbow River	E13_Bragg_Lott	32,488	1115.48	1117.13	1117.57	1117.81	1117.99	1118.13	1118.23	1118.34	1118.41	1118.58	1118.74	1118.85	1118.97	1119.06	XS 830
Elbow River	E13_Bragg_Lott	32,410	1115.30	1116.82	1117.26	1117.51	1117.68	1117.80	1117.87	1117.95	1118.01	1118.18	1118.32	1118.42	1118.53	1118.61	XS 831
Elbow River	E13_Bragg_Lott	32,329	1114.86	1116.45	1116.75	1116.95	1117.11	1117.25	1117.34	1117.47	1117.53	1117.70	1117.85	1117.95	1118.06	1118.15	XS 832
Elbow River	E13_Bragg_Lott	32,249	1114.13	1116.08	1116.39	1116.58	1116.75	1116.89	1116.98	1117.09	1117.16	1117.35	1117.50	1117.60	1117.72	1117.81	XS 833
Elbow River	E13_Bragg_Lott	32,167	1114.38	1115.82	1116.16	1116.35	1116.52	1116.66	1116.74	1116.84	1116.90	1117.08	1117.22	1117.31	1117.42	1117.50	XS 834
Elbow River	E13_Bragg_Lott	32,088	1114.05	1115.48	1115.81	1116.00	1116.15	1116.29	1116.38	1116.47	1116.54	1116.70	1116.83	1116.92	1117.02	1117.09	XS 835
Elbow River	E13_Bragg_Lott	32,008	1113.35	1114.96	1115.33	1115.53	1115.72	1115.87	1115.96	1116.06	1116.12	1116.28	1116.42	1116.51	1116.61	1116.69	XS 836
Elbow River	E13_Bragg_Lott	31,927	1112.41	1114.54	1114.94	1115.17	1115.37	1115.52	1115.61	1115.72	1115.79	1115.94	1116.08	1116.17	1116.27	1116.35	XS 837
Elbow River	E13_Bragg_Lott	31,850	1112.16	1114.16	1114.55	1114.76	1114.94	1115.08	1115.16	1115.26	1115.33	1115.48	1115.61	1115.69	1115.79	1115.87	XS 838
Elbow River	E13_Bragg_Lott	31,769	1111.91	1113.73	1114.14	1114.33	1114.48	1114.61	1114.70	1114.79	1114.86	1115.02	1115.15	1115.23	1115.33	1115.41	XS 839
Elbow River	E13_Bragg_Lott	31,688	1111.85	1113.28	1113.61	1113.80	1113.98	1114.13	1114.20	1114.29	1114.35	1114.51	1114.64	1114.73	1114.82	1114.90	XS 840
Elbow River	E13_Bragg_Lott	31,615	1111.88	1112.94	1113.22	1113.40	1113.58	1113.71	1113.79	1113.86	1113.92	1114.05	1114.17	1114.25	1114.34	1114.41	XS 841
Elbow River	E13_Bragg_Lott	31,523	1111.25	1112.61	1112.88	1113.04	1113.19	1113.28	1113.35	1113.41	1113.46	1113.59	1113.70	1113.77	1113.86	1113.93	XS 842
Elbow River	E13_Bragg_Lott	31,450	1110.49	1111.99	1112.30	1112.47	1112.62	1112.72	1112.79	1112.88	1112.94	1113.07	1113.19	1113.26	1113.35	1113.42	XS 843
Elbow River	E13_Bragg_Lott	31,377	1110.77	1111.51	1111.77	1111.95	1112.11	1112.23	1112.30	1112.38	1112.43	1112.57	1112.68	1112.76	1112.85	1112.91	XS 844
Elbow River	E13_Bragg_Lott	31,283	1110.19	1111.29	1111.53	1111.70	1111.85	1111.97	1112.03	1112.10	1112.15	1112.28	1112.39	1112.46	1112.53	1112.59	XS 845
Elbow River	E13_Bragg_Lott	31,208	1108.79	1111.03	1111.24	1111.37	1111.50	1111.62	1111.68	1111.75	1111.80	1111.92	1112.02	1112.09	1112.17	1112.23	XS 846
Elbow River	E13_Bragg_Lott	31,123	1109.22	1110.70	1110.93	1111.08	1111.20	1111.31	1111.36	1111.43	1111.48	1111.60	1111.70	1111.78	1111.86	1111.92	XS 847
Elbow River	E13_Bragg_Lott	31,047	1108.92	1110.43	1110.65	1110.79	1110.93	1111.04	1111.10	1111.18	1111.23	1111.35	1111.47	1111.55	1111.64	1111.71	XS 848



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E13_Bragg_Lott	30,944	1107.93	1109.96	1110.28	1110.45	1110.59	1110.71	1110.78	1110.86	1110.92	1111.08	1111.21	1111.30	1111.40	1111.48	XS 849
Elbow River	E13_Bragg_Lott	30,825	1107.85	1109.46	1109.80	1110.02	1110.21	1110.34	1110.43	1110.53	1110.60	1110.79	1110.94	1111.04	1111.15	1111.24	XS 850
Elbow River	E13_Bragg_Lott	30,725	1107.44	1108.92	1109.34	1109.60	1109.81	1109.97	1110.08	1110.19	1110.27	1110.48	1110.66	1110.78	1110.91	1111.00	XS 851
Elbow River	E13_Bragg_Lott	30,648	1106.92	1108.55	1108.98	1109.27	1109.48	1109.64	1109.75	1109.86	1109.95	1110.15	1110.32	1110.44	1110.57	1110.67	XS 852
Elbow River	E13_Bragg_Lott	30,559	1106.42	1108.26	1108.64	1108.92	1109.13	1109.28	1109.39	1109.50	1109.59	1109.81	1110.01	1110.14	1110.28	1110.39	XS 853
Elbow River	E13_Bragg_Lott	30,478	1106.34	1107.93	1108.33	1108.59	1108.79	1108.96	1109.07	1109.17	1109.26	1109.49	1109.69	1109.83	1109.97	1110.08	XS 854
Elbow River	E13_Bragg_Lott	30,398	1106.42	1107.63	1108.06	1108.32	1108.55	1108.73	1108.85	1108.93	1109.01	1109.24	1109.45	1109.57	1109.71	1109.82	XS 855
Elbow River	E13_Bragg_Lott	30,318	1105.61	1107.24	1107.70	1107.93	1108.16	1108.34	1108.45	1108.54	1108.64	1108.89	1109.10	1109.23	1109.38	1109.51	XS 856
Elbow River	E13_Bragg_Lott	30,237	1105.22	1106.89	1107.32	1107.55	1107.74	1107.90	1108.01	1108.12	1108.21	1108.44	1108.67	1108.84	1109.05	1109.21	XS 857
Elbow River	E13_Bragg_Lott	30,170	1104.74	1106.67	1107.07	1107.31	1107.48	1107.63	1107.73	1107.84	1107.92	1108.18	1108.46	1108.67	1108.91	1109.09	XS 858
Elbow River	E13_Bragg_Lott	30,081	1104.41	1106.26	1106.70	1106.93	1107.15	1107.32	1107.42	1107.55	1107.65	1107.96	1108.33	1108.57	1108.82	1109.02	XS 859
Elbow River	E13_Bragg_Lott	30,012	1104.24	1105.96	1106.43	1106.64	1106.86	1107.01	1107.12	1107.25	1107.35	1107.74	1108.16	1108.42	1108.69	1108.89	XS 860
Elbow River	E13_Bragg_Lott	29,935	1104.17	1105.65	1106.08	1106.30	1106.51	1106.67	1106.79	1106.93	1107.06	1107.56	1108.04	1108.32	1108.60	1108.80	XS 861
Elbow River	E13_Bragg_Lott	29,859	1103.74	1105.32	1105.79	1106.03	1106.22	1106.39	1106.53	1106.70	1106.86	1107.45	1107.95	1108.24	1108.52	1108.73	XS 862
Elbow River	E13_Bragg_Lott	29,776	1103.20	1104.93	1105.40	1105.68	1105.93	1106.13	1106.29	1106.50	1106.69	1107.35	1107.88	1108.17	1108.46	1108.66	XS 863
Elbow River	E13_Bragg_Lott	29,716	1102.83	1104.72	1105.17	1105.48	1105.75	1105.98	1106.15	1106.38	1106.59	1107.30	1107.83	1108.13	1108.41	1108.61	XS 864
Elbow River	E13_Bragg_Lott	29,647	1102.27	1104.45	1104.83	1105.14	1105.43	1105.69	1105.90	1106.18	1106.41	1107.19	1107.75	1108.05	1108.32	1108.52	XS 865
Elbow River	E13_Bragg_Lott	29,548	1102.18	1104.00	1104.41	1104.67	1104.97	1105.31	1105.58	1105.91	1106.18	1107.04	1107.62	1107.92	1108.19	1108.38	XS 866
Elbow River	E13_Bragg_Lott	29,454	1101.53	1103.45	1103.88	1104.19	1104.62	1105.05	1105.36	1105.73	1106.03	1106.93	1107.52	1107.83	1108.09	1108.27	XS 867
Elbow River	E13_Bragg_Lott	29,343	1101.50	1102.88	1103.46	1103.94	1104.47	1104.94	1105.27	1105.65	1105.95	1106.88	1107.47	1107.77	1108.03	1108.21	XS 868
Elbow River	E13_Bragg_Lott	29,280	1100.60	1102.70	1103.28	1103.75	1104.27	1104.74	1105.05	1105.43	1105.72	1106.65	1107.23	1107.56	1107.84	1108.03	XS 869; U/S of Highway 8 Bridge & Culvert
Elbow River	E13_Bragg_Lott	29,225	1101.17	1102.51	1103.05	1103.46	1103.87	1104.16	1104.37	1104.60	1104.76	1105.18	1105.55	1105.78	1106.02	1106.20	XS 870; D/S of Highway 8 Bridge & Culvert
Elbow River	E13_Bragg_Lott	29,099	1100.12	1102.03	1102.58	1102.98	1103.35	1103.62	1103.81	1104.01	1104.16	1104.51	1104.80	1104.98	1105.18	1105.33	XS 871
Elbow River	E13_Bragg_Lott	28,952	1099.94	1101.60	1102.17	1102.54	1102.85	1103.09	1103.23	1103.39	1103.51	1103.81	1104.05	1104.21	1104.37	1104.46	XS 872
Elbow River	E13_Bragg_Lott	28,810	1099.03	1101.16	1101.83	1102.19	1102.47	1102.69	1102.76	1102.85	1102.91	1103.07	1103.18	1103.26	1103.36	1103.47	XS 873
Elbow River	E13_Bragg_Lott	28,664	1098.35	1100.67	1101.25	1101.58	1101.83	1101.96	1102.09	1102.21	1102.30	1102.52	1102.70	1102.82	1102.96	1103.07	XS 874
Elbow River	E13_Bragg_Lott	28,497	1098.16	1100.06	1100.65	1100.99	1101.25	1101.40	1101.43	1101.53	1101.62	1101.82	1102.00	1102.11	1102.25	1102.35	XS 875
Elbow River	E13_Bragg_Lott	28,338	1097.14	1099.35	1099.95	1100.26	1100.51	1100.68	1100.78	1100.89	1100.94	1101.17	1101.34	1101.48	1101.64	1101.76	XS 876
Elbow River	E13_Bragg_Lott	28,169	1096.32	1098.83	1099.42	1099.75	1100.03	1100.23	1100.35	1100.45	1100.54	1100.80	1100.91	1101.05	1101.22	1101.35	XS 877
Elbow River	E13_Bragg_Lott	28,113	1096.49	1098.68	1099.20	1099.51	1099.77	1099.97	1100.09	1100.09 ⁽²⁾	1100.17	1100.42	1100.59	1100.73	1100.90	1101.03	XS 878
Elbow River	E13_Bragg_Lott	27,993	1096.12	1098.27	1098.74	1098.97	1099.18	1099.38	1099.50	1099.58	1099.68	1099.92	1100.14	1100.28	1100.45	1100.57	XS 879
Elbow River	E13_Bragg_Lott	27,871	1096.17	1097.94	1098.43	1098.75	1098.83	1099.03	1099.15	1099.29	1099.39	1099.63	1099.85	1099.99	1100.16	1100.28	XS 880
Elbow River	E13_Bragg_Lott	27,712	1095.85	1097.43	1097.90	1098.23	1098.30	1098.43	1098.56	1098.67	1098.74	1098.93	1099.12	1099.24	1099.39	1099.50	XS 881
Elbow River	E13_Bragg_Lott	27,540	1094.24	1096.49	1096.98	1097.25	1097.50	1097.67	1097.78	1097.91	1098.00	1098.24	1098.45	1098.59	1098.76	1098.88	XS 882
Elbow River	E13_Bragg_Lott	27,385	1093.78	1096.14	1096.62	1096.90	1097.14	1097.32	1097.43	1097.56	1097.66	1097.89	1098.11	1098.25	1098.41	1098.54	XS 883
Elbow River	E13_Bragg_Lott	27,226	1094.28	1095.77	1096.22	1096.51	1096.75	1096.94	1097.07	1097.22	1097.33	1097.59	1097.83	1097.97	1098.14	1098.26	XS 884
Elbow River	E13_Bragg_Lott	27,083	1093.35	1095.44	1095.92	1096.25	1096.51	1096.72	1096.86	1097.02	1097.14	1097.42	1097.66	1097.81	1097.97	1098.10	XS 885
Elbow River	E12_Lott_Dam	26,984	1092.92	1095.15	1095.60	1095.89	1096.15	1096.35	1096.48	1096.63	1096.74	1097.05	1097.28	1097.42	1097.58	1097.71	XS 886



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E12_Lott_Dam	26,810	1092.44	1094.83	1095.27	1095.57	1095.83	1096.03	1096.16	1096.32	1096.43	1096.72	1096.96	1097.12	1097.28	1097.41	XS 887
Elbow River	E12_Lott_Dam	26,672	1092.78	1094.56	1094.98	1095.23	1095.47	1095.65	1095.77	1095.91	1096.01	1096.28	1096.50	1096.66	1096.83	1096.95	XS 888
Elbow River	E12_Lott_Dam	26,530	1092.15	1094.10	1094.57	1094.85	1095.06	1095.21	1095.32	1095.43	1095.52	1095.74	1095.94	1096.09	1096.24	1096.35	XS 889
Elbow River	E12_Lott_Dam	26,418	1091.61	1093.75	1094.17	1094.44	1094.69	1094.87	1094.99	1095.12	1095.21	1095.45	1095.66	1095.81	1095.97	1096.09	XS 890
Elbow River	E12_Lott_Dam	26,235	1091.40	1093.21	1093.63	1093.89	1094.10	1094.25	1094.34	1094.45	1094.53	1094.75	1094.94	1095.08	1095.23	1095.35	XS 891
Elbow River	E12_Lott_Dam	26,088	1091.26	1092.82	1093.27	1093.55	1093.76	1093.93	1094.03	1094.14	1094.23	1094.45	1094.65	1094.79	1094.95	1095.08	XS 892
Elbow River	E12_Lott_Dam	26,001	1090.90	1092.54	1093.05	1093.34	1093.56	1093.72	1093.82	1093.94	1094.02	1094.25	1094.45	1094.59	1094.75	1094.88	XS 893
Elbow River	E12_Lott_Dam	25,923	1090.66	1092.26	1092.74	1093.00	1093.24	1093.39	1093.50	1093.62	1093.71	1093.94	1094.14	1094.29	1094.45	1094.57	XS 894
Elbow River	E12_Lott_Dam	25,819	1090.02	1091.93	1092.36	1092.57	1092.80	1092.98	1093.10	1093.24	1093.34	1093.58	1093.79	1093.94	1094.10	1094.22	XS 895
Elbow River	E12_Lott_Dam	25,679	1089.06	1091.45	1091.89	1092.15	1092.43	1092.66	1092.81	1092.96	1093.06	1093.31	1093.53	1093.68	1093.83	1093.95	XS 896
Elbow River	E12_Lott_Dam	25,556	1089.21	1091.10	1091.60	1091.94	1092.24	1092.47	1092.61	1092.76	1092.88	1093.13	1093.35	1093.51	1093.64	1093.76	XS 897
Elbow River	E12_Lott_Dam	25,432	1089.06	1090.91	1091.39	1091.72	1092.00	1092.21	1092.34	1092.50	1092.61	1092.88	1093.11	1093.29	1093.41	1093.52	XS 898
Elbow River	E12_Lott_Dam	25,370	1088.86	1090.74	1091.24	1091.61	1091.91	1092.13	1092.25	1092.40	1092.50	1092.77	1093.00	1093.18	1093.28	1093.39	XS 899
Elbow River	E12_Lott_Dam	25,223	1088.35	1089.86	1090.24	1090.49	1090.95	1091.26	1091.45	1091.58	1091.69	1091.90	1092.06	1092.15	1092.39	1092.50	XS 900
Elbow River	E12_Lott_Dam	25,076	1088.04	1089.63	1090.05	1090.35	1090.59	1090.78	1090.91	1091.04	1091.14	1091.39	1091.61	1091.76	1091.93	1092.06	XS 901
Elbow River	E12_Lott_Dam	24,997	1087.77	1089.53	1089.95	1090.25	1090.48	1090.66	1090.79	1090.92	1091.01	1091.26	1091.48	1091.64	1091.80	1091.92	XS 902
Elbow River	E12_Lott_Dam	24,824	1086.44	1089.15	1089.56	1089.83	1090.07	1090.26	1090.38	1090.51	1090.61	1090.85	1091.07	1091.22	1091.38	1091.50	XS 903
Elbow River	E12_Lott_Dam	24,686	1087.07	1088.59	1089.00	1089.27	1089.54	1089.76	1089.88	1090.02	1090.12	1090.38	1090.63	1090.77	1090.93	1091.06	XS 904
Elbow River	E12_Lott_Dam	24,527	1086.07	1087.99	1088.39	1088.67	1088.92	1089.13	1089.26	1089.40	1089.50	1089.77	1090.02	1090.16	1090.33	1090.46	XS 905
Elbow River	E12_Lott_Dam	24,444	1086.56	1087.87	1088.25	1088.51	1088.73	1088.92	1089.04	1089.17	1089.27	1089.52	1089.74	1089.88	1090.04	1090.17	XS 906
Elbow River	E12_Lott_Dam	24,343	1086.38	1087.69	1088.02	1088.29	1088.50	1088.70	1088.83	1088.96	1089.06	1089.30	1089.51	1089.65	1089.81	1089.93	XS 907
Elbow River	E12_Lott_Dam	24,188	1085.54	1087.34	1087.70	1087.97	1088.20	1088.39	1088.52	1088.65	1088.74	1088.98	1089.19	1089.32	1089.49	1089.61	XS 908
Elbow River	E12_Lott_Dam	24,049	1085.27	1086.77	1087.16	1087.42	1087.65	1087.86	1087.98	1088.11	1088.21	1088.47	1088.69	1088.83	1089.00	1089.13	XS 909
Elbow River	E12_Lott_Dam	23,936	1085.27	1086.52	1086.98	1087.24	1087.45	1087.62	1087.73	1087.86	1087.95	1088.19	1088.40	1088.54	1088.70	1088.82	XS 910
Elbow River	E12_Lott_Dam	23,739	1084.38	1086.33	1086.82	1087.05	1087.24	1087.40	1087.50	1087.61	1087.69	1087.90	1088.09	1088.22	1088.37	1088.49	XS 911
Elbow River	E12_Lott_Dam	23,509	1083.41	1086.12	1086.63	1086.89	1087.08	1087.23	1087.33	1087.44	1087.52	1087.72	1087.91	1088.03	1088.18	1088.30	XS 912
Elbow River	E12_Lott_Dam	23,360	1083.76	1085.94	1086.47	1086.74	1086.95	1087.11	1087.21	1087.32	1087.40	1087.60	1087.78	1087.91	1088.06	1088.17	XS 913
Elbow River	E12_Lott_Dam	23,242	1083.66	1085.79	1086.35	1086.61	1086.84	1087.00	1087.10	1087.21	1087.29	1087.49	1087.67	1087.79	1087.95	1088.07	XS 914
Elbow River	E12_Lott_Dam	23,121	1082.70	1085.58	1086.15	1086.42	1086.64	1086.82	1086.93	1087.04	1087.12	1087.33	1087.53	1087.67	1087.83	1087.96	XS 915
Elbow River	E12_Lott_Dam	22,970	1083.33	1085.33	1085.94	1086.23	1086.45	1086.62	1086.73	1086.84	1086.93	1087.15	1087.36	1087.50	1087.67	1087.80	XS 916
Elbow River	E12_Lott_Dam	22,844	1082.55	1084.98	1085.61	1085.94	1086.18	1086.36	1086.48	1086.62	1086.72	1086.98	1087.21	1087.36	1087.54	1087.68	XS 917
Elbow River	E12_Lott_Dam	22,691	1082.48	1084.63	1085.24	1085.59	1085.87	1086.09	1086.22	1086.37	1086.47	1086.72	1086.95	1087.10	1087.28	1087.42	XS 918
Elbow River	E12_Lott_Dam	22,582	1082.41	1084.36	1085.00	1085.39	1085.70	1085.92	1086.04	1086.17	1086.26	1086.47	1086.68	1086.83	1087.00	1087.14	XS 919
Elbow River	E12_Lott_Dam	22,401	1082.00	1083.89	1084.33	1084.63	1084.89	1085.12	1085.28	1085.45	1085.58	1085.90	1086.16	1086.33	1086.53	1086.68	XS 920
Elbow River	E12_Lott_Dam	22,268	1082.39	1083.68	1084.19	1084.54	1084.83	1085.04	1085.18	1085.33	1085.43	1085.71	1085.95	1086.11	1086.30	1086.44	XS 921
Elbow River	E12_Lott_Dam	22,105	1081.27	1083.40	1083.99	1084.35	1084.65	1084.85	1084.97	1085.11	1085.21	1085.45	1085.67	1085.82	1086.00	1086.13	XS 922
Elbow River	E12_Lott_Dam	21,983	1080.86	1083.30	1083.81	1084.12	1084.36	1084.54	1084.66	1084.78	1084.88	1085.13	1085.36	1085.52	1085.70	1085.84	XS 923
Elbow River	E12_Lott_Dam	21,842	1081.20	1083.13	1083.53	1083.79	1084.02	1084.22	1084.35	1084.51	1084.61	1084.89	1085.13	1085.29	1085.48	1085.63	XS 924



