

ABBOTSFORD

COMPARISON CHART

Long-term Flood Mitigation Options

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	OPTION #1	OPTION #2	OPTION #3	OPTION #4	PREFERRED OPTION
DIKES					
Permanently repair parts of Sumas Dike (make temporary repairs from November 2021 permanent only)	✓	✓	✓	✓	✓
Reinforce and raise parts of Sumas Dike			✓	✓	
Reinforce and raise parts of Vedder Dike			✓	✓	✓
Modify parts of existing Sumas Dike					✓
Relocate part of Sumas Dike and setback to allow for flood overflow channel, east of Sumas First Nation Reserve			✓	✓	✓
New relocated dike along north side of Hwy 1 (from Atkinson Rd to floodboxes)			✓	✓	✓
New dike to protect Huntingdon area to Hwy 1			✓		
New dike along Saar Creek, extending along border			✓		
New dike on both sides of Sumas River (through Sumas Prairie West - extends along border and protects Huntingdon area)				✓	
New dikes through Sumas Prairie West, extending along the border and to protect Huntingdon area and Arnold area					✓
New dike around Sumas First Nation Reserve			✓	✓	✓
Remove Interceptor Dike in Arnold area (to restore flow to Lake Bottom)				✓	
PUMP STATIONS					
Upgrade resiliency of Barrowtown Pump Station	✓	✓	✓	✓	✓
New Sumas River pump station		✓	✓	✓	✓
New pump stations in Sumas Prairie West at Marshall Creek (2 locations) and Saar Creek				✓	✓
DESIGNATED FLOODWAYS					
Designated temporary flood storage area in the Lake Bottom			✓		✓
Sumas Prairie West				✓	✓ (smaller)
Sumas Prairie North from Atkinson Rd to Barrowtown Pump Station floodboxes north of Hwy 1			✓	✓	✓
CONTROLLED OVERFLOWS					
Create controlled overflow locations in Lake Bottom (via flood overflow path)			✓ (less than one in 200 years)	✓ (only for events over one in 200 years)	✓ (less than one in 200 years)
Create controlled flows at border to Saar Creek and Arnold Slough			✓ Arnold Slough only	✓	✓ Arnold Slough only
Create flood overflow route around the Angus Campbell Road area					✓
UNPROTECTED FLOODPLAIN					
Sumas Prairie West (private mitigation only)	✓	✓	✓		✓
SUPPORTING INFRASTRUCTURE (BY PROVINCE)					
Hwy 1 expected to be raised			✓ from Hwy 11 to Atkinson Rd	✓ from east of Sumas First Nation Reserve to Aktinson Rd	✓ from east of Sumas First Nation Reserve to Aktinson Rd
Southern Railway raised				✓	
LAKE BOTTOM PROTECTION LEVEL (NOOKSACK)					
Approximate protection level provided** ***NOTE:** While the size of a flooding event is projected to occur once in so many years, they may occur more frequently. ****NOTE:** with climate change consideration	Up to a one in 35 year event	Up to a one in 50-100 year event	Up to a one in 200 year event	Up to a one in 200 year event	Up to a one in 200 year event
COSTS (ESTIMATIONS)					
Nooksack/Sumas Prairie Protection & Resiliency	$100M	$800M	$2B	$2.3B	$2.5B
Clayburn Village Resiliency	$32M	$32M	$32M	$32M	$32M
New Water Source Resiliency	$77M	$77M	$77M	$77M	$84M*
Matsqui Dike Resiliency	—	$388M	$388M	$388M	$388M
TOTAL ESTIMATED COST	**$209M**	**$1.297B**	**$2.497B**	**$2.797B**	**$3.004B**

*In 2022, the BC Government provided a $62M grant to support this work.