

No.	Background Item	Currently Available	Source	Notes
01. Climate Data				
A. IDF Curves				
B. Provincial Climate Data				
	i. NLFR0014 - Avalon West	Y	WRMD	Meteorological data from June 5, 2018 to January 12, 2022
	ii. Ruby Line 5 Minute Rainfall Data	Y	WRMD	5-minute rainfall data from January 1, 1999 to December 31, 2014
	iii. Windsor Lake 5 Minute Rainfall Data	Y	WRMD	5-minute rainfall data from January 1, 1999 to December 31, 2014
C. ECCC Climate Data				
	i. St. John's West CDA CS	Y	ECCC	Historical data for Climate Station 8403605 from 1996 to 2007
	ii. St. John's West Climate	Y	ECCC	Historical data for Climate Station 8403603 from 2010 to 2021
	iii. St. John's Intl A	Y	ECCC	Historical data for Climate Station 8403505 from 2012 to 2021
	iv. St. John's	Y	ECCC	Historical data for Climate Station 8403500 from 1874 to 1975
	v. St. John's A	Y	ECCC	Historical data for Climate Station 8403506 from 1942 to 2000
F. Canadian Precipitation Analysis Data				
	i. Precipitation data (January 1, 2002 to February 28, 2023)	Y	ECCC	Gridded 6-hour precipitation data over the Avalon Peninsula
02. Hydraulic Data				
A. Hydraulic Structure Information				
	i. Dam Inventory	Y	WRMD	
03. Hydrologic Data				
A. Hydrometric Data				
v. WSC Data - Historical				
	a. 02YJ001 Daily Flow Data	Y	WSC	
	b. 02YJ003 Daily Flow Data	Y	WSC	
	c. 02YK002 Daily Flow Data	Y	WSC	
	d. 02YN002 Daily Flow Data	Y	WSC	
	e. 02ZA001 Daily Flow Data	Y	WSC	
	f. 02ZA002 Daily Flow Data	Y	WSC	
	g. 02ZA003 Daily Flow Data	Y	WSC	
	h. 02ZB001 Daily Flow Data	Y	WSC	
	i. 02ZC002 Daily and Instantaneous Peak Flow Data	Y	WSC	
	j. 02ZD002 Daily Flow Data	Y	WSC	
	k. 02ZE001 Daily and Instantaneous Peak Flow Data	Y	WSC	
	l. 02ZE004 Daily and Instantaneous Peak Flow Data	Y	WSC	
	m. 02ZF001 Daily and Instantaneous Peak Flow Data	Y	WSC	
	n. 02ZG001 Daily and Instantaneous Peak Flow Data	Y	WSC	
	o. 02ZG002 Daily and Instantaneous Peak Flow Data	Y	WSC	
	p. 02ZG003 Daily and Instantaneous Peak Flow Data	Y	WSC	
	q. 02ZG004 Daily and Instantaneous Peak Flow Data	Y	WSC	
	r. 02ZH002 Daily and Instantaneous Peak Flow Data	Y	WSC	
	s. 02ZK001 Daily and Instantaneous Peak Flow Data	Y	WSC	
	t. 02ZK003 Daily and Instantaneous Peak Flow Data	Y	WSC	
	u. 02ZK004 Daily and Instantaneous Peak Flow Data	Y	WSC	
	v. 02ZK005 Daily and Instantaneous Peak Flow Data	Y	WSC	
	w. 02ZL003 Daily and Instantaneous Peak Flow Data	Y	WSC	
	x. 02ZL004 Daily and Instantaneous Peak Flow Data	Y	WSC	
	y. 02ZL005 Daily and Instantaneous Peak Flow Data	Y	WSC	
	z. 02ZM006 Daily and Instantaneous Peak Flow Data	Y	WSC	
	aa.02ZM009 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ab.02ZM010 Daily and Instantaneous Peak Flow Data	Y	WSC	

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	ac.02ZM016 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ad.02ZM017 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ae.02ZM018 Daily and Instantaneous Peak Flow Data	Y	WSC	
	af.02ZM019 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ag.02ZM021 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ah.02ZN001 Daily and Instantaneous Peak Flow Data	Y	WSC	
	ai.02ZN002 Daily and Instantaneous Peak Flow Data	Y	WSC	
	aj. 02ZK006 Instantaneous Peak Flow Data	Y	WSC	
	ak. 02ZM008 Instantaneous Peak Flow Data	Y	WSC	
	al. 02ZM020 Instantaneous Peak Flow Data	Y	WSC	
	am. 02ZK002 Daily Water Level Data	Y	WSC	
	viii. Tidal Information for Heart's Content, Holyrood, and Lance Cove	Y	DFO	
04. Soil Data				
	A. National Soils Database Version 2	Y	NRCAN	Soils database
05. Remote Sensing and Orthometric Imagery Data				
	A. SPOT-6 Satellite Captures on June 25, 2021 and June 19, 2016	Y	ESA	
	B. Ferryland, Brigus, Heart's Delight - Islington, Winterton and Hant's Harbour Orthometric Imagery	Y	Govt. of NL	
09. Reports				
	H. Climate Reports			
	i. Projected Impacts of Climate Change for the Province of Newfoundland and Labrador: 2018 Upd	Y	WRMD	
	ii. 2014 NL RFFA - Report	Y	WRMD	
	iii. 2014 NL RFFA - Users Guide	Y	WRMD	
	iv. 2016 NL RFFA	Y	WRMD	
	v. Past and Future Sea Level Change in NL	Y	WRMD	
	vi. 2015 Intensity-Duration-Frequency Curve Update for Newfoundland and Labrador	Y	WRMD	
	I. Flood Risk Mapping			
	i. Flood Risk Mapping Study for Carbonear, Victoria, Salmon Cove, Whitbourne, Hearts Delight, Winterton and Hants Harbour	Y	WRMD	
	ii. Hydrotechnical Study of the Placentia Area Flood Plain	Y	WRMD	
12. Topographic & Bathymetric Data				
	A. High Resolution Digital Elevation Model	Y	NRCan	
	B. Nonna Bathymetry Data	Y	CHS	
14. WRMD Flood Information				
