Summerside Extracted Questions – RDRP

HAZARD RESILIENCE ASSESSMENT

INDICATE: High Resilience Medium Resilience Low Resilience Need More Info Not

Applicable

Hazard	Hazard	Questions	Summerside
Category			
Atmospheric	Blizzard	Building regulations require building designs that reduce and withstand snow	High
		accumulation on roofs	
		Community-based blizzard exercises have taken place in schools and the	Medium (has not been exercised
		community-at-large (e.g., table-top or full-scale exercises)	recently)
		Critical power lines and sewer and water pipes are buried	Low - power, high water
		Hazardous trees are trimmed and/or removed near residences and power lines	High
		In case of an extended power failure due to a blizzard, there are plans to allow	High
		residents to evacuate to a designated shelter with back-up power	
		Has identified seconrdary sources of fuel for generators	High
		Most residents have heating sources that do not require power and/or have alternate	Low
		power sources (e.g., generator)	
		Roads are adequately maintained to allow emergency personnel to access residents	High
		during a blizzard	
		There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
		potential blizzard	EMO alerts
		There is a warning system in place to notify residents of a potential blizzard	National Public alerting system,
			EMO alerts
		Existing homeless shelters have made provisions for increased capacity and hazard	?
		specific conditions	B A a altitude
	B 111	Community members have been educated about climate change hazards	Medium
	Resilience	TOTAL : E.g. High, Medium, Low	High
	Level	Duilding vegulations veguine building designs that vedues and withstand soon	High
	Snow Storms	Building regulations require building designs that reduce and withstand snow accumulation on roofs	High
	Storins	Community-based snowstorm exercises have taken place in schools and the	Medium (has not been exercised
		·	•
		community-at-large (e.g., table-top or full-scale exercises)	recently)
		Critical power lines and sewer and water pipes are buried	Low - power, high water

	Hazardous trees are trimmed and/or removed near residences	High
	In case of an extended power failure due to a snow storm, there are plans to allow	High
	residents to evacuate to a designated shelter with back-up power	
	Most residents have heating sources that do not require power and/or have alternate	Low
	power sources (e.g., generator)	
	Roads are adequately maintained to allow emergency personnel to access residents	High
	during a snow storm	
	There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
	potential snow storm	EMO alerts
	There is a warning system in place to notify residents of a potential snow Storm	National Public alerting system, EMO alerts
	Existing homeless shelters have made provisions for increased capacity and hazard	?
	specific conditions.	
Resilience	TOTAL : E.g. High, Medium, Low	High
Level		
Heat Wave	Community-based heat wave exercises have taken place in schools and the	Medium (has not been exercised
	community-at-large (e.g., table-top or full-scale exercises)	recently)
	Plans are in place to install portable and widely available emergency drinking fountains	?
	for the public via portable water tanks or fire hydrant hook-up systems in the event of	
	a heat wave.	
	Community plans are in place to check on vulnerable populations during a heat wave, especially the elderly and poor.	Medium - utility keeps track
	Developers and property owners are encouraged to install air conditioning in new commercial buildings	?
	If there is an extended heat wave, combined with power outage, plans are in place to	Medium (shelter with back-up,
	allow residents to evacuate to a designated shelter with air-conditioned or cool	unclear if there is cooling)
	temperatures	
	Existing homeless shelters have made provisions for increased capacity and hazard	?
	specific conditions.	
	Residents are educated about heat waves and know the warning symptoms of heat	High (advisories)
	exhaustion and how best to keep cool	
	There are open green spaces, shade trees and light-coloured building in business areas	

		There is a warning system in place to notify police, fire and ambulance personnel of potential heat waves	National Public alerting system, EMO alerts
	-	There is a warning system in place to notify residents of potential heat waves	National Public alerting system, EMO alerts, Heat Advisories by Environment Canada
Res Lev		TOTAL : E.g. High, Medium, Low	Medium
Hui	ırricanes	Coastal wetlands are in place or are being re-established Community-based hurricane exercises have taken place in schools and the community-at-large Critical power lines and sewer and water pipes are buried Critical roads are well-draining	High Medium (has not been exercised recently) Low - power, high water Medium
	-	Designated shelters are in place in areas which are not impacted by hurricanes / or built to withstand hurricane force winds and outside the range of storm surge. Development regulations in areas susceptible to hurricanes limit land use, prohibit development or require wind and flood resilient building features including elevated buildings, concrete walls and roofs designed to withstand severe wind and rain	Low-Mid Low
	-	Hazardous trees are trimmed and/or removed near residences Protective dykes or levees are in place and well maintained in areas likely to experience hurricane damage Residents are aware of disaster evacuation routes for hurricanes	High Low
	-	Residents know to prepare for high winds and flooding by: covering windows with storm shutters or plywood, reinforcing garage doors, clearing rain gutters and downspouts, securing boats to land or storing them on land and removing potential windborne missiles such as barbecues and patio furniture.	Medium
		There is a warning system in place to notify police, fire and ambulance personnel of potential hurricanes There is a warning system in place to notify residents of potential hurricanes	National Public alerting system, EMO alerts National Public alerting system, EMO alerts
		Existing homeless shelters have made provisions for increased capacity and hazard specific conditions.	?
Res Lev		TOTAL : E.g. High, Medium, Low	Low