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E12_Lott_Dam	21,708	1080.62	1082.80	1083.26	1083.53	1083.77	1083.98	1084.12	1084.27	1084.37	1084.63	1084.87	1085.02	1085.21	1085.35	XS 925
Elbow River	E12_Lott_Dam	21,560	1080.69	1082.56	1082.98	1083.24	1083.50	1083.72	1083.85	1084.00	1084.10	1084.37	1084.61	1084.77	1084.96	1085.10	XS 926
Elbow River	E12_Lott_Dam	21,434	1080.10	1082.38	1082.81	1083.09	1083.34	1083.56	1083.69	1083.82	1083.92	1084.19	1084.43	1084.59	1084.78	1084.92	XS 927
Elbow River	E12_Lott_Dam	21,261	1079.83	1082.20	1082.67	1082.94	1083.18	1083.40	1083.51	1083.64	1083.74	1084.00	1084.24	1084.40	1084.59	1084.74	XS 928
Elbow River	E12_Lott_Dam	21,119	1080.25	1081.86	1082.27	1082.55	1082.84	1083.05	1083.18	1083.32	1083.42	1083.71	1083.96	1084.13	1084.32	1084.47	XS 929
Elbow River	E12_Lott_Dam	20,971	1079.21	1081.42	1081.87	1082.19	1082.49	1082.73	1082.86	1083.02	1083.14	1083.44	1083.70	1083.87	1084.07	1084.22	XS 930
Elbow River	E12_Lott_Dam	20,860	1079.30	1081.17	1081.68	1082.01	1082.30	1082.54	1082.68	1082.84	1082.96	1083.25	1083.50	1083.67	1083.86	1084.01	XS 931
Elbow River	E12_Lott_Dam	20,714	1079.02	1080.83	1081.43	1081.78	1082.07	1082.30	1082.44	1082.59	1082.69	1082.97	1083.20	1083.36	1083.53	1083.67	XS 932
Elbow River	E12_Lott_Dam	20,522	1078.07	1080.54	1081.15	1081.55	1081.89	1082.12	1082.26	1082.41	1082.52	1082.79	1083.01	1083.16	1083.33	1083.46	XS 933; U/S of Grey Eagle Drive Bridge
Elbow River	E12_Lott_Dam	20,483	1077.94	1080.48	1081.09	1081.49	1081.83	1082.06	1082.19	1082.35	1082.44	1082.71	1082.92	1083.06	1083.22	1083.35	XS 934; D/S of Grey Eagle Drive Bridge
Elbow River	E12_Lott_Dam	20,370	1078.59	1080.22	1080.86	1081.30	1081.66	1081.91	1082.03	1082.19	1082.28	1082.53	1082.73	1082.86	1083.02	1083.14	XS 935
Elbow River	E12_Lott_Dam	20,222	1077.74	1079.83	1080.36	1080.69	1080.96	1081.14	1081.35	1081.45	1081.60	1081.82	1082.06	1082.23	1082.40	1082.54	XS 936
Elbow River	E12_Lott_Dam	20,087	1077.46	1079.42	1079.87	1080.20	1080.51	1080.75	1080.89	1081.05	1081.17	1081.43	1081.66	1081.81	1081.99	1082.14	XS 937
Elbow River	E12_Lott_Dam	19,953	1077.24	1079.19	1079.68	1080.02	1080.34	1080.59	1080.73	1080.89	1081.00	1081.27	1081.50	1081.66	1081.84	1081.99	XS 938
Elbow River	E12_Lott_Dam	19,781	1076.17	1078.82	1079.35	1079.77	1080.12	1080.39	1080.54	1080.69	1080.80	1081.08	1081.31	1081.47	1081.65	1081.81	XS 939
Elbow River	E12_Lott_Dam	19,701	1076.90	1078.19	1078.81	1079.30	1079.70	1079.99	1080.15	1080.32	1080.44	1080.72	1080.94	1081.09	1081.28	1081.45	XS 940
Elbow River	E12_Lott_Dam	19,508	1075.65	1077.70	1078.43	1078.96	1079.44	1079.78	1079.95	1080.13	1080.25	1080.53	1080.74	1080.89	1081.08	1081.26	XS 941
Elbow River	E12_Lott_Dam	19,387	1075.04	1077.62	1078.37	1078.90	1079.37	1079.70	1079.88	1080.05	1080.16	1080.44	1080.64	1080.79	1080.98	1081.16	XS 942
Elbow River	E12_Lott_Dam	19,232	1074.90	1077.49	1078.20	1078.67	1079.09	1079.38	1079.54	1079.69	1079.77	1079.97	1080.22	1080.43	1080.69	1080.92	XS 943
Elbow River	E12_Lott_Dam	19,089	1074.47	1077.36	1077.96	1078.37	1078.71	1078.92	1079.09	1079.24	1079.37	1079.71	1080.03	1080.27	1080.57	1080.81	XS 944
Elbow River	E12_Lott_Dam	18,926	1074.21	1077.24	1077.81	1078.23	1078.57	1078.82	1078.98	1079.14	1079.27	1079.59	1079.92	1080.16	1080.46	1080.72	XS 945
Elbow River	E12_Lott_Dam	18,777	1074.78	1077.15	1077.64	1078.01	1078.32	1078.55	1078.71	1078.88	1079.00	1079.36	1079.72	1079.99	1080.32	1080.59	XS 946
Elbow River	E12_Lott_Dam	18,630	1074.84	1077.08	1077.50	1077.83	1078.12	1078.35	1078.50	1078.67	1078.81	1079.19	1079.58	1079.86	1080.20	1080.49	XS 947
Elbow River	E12_Lott_Dam	18,475	1074.14	1077.01	1077.34	1077.63	1077.91	1078.16	1078.32	1078.50	1078.64	1079.05	1079.46	1079.75	1080.10	1080.39	XS 948
Elbow River	E12_Lott_Dam	18,361	1074.39	1076.97	1077.26	1077.53	1077.81	1078.05	1078.21	1078.40	1078.53	1078.95	1079.38	1079.68	1080.04	1080.34	XS 949; U/S of Weaselhead Glenmore Pathway Bridge
Elbow River	E12_Lott_Dam	18,060	1074.03	1076.88	1076.96	1077.10	1077.30	1077.58	1077.76	1077.98	1078.15	1078.63	1079.09	1079.42	1079.81	1080.13	XS 950; D/S of Weaselhead Glenmore Pathway Bridge
Elbow River	E12_Lott_Dam	17,868	1072.99	1076.86	1076.91	1076.99	1077.17	1077.47	1077.67	1077.90	1078.07	1078.57	1079.04	1079.37	1079.77	1080.09	XS 951
Elbow River	E12_Lott_Dam	17,759	1072.97	1076.86	1076.90	1076.96	1077.12	1077.43	1077.63	1077.87	1078.05	1078.55	1079.02	1079.36	1079.76	1080.08	XS 952
Elbow River	E12_Lott_Dam	17,619	1073.06	1076.86	1076.89	1076.94	1077.09	1077.41	1077.61	1077.85	1078.03	1078.54	1079.01	1079.35	1079.75	1080.07	XS 953
Elbow River	E12_Lott_Dam	17,284	1072.96	1076.85	1076.87	1076.90	1077.02	1077.32	1077.53	1077.78	1077.97	1078.48	1078.96	1079.30	1079.71	1080.03	XS 954
Elbow River	E12_Lott_Dam	17,154	1072.92	1076.85	1076.87	1076.90	1077.00	1077.30	1077.51	1077.75	1077.94	1078.46	1078.94	1079.29	1079.69	1080.02	XS 955
Elbow River	E12_Lott_Dam	16,978	1072.47	1076.85	1076.86	1076.87	1076.93	1077.23	1077.45	1077.70	1077.89	1078.42	1078.91	1079.26	1079.67	1080.00	XS 956
Elbow River	E12_Lott_Dam	16,668	1071.69	1076.85	1076.86	1076.87	1076.94	1077.24	1077.45	1077.70	1077.90	1078.42	1078.91	1079.26	1079.67	1079.99	XS 957
Elbow River	E12_Lott_Dam	16,279	1071.11	1076.85	1076.86	1076.87	1076.94	1077.23	1077.45	1077.70	1077.89	1078.42	1078.91	1079.25	1079.66	1079.99	XS 958
Elbow River	E12_Lott_Dam	15,873	1071.40	1076.85	1076.86	1076.87	1076.94	1077.23	1077.45	1077.70	1077.89	1078.42	1078.91	1079.25	1079.66	1079.99	XS 959
Elbow River	E12_Lott_Dam	15,420	1071.08	1076.85	1076.86	1076.87	1076.94	1077.23	1077.45	1077.69	1077.89	1078.41	1078.90	1079.24	1079.65	1079.98	XS 960
Elbow River	E12_Lott_Dam	14,646	1066.80	1076.85	1076.86	1076.87	1076.94	1077.23	1077.45	1077.69	1077.89	1078.41	1078.90	1079.25	1079.65	1079.98	XS 961



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E12_Lott_Dam	13,936	1067.68	1076.85	1076.86	1076.87	1076.94	1077.23	1077.45	1077.69	1077.88	1078.41	1078.90	1079.24	1079.64	1079.97	XS 962
Elbow River	E12_Lott_Dam	13,555	1066.28	1076.85	1076.86	1076.87	1076.94	1077.23	1077.44	1077.69	1077.88	1078.40	1078.89	1079.23	1079.64	1079.96	XS 963
Elbow River	E12_Lott_Dam	13,171	1064.27	1076.85	1076.86	1076.87	1076.94	1077.23	1077.44	1077.69	1077.88	1078.41	1078.89	1079.23	1079.64	1079.96	XS 964
Elbow River	E12_Lott_Dam	12,780	1062.82	1076.85	1076.86	1076.87	1076.94	1077.23	1077.44	1077.69	1077.88	1078.41	1078.89	1079.23	1079.64	1079.96	XS 965
Elbow River	E12_Lott_Dam	12,492	1062.43	1076.85	1076.86	1076.87	1076.94	1077.23	1077.44	1077.69	1077.88	1078.40	1078.88	1079.22	1079.62	1079.95	XS 966
Elbow River	E12_Lott_Dam	12,368	1062.93	1076.85	1076.86	1076.86	1076.93	1077.22	1077.42	1077.66	1077.85	1078.35	1078.81	1079.13	1079.51	1079.81	XS 967; U/S of Glenmore Trail Bridge
Elbow River	E12_Lott_Dam	12,269	1064.63	1076.85	1076.85	1076.85	1076.89	1077.15	1077.34	1077.56	1077.72	1078.16	1078.54	1078.81	1079.11	1079.35	XS 968; D/S of Glenmore Trail Bridge
Elbow River	E12_Lott_Dam	12,174	1060.90	1076.85	1076.85	1076.85	1076.90	1077.17	1077.36	1077.59	1077.76	1078.21	1078.63	1078.91	1079.24	1079.50	XS 969
Elbow River	E12_Lott_Dam	12,042	1059.56	1076.85	1076.85	1076.85	1076.90	1077.17	1077.36	1077.59	1077.76	1078.21	1078.63	1078.91	1079.24	1079.50	XS 970
Elbow River	E12_Lott_Dam	11,837	1059.09	1076.85	1076.85	1076.85	1076.90	1077.17	1077.36	1077.59	1077.76	1078.22	1078.63	1078.91	1079.25	1079.51	XS 971
Elbow River	E12_Lott_Dam	11,486	1058.74	1076.85	1076.85	1076.85	1076.90	1077.17	1077.36	1077.59	1077.76	1078.21	1078.62	1078.91	1079.24	1079.50	XS 972; Downstream End of Upper Elbow River Model reach
Elbow River	E9_Dam_Roxboro	11,417	1073.97	1076.85 ⁽⁶⁾	1076.85 ⁽⁶⁾	1076.85 ⁽⁶⁾	1076.90 ⁽⁶⁾	1077.17 ⁽⁶⁾	1077.36 ⁽⁶⁾	1077.59 ⁽⁶⁾	1077.76 ⁽⁶⁾	1078.21 ⁽⁶⁾	1078.62 ⁽⁶⁾	1078.91 ⁽⁶⁾	1079.24 ⁽⁶⁾	1079.50 ⁽⁶⁾	XS 973; U/S of Glenmore Dam; Upstream end of Lower Elbow River Model reach
Elbow River	E9_Dam_Roxboro	11,343	1056.07	1058.21	1058.97	1059.69	1060.42	1061.04	1061.48	1061.97	1062.32	1063.17	1063.86	1064.29	1064.79	1065.19	XS 974
Elbow River	E9_Dam_Roxboro	11,303	1056.13	1058.20	1058.94	1059.66	1060.38	1060.98	1061.41	1061.89	1062.23	1063.05	1063.71	1064.12	1064.59	1064.98	XS 975
Elbow River	E9_Dam_Roxboro	11,267	1056.49	1058.15	1058.89	1059.61	1060.32	1060.93	1061.35	1061.82	1062.17	1062.98	1063.63	1064.04	1064.49	1064.88	XS 976
Elbow River	E9_Dam_Roxboro	11,241	1056.75	1058.00	1058.83	1059.56	1060.28	1060.88	1061.30	1061.78	1062.12	1062.93	1063.58	1063.98	1064.43	1064.82	XS 977
Elbow River	E9_Dam_Roxboro	11,204	1056.67	1057.88	1058.74	1059.48	1060.18	1060.77	1061.18	1061.65	1061.98	1062.79	1063.41	1063.81	1064.24	1064.63	XS 978
Elbow River	E9_Dam_Roxboro	11,153	1055.55	1057.85	1058.68	1059.38	1060.05	1060.59	1060.98	1061.41	1061.74	1062.50	1063.08	1063.44	1063.83	1064.17	XS 979
Elbow River	E9_Dam_Roxboro	11,099	1055.95	1057.71	1058.52	1059.20	1059.87	1060.45	1060.85	1061.32	1061.66	1062.45	1063.05	1063.41	1063.81	1064.18	XS 980
Elbow River	E9_Dam_Roxboro	11,048	1055.79	1057.54	1058.28	1058.96	1059.66	1060.27	1060.69	1061.16	1061.52	1062.29	1062.86	1063.21	1063.59	1063.92	XS 981
Elbow River	E9_Dam_Roxboro	10,989	1055.51	1057.41	1058.12	1058.77	1059.50	1060.11	1060.53	1060.99	1061.33	1061.99	1062.47	1062.73	1062.98	1063.32	XS 982
Elbow River	E9_Dam_Roxboro	10,947	1055.49	1057.25	1058.04	1058.72	1059.49	1060.13	1060.56	1061.03	1061.37	1062.06	1062.55	1062.82	1063.07	1063.39	XS 983
Elbow River	E9_Dam_Roxboro	10,889	1054.94	1057.26	1058.03	1058.74	1059.50	1060.15	1060.58	1061.05	1061.39	1062.08	1062.57	1062.83	1063.08	1063.39	XS 984
Elbow River	E9_Dam_Roxboro	10,844	1055.15	1057.23	1058.01	1058.70	1059.46	1060.11	1060.54	1061.01	1061.36	1062.06	1062.56	1062.84	1063.10	1063.43	XS 985
Elbow River	E9_Dam_Roxboro	10,797	1055.61	1057.15	1057.92	1058.62	1059.39	1060.04	1060.47	1060.95	1061.31	1062.02	1062.52	1062.80	1063.08	1063.44	XS 986
Elbow River	E9_Dam_Roxboro	10,757	1055.65	1057.02	1057.83	1058.56	1059.35	1060.01	1060.45	1060.95	1061.31	1062.03	1062.54	1062.81	1063.08	1063.41	XS 987
Elbow River	E9_Dam_Roxboro	10,705	1055.56	1056.93	1057.76	1058.49	1059.27	1059.94	1060.40	1060.91	1061.28	1062.02	1062.54	1062.83	1063.10	1063.44	XS 988
Elbow River	E9_Dam_Roxboro	10,657	1055.44	1056.83	1057.71	1058.45	1059.25	1059.92	1060.40	1060.92	1061.29	1062.04	1062.56	1062.85	1063.13	1063.41	XS 989
Elbow River	E9_Dam_Roxboro	10,611	1055.06	1056.80	1057.67	1058.40	1059.18	1059.83	1060.28	1060.83	1061.22	1062.00	1062.55	1062.85	1063.17	1063.48	XS 990
Elbow River	E9_Dam_Roxboro	10,542	1054.47	1056.74	1057.61	1058.33	1059.09	1059.75	1060.22	1060.76	1061.17	1061.96	1062.48	1062.80	1063.17	1063.48	XS 991
Elbow River	E9_Dam_Roxboro	10,500	1054.67	1056.65	1057.49	1058.18	1058.91	1059.53	1060.01	1060.60	1061.06	1061.89	1062.45	1062.74	1063.13	1063.45	XS 992
Elbow River	E9_Dam_Roxboro	10,427	1054.72	1056.55	1057.39	1058.08	1058.81	1059.42	1059.87	1060.43	1060.89	1061.76	1062.32	1062.66	1063.06	1063.39	XS 993
Elbow River	E9_Dam_Roxboro	10,382	1054.82	1056.47	1057.32	1058.00	1058.70	1059.29	1059.70	1060.15	1060.49	1061.32	1061.97	1062.38	1062.85	1063.22	XS 994
Elbow River	E9_Dam_Roxboro	10,307	1054.23	1056.33	1057.14	1057.84	1058.56	1059.16	1059.58	1060.04	1060.41	1061.26	1061.89	1062.30	1062.75	1063.12	XS 995
Elbow River	E9_Dam_Roxboro	10,253	1054.61	1056.16	1056.78	1057.35	1058.03	1058.63	1059.06	1059.55	1059.91	1060.83	1061.61	1062.11	1062.63	1063.02	XS 996
Elbow River	E9_Dam_Roxboro	10,194	1054.55	1055.85	1056.55	1057.17	1057.87	1058.48	1058.90	1059.38	1059.73	1060.57	1061.20	1061.67	1062.21	1062.61	XS 997
Elbow River	E9_Dam_Roxboro	10,149	1054.23	1055.81	1056.53	1057.14	1057.85	1058.46	1058.88	1059.37	1059.71	1060.52	1061.15	1061.53	1062.02	1062.39	XS 998