	A. Historical Flood Inventory	Y	WRMD	
	B. Historical Flood Hazard Mapping Extents	Y	WRMD	
	C. Hurricane Fiona Wrack Line	Y	WRMD	

Start Year	Season	Region	Community Name	Water Bodies	Type of Event	Description	Source
1955	Winter	Eastern	Ferryland		Coastal Flooding	MR: The "worst storm in memory" battered the East Coast. Surging waves sent water 200 feet in the air against the steep cliffs around St. John's Harbour. 12 wharves and two small boats were destroyed. General damages were said to be extensive	MR: Department of Natural Resources Website, The Daily News]
1955	Fall	Eastern	Ferryland		Coastal Flooding	MR: Stages were damaged in Petty Harbour and along the Southern Shore. The lowlands were flooded with seawater, the road near Cappahayden was washed out. high winds and waves and water levels generated by a nameless hurricane damaged stages at Petty Harbour.	Flooding Events in Newfoundland and Labrador - An Historical Perspective
1977	Winter	Eastern	Ferryland		Coastal Flooding	MR: High seas caused damages to fisherman's wharves in the Battery area. high winds and heavy seas damaged wharves (potentially Petty Harbour). High winds and heavy seas damaged wharves (potentially Ferryland). The seas were so high in Placentia that the spray went over the barrier beach and mixed with snow and rain causing basement flooding	Flooding Events in Newfoundland and Labrador - An Historical Perspective
1987	Winter	Eastern	Hant's Harbour	Halfway Brook	Ice Jam	Ice blocked the brook, then the rain and snowmelt produced runoff which caused the brook to overflow. A summer home was surrounded by water and access to five other homes and two summer cottages were inaccessible	Flood Risk Mapping Study of Carbonear, Victoria, Salmon Cove, Whitbourne, Heart's Delight, Winterton, Hant's Harbour
1989	Winter	Eastern	Ferryland		Coastal Flooding	Two families evacuated after a breakwater broke in the community	Flood Risk Mapping Study - Gould's, Petty Harbour and Ferryland
1991	Winter	Eastern	Winterton	Western Pond Brook	Rainfall and Snowmelt	MR: Heavy rains combined with snowmelt caused damages to several residences. Rain combined with snowmelt caused flooding conditions, water flowed over the highway and overtopped the river banks. snowmelt and rainfall caused flooding in many areas in the Gould's. Doyles River flooded its banks.	MR: Flood Risk Mapping Study of Carbonear, Victoria, Salmon Cove, Whitbourne, Heart's Delight, Winterton, Hant's Harbour. Flood Risk Mapping Study of Gould's, Petty Harbour and Ferryland
1991	Winter	Eastern	Winterton		Rainfall	MR: Rainfall caused flooding to residential property, and some damage to roads in the Shea Heights area. A bridge in Seal Cove was washed out by the rain. Extensive flood damage was reported in Winterton, where ice and water clogged the main brook running through the town causing tremendous overflow. The town had to call a state of emergency when rafting ice in the Shoal Harbour River threatened a bridge and also extensively damaged several houses.	Evening Telegram
1995	Winter	Eastern	Hant's Harbour	Halfway Brook	Rainfall and Snowmelt	Record captured by Dept. Source not found.	Flood Risk Mapping Study of Carbonear, Victoria, Salmon Cove, Whitbourne, Heart's Delight, Winterton, Hant's Harbour
2000	Winter	Eastern	Brigus		Storm Surge	MR: The breakwater was completely destroyed, several sections of infrastructure were washed ashore. Coastal Waves / Storm Surge. 2 waves of 11-17 m. Channel-Port Aux Basques. \$500,000 in damages to homes, a light house, etc. Damages to sewer outfall. To repair damages to a sea wall and two sanitary sewer outfalls to pre-storm conditions. Damages to roads. Major flooding in some areas, Allan's Island roadway cut off by large rocks tossed by storm surge blocking entrance. Damages to sea defence wall and walking trails.	MR: Internet, Multiple. The Compass. The Navigator. The Telegram. The Western Star
2004	Winter	Eastern	Ferryland		Coastal Waves	High winds and waves caused damage in the community. Waves washed away the breakwater protecting the road that runs out to Ferryland lighthouse.	Dept Natural Resources Website
2005	Winter	Eastern	Hant's Harbour		Coastal Waves	MR: High winds and high tides resulted in a storm surge, destruction was caused in nine communities. The breakwater at Flatrock was completely destroyed. There were road damages. Damages to other communities included roads, fishing gear. Storm Surge. 35 to 50 feet waves. 9 Eastern communities including Cavendish and Flatrock. Damages of \$2,000,000 included a damaged breakwater, road washouts, and boats. Stages, sheds, boats and fishing gear sustained damages. The breakwater was almost completely destroyed. The seawall was destroyed.	Multiple