Ice Storms	Community based is a storm eversions have taken place in schools and the	Madium (has not been eversised
ice Storms	Community-based ice storm exercises have taken place in schools and the	Medium (has not been exercised
	community-at-large	recently)
	Critical power lines and sewer and water pipes are buried	Low - power, high water
	Hazardous trees are trimmed and/or removed near residences	High
	In case of an extended power failure, there are plans to allow residents to evacuate to	High
	a designated shelter with back-up power	
	Plans are in place to locate persons without power over extended time periods and to	Medium - utility keeps track
	transport these persons to designated shelters	
	There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
	potential ice storms and freezing rain	EMO alerts
	There is a warning system in place to notify residents of a potential ice storms and	National Public alerting system,
	freezing rain	EMO alerts
	Existing homeless shelters have made provisions for increased capacity and hazard	?
	specific conditions.	
Resilience	TOTAL : E.g. High, Medium, Low	Low-Mid
Level		
Sea Storms	Coastal wetlands are in place or are being re-established	High
and Storm	Community-based sea storms and storm surges exercises have taken place in schools	Medium (has not been exercised
Surges	and the community-at-large	recently)
	Critical power lines and sewer and water pipes are buried	Low - power, high water
	Critical roads are well-draining	Medium
	Designated shelters are in place in areas which are not impacted by sea storms and storm surges	Low-Mid
	Development regulations in areas susceptible to sea storms and storm surges limit	Low
	land use, prohibit development or require wind and flood resilient building features	
	including elevated buildings, concrete walls and roofs designed to withstand severe	
	wind and rain	
	Hazardous trees are trimmed and/or removed near residences	High
	Most residents know to prepare for high winds and flooding by: covering windows	Medium
	with storm shutters or plywood, reinforcing garage doors, clearing rain gutters and	
	downspouts, securing boats to land or storing them on land and removing potential	
	windborne missiles such as barbecues and patio furniture.	
	Timasome mosnes such as sursecues and patie familiare.	

	Protective dykes or levees are in place and well maintained in areas likely to	Low
	experience sea storms and storm surges damage	2000
	Residents are aware of disaster evacuation routes for sea storms and storm surges	Low
	There is a warning system in place to notify police, fire and ambulance personnel of	National Public alerting system,
	potential sea storms and storm surges	EMO alerts
	There is a warning system in place to notify residents, boaters and fishers of potential	National Public alerting system,
	sea storms and storm surges	EMO alerts
	Existing homeless shelters have made provisions for increased capacity and hazard	?
	specific conditions	
Resilience	TOTAL : E.g. High, Medium, Low	Low-Mid
Level		
Wind	Community-based windstorm exercises have taken place in schools and the	Medium (has not been exercised
Storms	community-at-large (e.g., table-top or full-scale exercises)	recently)
	Critical power lines, sewer and water pipes are buried	Low - power, high water
	Development regulations require building reinforcements and wind resilient	Low
	infrastructure.	
	Hazardous trees are trimmed and/or removed near residences	High
	In case of an extended power failure due to a windstorm, there are plans to allow	High
	residents to evacuate to a designated shelter with back-up power	
	Residents know to prepare for high winds and flooding by: - covering windows with	Medium
	storm shutters or plywood, reinforcing garage doors, clearing rain gutters and	
	downspouts, securing boats to land or storing them on land and removing potential	
	windborne missiles such as barbecues and patio furniture. There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
	potential windstorm	EMO alerts
	There is a warning system in place to notify residents of a potential Windstorm	National Public alerting system,
	There is a warning system in place to notify residents of a potential windstorm	EMO alerts
	Existing homeless shelters have made provisions for increased capacity and hazard	?
	specific conditions.	
Resilience	TOTAL : E.g. High, Medium, Low	Medium
Level		
Hail	Airport operators prepare for hailstorms by putting planes under cover	?
Storms		