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E9_Dam_Roxboro	10,091	1053.71	1055.76	1056.46	1057.07	1057.79	1058.42	1058.85	1059.35	1059.70	1060.54	1061.10	1061.46	1061.85	1062.18	XS 999
Elbow River	E9_Dam_Roxboro	10,013	1054.20	1055.53	1056.30	1056.96	1057.71	1058.36	1058.81	1059.32	1059.69	1060.59	1061.25	1061.65	1062.09	1062.42	XS 1000
Elbow River	E9_Dam_Roxboro	9,916	1052.93	1055.50	1056.21	1056.83	1057.50	1058.08	1058.48	1058.94	1059.28	1060.12	1060.71	1061.13	1061.56	1061.90	XS 1001
Elbow River	E9_Dam_Roxboro	9,873	1053.09	1055.48	1056.17	1056.79	1057.46	1058.04	1058.44	1058.90	1059.23	1060.05	1060.67	1061.10	1061.56	1061.93	XS 1002
Elbow River	E9_Dam_Roxboro	9,791	1053.86	1055.29	1055.95	1056.56	1057.26	1057.86	1058.28	1058.74	1059.07	1059.87	1060.61	1061.09	1061.60	1061.98	XS 1003
Elbow River	E9_Dam_Roxboro	9,707	1053.63	1055.06	1055.82	1056.49	1057.21	1057.83	1058.26	1058.75	1059.08	1059.93	1060.69	1061.17	1061.66	1062.03	XS 1004
Elbow River	E9_Dam_Roxboro	9,618	1052.75	1054.85	1055.68	1056.36	1057.08	1057.68	1058.11	1058.58	1058.92	1059.83	1060.63	1061.12	1061.62	1062.00	XS 1005
Elbow River	E9_Dam_Roxboro	9,540	1052.21	1054.81	1055.61	1056.26	1056.94	1057.51	1057.91	1058.36	1058.64	1059.54	1060.46	1061.00	1061.53	1061.93	XS 1006
Elbow River	E9_Dam_Roxboro	9,484	1053.02	1054.64	1055.40	1056.04	1056.72	1057.30	1057.70	1058.14	1058.48	1059.35	1060.28	1060.88	1061.44	1061.85	XS 1007
Elbow River	E9_Dam_Roxboro	9,462	1052.83	1054.67	1055.44	1056.08	1056.76	1057.34	1057.74	1058.20	1058.54	1059.41	1060.32	1060.89	1061.44	1061.84	XS 1008
Elbow River	E9_Dam_Roxboro	9,442	1052.58	1054.64	1055.40	1056.04	1056.73	1057.31	1057.72	1058.17	1058.51	1059.39	1060.20	1060.71	1061.20	1061.59	XS 1009
Elbow River	E9_Dam_Roxboro	9,426	1052.84	1054.61	1055.36	1056.00	1056.67	1057.24	1057.64	1058.08	1058.42	1059.23	1059.99	1060.50	1061.02	1061.42	XS 1010
Elbow River	E9_Dam_Roxboro	9,375	1052.49	1054.55	1055.30	1055.94	1056.64	1057.22	1057.63	1058.08	1058.42	1059.25	1059.99	1060.50	1061.00	1061.39	XS 1011
Elbow River	E9_Dam_Roxboro	9,323	1052.59	1054.43	1055.14	1055.74	1056.41	1056.97	1057.36	1057.79	1058.09	1058.90	1059.59	1060.03	1060.64	1061.09	XS 1012
Elbow River	E9_Dam_Roxboro	9,294	1052.71	1054.40	1055.11	1055.73	1056.41	1056.97	1057.37	1057.80	1058.11	1058.90	1059.59	1060.11	1060.74	1061.20	XS 1013
Elbow River	E9_Dam_Roxboro	9,263	1052.65	1054.35	1055.07	1055.69	1056.37	1056.94	1057.33	1057.76	1058.07	1058.86	1059.55	1060.06	1060.70	1061.16	XS 1014
Elbow River	E9_Dam_Roxboro	9,221	1052.64	1054.25	1054.97	1055.59	1056.27	1056.85	1057.25	1057.69	1058.00	1058.79	1059.49	1060.00	1060.65	1061.12	XS 1015
Elbow River	E9_Dam_Roxboro	9,147	1052.49	1054.10	1054.84	1055.48	1056.18	1056.79	1057.21	1057.67	1057.99	1058.80	1059.50	1059.99	1060.60	1061.04	XS 1016
Elbow River	E9_Dam_Roxboro	9,083	1052.22	1054.05	1054.80	1055.45	1056.17	1056.79	1057.21	1057.68	1058.01	1058.82	1059.51	1059.93	1060.42	1060.79	XS 1017
Elbow River	E9_Dam_Roxboro	9,031	1052.06	1053.98	1054.72	1055.37	1056.08	1056.71	1057.14	1057.61	1057.93	1058.74	1059.43	1059.84	1060.30	1060.66	XS 1018
Elbow River	E9_Dam_Roxboro	8,957	1052.40	1053.86	1054.65	1055.32	1056.06	1056.71	1057.15	1057.63	1057.97	1058.80	1059.52	1059.97	1060.46	1060.83	XS 1019
Elbow River	E9_Dam_Roxboro	8,899	1052.41	1053.76	1054.59	1055.27	1056.01	1056.67	1057.11	1057.59	1057.93	1058.78	1059.50	1059.96	1060.46	1060.84	XS 1020
Elbow River	E9_Dam_Roxboro	8,854	1052.26	1053.71	1054.51	1055.17	1055.88	1056.51	1056.95	1057.44	1057.78	1058.64	1059.37	1059.83	1060.34	1060.71	XS 1021; U/S of Sandy Beach Bridge
Elbow River	E9_Dam_Roxboro	8,850	1052.16	1053.69	1054.50	1055.15	1055.85	1056.48	1056.91	1057.40	1057.73	1058.57	1059.27	1059.73	1060.24	1060.61	XS 1022; D/S of Sandy Beach Bridge
Elbow River	E9_Dam_Roxboro	8,745	1051.52	1053.64	1054.46	1055.12	1055.83	1056.47	1056.90	1057.37	1057.70	1058.53	1059.22	1059.67	1060.17	1060.54	XS 1023
Elbow River	E9_Dam_Roxboro	8,696	1051.22	1053.60	1054.39	1055.01	1055.69	1056.29	1056.70	1057.15	1057.45	1058.23	1058.88	1059.31	1059.78	1060.12	XS 1024
Elbow River	E9_Dam_Roxboro	8,601	1051.56	1053.48	1054.22	1054.84	1055.52	1056.13	1056.54	1056.97	1057.27	1058.02	1058.63	1059.04	1059.50	1059.85	XS 1025
Elbow River	E9_Dam_Roxboro	8,535	1051.74	1053.39	1054.14	1054.76	1055.45	1056.07	1056.48	1056.92	1057.21	1057.95	1058.56	1059.00	1059.50	1059.88	XS 1026
Elbow River	E9_Dam_Roxboro	8,486	1051.58	1053.28	1054.06	1054.71	1055.42	1056.06	1056.48	1056.92	1057.23	1058.00	1058.67	1059.14	1059.66	1060.05	XS 1027
Elbow River	E9_Dam_Roxboro	8,423	1051.68	1053.18	1053.97	1054.64	1055.37	1056.02	1056.44	1056.89	1057.21	1058.02	1058.72	1059.21	1059.73	1060.13	XS 1028
Elbow River	E9_Dam_Roxboro	8,326	1051.33	1053.02	1053.83	1054.51	1055.23	1055.87	1056.31	1056.80	1057.13	1057.98	1058.70	1059.19	1059.72	1060.12	XS 1029
Elbow River	E9_Dam_Roxboro	8,251	1051.22	1052.94	1053.78	1054.46	1055.20	1055.85	1056.30	1056.79	1057.12	1057.94	1058.63	1059.09	1059.61	1059.99	XS 1030
Elbow River	E9_Dam_Roxboro	8,217	1051.16	1052.89	1053.71	1054.37	1055.07	1055.70	1056.11	1056.55	1056.84	1057.48	1058.01	1058.38	1058.75	1059.03	XS 1031
Elbow River	E9_Dam_Roxboro	8,181	1051.13	1052.84	1053.65	1054.31	1055.02	1055.64	1056.06	1056.49	1056.78	1057.43	1057.93	1058.28	1058.64	1058.91	XS 1032
Elbow River	E9_Dam_Roxboro	8,121	1050.96	1052.78	1053.59	1054.24	1054.95	1055.56	1055.97	1056.40	1056.68	1057.33	1057.87	1058.21	1058.61	1058.90	XS 1033
Elbow River	E9_Dam_Roxboro	8,068	1050.89	1052.67	1053.46	1054.10	1054.79	1055.39	1055.80	1056.22	1056.49	1057.09	1057.58	1057.90	1058.24	1058.50	XS 1034
Elbow River	E9_Dam_Roxboro	8,023	1050.84	1052.60	1053.40	1054.05	1054.75	1055.37	1055.78	1056.21	1056.49	1057.11	1057.61	1057.94	1058.30	1058.56	XS 1035
Elbow River	E9_Dam_Roxboro	7,985	1050.75	1052.53	1053.32	1053.98	1054.70	1055.33	1055.75	1056.18	1056.45	1057.07	1057.56	1057.89	1058.25	1058.50	XS 1036



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E9_Dam_Roxboro	7,916	1050.81	1052.40	1053.18	1053.89	1054.64	1055.28	1055.71	1056.15	1056.43	1057.06	1057.56	1057.89	1058.25	1058.50	XS 1037
Elbow River	E9_Dam_Roxboro	7,849	1051.07	1052.26	1053.07	1053.79	1054.56	1055.21	1055.64	1056.08	1056.35	1056.98	1057.48	1057.81	1058.17	1058.43	XS 1038
Elbow River	E9_Dam_Roxboro	7,813	1050.32	1052.10	1052.98	1053.73	1054.49	1055.14	1055.57	1056.01	1056.29	1056.91	1057.40	1057.73	1058.08	1058.33	XS 1039
Elbow River	E9_Dam_Roxboro	7,746	1049.81	1052.02	1052.90	1053.62	1054.36	1055.00	1055.43	1055.87	1056.14	1056.73	1057.19	1057.49	1057.81	1058.04	XS 1040
Elbow River	E9_Dam_Roxboro	7,710	1050.27	1051.92	1052.81	1053.55	1054.30	1054.95	1055.39	1055.83	1056.11	1056.70	1057.16	1057.47	1057.80	1058.03	XS 1041
Elbow River	E9_Dam_Roxboro	7,658	1050.13	1051.80	1052.72	1053.47	1054.23	1054.89	1055.34	1055.78	1056.05	1056.64	1057.08	1057.38	1057.70	1057.93	XS 1042
Elbow River	E9_Dam_Roxboro	7,614	1049.95	1051.67	1052.60	1053.35	1054.11	1054.79	1055.25	1055.68	1055.96	1056.55	1056.98	1057.29	1057.62	1057.84	XS 1043
Elbow River	E9_Dam_Roxboro	7,605	1049.71	1051.66	1052.59	1053.32	1054.05	1054.72	1055.18	1055.61	1055.89	1056.45	1056.84	1057.13	1057.44	1057.65	XS 1044; U/S of Riverdale Ave Bridge
Elbow River	E9_Dam_Roxboro	7,595	1049.52	1051.66	1052.60	1053.34	1054.09	1054.77	1055.22	1055.67	1055.94	1056.52	1056.96	1057.27	1057.60	1057.83	XS 1045; D/S of Riverdale Ave Bridge
Elbow River	E9_Dam_Roxboro	7,577	1049.18	1051.65	1052.59	1053.34	1054.08	1054.75	1055.20	1055.62	1055.89	1056.45	1056.87	1057.18	1057.50	1057.73	XS 1046
Elbow River	E9_Dam_Roxboro	7,518	1049.09	1051.56	1052.48	1053.22	1053.95	1054.62	1055.05	1055.47	1055.71	1056.28	1056.68	1056.99	1057.32	1057.55	XS 1047
Elbow River	E9_Dam_Roxboro	7,480	1049.15	1051.52	1052.42	1053.16	1053.89	1054.54	1054.97	1055.37	1055.60	1056.11	1056.48	1056.73	1057.01	1057.25	XS 1048
Elbow River	E9_Dam_Roxboro	7,426	1049.41	1051.45	1052.36	1053.12	1053.87	1054.54	1054.99	1055.40	1055.63	1056.16	1056.55	1056.81	1057.11	1057.35	XS 1049
Elbow River	E9_Dam_Roxboro	7,390	1049.29	1051.42	1052.34	1053.11	1053.86	1054.53	1054.98	1055.39	1055.63	1056.16	1056.53	1056.79	1057.09	1057.33	XS 1050
Elbow River	E9_Dam_Roxboro	7,345	1049.68	1051.33	1052.28	1053.06	1053.82	1054.50	1054.94	1055.35	1055.60	1056.12	1056.49	1056.75	1057.05	1057.29	XS 1051
Elbow River	E9_Dam_Roxboro	7,321	1049.73	1051.26	1052.22	1053.01	1053.78	1054.46	1054.91	1055.34	1055.58	1056.10	1056.48	1056.74	1057.04	1057.28	XS 1052
Elbow River	E9_Dam_Roxboro	7,282	1049.00	1051.22	1052.21	1053.00	1053.77	1054.45	1054.89	1055.32	1055.56	1056.08	1056.44	1056.70	1056.99	1057.23	XS 1053
Elbow River	E9_Dam_Roxboro	7,238	1049.22	1051.17	1052.17	1052.95	1053.72	1054.40	1054.84	1055.27	1055.51	1056.01	1056.36	1056.61	1056.91	1057.13	XS 1054
Elbow River	E9_Dam_Roxboro	7,221	1049.16	1051.16	1052.16	1052.94	1053.70	1054.37	1054.83	1055.24	1055.48	1055.98	1056.34	1056.59	1056.89	1057.11	XS 1055; U/S of Elboya Bridge
Elbow River	E9_Dam_Roxboro	7,195	1049.10	1051.12	1052.11	1052.89	1053.63	1054.20	1054.55	1054.94	1055.22	1055.77	1056.13	1056.37	1056.69	1056.91	XS 1056; D/S of Elboya Bridge
Elbow River	E9_Dam_Roxboro	7,181	1048.99	1051.07	1052.07	1052.84	1053.57	1054.13	1054.49	1054.87	1055.15	1055.70	1056.10	1056.35	1056.65	1056.88	XS 1057
Elbow River	E9_Dam_Roxboro	7,146	1049.03	1051.03	1052.02	1052.80	1053.53	1054.10	1054.46	1054.84	1055.12	1055.67	1056.07	1056.33	1056.62	1056.88	XS 1058
Elbow River	E9_Dam_Roxboro	7,104	1048.73	1050.99	1051.98	1052.75	1053.49	1054.06	1054.42	1054.81	1055.07	1055.61	1056.01	1056.28	1056.59	1056.83	XS 1059
Elbow River	E9_Dam_Roxboro	7,063	1048.58	1050.96	1051.95	1052.73	1053.48	1054.06	1054.43	1054.81	1055.09	1055.67	1056.08	1056.35	1056.66	1056.91	XS 1060
Elbow River	E9_Dam_Roxboro	7,012	1048.51	1050.90	1051.90	1052.68	1053.43	1054.01	1054.38	1054.76	1055.05	1055.63	1056.05	1056.33	1056.65	1056.89	XS 1061
Elbow River	E9_Dam_Roxboro	6,985	1048.57	1050.88	1051.89	1052.67	1053.42	1054.00	1054.37	1054.76	1055.04	1055.64	1056.06	1056.33	1056.65	1056.90	XS 1062
Elbow River	E9_Dam_Roxboro	6,935	1048.33	1050.80	1051.83	1052.62	1053.38	1053.98	1054.34	1054.75	1055.05	1055.63	1056.06	1056.33	1056.65	1056.91	XS 1063
Elbow River	E9_Dam_Roxboro	6,881	1048.33	1050.75	1051.73	1052.50	1053.28	1053.91	1054.30	1054.71	1055.02	1055.61	1056.03	1056.30	1056.62	1056.87	XS 1064
Elbow River	E9_Dam_Roxboro	6,837	1048.41	1050.66	1051.67	1052.51	1053.35	1053.99	1054.37	1054.78	1055.08	1055.67	1056.09	1056.36	1056.68	1056.93	XS 1065
Elbow River	E9_Dam_Roxboro	6,800	1048.14	1050.62	1051.63	1052.45	1053.28	1053.94	1054.34	1054.76	1055.06	1055.65	1056.07	1056.34	1056.66	1056.91	XS 1066
Elbow River	E9_Dam_Roxboro	6,748	1048.10	1050.57	1051.58	1052.38	1053.23	1053.91	1054.32	1054.74	1055.04	1055.64	1056.05	1056.33	1056.64	1056.89	XS 1067
Elbow River	E9_Dam_Roxboro	6,710	1047.96	1050.56	1051.57	1052.37	1053.21	1053.89	1054.29	1054.70	1055.00	1055.60	1056.01	1056.29	1056.60	1056.85	XS 1068
Elbow River	E9_Dam_Roxboro	6,602	1048.62	1050.43	1051.46	1052.26	1053.13	1053.82	1054.23	1054.64	1054.95	1055.55	1055.96	1056.23	1056.55	1056.80	XS 1069
Elbow River	E9_Dam_Roxboro	6,557	1048.31	1050.38	1051.41	1052.21	1053.06	1053.76	1054.17	1054.59	1054.90	1055.51	1055.92	1056.18	1056.50	1056.75	XS 1070
Elbow River	E9_Dam_Roxboro	6,521	1047.63	1050.36	1051.38	1052.17	1053.00	1053.69	1054.09	1054.50	1054.82	1055.42	1055.83	1056.10	1056.42	1056.66	XS 1071
Elbow River	E9_Dam_Roxboro	6,498	1047.55	1050.33	1051.35	1052.13	1052.98	1053.67	1054.08	1054.48	1054.80	1055.40	1055.81	1056.08	1056.39	1056.64	XS 1072
Elbow River	E9_Dam_Roxboro	6,470	1047.12	1050.29	1051.27	1052.03	1052.83	1053.47	1053.91	1054.33	1054.63	1055.25	1055.69	1055.97	1056.30	1056.55	XS 1073
Elbow River	E9_Dam_Roxboro	6,427	1046.80	1050.26	1051.19	1051.90	1052.64	1053.27	1053.73	1054.16	1054.44	1055.08	1055.58	1055.88	1056.22	1056.49	XS 1074