2007	Summer	Eastern	Brigus		Rainfall	MR: Many streams overflowed their banks washing away roads and culverts and caused property damage. Shearstown Brook burst its bank and the bridge over the river was in danger of failing. Numerous basements were flooded. The access road was washed out meaning the Marine Atlantic ferry couldn't run. The road to the fish plant was washed out. Houses had 4-5 feet of water in them, 4 different sections of the road was washed out.	MR: VOCM. CBC. Telegram. The Charter
2009	Winter	Eastern	Ferryland		Coastal Waves	High seas washed out a road leading from Ferryland to the lighthouse, damaging property and the breakwater in the area.	Dept Natural Resources Website
2010	Fall	Eastern	Heart's Delight		Rainfall		Multiple
2010	Winter	Eastern	Ferryland		Coastal Flooding	Road washed out leading to the Ferryland lighthouse damaging property in the area.	CBC Website, Northern Pen, Dept of Natural Resources Website

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2013	Spring	Eastern	Hant's Harbour		Snowstorm, Winds, Storm Surge	Waves took out parts of the pavement and dislodged boulders on Custard Head Road. Rock breakwater that protects vessels moored at the Royal Newfoundland Yacht Club has almost completely washed away. Serious damage in Spainiard's Bay, Petty Harbour.	Dept Natural Resources Website
2021	Fall	Eastern	Brigus		Storm Surge	Storm surge is causing very high water levels around Brigus this morning as high tide approaches.	VOCM
2010	Fall	Eastern	Winterton		Rainfall	High rainfall from Hurricane Igor resulted in high flows the waterways in Winterton, resulting in a culvert crossing being overwhelmed and the road being overtopped by approximately 1 foot for over an hour. The parking lot near the town office was also submerged by 6 to 8 inches of water.	Winterton
2010	Fall	Eastern	Brigus		Storm Surge	The town noted that there was coastal flooding due to high tides and storm surge associated with Hurricane Igor.	Brigus
2021	Fall	Eastern	Brigus		Storm Surge	The town noted that there was coastal flooding due to high tides and storm surge associated with Hurricane Larry.	Brigus
2019	Summer	Eastern	Ferryland		Rainfall	Following heavy rainfall Tuesday evening, residents of Merrymeeting road said they had never seen the river levels so high. But they don't believe it was rain that caused the surge of water. They allege construction upstream caused the water to overflow onto their land, although it's not clear exactly what caused the flooding, and the construction company was not available for an interview with CBC News. Tony Hayden, who lives downstream the river, said he was at a friend's house Tuesday evening when he was told he had better get home because his property was filling with water. "When I got back here, well it was certainly flooded," he said, standing in his soggy, mucky grass Wednesday afternoon. The bridge that he built to cross over the river from his yard had to be removed in order for all the water and debris to pass through. "We tried to clear it up as best we could, to get the dam cleared up to stop the flooding, that worked but it did a lot of damage beforehand."	CBC
2021	Fall	Eastern	Ferryland			The Colony of Avalon archaeological site in Ferryland experienced flooding during those intense winds over the weekend, and those who work at the site worry that could be an indicator of more damaging weather patterns to come.	VOCM
2010	Fall	Eastern	Hant's Harbour			Hurricane Igor resulted in a lot of water on Short's Brook, and resulted in damaged culverts that were replaced following the flood	Hant's Harbour
2025	Winter	Eastern	Brigus		Storm Surge	Winds hit triple digits in many areas, including the metro region. Mother Nature has called o some aspects of the assault, such as wind speed, but storm surge warnings continue until about midnight. Waves will continue to be 20-30 feet larger than normal when they break on shore. Dozens of communities, including metro, will have a lot of damage to contend with. The storm surge washed out roads in beach areas, including Conception Bay North, so transportation o cials are assessing the a fected areas. The Town of Gambo has declared a state of emergency. Parts of Brigus are underwater. The Lions Club in Lewisporte has been heavily damaged.	VOCM