	Community-based hailstorm exercises have taken place in schools and the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
	Most car dealers prepare for hailstorms by putting vehicles under cover	Low
	Most farmers check regularly with weather and storm forecasting agencies such as Environment Canada	High
	Most farmers prepare for hailstorms by putting vehicles under cover, protecting greenhouses and bringing in animals wherever possible	High
	Most residents check regularly with weather and storm forecasting agencies such as Environment Canada	High
	Most residents know to prepare for hailstorms by putting vehicles under cover	High (although some residents may not be able to)
	Residents are educated about storm safety and know to stay indoors and away from windows, skylights and glass doors during hail and avoid contact with plumbing, corded electrical equipment, concrete floors and walls if there is lightning along with the hail	Medium
	There is a warning system in place to notify police, fire and ambulance personnel of potential heavy hailstorms	National Public alerting system, EMO alerts
	There is a warning system in place to notify residents of potentially heavy hailstorms	National Public alerting system, EMO alerts, Environment Canada alerts
	Existing homeless shelters have made provisions for increased capacity and hazard specific conditions.	?
Resilience Level	TOTAL : E.g. High, Medium, Low	High

Hydrological	Sea Level Rise		Medium
	Resilience Level	TOTAL : E.g. High, Medium, Low	High
	Flash Floods	Community officials check frequently with weather forecasting agencies such as Environment Canada and monitor conditions that may lead to flash flooding.	High
		Community-based flash flood exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
		Have a warning system to notify community residents of flash flood risk and to evacuate areas prone to flash flooding (e.g., river beds).	National Public alerting system, EMO alerts
		The community has implemented structural measures to reduce the risk of flooding, such as building dams, dykes and floodwalls, creating reservoirs or making channel improvements.	Low
		The community has mapped areas subject to flash flooding. The community has posted signs warning of areas subject to flash flooding (e.g., roads).	Low
		The community has regulations that prohibit development, limit land use, or require specific building codes for developments within flood hazard areas, such as elevating structures above maximum flood levels, requiring waterproof materials and anchoring buildings to prevent floatation.	Low
		The community has retained or re-established natural ecosystems in floodplains that provide flood control, such as vegetation cover which provides soil stability and absorption, wetlands and estuaries (a partly enclosed coastal body of water with one or more rivers or streams flowing into it and a free connection to the sea) which assist with water retention and absorption, and natural stream flows and riparian areas (areas situated on the bank of a river or other body of water) which slow water runoff velocity, reduce bank erosion and reduce the introduction of sediment and debris in watercourses.	Medium
		There is a warning system in place to notify community residents of a potential flash flood	National Public alerting system, EMO alerts, Environment Canada alerts

	There is a warning system in place to notify police, fire and ambulance personnel of a potential flash flood and to prohibit entry into areas subject to flash flooding	National Public alerting system, EMO alerts, Environment Canada alerts
	There is a warning system in place to notify Search and Rescue (SAR) personnel of a potential flash flood.	National Public alerting system, EMO alerts, Environment Canada alerts
Res Lev	TOTAL : E.g. High, Medium, Low	Medium
Ice	Jams Community officials check frequently with weather forecasting agencies such as Environment .Canada and monitor conditions that may lead to ice-jam flooding.	High
	Community-based ice-jam flood exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
	Community volunteers and personnel have received training regarding sand-bagging.	Low
	Dredging has taken place to avert potential ice jam floods and/or dredging activities are monitored and assessed for their potential to cause submarine slides.	n/a
	The community has implemented structural measures to reduce the risk of ice-jam flooding, such as building dams, dykes and floodwalls, creating reservoirs or making channel improvements.	low
	The community has mapped areas subject to ice-jam flooding.	low
	The community has posted signs warning of areas subject to ice jam flooding (e.g., roads, railroad lines).	low
	The community has ready access to stockpiles of sandbags.	medium
	The community has regulations that prohibit development, limit land use, or require specific building codes for developments within ice-jam flood hazard areas, such as elevating structures above maximum flood levels, requiring waterproof materials and anchoring buildings to prevent floatation.	low
	The community has retained or re-established natural ecosystems in floodplains that provide flood control, such as vegetation cover which provides soil stability and absorption, wetlands and estuaries (a partly enclosed coastal body of water with one or more rivers or streams flowing into it and a free connection to the sea) which assist with water retention and absorption, and natural stream flows and riparian areas (areas situated on the bank of a river or other body of water) which slow water runoff	