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E9_Dam_Roxboro	6,381	1046.61	1050.23	1051.14	1051.84	1052.60	1053.26	1053.71	1054.13	1054.44	1055.08	1055.57	1055.87	1056.20	1056.47	XS 1075
Elbow River	E9_Dam_Roxboro	6,339	1047.17	1050.21	1051.12	1051.82	1052.58	1053.23	1053.68	1054.08	1054.41	1055.05	1055.54	1055.82	1056.16	1056.42	XS 1076
Elbow River	E9_Dam_Roxboro	6,287	1048.07	1050.12	1051.05	1051.75	1052.51	1053.14	1053.56	1054.00	1054.31	1054.98	1055.47	1055.76	1056.09	1056.35	XS 1077
Elbow River	E9_Dam_Roxboro	6,230	1047.42	1050.09	1050.99	1051.67	1052.40	1053.00	1053.40	1053.81	1054.12	1054.76	1055.29	1055.59	1055.94	1056.21	XS 1078
Elbow River	E9_Dam_Roxboro	6,181	1047.19	1050.08	1050.98	1051.66	1052.38	1052.97	1053.37	1053.78	1054.09	1054.72	1055.23	1055.52	1055.86	1056.13	XS 1079
Elbow River	E9_Dam_Roxboro	6,112	1047.49	1050.03	1050.90	1051.55	1052.24	1052.79	1053.16	1053.56	1053.83	1054.43	1054.90	1055.23	1055.61	1055.89	XS 1080
Elbow River	E9_Dam_Roxboro	6,034	1047.31	1050.02	1050.88	1051.53	1052.24	1052.82	1053.21	1053.62	1053.89	1054.43	1054.90	1055.20	1055.55	1055.82	XS 1081
Elbow River	E9_Dam_Roxboro	5,953	1048.05	1049.92	1050.76	1051.43	1052.16	1052.76	1053.15	1053.56	1053.83	1054.38	1054.84	1055.14	1055.49	1055.76	XS 1082
Elbow River	E9_Dam_Roxboro	5,887	1048.22	1049.81	1050.67	1051.35	1052.07	1052.65	1053.04	1053.43	1053.69	1054.31	1054.82	1055.13	1055.50	1055.79	XS 1083
Elbow River	E9_Dam_Roxboro	5,785	1047.88	1049.74	1050.63	1051.32	1052.06	1052.67	1053.06	1053.46	1053.74	1054.35	1054.84	1055.15	1055.51	1055.79	XS 1084
Elbow River	E9_Dam_Roxboro	5,709	1047.24	1049.71	1050.57	1051.23	1051.94	1052.51	1052.87	1053.23	1053.48	1054.09	1054.58	1054.90	1055.28	1055.57	XS 1085
Elbow River	E9_Dam_Roxboro	5,658	1046.72	1049.70	1050.54	1051.18	1051.86	1052.39	1052.72	1053.08	1053.34	1053.97	1054.46	1054.78	1055.15	1055.42	XS 1086
Elbow River	E9_Dam_Roxboro	5,582	1046.73	1049.67	1050.49	1051.11	1051.76	1052.28	1052.62	1052.97	1053.23	1053.85	1054.33	1054.63	1054.99	1055.26	XS 1087
Elbow River	E9_Dam_Roxboro	5,513	1047.00	1049.65	1050.46	1051.07	1051.72	1052.25	1052.59	1052.96	1053.22	1053.83	1054.30	1054.60	1054.95	1055.22	XS 1088; U/S of Rideau Park Bridge
Elbow River	E9_Dam_Roxboro	5,495	1047.45	1049.63	1050.42	1051.02	1051.66	1052.17	1052.52	1052.89	1053.15	1053.75	1054.23	1054.52	1054.88	1055.16	XS 1089; D/S of Rideau Park Bridge
Elbow River	E9_Dam_Roxboro	5,428	1047.35	1049.57	1050.34	1050.91	1051.55	1052.04	1052.36	1052.71	1052.95	1053.51	1053.99	1054.28	1054.65	1054.93	XS 1090
Elbow River	E9_Dam_Roxboro	5,392	1047.64	1049.54	1050.30	1050.86	1051.50	1052.00	1052.33	1052.67	1052.91	1053.47	1053.94	1054.24	1054.60	1054.88	XS 1091
Elbow River	E9_Dam_Roxboro	5,337	1047.36	1049.49	1050.24	1050.80	1051.43	1051.92	1052.24	1052.59	1052.83	1053.38	1053.86	1054.14	1054.51	1054.78	XS 1092
Elbow River	E9_Dam_Roxboro	5,303	1047.44	1049.45	1050.20	1050.76	1051.39	1051.89	1052.22	1052.56	1052.80	1053.36	1053.81	1054.09	1054.43	1054.69	XS 1093
Elbow River	E8_Roxboro_Cliff	5,259	1047.00	1049.41	1050.16	1050.72	1051.37	1051.86	1052.19	1052.54	1052.78	1053.32	1053.77	1054.04	1054.37	1054.62	XS 1094
Elbow River	E8_Roxboro_Cliff	5,216	1047.69	1049.31	1050.10	1050.67	1051.33	1051.83	1052.16	1052.52	1052.77	1053.33	1053.79	1054.07	1054.41	1054.67	XS 1095
Elbow River	E8_Roxboro_Cliff	5,172	1047.55	1049.18	1049.98	1050.58	1051.28	1051.79	1052.13	1052.50	1052.76	1053.33	1053.80	1054.09	1054.44	1054.70	XS 1096
Elbow River	E8_Roxboro_Cliff	5,124	1046.55	1049.11	1049.87	1050.49	1051.21	1051.76	1052.12	1052.50	1052.77	1053.35	1053.82	1054.10	1054.45	1054.72	XS 1097
Elbow River	E8_Roxboro_Cliff	5,073	1047.14	1049.02	1049.75	1050.39	1051.14	1051.72	1052.09	1052.47	1052.74	1053.32	1053.79	1054.07	1054.42	1054.69	XS 1098
Elbow River	E8_Roxboro_Cliff	5,032	1047.15	1048.94	1049.66	1050.28	1051.05	1051.65	1052.02	1052.41	1052.68	1053.25	1053.71	1053.99	1054.33	1054.59	XS 1099
Elbow River	E8_Roxboro_Cliff	4,984	1046.94	1048.81	1049.53	1050.14	1050.92	1051.54	1051.92	1052.30	1052.56	1053.11	1053.55	1053.81	1054.13	1054.38	XS 1100
Elbow River	E8_Roxboro_Cliff	4,931	1046.73	1048.67	1049.41	1050.04	1050.81	1051.44	1051.83	1052.21	1052.47	1053.00	1053.42	1053.66	1053.95	1054.18	XS 1101
Elbow River	E8_Roxboro_Cliff	4,877	1046.41	1048.56	1049.30	1049.99	1050.78	1051.43	1051.82	1052.21	1052.47	1053.01	1053.44	1053.68	1053.98	1054.22	XS 1102
Elbow River	E7_Cliff_Roxboro	4,830	1046.21	1048.48	1049.18	1049.87	1050.69	1051.36	1051.76	1052.17	1052.44	1052.99	1053.44	1053.69	1054.01	1054.25	XS 1103
Elbow River	E7_Cliff_Roxboro	4,795	1046.08	1048.45	1049.16	1049.86	1050.69	1051.35	1051.75	1052.15	1052.42	1052.96	1053.39	1053.63	1053.94	1054.18	XS 1104; U/S of Mission Bridge
Elbow River	E7_Cliff_Roxboro	4,768	1046.46	1048.37	1049.05	1049.74	1050.51	1051.06	1051.39	1051.72	1051.94	1052.54	1053.07	1053.35	1053.70	1053.95	XS 1105; D/S of Mission Bridge
Elbow River	E7_Cliff_Roxboro	4,747	1047.02	1048.13	1048.95	1049.68	1050.46	1051.01	1051.34	1051.67	1051.89	1052.49	1053.02	1053.30	1053.64	1053.89	XS 1106
Elbow River	E7_Cliff_Roxboro	4,708	1046.69	1048.06	1048.88	1049.61	1050.39	1050.93	1051.25	1051.57	1051.80	1052.39	1052.91	1053.18	1053.52	1053.77	XS 1107
Elbow River	E7_Cliff_Roxboro	4,652	1046.15	1047.98	1048.78	1049.49	1050.24	1050.76	1051.06	1051.36	1051.56	1052.11	1052.60	1052.82	1053.10	1053.33	XS 1108
Elbow River	E7_Cliff_Roxboro	4,573	1046.09	1047.89	1048.67	1049.36	1050.10	1050.59	1050.87	1051.15	1051.34	1051.81	1052.28	1052.45	1052.72	1052.92	XS 1109
Elbow River	E7_Cliff_Roxboro	4,520	1046.27	1047.83	1048.61	1049.31	1050.06	1050.55	1050.83	1051.12	1051.31	1051.80	1052.27	1052.44	1052.70	1052.90	XS 1110
Elbow River	E7_Cliff_Roxboro	4,473	1046.39	1047.68	1048.53	1049.27	1050.04	1050.55	1050.85	1051.15	1051.36	1051.88	1052.39	1052.59	1052.88	1053.11	XS 1111
Elbow River	E7_Cliff_Roxboro	4,417	1046.06	1047.54	1048.40	1049.13	1049.92	1050.43	1050.74	1051.05	1051.27	1051.82	1052.34	1052.54	1052.84	1053.08	XS 1112



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E7_Cliff_Roxboro	4,365	1045.54	1047.46	1048.29	1048.95	1049.72	1050.23	1050.53	1050.85	1051.07	1051.65	1052.21	1052.39	1052.70	1052.94	XS 1113
Elbow River	E7_Cliff_Roxboro	4,323	1045.26	1047.44	1048.29	1048.98	1049.75	1050.25	1050.55	1050.87	1051.09	1051.67	1052.23	1052.42	1052.73	1052.97	XS 1114
Elbow River	E6_Roxboro_25AV	4,281	1045.24	1047.38	1048.21	1048.87	1049.66	1050.19	1050.51	1050.83	1051.04	1051.59	1052.15	1052.31	1052.59	1052.81	XS 1115
Elbow River	E6_Roxboro_25AV	4,223	1044.97	1047.22	1047.97	1048.57	1049.27	1049.67	1049.87	1050.08	1050.23	1050.69	1050.84	1051.46	1051.71	1051.88	XS 1116
Elbow River	E6_Roxboro_25AV	4,168	1044.95	1047.07	1047.84	1048.47	1049.24	1049.66	1049.88	1050.09	1050.24	1050.61	1051.01	1051.31	1051.64	1051.86	XS 1117
Elbow River	E6_Roxboro_25AV	4,098	1044.00	1046.96	1047.76	1048.44	1049.25	1049.70	1049.92	1050.15	1050.30	1050.69	1051.09	1051.38	1051.70	1051.92	XS 1118
Elbow River	E6_Roxboro_25AV	4,083	1043.99	1046.93	1047.74	1048.42	1049.22	1049.66	1049.89	1050.11	1050.26	1050.67	1051.07	1051.37	1051.68	1051.91	XS 1119
Elbow River	E5_25AV_22AV	4,052	1044.96	1046.88	1047.69	1048.38	1049.20	1049.65	1049.89	1050.15	1050.32	1050.77	1051.19	1051.50	1051.83	1052.06	XS 1120; U/S of 25th Ave SW Bridge
Elbow River	E5_25AV_22AV	4,034	1044.94	1046.88	1047.69	1048.38	1049.04	1049.42	1049.66	1049.93	1050.12	1050.66	1051.14	1051.47	1051.81	1052.05	XS 1121; D/S of 25th Ave SW Bridge
Elbow River	E5_25AV_22AV	3,989	1045.37	1046.73	1047.53	1048.24	1048.95	1049.35	1049.60	1049.87	1050.07	1050.61	1051.09	1051.42	1051.76	1052.00	XS 1122
Elbow River	E5_25AV_22AV	3,931	1044.65	1046.68	1047.44	1048.11	1048.72	1049.09	1049.33	1049.59	1049.79	1050.34	1050.83	1051.16	1051.51	1051.74	XS 1123
Elbow River	E5_25AV_22AV	3,889	1044.09	1046.65	1047.39	1048.05	1048.69	1049.07	1049.31	1049.58	1049.77	1050.31	1050.80	1051.13	1051.48	1051.71	XS 1124
Elbow River	E5_25AV_22AV	3,869	1043.87	1046.65	1047.38	1048.02	1048.64	1049.01	1049.26	1049.54	1049.75	1050.30	1050.79	1051.13	1051.47	1051.70	XS 1125; Eriton Flood Control Weir on ROB
Elbow River	E5_25AV_22AV	3,851	1043.72	1046.63	1047.33	1047.94	1048.51	1048.86	1049.11	1049.39	1049.59	1050.14	1050.64	1050.97	1051.31	1051.53	XS 1126; Eriton Flood Control Weir on ROB
Elbow River	E5_25AV_22AV	3,834	1043.72	1046.62	1047.30	1047.89	1048.41	1048.72	1048.94	1049.22	1049.42	1049.97	1050.48	1050.83	1051.17	1051.37	XS 1127; Eriton Flood Control Weir on ROB
Elbow River	E5_25AV_22AV	3,809	1043.95	1046.61	1047.28	1047.86	1048.37	1048.68	1048.89	1049.16	1049.35	1049.87	1050.37	1050.70	1051.03	1051.21	XS 1128; Eriton Flood Control Weir on ROB
Elbow River	E5_25AV_22AV	3,777	1043.89	1046.59	1047.24	1047.82	1048.31	1048.58	1048.77	1048.99	1049.17	1049.73	1050.27	1050.62	1050.96	1051.15	XS 1129; Eriton Flood Control Weir on ROB
Elbow River	E5_25AV_22AV	3,738	1044.07	1046.56	1047.22	1047.82	1048.35	1048.64	1048.84	1049.06	1049.24	1049.80	1050.34	1050.69	1051.04	1051.23	XS 1130; Eriton Flood Control Weir on ROB
Elbow River	E4_Talisman	3,671	1045.11	1046.40	1047.09	1047.75	1048.32	1048.64	1048.87	1049.12	1049.32	1049.91	1050.46	1050.82	1051.17	1051.38	XS 1131; Eriton Flood Control Weir on ROB
Elbow River	E4_Talisman	3,610	1044.63	1046.11	1046.97	1047.69	1048.30	1048.63	1048.86	1049.12	1049.32	1049.92	1050.47	1050.83	1051.19	1051.40	XS 1132
Elbow River	E4_Talisman	3,568	1044.17	1045.95	1046.91	1047.66	1048.28	1048.61	1048.84	1049.11	1049.31	1049.91	1050.46	1050.83	1051.18	1051.39	XS 1133
Elbow River	E4_Talisman	3,498	1043.19	1045.68	1046.44	1046.95	1047.74	1048.21	1048.51	1048.82	1049.06	1049.72	1050.31	1050.69	1051.05	1051.26	XS 1134; U/S of Lindsay Park Bridge
Elbow River	E4_Talisman	3,478	1043.40	1045.60	1046.30	1046.86	1047.40	1047.96	1048.31	1048.64	1048.90	1049.61	1050.23	1050.62	1050.99	1051.18	XS 1135; D/S of Lindsay Park Bridge
Elbow River	E4_Talisman	3,455	1043.40	1045.57	1046.30	1046.88	1047.48	1047.98	1048.31	1048.64	1048.89	1049.60	1050.21	1050.60	1050.97	1051.17	XS 1136
Elbow River	E4_Talisman	3,438	1043.57	1045.52	1046.26	1046.87	1047.47	1047.96	1048.29	1048.61	1048.86	1049.56	1050.18	1050.53	1050.90	1051.10	XS 1137
Elbow River	E4_Talisman	3,386	1043.74	1045.41	1046.14	1046.76	1047.37	1047.86	1048.19	1048.51	1048.76	1049.46	1050.07	1050.44	1050.78	1050.97	XS 1138
Elbow River	E4_Talisman	3,346	1043.68	1045.29	1046.00	1046.60	1047.25	1047.77	1048.11	1048.43	1048.68	1049.39	1050.01	1050.38	1050.73	1050.89	XS 1139
Elbow River	E4_Talisman	3,297	1043.42	1045.14	1045.85	1046.47	1047.13	1047.64	1047.98	1048.30	1048.54	1049.24	1049.85	1050.22	1050.55	1050.70	XS 1140
Elbow River	E4_Talisman	3,263	1043.26	1045.12	1045.87	1046.51	1047.17	1047.68	1048.02	1048.33	1048.57	1049.27	1049.88	1050.25	1050.59	1050.75	XS 1141
Elbow River	E4_Talisman	3,251	1043.18	1045.10	1045.85	1046.50	1047.16	1047.68	1048.01	1048.33	1048.57	1049.26	1049.88	1050.24	1050.60	1050.76	XS 1142; U/S of Lindsay Park CNR Bridge
Elbow River	E4_Talisman	3,236	1043.04	1045.02	1045.76	1046.39	1047.04	1047.56	1047.90	1048.20	1048.45	1048.98	1049.44	1049.78	1050.16	1050.41	XS 1143; D/S of Lindsay Park CNR Bridge
Elbow River	E4_Talisman	3,224	1042.71	1045.01	1045.74	1046.38	1047.04	1047.56	1047.90	1048.21	1048.45	1048.99	1049.45	1049.78	1050.17	1050.41	XS 1144
Elbow River	E4_Talisman	3,188	1043.05	1044.92	1045.65	1046.27	1046.93	1047.46	1047.81	1048.13	1048.37	1048.91	1049.38	1049.72	1050.09	1050.34	XS 1145
Elbow River	E4_Talisman	3,146	1043.05	1044.45	1045.26	1045.89	1046.61	1047.20	1047.58	1047.90	1048.15	1048.69	1049.16	1049.51	1049.89	1050.15	XS 1146
Elbow River	E4_Talisman	3,073	1042.33	1044.17	1044.95	1045.57	1046.26	1046.90	1047.30	1047.61	1047.87	1048.42	1048.92	1049.29	1049.72	1050.00	XS 1147
Elbow River	E4_Talisman	3,027	1042.41	1044.04	1044.81	1045.43	1046.20	1046.90	1047.32	1047.65	1047.92	1048.49	1049.00	1049.38	1049.82	1050.09	XS 1148
Elbow River	E4_Talisman	2,982	1041.76	1043.98	1044.73	1045.37	1046.20	1046.93	1047.36	1047.70	1047.98	1048.56	1049.09	1049.47	1049.90	1050.17	XS 1149
Elbow River	E4_Talisman	2,966	1041.39	1044.02	1044.80	1045.45	1046.26	1046.96	1047.38	1047.72	1048.00	1048.59	1049.11	1049.48	1049.91	1050.19	XS 1150; U/S of Pattison Bridge



