ABBOTSFORD

COMPARISON CHART

Long-term Flood Mitigation Options

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	OPTION #1 Status quo with enhancements to Barrowtown Pump Station	OPTION #2 Status quo with enhancements to Barrowtown Pump Station and a new Sumas River pump station	OPTION #3 Added floodway, storage area, enhancements to Barrowtown Pump Station and a new Sumas River pump station	OPTION #4 Added narrow floodway, enhancements to Barrowtown Pump Station and a new Sumas River pump station
DYKE				
Permanently repair parts of Sumas Dyke (make temporary repairs from November 2021 permanent only)	✓	✓		
Reinforce and raise parts of Sumas Dyke			✓	✓
Reinforce and raise parts of Vedder Dyke			✓	✓
Relocate part of Sumas Dyke and set back to allow for flood overflow channel, east of Sumas First Nation Reserve			✓	✓
New relocated dyke along north side of Hwy 1 (from Atkinson Rd to floodboxes)			✓	✓
New dyke to protect Huntingdon area to Hwy 1			✓	
New dyke along Saar Creek, extending along border			✓	
New dyke on both sides of Sumas River (through Sumas Prairie West - extends along border and protects Huntingdon area)				✓
Remove Interceptor Dyke 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				✓
Sumas Prairie North from Atkinson Rd to Barrowtown Pump Station floodboxes north of Hwy 1			✓	✓
CONTROLLED OVERFLOWS				
Create controlled overflow locations			✓ Lake Bottom (near main breach) (less than one in 200 years)	✓ Lake Bottom (near main breach and Arnold Slough) only for events over one in 200 years
Create controlled flows at border to Saar Creek and Arnold Slough			✓ Arnold Slough only	✓
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
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
COSTS (ESTIMATIONS)				
Nooksack/Sumas Prairie Protection & Resiliency	$100M	$800M	$2B	$2.3B
Clayburn Village Resiliency	$32M	$32M	$32M	$32M
New Water Source Resiliency	$77M	$77M	$77M	$77M
Matsqui Dyke Resiliency	—	$388M	$388M	$388M
TOTAL ESTIMATED COST	**$209M**	**$1.297B**	**$2.497B**	**$2.797B**