	velocity, reduce bank erosion and reduce the introduction of sediment and debris in watercourses.	
	There is a warning system in place to notify community residents of a potential ice jam	National Public alerting system,
	flood and to evacuate areas prone to ice-jam flooding (e.g., river beds, bridges).	EMO alerts, Environment Canada
		alerts
	There is a warning system in place to notify police, fire and ambulance personnel of a potential ice jam flood and to prohibit entry into areas subject to ice jam flooding	National Public alerting system, EMO alerts, Environment Canada
	potential ice jain nood and to prombit entry into areas subject to ice jain nooding	alerts
	There is a warning system in place to notify Search and Rescue (SAR) personnel of a	National Public alerting system,
	potential ice jam flood.	EMO alerts, Environment Canada
		alerts
Resilience Level	TOTAL : E.g. High, Medium, Low	mid-High
Local	Community officials check frequently with weather forecasting agencies such as	High
Floods	Environment Canada and monitor conditions that may lead to local flooding.	
	Community volunteers and personnel have received training regarding sand-bagging.	Low
	The community has ready access to stockpiles of sandbags.	medium
	Community-based local flood exercises have taken place in the community-at-large	Medium (has not been exercised
	(e.g., table-top or full-scale exercises)	recently)
	The community has a warning system to notify community residents and businesses of	National Public alerting system,
	potential local flooding risk and to evacuate areas prone to local flooding.	EMO alerts, Environment Canada
	The community has impulsively a second as a reduce the risk of least flooding and	alerts
	The community has implemented measures to reduce the risk of local flooding, such as ensuring that storm sewage drains and systems are well maintained.	High
	The community has adequate and separated storm sewage and human sewage	High
	treatment systems to prevent water contamination.	
	The community monitors and maintains pumps and pump stations.	High
	The community has retained or re-established natural ecosystems in floodplains that	Medium
	provide flood control, such as vegetation cover which provides soil stability and	
	absorption, wetlands and estuaries (a partly enclosed coastal body of water with one	
	or more rivers or streams flowing into it and a free connection to the sea) which assist	
	with water retention and absorption, and natural stream flows and riparian areas	
	(areas situated on the bank of a river or other body of water) which slow water runoff	

		velocity, reduce bank erosion and reduce the introduction of sediment and debris in	
		watercourses.	
		There is a warning system in place to notify police, fire and ambulance personnel of	National Public alerting system,
		potential local flooding and to prohibit entry into areas subject to ice jam flooding	EMO alerts, Environment Canada
			alerts
R	Resilience	TOTAL : E.g. High, Medium, Low	High
L	Level		
R	Rain Storm	Community officials check frequently with weather forecasting agencies such as	High
F	Floods	Environment Canada and monitor conditions that may lead to rain storm flooding.	
		Community volunteers and personnel have received training regarding sand-bagging.	Low
		The community has ready access to stockpiles of sandbags.	medium
		Community-based rain storm flood exercises have taken place in the	Medium (has not been exercised
		community-at-large (e.g., table-top or full-scale exercises)	recently)
		The community has implemented structural measures to reduce the risk of rain storm	low
		flooding, such as building dams, dykes and floodwalls, creating reservoirs or making	
		channel improvements.	
		The community has adequate and seperated storm sewage and human sewage	High
		treatment systems to prevent water contamination.	
		The community has mapped areas subject to rain storm flooding (e.g., established	High
		flood plain areas at the 100 and 200 year level).	
		The community has posted signs warning of areas subject to rain storm flooding (e.g.,	Low
		roads, railroad lines).	
		The community has regulations that prohibit development, limit land use, or require	Low
		specific building codes for developments within flood plains, such as elevating	
		structures above maximum flood levels (e.g., 100 or 200 year levels), requiring	
		waterproof materials and anchoring buildings to prevent floatation.	
		The community has retained or re-established natural ecosystems in floodplains that	Medium
		provide flood control, such as vegetation cover which provides soil stability and	
		absorption, wetlands and estuaries (a partly enclosed coastal body of water with one	
		or more rivers or streams flowing into it and a free connection to the sea) which assist	
		with water retention and absorption, and natural stream flows and riparian areas	
		(areas situated on the bank of a river or other body of water) which slow water runoff	
		Tareas strates on the bank of a five of other body of water, which slow water failor	