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E4_Talisman	2,939	1039.61	1044.01	1044.80	1045.45	1046.12	1046.70	1047.10	1047.55	1047.89	1048.52	1049.06	1049.45	1049.89	1050.17	XS 1151; D/S of Pattison Bridge
Elbow River	E4_Talisman	2,911	1042.17	1043.74	1044.44	1045.04	1045.77	1046.45	1046.89	1047.40	1047.78	1048.46	1049.02	1049.41	1049.86	1050.14	XS 1152
Elbow River	E4_Talisman	2,882	1042.12	1043.59	1044.31	1044.97	1045.73	1046.43	1046.89	1047.42	1047.79	1048.46	1049.02	1049.42	1049.87	1050.15	XS 1153
Elbow River	E4_Talisman	2,840	1042.01	1043.38	1044.15	1044.87	1045.68	1046.41	1046.90	1047.43	1047.80	1048.48	1049.03	1049.43	1049.87	1050.16	XS 1154
Elbow River	E4_Talisman	2,802	1041.33	1043.28	1044.07	1044.80	1045.62	1046.37	1046.87	1047.41	1047.79	1048.47	1049.03	1049.42	1049.87	1050.15	XS 1155
Elbow River	E4_Talisman	2,767	1041.59	1043.05	1043.95	1044.71	1045.55	1046.33	1046.81	1047.35	1047.75	1048.44	1049.00	1049.40	1049.85	1050.14	XS 1156
Elbow River	E3_22AV_25AV	2,742	1041.72	1043.03	1043.97	1044.76	1045.60	1046.37	1046.84	1047.36	1047.74	1048.40	1048.94	1049.33	1049.78	1050.05	XS 1157; U/S of Victoria Bridge
Elbow River	E3_22AV_25AV	2,699	1041.52	1042.90	1043.91	1044.72	1045.55	1046.26	1046.70	1047.19	1047.54	1048.29	1048.87	1049.28	1049.73	1050.01	XS 1158; Between Victoria Bridge and LRT Bridge
Elbow River	E3_22AV_25AV	2,656	1041.12	1042.82	1043.87	1044.69	1045.53	1046.22	1046.66	1047.15	1047.48	1048.16	1048.83	1049.26	1049.74	1050.04	XS 1159; D/S of LRT Bridge; Stampede Floodwall on LOB
Elbow River	E3_22AV_25AV	2,636	1041.04	1042.72	1043.76	1044.58	1045.42	1046.11	1046.56	1047.05	1047.40	1048.11	1048.74	1049.20	1049.70	1050.00	XS 1160; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,608	1040.62	1042.67	1043.66	1044.43	1045.21	1045.82	1046.21	1046.63	1046.97	1047.61	1048.27	1048.69	1049.15	1049.39	XS 1161; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,588	1040.58	1042.67	1043.67	1044.45	1045.22	1045.83	1046.22	1046.64	1046.97	1047.60	1048.24	1048.63	1049.05	1049.28	XS 1162; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,536	1040.21	1042.63	1043.63	1044.40	1045.18	1045.78	1046.16	1046.58	1046.90	1047.47	1048.05	1048.41	1048.80	1048.96	XS 1163; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,481	1040.26	1042.51	1043.42	1044.17	1044.95	1045.55	1045.94	1046.36	1046.66	1047.17	1047.75	1048.09	1048.48	1048.53	XS 1164; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,469	1040.37	1042.50	1043.45	1044.24	1045.05	1045.69	1046.10	1046.54	1046.86	1047.43	1048.03	1048.39	1048.78	1048.91	XS 1165; U/S of Stampede Park Access Bridge; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,443	1039.88	1042.51	1043.45	1044.20	1044.98	1045.59	1045.96	1046.34	1046.62	1047.04	1047.52	1047.87	1048.27	1048.57	XS 1166; D/S of Stampede Park Access Bridge; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,424	1039.32	1042.50	1043.41	1044.13	1044.88	1045.44	1045.78	1046.12	1046.35	1046.56	1046.87	1047.13	1047.52	1047.88	XS 1167; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,387	1039.21	1042.49	1043.39	1044.10	1044.83	1045.38	1045.69	1046.01	1046.24	1046.35	1046.53	1046.68	1046.99	1046.99 ⁽²⁾	XS 1168; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,332	1040.39	1042.35	1043.19	1043.85	1044.56	1045.09	1045.39	1045.68	1045.86	1046.26	1046.51	1046.72	1047.11	1047.12	XS 1169; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,272	1040.25	1042.17	1042.98	1043.63	1044.38	1044.96	1045.27	1045.56	1045.74	1046.32	1046.55	1046.75	1047.12	1047.14	XS 1170; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,212	1040.14	1041.72	1042.73	1043.51	1044.33	1044.97	1045.31	1045.63	1045.83	1046.31	1046.54	1046.74	1047.11	1047.13	XS 1171; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,146	1039.76	1041.67	1042.65	1043.42	1044.24	1044.88	1045.23	1045.57	1045.77	1046.28	1046.51	1046.71	1047.10	1047.11	XS 1172; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,090	1039.52	1041.64	1042.62	1043.40	1044.22	1044.87	1045.21	1045.53	1045.72	1046.26	1046.49	1046.69	1047.08	1047.09	XS 1173; Stampede Floodwall on LOB
Elbow River	E2_Stampede_Clif	2,048	1038.52	1041.58	1042.54	1043.29	1044.08	1044.75	1045.17	1045.56	1045.80	1046.24	1046.47	1046.67	1047.07	1047.07	XS 1174
Elbow River	E2_Stampede_Clif	2,020	1038.35	1041.55	1042.47	1043.21	1043.97	1044.59	1044.97	1045.46	1045.73	1046.20	1046.43	1046.64	1047.04	1047.04	XS 1175
Elbow River	E2_Stampede_Clif	1,999	1038.49	1041.48	1042.40	1043.14	1043.91	1044.51	1044.88	1045.34	1045.67	1046.16	1046.39	1046.60	1047.01	1047.01 ⁽²⁾	XS 1176
Elbow River	E2_Stampede_Clif	1,969	1037.56	1041.51	1042.42	1043.16	1043.93	1044.54	1044.89	1045.31	1045.56	1046.06	1046.28	1046.50	1046.95	1046.95 ⁽²⁾	XS 1177
Elbow River	E2_Stampede_Clif	1,944	1038.67	1041.46	1042.35	1043.08	1043.83	1044.40	1044.75	1045.14	1045.42	1045.76	1046.01	1046.36	1046.90	1046.90 ⁽²⁾	XS 1178
Elbow River	E2_Stampede_Clif	1,910	1039.32	1041.40	1042.26	1042.99	1043.74	1044.31	1044.64	1044.98	1045.26	1045.82	1046.07	1046.39	1046.90	1046.90 ⁽²⁾	XS 1179; U/S of Horse Barn Bridge (New)
Elbow River	E2_Stampede_Clif	1,894	1039.47	1041.38	1042.23	1042.96	1043.71	1044.25	1044.54	1044.86	1045.30	1045.89	1046.12	1046.41	1046.90	1046.90 ⁽²⁾	XS 1180; D/S of Horse Barn Bridge (New)
Elbow River	E2_Stampede_Clif	1,861	1039.09	1041.34	1042.17	1042.88	1043.62	1044.16	1044.48	1044.84	1045.36	1045.91	1046.13	1046.41	1046.90	1046.90 ⁽²⁾	XS 1181; U/S of Horse Barn Bridge (Old)
Elbow River	E2_Stampede_Clif	1,848	1039.17	1041.35	1042.19	1042.89	1043.62	1044.12	1044.43	1044.88	1045.32	1045.88	1046.11	1046.40	1046.89	1046.89 ⁽²⁾	XS 1182; D/S of Horse Barn Bridge (Old)
Elbow River	E2_Stampede_Clif	1,755	1039.71	1041.13	1041.96	1042.66	1043.38	1043.91	1044.20	1044.59	1044.97	1045.68	1045.89	1046.23	1046.79	1046.79 ⁽²⁾	XS 1183
Elbow River	E2_Stampede_Clif	1,698	1039.27	1041.05	1041.89	1042.60	1043.32	1043.89	1044.23	1044.66	1044.97	1045.70	1045.89	1046.22	1046.78	1046.78 ⁽²⁾	XS 1184
Elbow River	E2_Stampede_Clif	1,621	1038.67	1040.90	1041.70	1042.37	1043.07	1043.70	1044.13	1044.62	1044.95	1045.65	1045.84	1046.18	1046.75	1046.75 ⁽²⁾	XS 1185
Elbow River	E2_Stampede_Clif	1,561	1038.81	1040.78	1041.64	1042.36	1043.13	1043.74	1044.11	1044.57	1044.90	1045.58	1045.74	1046.09	1046.69	1046.69 ⁽²⁾	XS 1186



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A3: Flood Frequency Profiles – Elbow River

River	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Elbow River	E2_Stampede_Clif	1,530	1038.33	1040.74	1041.62	1042.35	1043.11	1043.71	1044.08	1044.52	1044.84	1045.56	1045.70	1046.07	1046.68	1046.68 ⁽³⁾	XS 1187
Elbow River	E2_Stampede_Clif	1,506	1038.51	1040.62	1041.46	1042.14	1042.85	1043.40	1043.72	1044.10	1044.34	1045.40	1045.45	1046.02	1046.67	1046.67 ⁽²⁾	XS 1188
Elbow River	E2_Stampede_Clif	1,448	1038.05	1040.50	1041.35	1042.00	1042.68	1043.19	1043.46	1043.78	1043.96	1044.35	1045.42	1046.00	1046.65	1046.65 ⁽²⁾	XS 1189
Elbow River	E2_Stampede_Clif	1,374	1038.49	1040.37	1041.19	1041.85	1042.53	1043.01	1043.27	1043.57	1043.78	1044.74	1045.50	1046.02	1046.66	1046.66 ⁽²⁾	XS 1190
Elbow River	E2_Stampede_Clif	1,303	1038.31	1040.26	1041.07	1041.74	1042.43	1042.91	1043.18	1043.54	1043.79	1044.73	1045.45	1045.96	1046.61	1046.61 ⁽²⁾	XS 1191
Elbow River	E2_Stampede_Clif	1,249	1038.19	1040.19	1040.99	1041.65	1042.33	1042.81	1043.07	1043.47	1043.75	1044.70	1045.44	1045.95	1046.60	1046.60 ⁽²⁾	XS 1192; U/S of Weadick Crossing
Elbow River	E2_Stampede_Clif	1,238	1038.10	1040.15	1040.95	1041.62	1042.31	1042.79	1043.04	1043.44	1043.75	1044.73	1045.45	1045.96	1046.61	1046.61 ⁽²⁾	XS 1193; D/S of Weadick Crossing
Elbow River	E2_Stampede_Clif	1,205	1038.39	1040.09	1040.91	1041.60	1042.32	1042.84	1043.15	1043.60	1043.89	1044.75	1045.42	1045.92	1046.58	1046.58 ⁽²⁾	XS 1194
Elbow River	E2_Stampede_Clif	1,193	1038.34	1040.04	1040.86	1041.56	1042.29	1042.83	1043.15	1043.62	1043.91	1044.75	1045.42	1045.93	1046.59	1046.59 ⁽²⁾	XS 1195
Elbow River	E2_Stampede_Clif	1,135	1038.12	1039.92	1040.69	1041.31	1041.95	1042.53	1042.95	1043.55	1043.87	1044.75	1045.43	1045.94	1046.59	1046.59 ⁽²⁾	XS 1196
Elbow River	E2_Stampede_Clif	1,085	1038.42	1039.73	1040.50	1041.13	1041.83	1042.46	1042.88	1043.50	1043.83	1044.74	1045.42	1045.93	1046.58	1046.58 ⁽²⁾	XS 1197
Elbow River	E2_Stampede_Clif	999	1037.72	1039.64	1040.44	1041.10	1041.81	1042.39	1042.76	1043.32	1043.65	1044.63	1045.35	1045.88	1046.55	1046.55 ⁽²⁾	XS 1198; U/S of Agriculture Trail Bridge
Elbow River	E2_Stampede_Clif	979	1036.51	1039.66	1040.46	1041.12	1041.83	1042.41	1042.78	1043.30	1043.62	1044.59	1045.33	1045.85	1046.53	1046.53 ⁽²⁾	XS 1199; D/S of Agriculture Trail Bridge
Elbow River	E2_Stampede_Clif	955	1037.39	1039.58	1040.34	1040.97	1041.64	1042.21	1042.59	1043.20	1043.57	1044.56	1045.30	1045.83	1046.50	1046.50 ⁽²⁾	XS 1200
Elbow River	E2_Stampede_Clif	918	1037.74	1039.46	1040.20	1040.81	1041.46	1042.03	1042.42	1042.88	1043.29	1044.41	1045.19	1045.73	1046.43	1046.43 ⁽²⁾	XS 1201
Elbow River	E2_Stampede_Clif	858	1037.85	1039.38	1040.11	1040.72	1041.37	1041.95	1042.34	1042.81	1043.14	1044.28	1045.08	1045.64	1046.35	1046.35 ⁽²⁾	XS 1202
Elbow River	E2_Stampede_Clif	800	1037.24	1039.31	1040.03	1040.63	1041.28	1041.86	1042.24	1042.72	1043.06	1044.24	1045.06	1045.63	1046.35	1046.35 ⁽²⁾	XS 1203
Elbow River	E2_Stampede_Clif	755	1037.83	1039.17	1039.91	1040.54	1041.21	1041.81	1042.21	1042.72	1043.08	1044.21	1044.98	1045.54	1046.25	1046.25 ⁽²⁾	XS 1204
Elbow River	E2_Stampede_Clif	659	1037.23	1038.83	1039.62	1040.27	1040.95	1041.59	1042.02	1042.55	1042.91	1044.04	1044.77	1045.30	1046.00	1046.00 ⁽²⁾	XS 1205
Elbow River	E2_Stampede_Clif	588	1036.73	1038.70	1039.48	1040.11	1040.77	1041.39	1041.81	1042.33	1042.67	1043.83	1044.59	1045.14	1045.88	1045.88 ⁽²⁾	XS 1206; U/S of Macdonald Ave Bridge
Elbow River	E2_Stampede_Clif	568	1036.94	1038.69	1039.49	1040.12	1040.78	1041.33	1041.70	1042.17	1042.45	1043.59	1044.35	1044.89	1045.62	1045.62 ⁽²⁾	XS 1207; D/S of Macdonald Ave Bridge
Elbow River	E2_Stampede_Clif	464	1036.67	1038.53	1039.30	1039.89	1040.51	1041.03	1041.44	1041.98	1042.31	1043.56	1044.31	1044.84	1045.56	1045.56 ⁽²⁾	XS 1208
Elbow River	E2_Stampede_Clif	457	1036.32	1038.54	1039.32	1039.92	1040.55	1041.09	1041.50	1042.04	1042.37	1043.59	1044.35	1044.87	1045.59	1045.59 ⁽²⁾	XS 1209
Elbow River	E2_Stampede_Clif	418	1036.25	1038.46	1039.20	1039.77	1040.35	1040.89	1041.33	1041.89	1042.22	1043.47	1044.21	1044.73	1045.44	1045.44 ⁽²⁾	XS 1210
Elbow River	E1_Cliff_Bow	343	1035.90	1038.43	1039.14	1039.67	1040.23	1040.73	1041.09	1041.56	1041.77	1042.93	1043.45	1044.97	1045.72	1045.72 ⁽²⁾	XS 1211; U/S of CP Bridge
Elbow River	E1_Cliff_Bow	324	1036.00	1038.40	1039.08	1039.57	1040.03	1040.46	1040.76	1041.14	1041.29	1042.91 ⁽¹⁾	1043.49 ⁽¹⁾	1044.51 ⁽¹⁾	1045.09 ⁽¹⁾	1045.09 ⁽²⁾	XS 1212; D/S of CP Bridge
Elbow River	E1_Cliff_Bow	295	1036.24	1038.34	1038.98	1039.46	1039.92	1040.32	1040.61	1040.99	1041.05	1042.88	1043.56	1043.79	1044.09	1044.30	XS 1213; U/S of 9th Avenue Bridge (Inglewood)
Elbow River	E1_Cliff_Bow	275	1036.20	1038.32	1038.95	1039.43	1039.87	1040.26	1040.49	1040.77	1040.98	1041.42	1042.92	1042.92 ⁽²⁾	1043.19	1043.42	XS 1214; D/S of 9th Avenue Bridge (Inglewood); Deane House Flood Barrier on ROB
Elbow River	E1_Cliff_Bow	171	1036.44	1038.20	1038.77	1039.22	1039.65	1040.03	1040.26	1040.52	1040.74	1041.15	1042.37 ⁽¹⁾	1042.53 ⁽¹⁾	1042.84 ⁽¹⁾	1043.09 ⁽¹⁾	XS 1215; U/S of Traverse Bridge; Riverwalk Berm on LOB; Deane House Flood Barrier on ROB
Elbow River	E1_Cliff_Bow	156	1036.17	1038.17	1038.74	1039.19	1039.62	1040.00	1040.23	1040.49	1040.71	1041.11	1042.29 ⁽¹⁾	1042.48 ⁽¹⁾	1042.79 ⁽¹⁾	1043.04 ⁽¹⁾	XS 1216; D/S of Traverse Bridge; Riverwalk Berm on LOB; Deane House Flood Barrier on ROB
Elbow River	E1_Cliff_Bow	84	1035.80	1038.14	1038.72	1039.20	1039.65	1040.07	1040.32	1040.63	1040.87	1041.53	1041.91	1042.21	1042.55	1042.81	XS 1217; Deane House Flood Barrier on ROB