	velocity, reduce bank erosion and reduce the introduction of sediment and debris in watercourses.	
	There is a warning system in place to notify community residents of a potential rain	National Public alerting system,
	storm floods and to evacuate areas prone to rain storm flooding (e.g., flood plains).	EMO alerts, Environment Canada alerts
	There is a early warning system in place to notify farmers of a potential rain floods and to evacuate livestock from areas prone to rain storm flooding (e.g., flood plains).	High
	There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
	potential rain storm flood and to prohibit entry into areas subject to flooding	EMO alerts, Environment Canada alerts
	There is a warning system in place to notify Search and Rescue (SAR) personnel of a	National Public alerting system,
	potential rain storm flood.	EMO alerts, Environment Canada alerts
Resilience Level	TOTAL : E.g. High, Medium, Low	Medium
Snow Melt	Community officials check frequently with weather forecasting agencies such as	High
Floods	Environment Canada and monitor snow pack conditions that may lead to snow melt flooding.	
	Community volunteers and personnel have received training regarding sand-bagging.	Low
	The community has ready access to stockpiles of sandbags.	medium
	Community-based snow melt flood exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
	Dredging has taken place to avert potential ice jam floods and/or dredging activities are monitored and assessed for their potential to cause submarine slides.	n/a
	The community has implemented structural measures to reduce the risk of snow melt flooding, such as building dams, dykes and floodwalls, creating reservoirs or making channel improvements.	low
	The community has adequate and seperated storm sewage and human sewage treatment systems to prevent water contamination.	High
	The community has mapped areas subject to snow melt flooding (e.g., established flood plain areas at the 100 and 200 year level).	High
	The community has regulations that prohibit development, limit land use, or require specific building codes for developments within flood plains, such as elevating	Low

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		structures above maximum flood levels (e.g., 100 or 200 year levels), requiring	
		waterproof materials and anchoring buildings to prevent floatation.	
		The community has retained or re-established natural ecosystems in floodplains that	Medium
		provide flood control, such as vegetation cover which provides soil stability and	
		absorption, wetlands and estuaries (a partly enclosed coastal body of water with one	
		or more rivers or streams flowing into it and a free connection to the sea) which assist	
		with water retention and absorption, and natural stream flows and riparian areas	
		(areas situated on the bank of a river or other body of water) which slow water runoff	
		velocity, reduce bank erosion and reduce the introduction of sediment and debris in	
		watercourses.	
		There is an early warning system in place to notify farmers of a potential snow melt	High (EMO and they check
		floods and to evacuate livestock from areas prone to snow melt flooding (e.g., flood	weather)
		plains).	,
		There is a warning system in place to notify community residents of a potential snow	National Public alerting system,
		melt floods and to evacuate areas prone to snow melt flooding (e.g., flood plains).	EMO alerts, Environment Canada
		0(-0),p,	alerts
		There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
		potential snow melt flood and to prohibit entry into areas subject to flooding	EMO alerts, Environment Canada
			alerts
		There is a warning system in place to notify Search and Rescue (SAR) personnel of a	National Public alerting system,
		potential snow melt flood.	EMO alerts, Environment Canada
			alerts
	Resilience Level	TOTAL : E.g. High, Medium, Low	Medium
Hazardous /	Gas Leaks	Community-based gas explosion and gas leak exercises have taken place in the	Medium (has not been exercised
Contamination	and	community-at-large (e.g., table-top or full-scale exercises)	recently)
	Explosions	Fire departments have trained fire fighters to respond to gas explosions and gas leaks	High
		and have sufficient personal protective equipment (PPE) for all fire fighters.	
		Gas companies and community officials perform regular safety checks of gas storage	?
		structures and distribution systems	
		Gas companies have replaced all gray cast iron pipes.	n/a
		There is a warning system in place to notify community residents and businesses of	National Public alerting system,
		gas explosions and gas leaks and how to prepare for them.	EMO alerts,

	There is a warning system in place to notify police, fire and ambulance personnel of	National Public alerting system,
	gas explosions and gas leaks	EMO alerts,
Resilience Level	TOTAL : E.g. High, Medium, Low	High
Oil	Closed-circuit security cameras are in place monitor pipelines.	?
Pipeline	Community-based oil pipeline leak exercises have taken place in the	Medium (has not been exercised
leaks	community-at-large (e.g., table-top or full-scale exercises)	recently)
	Gas companies have replaced all gray cast iron pipes.	?
	The Fire department has access to oil absorbents, absorbent pads, mats, pipe flange	?
	wraps and other products to minimize the spread and contamination of the soil and waterways.	
	The pipeline company monitors and replaces unsafe pipeline sections on a regular basis.	?
	There is a warning system in place to notify community residents and businesses of an	National Public alerting system,
	oil pipeline leak and how to prepare for it.	EMO alerts,
	There is a warning system in place to notify police, fire and ambulance personnel of an	National Public alerting system,
	oil pipeline leak.	EMO alerts,
Resilience	TOTAL : E.g. High, Medium, Low	High
Level		
Other	Community-based explosion exercises have taken place in the community-at-large	Medium (has not been exercised
explosions	(e.g., table-top or full-scale exercises)	recently)
	There is a warning system in place to notify community residents and businesses of an	National Public alerting system,
	explosion.	EMO alerts,
	There is a warning system in place to notify police, fire and ambulance personnel of an	National Public alerting system,
	explosion	EMO alerts,
Resilience Level	TOTAL : E.g. High, Medium, Low	High
Hazardous	Community officials perform regular safety checks of hazardous material storage	?
materials	structures including chemicals stored under pressure.	
spills (on	Community-based hazardous material spill exercises have taken place in the	Medium (has not been exercised
site, on	community-at-large (e.g., table-top or full-scale exercises)	recently)
road, rail	Fire departments have trained fire fighters to respond to hazardous material spills and have sufficient personal protective equipment (PPE) for all fire fighters.	High (we assume so)

and	Fire fighters and residents have ready access to decontamination sites.	fire yes; residents no
marine)	The fire department has access to products to minimize the spread and contamination	High (we assume EMO, Port
	of the waterways and beaches.	Authorities, or Fire does)
	The fire department has trained Hazardous Material Teams available for deployment	Medium - Some trained Emergency
		personnel, and EMO
	The fire department is aware of the quantity and type of hazardous materials	Low
	travelling by road or rail in close proximity to the community.	
	Local industry have access to products to minimize the spread and contamination of	High ? (Marine port)
	the soil and waterways.	
	Local industry have trained Hazardous Material Teams on site.	High ? (Marine port)
	Centre line guardrails, safer intersections and wider road shoulders are in place in	High
	problematic areas.	
	Roundabouts are in place to calm the flow of traffic.	High
	Police conduct regular safety checks on vehicles carrying hazardous materials.	High
	Police regularly target impaired drivers.	High
	Speed cameras or warning signs are located in places subject to speeding on	
	transportation routes used by trucks carrying hazardous materials.	
	The community has reduced speed limits and/or lower speed zones in areas where	High
	hazardous materials are being transported.	
	The community limits travel of trucks carrying hazardous material in core and	Medium
	residential neighbours.	
	Contrasting materials are in place to clearly mark rail crossings.	n/a
	Development regulations in areas susceptible to rail derailments limit land use, or	n/a
	prohibit development	. /.
	Rail companies limit carrying hazardous materials through, or close by, residential areas in the community.	n/a
	Rail company officials perform regular safety checks of rail cars carrying hazardous	n/a
	materials.	ii/a
	Railway warning systems are visible prior to reaching the crossing.	n/a
	Namway warning systems are visible prior to reaching the crossing.	ii) u
	If applicable, harbour masters are familiar with the harbour and are available to board	?
	and navigate ships.	

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		Marinas have warning system in place to notify boat operators of potential heavy fog	?
		or storms.	
		Officials perform regular safety checks of storage structures (e.g., gas and oil barges) in	?
		marinas and harbours.	
		There is a warning system in place to notify community residents and businesses of a	National Public alerting system,
		hazardous material spill on site/in situ, involving land transport, rail transport, or	EMO alerts,
		marine transport	
		There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
		hazardous material spill on site/in situ, involving land transport, rail transport, or	EMO alerts,
		marine transport.	
	Resilience	TOTAL : E.g. High, Medium, Low	High
	Level		
Power, Water,	Power	All critical facilities (e.g., Emergency Operations Centre) have back-up	High
Food	Outage	generators in place.	
Shortages			
		There are provisions to keep fuel stations open	
			High
		All dairy farmers who have essential power needs (e.g., automatic milking machines)	?
		have back-up power supplies or plans to milk cows over an extended power outage	
		All farmers who have essential power needs (e.g., greenhouses) have back-up power	?
		supplies.	
		All residents who have essential power needs (e.g., on a respirator) have back-up	High (unclear if all do)
		power supplies.	
		Bushes, trees and branches that are growing too close to power lines have been	High
		pruned.	
		Community-based power outage exercises have taken place in schools and the	Medium (has not been exercised
		community-at-large (e.g., table-top or full-scale exercises)	recently)
		Construction and excavation workers know to check for overhead and underground	High
		wires.	
		Critical power lines are located underground	Low
		- note: some utilities argue that underground infrastructure is lso at risk of	
		flooding, and is harder to access and fix.	