Notes:

- 1) Simulated water level replaced with interpolated value using upstream and downstream water levels.
- 2) Simulated water level replaced with higher water level from lower flow profile to avoid profile crossing.
- 3) Simulated water level replaced with lower water level from higher flow profile to avoid profile crossing.
- 4) Simulated water level replaced with higher water level from higher flow profile to avoid profile crossing.
- 5) Simulated supercritical flow water level.
- 6) Water level upstream of Glenmore Dam based on outflow rating curve for flows higher than 350 m³/s and full supply level for flows less than 350 m³/s.



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A4: Flood Frequency Profiles – Elbow River Side Channels

Branch	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
ES1_CliffST	ES1_CliffST	3,547	1050.39	1048.54	1049.29	1050.00	1050.83	1051.49	1051.86	1052.23	1052.46	1052.92	1053.23	1053.40	1053.58	1053.71	XS 1248
ES1_CliffST	ES1_CliffST	3,414	1051.36	1048.15	1048.90	1049.61	1050.83	1051.44	1051.78	1052.12	1052.35	1052.79	1053.12	1053.32	1053.53	1053.69	XS 1249
ES1_CliffST	ES1_CliffST	3,294	1052.02	1047.80	1048.55	1049.26	1050.83	1051.37	1051.67	1051.98	1052.18	1052.58	1052.87	1053.04	1053.23	1053.36	XS 1250
ES1_CliffST	ES1_CliffST	3,193	1052.37	1047.50	1048.26	1048.97	1050.82	1051.31	1051.57	1051.85	1052.02	1052.38	1052.64	1052.79	1052.96	1053.07	XS 1251
ES1_CliffST	ES1_CliffST	3,065	1052.03	1047.13	1047.88	1048.59	1050.73	1051.12	1051.35	1051.59	1051.74	1052.06	1052.31	1052.46	1052.62	1052.74	XS 1252
ES1_CliffST	ES1_CliffST	2,867	1051.28	1046.55	1047.30	1048.01	1049.24	1050.40	1050.57	1050.80	1050.93	1051.25	1051.42	1051.54	1051.69	1051.79	XS 1253
ES1_CliffST	ES1_CliffST	2,834	1051.01	1046.45	1047.20	1047.91	1048.58	1049.93	1050.14	1050.23	1050.35	1050.48	1050.75	1050.97	1051.16	1051.31	XS 1254
ES1_CliffST	ES1_CliffST	2,658	1049.25	1045.93	1046.68	1047.40	1048.54	1049.09	1049.37	1049.65	1049.83	1050.15	1050.42	1050.56	1050.74	1050.87	XS 1255
ES1_CliffST	ES1_CliffST	2,437	1048.73	1045.28	1046.04	1046.75	1048.49	1048.96	1049.19	1049.40	1049.53	1049.79	1050.02	1050.13	1050.28	1050.39	XS 1256
ES1_CliffST	ES1_CliffST	2,232	1047.88	1044.68	1045.44	1046.15	1048.11	1048.52	1048.74	1048.95	1049.07	1049.32	1049.54	1049.65	1049.79	1049.91	XS 1257
ES1_CliffST	ES1_CliffST	1,985	1047.78	1043.96	1044.71	1045.43	1047.77	1048.22	1048.41	1048.58	1048.69	1048.90	1049.08	1049.19	1049.32	1049.44	XS 1258
ES1_CliffST	ES1_CliffST	1,740	1046.96	1043.24	1044.00	1044.72	1047.05	1047.32	1047.44	1047.59	1047.68	1047.90	1048.10	1048.20	1048.34	1048.42	XS 1259
ES1_CliffST	ES1_CliffST	1,530	1046.12	1042.62	1043.39	1044.11	1046.02	1046.31	1046.46	1046.63	1046.74	1046.95	1047.12	1047.21	1047.30	1047.39	XS 1260
ES1_CliffST	ES1_CliffST	1,361	1045.25	1042.13	1042.90	1043.63	1044.95	1045.51	1045.66	1045.83	1045.94	1046.17	1046.38	1046.49	1046.68	1046.76	XS 1261
ES1_CliffST	ES1_CliffST	1,211	1044.85	1041.69	1042.47	1043.20	1044.75	1045.14	1045.33	1045.54	1045.67	1045.94	1046.19	1046.29	1046.51	1046.58	XS 1262
ES1_CliffST	ES1_CliffST	1,054	1044.48	1041.24	1042.02	1042.76	1044.74	1045.08	1045.25	1045.45	1045.57	1045.84	1046.09	1046.18	1046.42	1046.47	XS 1263
ES1_CliffST	ES1_CliffST	930	1044.48	1040.88	1041.68	1042.41	1044.73	1045.01	1045.14	1045.30	1045.41	1045.63	1045.89	1045.92	1046.20	1046.20 ⁽¹⁾	XS 1264
ES1_CliffST	ES1_CliffST	792	1044.23	1040.49	1041.29	1042.02	1044.23	1044.48	1044.62	1044.77	1044.87	1045.10	1045.11	1045.40	1046.03	1046.03 ⁽¹⁾	XS 1265
ES1_CliffST	ES1_CliffST	617	1043.80	1040.00	1040.81	1041.55	1043.55	1043.86	1044.00	1044.13	1044.19	1044.30	1044.91	1045.32	1046.01	1046.01 ⁽¹⁾	XS 1266
ES1_CliffST	ES1_CliffST	461	1042.93	1039.57	1040.40	1041.13	1042.86	1043.09	1043.24	1043.40	1043.53	1044.13	1044.87	1045.29	1046.00	1046.00 ⁽¹⁾	XS 1267
ES1_CliffST	ES1_CliffST	371	1042.54	1039.32	1040.17	1040.89	1042.55	1042.84	1043.05	1043.27	1043.43	1044.10	1044.86	1045.28	1045.99	1045.99 ⁽¹⁾	XS 1268
ES1_CliffST	ES1_CliffST	152	1041.79	1038.76	1039.62	1040.33	1041.80	1042.23	1042.41	1042.58	1042.90	1044.02	1044.81	1045.24	1045.96	1045.96 ⁽¹⁾	XS 1269
ES1_CliffST	ES1_CliffST	103	1042.13	1038.64	1039.50	1040.21	1041.26	1041.74	1042.06	1042.55	1042.90	1044.02	1044.82	1045.24	1045.96	1045.96 ⁽¹⁾	XS 1270
ES1_CliffST	ES1_CliffST	94	1041.98	1038.62	1039.48	1040.19	1041.18	1041.65	1042.02	1042.54	1042.90	1044.02	1044.82	1045.24	1045.96	1045.96 ⁽¹⁾	XS 1271
ES1_CliffST	ES1_CliffST	65	1041.04	1038.55	1039.41	1040.12	1040.86	1041.51	1041.97	1042.52	1042.86	1044.02	1044.81	1045.24	1045.96	1045.96 ⁽¹⁾	XS 1272
ES2_25AV	ES2_25AV	517	1049.15	1048.73	1048.73	1048.73	1049.34	1049.80	1050.04	1050.27	1050.42	1050.83	1051.19	1051.43	1051.70	1051.89	XS 1230
ES2_25AV	ES2_25AV	449	1048.43	1043.96	1043.98	1044.83	1048.94	1049.39	1049.61	1049.81	1049.94	1050.27	1050.56	1050.75	1050.95	1051.12	XS 1231
ES2_25AV	ES2_25AV	366	1048.09	1043.34	1043.98	1044.83	1048.65	1049.03	1049.20	1049.35	1049.45	1049.67	1049.86	1050.03	1050.41	1050.75	XS 1232
ES2_25AV	ES2_25AV	288	1047.94	1042.89	1043.98	1044.83	1048.40	1048.68	1048.81	1048.93	1049.00	1049.21	1049.46	1049.85	1050.36	1050.74	XS 1233
ES2_25AV	ES2_25AV	236	1047.78	1042.89	1043.98	1044.83	1048.22	1048.43	1048.50	1048.58	1048.68	1048.77	1049.35	1049.80	1050.34	1050.72	XS 1234
ES2_25AV	ES2_25AV	203	1047.61	1042.89	1043.98	1044.83	1047.85	1047.99	1048.10	1048.17	1048.17 ⁽¹⁾	1048.73	1049.34	1049.80	1050.34	1050.72	XS 1235
ES2_25AV	ES2_25AV	159	1047.16	1042.89	1043.98	1044.83	1047.11	1047.45	1047.67	1047.93	1048.14	1048.72	1049.33	1049.80	1050.34	1050.72	XS 1236
ES2_25AV	ES2_25AV	123	1046.93	1042.89	1043.98	1044.83	1046.91	1047.39	1047.63	1047.91	1048.12	1048.71	1049.33	1049.80	1050.34	1050.72	XS 1237
ES2_25AV	ES2_25AV	32	1045.40	1042.89	1043.98	1044.83	1045.95	1046.64	1047.05	1047.29	1047.43	1047.85	1048.26	1048.56	1048.91	1049.15	XS 1238
ES3_22AV	ES3_22AV	443	1045.97	1046.51	1047.23	1047.90	1048.50	1048.84	1049.07	1049.33	1049.52	1050.11	1050.63	1050.98	1051.33	1051.55	XS 1239; U/S of Erlton Flood Control Weir
ES3_22AV	ES3_22AV	435	1047.81	1046.49	1047.22	1047.89	1048.49	1048.82	1049.05	1049.30	1049.49	1050.06	1050.57	1050.92	1051.27	1051.48	XS 1240; D/S of Erlton Flood Control Weir
ES3_22AV	ES3_22AV	392	1047.46	1046.14	1046.86	1047.57	1048.13	1048.52	1048.77	1049.03	1049.24	1049.84	1050.38	1050.75	1051.11	1051.33	XS 1241



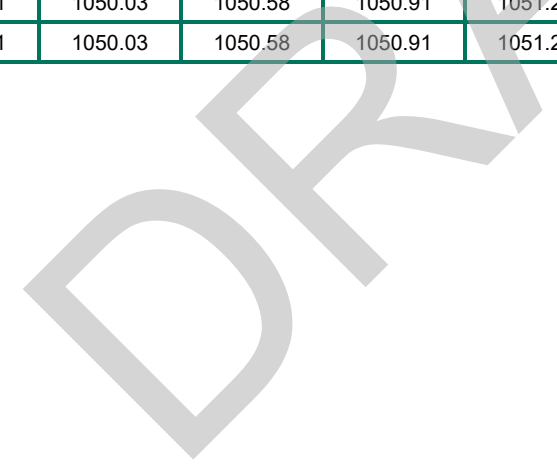
BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A4: Flood Frequency Profiles – Elbow River Side Channels

Branch	Model Reach	River Station (m)	Minimum Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
ES3_22AV	ES3_22AV	314	1047.02	1045.50	1046.22	1047.13	1047.94	1048.27	1048.48	1048.71	1048.89	1049.40	1049.87	1050.17	1050.48	1050.67	XS 1242
ES3_22AV	ES3_22AV	252	1047.18	1044.98	1045.71	1046.70	1047.75	1048.01	1048.17	1048.34	1048.46	1048.83	1049.18	1049.45	1049.78	1050.03	XS 1243
ES3_22AV	ES3_22AV	200	1046.88	1044.52	1045.27	1046.21	1047.58	1047.81	1047.95	1048.10	1048.22	1048.65	1049.10	1049.44	1049.84	1050.10	XS 1244
ES3_22AV	ES3_22AV	142	1047.00	1043.99	1044.78	1045.65	1047.37	1047.58	1047.69	1047.81	1047.95	1048.54	1049.07	1049.45	1049.89	1050.18	XS 1245
ES3_22AV	ES3_22AV	126	1046.85	1043.84	1044.64	1045.50	1047.34	1047.56	1047.68	1047.81	1047.95	1048.56	1049.10	1049.49	1049.93	1050.21	XS 1246
ES3_22AV	ES3_22AV	79	1046.86	1043.36	1044.23	1045.01	1046.96	1047.18	1047.30	1047.41	1047.86	1048.54	1049.10	1049.48	1049.93	1050.21	XS 1247
ES4_Roxboro	ES4_Roxboro	915	1050.71	1050.71	1050.71	1050.86	1051.56	1052.10	1052.46	1052.84	1053.10	1053.70	1054.19	1054.50	1054.87	1055.15	XS 1218
ES4_Roxboro	ES4_Roxboro	832	1051.31	1050.71	1050.71	1050.85	1051.56	1052.08	1052.42	1052.77	1053.01	1053.56	1054.02	1054.31	1054.66	1054.92	XS 1219
ES4_Roxboro	ES4_Roxboro	770	1051.46	1050.71	1050.71	1050.83	1051.41	1051.98	1052.24	1052.55	1052.75	1053.22	1053.65	1053.93	1054.26	1054.52	XS 1220
ES4_Roxboro	ES4_Roxboro	715	1051.44	1050.71	1050.71	1050.82	1051.16	1051.54	1051.82	1052.11	1052.31	1052.79	1053.26	1053.54	1053.88	1054.14	XS 1221
ES4_Roxboro	ES4_Roxboro	671	1051.36	1050.71	1050.71	1050.81	1051.09	1051.39	1051.66	1051.93	1052.12	1052.61	1053.09	1053.37	1053.71	1053.97	XS 1222
ES4_Roxboro	ES4_Roxboro	569	1051.16	1050.71	1050.71	1050.73	1050.77	1051.03	1051.26	1051.53	1051.75	1052.32	1052.85	1053.12	1053.47	1053.73	XS 1223
ES4_Roxboro	ES4_Roxboro	444	1050.09	1049.17	1049.17	1049.46	1050.03	1050.60	1050.94	1051.29	1051.53	1052.15	1052.70	1052.96	1053.31	1053.57	XS 1224
ES4_Roxboro	ES4_Roxboro	367	1049.37	1049.17	1049.17	1049.44	1050.03	1050.59	1050.91	1051.26	1051.50	1052.11	1052.67	1052.92	1053.26	1053.52	XS 1225
ES4_Roxboro	ES4_Roxboro	254	1049.23	1049.17	1049.17	1049.40	1050.03	1050.58	1050.91	1051.25	1051.48	1052.09	1052.64	1052.89	1053.22	1053.48	XS 1226
ES4_Roxboro	ES4_Roxboro	169	1049.15	1049.16	1049.16	1049.21	1050.03	1050.58	1050.91	1051.24	1051.48	1052.08	1052.63	1052.87	1053.21	1053.46	XS 1227
ES4_Roxboro	ES4_Roxboro	116	1048.69	1047.53	1048.46	1049.21	1050.03	1050.58	1050.91	1051.24	1051.48	1052.07	1052.62	1052.86	1053.19	1053.45	XS 1228
ES4_Roxboro	ES4_Roxboro	43	1048.53	1047.53	1048.46	1049.21	1050.03	1050.58	1050.91	1051.24	1051.47	1052.06	1052.59	1052.82	1053.14	1053.38	XS 1229

Notes:

1) Simulated water level replaced with higher water level from lower flow profile to avoid profile crossing.