	Most businesses have back-up generators in place and ready to be used	Low
	Most residents have back-up generators in place and ready to be used	Low
	The community has designated shelters with back-up power, sources of heat or cooling.	High
	There is a warning system in place to notify community residents of a potential power outage and how to reduce non-essential power usage (e.g., turn-off unnecessary	High - for alerts
	appliances, limit heavy usage to non-peak hours)	Low - for education of public for what to turn-off
	-note: In NB, more residents have wood heat as a back up heat source, and typically help each other. However, The utility in NB does not have smart metering which can help with outage identification, response/restoration, reduce ETR. Whereas Alberta utilities do, however public remains uninformed on energy use behaviors during outages / restoration.	Medium - some properties have smart meters
	There is a warning system in place to notify police, fire and ambulance personnel of a potential power outages	National Public alerting system, EMO alerts, utility alerts
Resiliend Level	Resilience Level TOTAL : E.g. High, Medium, Low	
Water Outage	Back-up generators are in place at pump stations to ensure equipment continues to operate in an extended power outage.	High
	Community-based water outage exercises have taken place in schools and the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
	Are your water / waste water treatment, pipes and pumps above estimated sea level rise and storm surge, or flood events?	Medium
	Inspectors perform regular safety checks of farm and residential wells	Medium
	Inspectors perform regular safety checks of water reservoirs or silos	High
	Inspectors perform regular safety checks of water treatment and distribution systems	High
	The community has updated old and worn out pipes, or pipes made from gray cast iron to prevent pipeline failure in the future	?
	The community has plans in place for water distribution should the community experience a loss of potable water	High
	The community has policies in place to limit non-essential water usage during times of drought	High ?

	Resilience Level	TOTAL : E.g. High, Medium, Low	High
	Food Shortage	Alternate routes are available for the delivery of food (e.g., road and air)	Medium (multiple routes exist, however Confederation Bridge shutdown would have island-wide impact on supply)
	discuss strategies to deal with lack of food Most homeowners have large amounts of frozen food stored and have back-up generators in case of extended power failures The community encourages and supports locally grown food (e.g., community gardens in the summer).		Medium (has not been exercised recently)
			Low
			Medium (one garden, one greenhouse, but could encourage more)
		The community has emergency food stocks stored in the community.	Low - doesn't know how much food
	Resilience Level TOTAL : E.g. High, Medium, Low		Medium
Fires	Brush, Bush and	Before issuing a permit for any prescribed /controlled burns there have to be adequate plans to avoid the fires becoming uncontrolled including scenarios of high	
Grass Fires		winds. Community-based brush, bush and grass fire exercises have taken place in the community-at-large (e.g., table-top or full-scale exercises)	Medium (has not been exercised recently)
		Most residences and all businesses have smoke detectors and fire extinguishers on each floor of the building	Low
		Most residents and businesses have cleared flammable vegetation (e.g., dried grass) within 10 metres of structures and cleared all combustible material (e.g., firewood, debris under porches) within 10 metres.	Low
		Most residents have burn barrels located well away from their homes and have proper ventilation and screens.	Medium
		Most residents have covered building vents and chimneys with wire mesh to prevent flying embers from entering or leaving the home	Medium
		Most residents have home fire evacuation plans and have tested them.	Low
		Most residents have homes that do not have single-paned glass and have metal, clay tile and asphalt shingles with outer surfaces of stucco, metal, brick and concrete which	Low

		offer superior fire resistance to wildfire or logs and heavy timbers (wood and vinyl	
		siding offer very little protection).	
		Most residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to	Medium
		assist in suppressing brush, bush and grass fires.	
		The community and Parks Boards have policies in place to ban outdoor fires and to	High
		advise residents and visitors about these fire bans.	
		The community has cleared and pruned flammable brush, bushes and grasses in an	Low?
		extensive zone around the community core.	
		The community has developed designated evacuation routes.	High
		The community has signage posted (which include the appropriate phone number)	Low?
		encouraging residents and visitors to report any fires which are observed no matter	
		where they are spotted.	
		The community requires new construction to be built using fire-resistant building	Low
		materials and to have sprinkler systems.	
		The Fire Department checks frequently with fire risk monitoring and weather	High
		forecasting agencies such as the Canadian Wildland Fire	
Ir		Information System, provincial/territorial fire agencies and Environment Canada.	
The Fire Department conducts program		The Fire Department conducts programs (e.g., such as Learn Not To Burn) within	?
schools and with youth to prevent arson/fire setting.			
	There is a warning system in place to notify community residents and businesses of a		National Public alerting system,
		potential brush, bush or grass fire and how to prepare for it.	EMO alerts,
		There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
		potential brush, bush or grass fire	EMO alerts,
	Resilience	TOTAL : E.g. High, Medium, Low	Medium
	Level		
	Forest	Before issuing a permit for any prescribed /controlled burns (e.g., slash burning) there	High
	Fires /	have to be adequate plans to avoid the fires being uncontrolled including scenarios of	
Wildfires high winds.		high winds.	
		Forest fighting organizations have held forest fire exercises with scenarios including	?
		forests near the community (e.g., table-top or fullscale exercises)	
		Forestry practices around the community are sustainable and ecologically sound.	n/a ?
		Forestry practices reduce the amount of forest fuel build-up.	n/a ?

	The community and Parks Boards have policies in place to ban outdoor fires and to	High (assumed provincial)
	advise residents and visitors about these fire bans.	
	The Fire Department conducts programs (e.g., such as Learn Not To Burn) within	Medium (assumed they do school
	schools and with youth to prevent arson/fire setting.	visits)
	The forested area around the community is covered by a real-time Lightning Detection	Low
	Network (providing immediate feedback on local lightning) and the Fire Department	
	has access to the information to plan for potential forest fires.	
	There is a warning system in place to notify community residents and businesses of a	National Public alerting system,
	potential forest fire and how to prepare for it.	EMO alerts,
	There is a warning system in place to notify police, fire and ambulance personnel of a	National Public alerting system,
	potential forest fire	EMO alerts,
Resilience	TOTAL : E.g. High, Medium, Low	Mid-high
Level		
Wildland/	Before issuing a permit for any prescribed /controlled burns there have to be	
Urban	adequate plans to avoid the fires being uncontrolled, including scenarios of high	
Interface	winds.	
Fires	Community-based wildland/urban interface fire exercises have taken place in the	Medium (has not been exercised
	community-at-large (e.g., table-top or full-scale exercises)	recently)
	Forestry practices around the community are sustainable and ecologically sound.	
	Most homes do not have single-paned glass and have metal, clay tile and asphalt	
	shingles.	
	Most residences and all businesses have smoke detectors and fire extinguishers on	High
	each floor of the building	
	Most residents and businesses are able to access water to sprinkle/hose down roofs	High
	and areas surrounding their home.	
	Most residents and businesses have cleared and pruned flammable trees and	Low (assumed)
	vegetation (e.g., dried grass) within 10 metres of structures and cleared all	
	combustible material (e.g., firewood, debris under porches) within 10 metres.	
	Most residents have burn barrels located well away from their homes and have proper	High (not many have burn barrels)
	ventilation and screens.	, , , , , , , , , , , , , , , , , , , ,
	Most residents have covered building vents and chimneys with wire mesh to prevent	
	flying embers from entering or leaving the building	

	Most residents have home-based fire evacuation plans and have tested them.	Low-Mid
	Most residents have homes with outer surfaces of stucco, metal, brick and concrete	Low-Mid (many wood / vinyl)
	which offer superior fire resistance to wildfire or logs and heavy timbers (wood and	
	vinyl siding offer very little protection).	
	Most residents have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to	Medium (assumed homeowners do
	assist in suppressing wildfires	but multiplexes don't)
	Most residents have spaced trees so that the crowns of individual trees are 3 to 6	Low
	metres apart and have removed or reduced the number of evergreen trees within 10	
	to 30 metres from their homes.	
	The community and Parks Boards have policies in place to ban outdoor fires and to	High (assumed provincial)
	advise residents and visitors about these fire bans.	
	The community has cleared and pruned flammable brush, bushes and grasses in an	Unknown
	extensive zone around the central community core.	
	The community has developed designated evacuation routes.	Low-Medium (need more proactive
		communication to improve
		awareness)
	The community has signage postage (which include the appropriate phone number)	Low (assumed)
	encouraging residents and visitors to report any fires which are observed no matter	
	where they are spotted.	
	The community requires new construction to have sprinkler systems and to be built	Medium (assumed in building code)
	using fire-resistant building materials.	Heate Community
	The Fire Department checks frequently with fire risk monitoring and weather	High (assumed)
	forecasting agencies such as the Canadian Wildland Fire	
	Information System, and Environment Canada. The Fire Department conducts programs (e.g., such as Learn Not To Burn) within	Madium (assumed they do school
	The Fire Department conducts programs (e.g., such as Learn Not To Burn) within schools and with youth to prevent arson/fire setting.	Medium (assumed they do school visits)
	There is a warning system in place to notify community residents and businesses of a	National Public alerting system,
	potential wildland/urban interface fire and how to prepare for it.	EMO alerts,
	There is a warning system in place to notify police, fire and ambulance personnel of an	National Public alerting system,
	wildland/urban interface fire	EMO alerts,
Resilience	TOTAL : E.g. High, Medium, Low	Medium
Level	To the Leight Highly Modelling Edward	Wediani
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