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Table A5: Flood Frequency Profiles – Bragg Creek

River	Model Reach	River Station (m)	Min. Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1000-year
Bragg Creek	Bragg Creek	1,169	1312.06	1313.26	1313.65	1313.96	1314.16	1314.32	1314.42	1314.55	1314.64	1314.87	1315.08	1315.27	1315.46	1315.60	XS 1273
Bragg Creek	Bragg Creek	1,143	1312.32	1313.14	1313.54	1313.85	1314.05	1314.21	1314.32	1314.45	1314.54	1314.78	1315.01	1315.22	1315.42	1315.57	XS 1274
Bragg Creek	Bragg Creek	1,084	1311.97	1312.77	1313.22	1313.60	1313.83	1314.00	1314.11	1314.24	1314.35	1314.64	1314.92	1315.16	1315.39	1315.55	XS 1275; U/S of Centre Avenue Bridge
Bragg Creek	Bragg Creek	1,042	1311.44	1312.69	1313.14	1313.49	1313.68	1313.81	1313.89	1313.97	1314.04	1314.19	1314.31	1314.38	1314.46	1314.51	XS 1276; D/S of Centre Avenue Bridge
Bragg Creek	Bragg Creek	948	1311.20	1312.40	1312.73	1312.90	1313.07	1313.11	1313.14	1313.17	1313.19	1313.25	1313.31	1313.35	1313.41	1313.45	XS 1277
Bragg Creek	Bragg Creek	824	1310.68	1311.20	1311.42	1311.58	1311.72	1311.83	1311.90	1311.98	1312.04	1312.20	1312.33	1312.42	1312.52	1312.59	XS 1278
Bragg Creek	Bragg Creek	592	1308.28	1309.26	1309.62	1309.89	1310.10	1310.25	1310.33	1310.45	1310.56	1310.76	1310.87	1310.91	1310.98	1311.03	XS 1279
Bragg Creek	Bragg Creek	443	1307.59	1308.09	1308.39	1308.56	1308.81	1308.97	1309.05	1309.10	1309.10	1309.20	1309.33	1309.44	1309.57	1309.67	XS 1280
Bragg Creek	Bragg Creek	311	1305.85	1306.67	1306.91	1307.10	1307.28	1307.40	1307.49	1307.65	1307.83	1308.29	1308.68	1308.83	1309.01	1309.17	XS 1281
Bragg Creek	Bragg Creek	196	1304.78	1305.41	1305.81	1306.03	1306.27	1306.55	1306.83	1307.20	1307.51	1308.06	1308.62	1308.80	1309.00	1309.17	XS 1282
Bragg Creek	Bragg Creek	137	1303.98	1304.91	1305.30	1305.60	1305.98	1306.38	1306.73	1307.14	1307.46	1308.05	1308.61	1308.79	1309.00	1309.17	XS 1283; U/S of Bracken Road Bridge
Bragg Creek	Bragg Creek	110	1303.57	1304.56	1305.05	1305.39	1305.83	1306.26	1306.55	1306.90	1307.18	1307.94	1308.59	1308.78	1308.99	1309.17	XS 1284; D/S of Bracken Road Bridge
Bragg Creek	Bragg Creek	94	1303.55	1304.46	1304.99	1305.35	1305.80	1306.25	1306.55	1306.91	1307.18	1307.94	1308.59	1308.78	1308.99	1309.17	XS 1285
Bragg Creek	Bragg Creek	40	1303.36	1304.33	1304.94	1305.32	1305.80	1306.25	1306.55	1306.91	1307.18	1307.95	1308.59	1308.78	1308.99	1309.16	XS 1286

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BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A6: Flood Frequency Profiles – Lott Creek

River	Model Reach	River Station (m)	Min. Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
Lott Creek	L3_USBC_EVL	7,278	1125.10	1125.90	1126.35	1126.58	1126.75	1126.87	1126.94	1127.01	1127.06	1127.16	1127.24	1127.29	1127.35	1127.38	XS 1287
Lott Creek	L3_USBC_EVL	7,175	1124.63	1125.42	1125.81	1125.95	1126.09	1126.20	1126.26	1126.32	1126.37	1126.49	1126.59	1126.66	1126.73	1126.78	XS 1288
Lott Creek	L3_USBC_EVL	7,099	1124.24	1125.02	1125.42	1125.62	1125.79	1125.92	1126.00	1126.09	1126.15	1126.30	1126.41	1126.48	1126.55	1126.61	XS 1289
Lott Creek	L3_USBC_EVL	7,027	1123.80	1124.68	1125.09	1125.34	1125.52	1125.66	1125.74	1125.84	1125.90	1126.04	1126.15	1126.22	1126.30	1126.35	XS 1290
Lott Creek	L3_USBC_EVL	6,903	1123.31	1123.97	1124.49	1124.75	1124.97	1125.13	1125.23	1125.33	1125.40	1125.55	1125.67	1125.73	1125.80	1125.85	XS 1291
Lott Creek	L3_USBC_EVL	6,819	1122.55	1123.51	1124.08	1124.36	1124.59	1124.76	1124.87	1124.97	1125.04	1125.18	1125.28	1125.33	1125.39	1125.42	XS 1292
Lott Creek	L3_USBC_EVL	6,701	1122.01	1122.65	1123.20	1123.46	1123.66	1123.81	1123.90	1124.01	1124.08	1124.22	1124.33	1124.40	1124.48	1124.52	XS 1293
Lott Creek	L3_USBC_EVL	6,606	1121.16	1121.87	1122.20	1122.50	1122.69	1122.81	1122.88	1122.95	1123.00	1123.11	1123.18	1123.23	1123.27	1123.30	XS 1294
Lott Creek	L3_USBC_EVL	6,527	1120.30	1120.81	1121.47	1121.78	1122.00	1122.13	1122.19	1122.26	1122.30	1122.40	1122.48	1122.52	1122.57	1122.61	XS 1295
Lott Creek	L3_USBC_EVL	6,439	1119.42	1120.56	1121.16	1121.39	1121.56	1121.66	1121.72	1121.78	1121.82	1121.91	1121.97	1122.01	1122.05	1122.08	XS 1296
Lott Creek	L3_USBC_EVL	6,345	1119.51	1120.28	1120.84	1121.02	1121.16	1121.25	1121.31	1121.37	1121.42	1121.51	1121.57	1121.61	1121.65	1121.69	XS 1297
Lott Creek	L3_USBC_EVL	6,238	1118.79	1119.75	1120.38	1120.59	1120.75	1120.84	1120.89	1120.95	1120.98	1121.06	1121.12	1121.16	1121.20	1121.23	XS 1298
Lott Creek	L3_USBC_EVL	6,156	1118.44	1119.29	1119.93	1120.15	1120.31	1120.40	1120.45	1120.50	1120.54	1120.62	1120.70	1120.74	1120.79	1120.82	XS 1299
Lott Creek	L3_USBC_EVL	6,045	1117.74	1118.55	1118.95	1119.19	1119.41	1119.57	1119.67	1119.77	1119.83	1119.96	1120.03	1120.06	1120.10	1120.13	XS 1300
Lott Creek	L3_USBC_EVL	6,025	1117.39	1118.52	1118.86	1119.03	1119.18	1119.29	1119.34	1119.39	1119.43	1119.56	1119.67	1119.76	1119.79	1119.81	XS 1301
Lott Creek	L3_USBC_EVL	6,015	1117.55	1118.49	1118.75	1118.91	1119.06	1119.17	1119.22	1119.28	1119.31	1119.38	1119.41	1119.43	1119.46	1119.47	XS 1302
Lott Creek	L3_USBC_EVL	5,932	1116.74	1117.37	1117.84	1118.04	1118.17	1118.26	1118.32	1118.38	1118.43	1118.53	1118.63	1118.69	1118.76	1118.81	XS 1303
Lott Creek	L3_USBC_EVL	5,871	1115.93	1117.13	1117.58	1117.80	1117.98	1118.10	1118.18	1118.26	1118.31	1118.44	1118.54	1118.60	1118.67	1118.73	XS 1304
Lott Creek	L3_USBC_EVL	5,783	1115.88	1116.96	1117.32	1117.47	1117.59	1117.68	1117.74	1117.80	1117.84	1117.92	1117.97	1118.00	1118.03	1118.04	XS 1305
Lott Creek	L3_USBC_EVL	5,712	1115.58	1116.77	1117.14	1117.25	1117.33	1117.39	1117.43	1117.45	1117.48	1117.54	1117.61	1117.65	1117.70	1117.74	XS 1306
Lott Creek	L3_USBC_EVL	5,605	1115.15	1116.28	1116.71	1116.84	1116.95	1117.04	1117.11	1117.18	1117.23	1117.33	1117.43	1117.48	1117.55	1117.59	XS 1307
Lott Creek	L3_USBC_EVL	5,519	1114.78	1115.88	1116.45	1116.71	1116.87	1116.99	1117.06	1117.13	1117.18	1117.29	1117.39	1117.45	1117.51	1117.56	XS 1308
Lott Creek	L3_USBC_EVL	5,459	1114.48	1115.73	1116.33	1116.65	1116.84	1116.95	1117.03	1117.10	1117.16	1117.26	1117.36	1117.42	1117.49	1117.53	XS 1309
Lott Creek	L3_USBC_EVL	5,396	1114.49	1115.59	1116.30	1116.63	1116.82	1116.93	1117.00	1117.07	1117.13	1117.23	1117.33	1117.39	1117.45	1117.50	XS 1310
Lott Creek	L3_USBC_EVL	5,322	1114.32	1115.49	1116.29	1116.62	1116.81	1116.92	1116.99	1117.06	1117.11	1117.21	1117.31	1117.37	1117.43	1117.47	XS 1311
Lott Creek	L3_USBC_EVL	5,262	1114.35	1115.39	1116.25	1116.59	1116.77	1116.88	1116.95	1117.01	1117.07	1117.16	1117.25	1117.31	1117.37	1117.42	XS 1312; U/S of Misty Morning Drive Culvert
Lott Creek	L3_USBC_EVL	5,231	1114.14	1115.28	1115.57	1115.74	1115.93	1115.99	1116.05	1116.11	1116.20	1116.27	1116.33	1116.39	1116.45	1116.50	XS 1313; D/S of Misty Morning Drive Culvert
Lott Creek	L3_USBC_EVL	5,181	1113.65	1115.25	1115.52	1115.68	1115.91	1115.98	1116.06	1116.15	1116.27	1116.37	1116.46	1116.54	1116.61	1116.67	XS 1314
Lott Creek	L3_USBC_EVL	5,132	1113.49	1115.24	1115.49	1115.64	1115.88	1115.92	1116.00	1116.09	1116.21	1116.28	1116.36	1116.44	1116.51	1116.57	XS 1315
Lott Creek	L3_USBC_EVL	5,080	1113.39	1115.23	1115.48	1115.62	1115.85	1115.89	1115.96	1116.04	1116.17	1116.25	1116.33	1116.41	1116.48	1116.54	XS 1316
Lott Creek	L2_EVL_LCDrive	5,043	1113.55	1115.22	1115.47	1115.60	1115.83	1115.87	1115.95	1116.03	1116.16	1116.24	1116.32	1116.40	1116.47	1116.53	XS 1317; U/S of Elbow Valley Lake Culvert
Lott Creek	L2_EVL_LCDrive	5,009	1112.88	1114.06	1114.13	1114.16	1114.21	1114.21	1114.23	1114.25	1114.30	1114.34	1114.38	1114.42	1114.45	1114.48	XS 1318; D/S of Elbow Valley Lake Culvert
Lott Creek	L2_EVL_LCDrive	4,960	1112.97	1114.05	1114.12	1114.15	1114.19	1114.20	1114.21	1114.24	1114.29	1114.34	1114.38	1114.42	1114.45	1114.48	XS 1319
Lott Creek	L2_EVL_LCDrive	4,906	1112.64	1114.04	1114.11	1114.14	1114.19	1114.19	1114.21	1114.23	1114.28	1114.34	1114.38	1114.42	1114.45	1114.48	XS 1320
Lott Creek	L2_EVL_LCDrive	4,858	1112.17	1114.04	1114.11	1114.14	1114.18	1114.19	1114.20	1114.23	1114.28	1114.34	1114.38	1114.42	1114.45	1114.48	XS 1321
Lott Creek	L2_EVL_LCDrive	4,837	1112.77	1114.01	1114.08	1114.11	1114.15	1114.15	1114.17	1114.19	1114.24	1114.30	1114.34	1114.38	1114.41	1114.44	XS 1322
Lott Creek	L2_EVL_LCDrive	4,816	1112.84	1113.86	1113.91	1113.94	1113.97	1113.98	1113.99	1114.01	1114.07	1114.13	1114.18	1114.23	1114.27	1114.31	XS 1323
Lott Creek	L2_EVL_LCDrive	4,757	1112.66	1113.65	1113.72	1113.76	1113.81	1113.82	1113.84	1113.87	1113.93	1114.00	1114.07	1114.14	1114.21	1114.28	XS 1324



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Table A6: Flood Frequency Profiles – Lott Creek

River	Model Reach	River Station (m)	Min. Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
Lott Creek	L2_EVL_LCDrive	4,703	1112.44	1113.59	1113.67	1113.71	1113.77	1113.77	1113.79	1113.82	1113.89	1114.88	1115.05	1115.13	1115.21	1115.26	XS 1325
Lott Creek	L2_EVL_LCDrive	4,658	1112.38	1113.58	1113.66	1113.70	1113.76	1113.76	1113.78	1113.81	1113.88	1114.88	1115.05	1115.12	1115.21	1115.26	XS 1326
Lott Creek	L2_EVL_LCDrive	4,611	1112.58	1113.56	1113.64	1113.68	1113.73	1113.74	1113.76	1113.79	1113.85	1114.87	1115.03	1115.11	1115.19	1115.24	XS 1327; U/S of Lott Creek Hollow Culvert
Lott Creek	L2_EVL_LCDrive	4,551	1112.30	1113.19	1113.27	1113.31	1113.37	1113.38	1113.40	1113.43	1113.52	1114.31	1114.54	1114.57	1114.69	1114.75	XS 1328; D/S of Lott Creek Hollow Culvert
Lott Creek	L2_EVL_LCDrive	4,503	1112.00	1113.11	1113.19	1113.23	1113.30	1113.31	1113.33	1113.36	1113.45	1114.27	1114.51	1114.51	1114.60	1114.65	XS 1329; U/S of Wolfwillow Lane Culvert
Lott Creek	L2_EVL_LCDrive	4,462	1111.76	1112.38	1112.43	1112.45	1112.49	1112.49	1112.50	1112.52	1112.56	1112.86	1113.07	1113.20	1113.38	1113.48	XS 1330; D/S of Wolfwillow Lane Culvert
Lott Creek	L2_EVL_LCDrive	4,408	1110.45	1111.75	1111.81	1111.84	1111.88	1111.89	1111.90	1111.93	1111.98	1112.36	1112.64	1112.78	1112.78	1112.84	XS 1331
Lott Creek	L2_EVL_LCDrive	4,359	1110.51	1111.38	1111.43	1111.46	1111.51	1111.51	1111.53	1111.55	1111.60	1112.11	1112.41	1112.50	1112.59	1112.65	XS 1332
Lott Creek	L2_EVL_LCDrive	4,318	1110.35	1111.19	1111.26	1111.30	1111.35	1111.36	1111.38	1111.40	1111.47	1112.03	1112.34	1112.44	1112.53	1112.59	XS 1333; U/S of Coulee Ridge Culvert
Lott Creek	L2_EVL_LCDrive	4,221	1107.63	1108.75	1108.84	1108.88	1108.94	1108.95	1108.99	1109.04	1109.14	1109.92	1110.32	1110.45	1110.56	1110.64	XS 1334; D/S of Coulee Ridge Culvert
Lott Creek	L2_EVL_LCDrive	4,185	1107.25	1108.72	1108.80	1108.85	1108.91	1108.92	1108.95	1109.01	1109.11	1109.90	1110.30	1110.45	1110.58	1110.67	XS 1335
Lott Creek	L2_EVL_LCDrive	4,145	1107.46	1108.66	1108.74	1108.78	1108.84	1108.85	1108.89	1108.95	1109.05	1109.86	1110.30	1110.45	1110.57	1110.66	XS 1336
Lott Creek	L2_EVL_LCDrive	4,096	1107.24	1108.51	1108.58	1108.61	1108.66	1108.68	1108.72	1108.80	1108.91	1109.77	1110.25	1110.41	1110.54	1110.63	XS 1337; U/S of Fisherman's Lake Pedestrian Bridge
Lott Creek	L2_EVL_LCDrive	4,090	1107.48	1108.45	1108.51	1108.54	1108.59	1108.62	1108.67	1108.76	1108.88	1109.75	1110.22	1110.37	1110.51	1110.60	XS 1338; D/S of Fisherman's Lake Pedestrian Bridge
Lott Creek	L2_EVL_LCDrive	4,046	1107.21	1108.03	1108.12	1108.15	1108.25	1108.37	1108.47	1108.61	1108.76	1109.69	1110.16	1110.31	1110.46	1110.55	XS 1339
Lott Creek	L2_EVL_LCDrive	3,995	1106.74	1107.98	1108.08	1108.12	1108.24	1108.36	1108.46	1108.61	1108.76	1109.70	1110.16	1110.31	1110.46	1110.55	XS 1340
Lott Creek	L2_EVL_LCDrive	3,944	1106.76	1107.94	1108.04	1108.07	1108.20	1108.33	1108.45	1108.60	1108.74	1109.68	1110.14	1110.29	1110.42	1110.51	XS 1341; U/S of Owl Haven Culvert
Lott Creek	L2_EVL_LCDrive	3,917	1106.54	1107.22	1107.56	1107.79	1107.98	1108.16	1108.28	1108.42	1108.52	1108.75	1108.93	1109.04	1109.15	1109.23	XS 1342; D/S of Owl Haven Culvert
Lott Creek	L1_LCDrive_Elbow	3,877	1106.03	1107.22	1107.53	1107.74	1107.89	1108.05	1108.15	1108.27	1108.35	1108.57	1108.75	1108.86	1108.99	1109.08	XS 1343; U/S of Lott Creek Drive Bridge
Lott Creek	L1_LCDrive_Elbow	3,845	1105.92	1107.21	1107.51	1107.68	1107.80	1107.91	1107.99	1108.07	1108.12	1108.24	1108.33	1108.38	1108.41	1108.45	XS 1344; D/S of Lott Creek Drive Bridge
Lott Creek	L1_LCDrive_Elbow	3,795	1106.68	1107.20	1107.49	1107.66	1107.77	1107.89	1107.96	1108.05	1108.10	1108.23	1108.33	1108.38	1108.43	1108.47	XS 1345
Lott Creek	L1_LCDrive_Elbow	3,685	1106.74	1107.17	1107.45	1107.61	1107.71	1107.81	1107.89	1107.97	1108.02	1108.15	1108.24	1108.30	1108.33	1108.37	XS 1346
Lott Creek	L1_LCDrive_Elbow	3,652	1106.32	1107.13	1107.41	1107.58	1107.67	1107.78	1107.85	1107.94	1107.99	1108.11	1108.21	1108.26	1108.29	1108.33	XS 1347
Lott Creek	L1_LCDrive_Elbow	3,633	1106.45	1106.82	1107.31	1107.54	1107.62	1107.74	1107.83	1107.92	1107.97	1108.10	1108.19	1108.25	1108.28	1108.32	XS 1348
Lott Creek	L1_LCDrive_Elbow	3,585	1105.57	1106.59	1107.12	1107.37	1107.37 ⁽¹⁾	1107.43	1107.55	1107.67	1107.72	1107.87	1107.97	1108.03	1108.03 ⁽¹⁾	1108.06	XS 1349
Lott Creek	L1_LCDrive_Elbow	3,535	1105.41	1106.49	1106.99	1107.19	1107.29	1107.40	1107.53	1107.65	1107.70	1107.86	1107.96	1108.02	1108.02 ⁽¹⁾	1108.04	XS 1350; U/S of Golf Course Bridge 1
Lott Creek	L1_LCDrive_Elbow	3,526	1105.33	1106.46	1106.93	1107.12	1107.24	1107.40	1107.53	1107.65	1107.70	1107.85	1107.96	1108.02	1108.02 ⁽¹⁾	1108.04	XS 1351; D/S of Golf Course Bridge 1
Lott Creek	L1_LCDrive_Elbow	3,478	1105.31	1106.24	1106.72	1106.95	1107.19	1107.38	1107.51	1107.64	1107.70	1107.85	1107.96	1108.02	1108.02 ⁽¹⁾	1108.04	XS 1352
Lott Creek	L1_LCDrive_Elbow	3,435	1104.77	1106.14	1106.53	1106.75	1107.08	1107.33	1107.47	1107.59	1107.66	1107.81	1107.91	1107.97	1107.97 ⁽¹⁾	1107.97	XS 1353; U/S of Golf Course Bridge 2
Lott Creek	L1_LCDrive_Elbow	3,427	1104.61	1106.14	1106.53	1106.74	1107.03	1107.23	1107.35	1107.49	1107.56	1107.71	1107.82	1107.89	1107.89 ⁽¹⁾	1107.89 ⁽¹⁾	XS 1354; D/S of Golf Course Bridge 2
Lott Creek	L1_LCDrive_Elbow	3,393	1105.06	1106.10	1106.39	1106.46	1106.70	1106.87	1106.99	1107.21	1107.28	1107.46	1107.57	1107.61	1107.86	1107.90	XS 1355; U/S of Golf Course Bridge 3
Lott Creek	L1_LCDrive_Elbow	3,386	1105.10	1106.09	1106.33	1106.33 ⁽¹⁾	1106.34	1106.50	1106.61	1106.91	1106.96	1107.06	1107.12	1107.16	1107.20	1107.22	XS 1356; D/S of Golf Course Bridge 3
Lott Creek	L1_LCDrive_Elbow	3,356	1105.35	1105.85	1105.94	1106.06	1106.17	1106.25	1106.30	1106.35	1106.40	1106.48	1106.54	1106.58	1106.62	1106.64	XS 1357
Lott Creek	L1_LCDrive_Elbow	3,304	1104.76	1105.59	1105.86	1106.01	1106.13	1106.21	1106.26	1106.31	1106.36	1106.44	1106.50	1106.54	1106.57	1106.60	XS 1358
Lott Creek	L1_LCDrive_Elbow	3,255	1104.67	1105.57	1105.85	1105.99	1106.11	1106.19	1106.24	1106.29	1106.34	1106.42	1106.48	1106.51	1106.55	1106.57	XS 1359
Lott Creek	L1_LCDrive_Elbow	3,206	1104.79	1105.52	1105.81	1105.95	1106.06	1106.14	1106.19	1106.24	1106.29	1106.37	1106.42	1106.45	1106.49	1106.51	XS 1360
Lott Creek	L1_LCDrive_Elbow	3,155	1104.16	1105.37	1105.67	1105.81	1105.91	1105.97	1106.01	1106.05	1106.07	1106.14	1106.18	1106.20	1106.23	1106.24	XS 1361
Lott Creek	L1_LCDrive_Elbow	3,107	1104.03	1105.27	1105.37	1105.42	1105.47	1105.50	1105.52	1105.54	1105.56	1105.60	1105.62	1105.64	1105.66	1105.68	XS 1362



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Table A6: Flood Frequency Profiles – Lott Creek

River	Model Reach	River Station (m)	Min. Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)												Notes	
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year		1,000-year
Lott Creek	L1_LCDrive_Elbow	2,863	1103.38	1104.58	1104.69	1104.75	1104.79	1104.83	1104.85	1104.87	1104.89	1104.93	1104.96	1104.97	1104.99	1105.01	XS 1363
Lott Creek	L1_LCDrive_Elbow	2,789	1103.03	1104.45	1104.63	1104.69	1104.73	1104.76	1104.78	1104.80	1104.81	1104.85	1104.88	1104.89	1104.90	1104.92	XS 1364
Lott Creek	L1_LCDrive_Elbow	2,703	1103.04	1104.27	1104.27	1104.50	1104.52	1104.54	1104.56	1104.57	1104.58	1104.59	1104.60	1104.61	1104.63	1104.64	XS 1365
Lott Creek	L1_LCDrive_Elbow	2,624	1103.03	1104.04	1104.15	1104.16	1104.21	1104.24	1104.26	1104.28	1104.30	1104.33	1104.36	1104.38	1104.40	1104.41	XS 1366
Lott Creek	L1_LCDrive_Elbow	2,464	1102.43	1103.43	1103.72	1103.85	1103.87	1103.89	1103.90	1103.91	1103.92	1103.94	1103.96	1103.97	1103.98	1103.98	XS 1367
Lott Creek	L1_LCDrive_Elbow	2,457	1102.35	1103.39	1103.57	1103.77	1103.80	1103.81	1103.82	1103.83	1103.84	1103.86	1103.87	1103.88	1103.88	1103.89	XS 1368
Lott Creek	L1_LCDrive_Elbow	2,383	1102.02	1103.16	1103.27	1103.29	1103.32	1103.34	1103.35	1103.37	1103.38	1103.42	1103.45	1103.47	1103.50	1103.52	XS 1369
Lott Creek	L1_LCDrive_Elbow	2,311	1102.49	1102.65	1102.89	1102.96	1103.03	1103.08	1103.11	1103.15	1103.18	1103.24	1103.29	1103.34	1103.38	1103.40	XS 1370
Lott Creek	L1_LCDrive_Elbow	2,222	1101.59	1102.00	1102.34	1102.54	1102.71	1102.82	1102.88	1102.93	1102.97	1103.05	1103.11	1103.17	1103.21	1103.23	XS 1371
Lott Creek	L1_LCDrive_Elbow	2,145	1100.70	1101.65	1101.94	1102.11	1102.25	1102.36	1102.42	1102.47	1102.51	1102.59	1102.66	1102.70	1102.74	1102.77	XS 1372
Lott Creek	L1_LCDrive_Elbow	2,064	1100.33	1101.30	1101.54	1101.65	1101.74	1101.81	1101.85	1101.89	1101.92	1101.99	1102.04	1102.07	1102.11	1102.14	XS 1373
Lott Creek	L1_LCDrive_Elbow	1,985	1100.44	1101.10	1101.28	1101.37	1101.44	1101.50	1101.53	1101.56	1101.59	1101.65	1101.70	1101.72	1101.76	1101.78	XS 1374
Lott Creek	L1_LCDrive_Elbow	1,898	1100.21	1100.79	1100.96	1101.06	1101.14	1101.20	1101.23	1101.26	1101.28	1101.33	1101.37	1101.40	1101.42	1101.44	XS 1375
Lott Creek	L1_LCDrive_Elbow	1,822	1099.27	1100.22	1100.58	1100.64	1100.70	1100.73	1100.76	1100.80	1100.82	1100.88	1100.93	1100.96	1100.99	1101.02	XS 1376
Lott Creek	L1_LCDrive_Elbow	1,744	1098.77	1099.56	1100.03	1100.29	1100.43	1100.53	1100.57	1100.62	1100.66	1100.74	1100.80	1100.84	1100.88	1100.90	XS 1377
Lott Creek	L1_LCDrive_Elbow	1,658	1098.61	1099.38	1099.89	1100.16	1100.34	1100.45	1100.50	1100.56	1100.60	1100.69	1100.75	1100.79	1100.82	1100.85	XS 1378
Lott Creek	L1_LCDrive_Elbow	1,587	1098.46	1099.29	1099.79	1100.05	1100.24	1100.36	1100.39	1100.45	1100.49	1100.58	1100.65	1100.68	1100.71	1100.74	XS 1379
Lott Creek	L1_LCDrive_Elbow	1,502	1098.39	1099.20	1099.71	1099.96	1100.16	1100.25	1100.26	1100.31	1100.35	1100.41	1100.46	1100.49	1100.52	1100.54	XS 1380
Lott Creek	L1_LCDrive_Elbow	1,423	1098.25	1099.05	1099.57	1099.82	1100.01	1100.08	1100.14	1100.19	1100.23	1100.28	1100.32	1100.34	1100.37	1100.39	XS 1381
Lott Creek	L1_LCDrive_Elbow	1,348	1097.85	1098.76	1099.27	1099.51	1099.68	1099.80	1099.86	1099.93	1099.96	1100.03	1100.09	1100.12	1100.15	1100.18	XS 1382
Lott Creek	L1_LCDrive_Elbow	1,267	1097.41	1098.68	1099.13	1099.29	1099.41	1099.50	1099.54	1099.59	1099.62	1099.70	1099.76	1099.79	1099.83	1099.85	XS 1383
Lott Creek	L1_LCDrive_Elbow	1,189	1097.80	1098.60	1099.03	1099.17	1099.28	1099.35	1099.39	1099.44	1099.46	1099.53	1099.58	1099.61	1099.64	1099.67	XS 1384
Lott Creek	L1_LCDrive_Elbow	1,083	1097.57	1098.31	1098.82	1099.00	1099.13	1099.21	1099.25	1099.30	1099.32	1099.39	1099.44	1099.47	1099.51	1099.53	XS 1385
Lott Creek	L1_LCDrive_Elbow	1,025	1097.19	1098.05	1098.62	1098.87	1099.02	1099.11	1099.16	1099.21	1099.24	1099.31	1099.36	1099.39	1099.43	1099.45	XS 1386
Lott Creek	L1_LCDrive_Elbow	941	1096.93	1097.93	1098.48	1098.71	1098.85	1098.94	1098.98	1099.03	1099.06	1099.13	1099.18	1099.21	1099.24	1099.27	XS 1387
Lott Creek	L1_LCDrive_Elbow	864	1097.21	1097.80	1098.33	1098.56	1098.69	1098.78	1098.83	1098.88	1098.91	1098.98	1099.03	1099.06	1099.09	1099.12	XS 1388
Lott Creek	L1_LCDrive_Elbow	789	1096.83	1097.60	1098.16	1098.39	1098.52	1098.60	1098.65	1098.70	1098.73	1098.80	1098.84	1098.88	1098.91	1098.93	XS 1389
Lott Creek	L1_LCDrive_Elbow	704	1096.60	1097.43	1097.97	1098.18	1098.30	1098.38	1098.42	1098.47	1098.50	1098.57	1098.62	1098.65	1098.70	1098.73	XS 1390
Lott Creek	L1_LCDrive_Elbow	625	1096.34	1097.33	1097.81	1098.01	1098.13	1098.21	1098.25	1098.30	1098.33	1098.40	1098.46	1098.51	1098.57	1098.63	XS 1391
Lott Creek	L1_LCDrive_Elbow	546	1096.31	1097.22	1097.68	1097.88	1098.00	1098.07	1098.11	1098.16	1098.19	1098.26	1098.34	1098.40	1098.49	1098.56	XS 1392
Lott Creek	L1_LCDrive_Elbow	464	1096.23	1096.98	1097.46	1097.69	1097.82	1097.91	1097.95	1098.00	1098.04	1098.13	1098.23	1098.32	1098.43	1098.52	XS 1393
Lott Creek	L1_LCDrive_Elbow	386	1095.98	1096.72	1097.13	1097.37	1097.59	1097.70	1097.77	1097.83	1097.89	1098.02	1098.17	1098.27	1098.40	1098.50	XS 1394
Lott Creek	L1_LCDrive_Elbow	305	1095.62	1095.96	1096.59	1096.98	1097.28	1097.47	1097.57	1097.66	1097.73	1097.91	1098.10	1098.22	1098.36	1098.47	XS 1395
Lott Creek	L1_LCDrive_Elbow	224	1094.57	1095.77	1096.37	1096.75	1097.06	1097.27	1097.37	1097.48	1097.57	1097.79	1098.01	1098.14	1098.29	1098.41	XS 1396
Lott Creek	L1_LCDrive_Elbow	146	1094.76	1095.62	1096.10	1096.43	1096.71	1096.93	1097.07	1097.25	1097.38	1097.66	1097.91	1098.05	1098.22	1098.35	XS 1397
Lott Creek	L1_LCDrive_Elbow	65	1093.92	1095.61	1096.09	1096.42	1096.71	1096.93	1097.08	1097.24	1097.37	1097.64	1097.90	1098.04	1098.21	1098.33	XS 1398

Notes:

1) Simulated water level replaced with higher water level from lower flow profile to avoid profile crossing.



BOW AND ELBOW RIVER HAZARD STUDY - OPEN WATER FLOOD INUNDATION MAPPING REPORT

Table A7: Flood Frequency Profiles – Lott Creek Lakes

Branch	Model Reach	River Station (m)	Min. Channel Elevation (m)	Simulated Water Levels for Various Flood Events (m)													Notes
				2-year	5-year	10-year	20-year	35-year	50-year	75-year	100-year	200-year	350-year	500-year	750-year	1,000-year	
Lott Creek Lakes	Lott Creek Lakes	1,071	1115.00	1115.23	1115.46	1115.59	1115.72	1115.82	1115.89	1115.96	1116.11	1116.61	1116.88	1116.98	1117.05	1117.10	XS 1399; U/S of Drop Inlet Structure - Weir
Lott Creek Lakes	Lott Creek Lakes	1,047	1112.40	1112.58	1113.68	1113.98	1114.39	1114.87	1115.24	1115.74	1116.10	1116.60	1116.87	1116.96	1117.04	1117.09	XS 1400; Between Drop Inlet Structure Weir & Culvert
Lott Creek Lakes	Lott Creek Lakes	1,006	1112.36	1112.42	1113.63	1113.79	1113.93	1114.03	1114.09	1114.16	1114.20	1114.26	1114.28	1114.29	1114.30	1114.30	XS 1401; D/S of Drop Inlet Structure - Culvert
Lott Creek Lakes	Lott Creek Lakes	980	1112.13	1112.41	1113.63	1113.79	1113.93	1114.03	1114.10	1114.16	1114.21	1114.26	1114.29	1114.30	1114.30	1114.31	XS 1402
Lott Creek Lakes	Lott Creek Lakes	932	1112.14	1112.41	1113.63	1113.79	1113.93	1114.03	1114.09	1114.16	1114.21	1114.26	1114.28	1114.29	1114.30	1114.31	XS 1403
Lott Creek Lakes	Lott Creek Lakes	859	1112.15	1112.41	1113.63	1113.79	1113.93	1114.03	1114.09	1114.16	1114.20	1114.26	1114.28	1114.29	1114.30	1114.30	XS 1404
Lott Creek Lakes	Lott Creek Lakes	797	1112.16	1112.41	1113.63	1113.79	1113.93	1114.03	1114.09	1114.16	1114.20	1114.26	1114.28	1114.29	1114.30	1114.30	XS 1405
Lott Creek Lakes	Lott Creek Lakes	682	1112.15	1112.41	1113.63	1113.79	1113.93	1114.03	1114.09	1114.16	1114.20	1114.26	1114.28	1114.29	1114.30	1114.30	XS 1406
Lott Creek Lakes	Lott Creek Lakes	620	1112.28	1112.41	1113.63	1113.79	1113.92	1114.03	1114.09	1114.16	1114.20	1114.25	1114.28	1114.29	1114.29	1114.30	XS 1407
Lott Creek Lakes	Lott Creek Lakes	613	1112.18	1112.29	1113.62	1113.78	1113.91	1114.00	1114.06	1114.12	1114.16	1114.21	1114.23	1114.24	1114.25	1114.25	XS 1408; U/S of Elbow Valley Lake Outlet Culvert
Lott Creek Lakes	Lott Creek Lakes	599	1111.49	1111.74	1112.14	1112.35	1112.55	1112.72	1112.82	1112.93	1113.00	1113.10	1113.14	1113.15	1113.17	1113.18	XS 1409; D/S of Elbow Valley Lake Outlet Culvert
Lott Creek Lakes	Lott Creek Lakes	587	1111.33	1111.44	1111.81	1111.99	1112.14	1112.27	1112.34	1112.41	1112.45	1112.51	1112.56	1112.57	1112.57	1112.58	XS 1410
Lott Creek Lakes	Lott Creek Lakes	480	1110.19	1110.54	1111.21	1111.39	1111.53	1111.64	1111.70	1111.77	1111.81	1111.86	1111.93	1111.94	1111.95	1111.95	XS 1411
Lott Creek Lakes	Lott Creek Lakes	405	1110.06	1110.22	1110.77	1110.91	1111.03	1111.14	1111.20	1111.24	1111.24	1111.25 ⁽²⁾	1111.25	1111.26	1111.26	1111.26	XS 1412
Lott Creek Lakes	Lott Creek Lakes	366	1109.01	1109.15	1109.55	1109.73	1109.90	1110.02	1110.11	1110.28	1110.39	1110.45	1110.53	1110.53	1110.54	1110.54	XS 1413
Lott Creek Lakes	Lott Creek Lakes	310	1108.39	1108.47	1108.69	1108.80	1108.89	1108.96	1109.01	1109.06	1109.09	1109.12	1109.14	1109.18	1109.26	1109.34	XS 1414
Lott Creek Lakes	Lott Creek Lakes	213	1108.25	1108.47	1108.66	1108.77	1108.85	1108.93	1108.97	1109.02	1109.05	1109.09	1109.11	1109.15	1109.25	1109.33	XS 1415
Lott Creek Lakes	Lott Creek Lakes	127	1108.21	1108.47	1108.65	1108.75	1108.84	1108.91	1108.95	1109.00	1109.03	1109.07	1109.09	1109.14	1109.24	1109.32	XS 1416
Lott Creek Lakes	Lott Creek Lakes	59	1108.31	1108.47	1108.61	1108.69	1108.77	1108.83	1108.87	1108.92	1108.95	1108.98	1109.00	1109.06	1109.19	1109.29	XS 1417; U/S of Fisherman's Lake Outlet Weir
Lott Creek Lakes	Lott Creek Lakes	38	1106.49	1107.22	1107.55	1107.77	1107.95	1108.13	1108.25	1108.38	1108.48	1108.71	1108.91	1109.04	1109.18	1109.29	XS 1418; D/S of Fisherman's Lake Outlet Weir

Notes:

1) Simulated water level replaced with lower water level from higher flow profile to avoid profile crossing.

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