HRVA Prioritizing Risk & Resiliency Strategies

August 23, 2022 7:00pm

Microsoft Teams

In Attendance

- Laura Blackwell
- Jim Daigneault
- Christopher Newell
- > Andy Muma

Regrets

- > Tim Anderson
- Mark Power
- > Jerry Madam
- Sandy Anaka
- Byron Sketchly
- Ryan Fillmore

- Jessie Zhu
- Wendy Curtis
- Vince Ross
- > Tom Stringfellow
- > Alana Dickson
- > Dwayne Anderson
- Cindy Cockle
- Karen Hutton
- Maureen Czirfusz

Introduction Summary Hazard Matrix



- > This is the common Hazard Risk Matrix.
- The hazard list referenced within this report is based on the 37 / 57 Hazards A Risk Matrix, as shown here is a useful tool for a local authority during the process of risk management to help determine options to reduce, avoid, accept, or transfer responsibility of the four pillars of emergency management (Mitigate, Prepare, Respond, Recover).
- > Methodology How is the matrix created and what does it tell us:
 - The first access is the Likelihood Scoring we used the Median Score.
 - The next is the Consequence (impact expressed in numbers) Scoring using the mean, which is the average score.

Hazard Scoring

> This table summarizes the likelihood scoring and consequence scoring. The different colours represent where they fall on the Hazard Risk Matrix for Acceptable, Tolerable and Unacceptable.

Priority		Hazard List	Current Likelihood	Consequence Total	Future Likelihood
1	赫	Wildfire	D - Likely	30	D - likely
2	m	Dam and Spillway Failure	B - Unlikely	23	B - Unlikely
3		Rail Incidents	C - Probable	23	C - Probable
4	<u>eb</u>	Hazardous Material Spill	C - Probable	22	C - Probable
5	*	Human Disease	D - likely	20	D - likely
6		Dike Failure	C - Probable	20	B - Unlikely
7	j.	Explosions	B - Unlikely	20	B - Unlikely
8	P	Oil or Gas Pipeline Spill	C - Probable	20	C - Probable
9		Lake, River, and Stream Flooding	D - Likely	19	D - likely
10	i A	Mine Incident	B - Unlikely	18	B - Unlikely
11	Â	Structure Fire	D - Likely	18	D - likely
12	ţ,	Public Health Crisis	C - Probable	17	D - likely
13	Ċ.	Water Service Interruption	C - Probable	15	C - Probable
14	茶曲	Extreme Heat	C - Probable	14	D - likely
15	<u>I</u> .	Structural Failure	B - Unlikely	14	C - Probable
16	×.	Public Disturbance	C - Probable	13	D - likely
17	•	Extreme Cold	D - Likely	13	D - likely
18	甶	Earthquake	B - Unlikely	13	B - Unlikely
19	1	Plant disease and Pest Infestation	C - Probable	13	D - likely
20	-445	Food Source Interruption	C - Probable	12	D - likely
21	<u>*</u> £	Drought	C - Probable	12	C - Probable
22	N	Landslide/ Debris Flow	B - Unlikely	12	C - Probable
23	\bigcirc	Snowstorms and Blizzards	E - Almost Certain	12	E - Almost Certain
24	RA	Wastewater Interruption	B - Unlikely	12	B - Unlikely
25	A	Motor Vehicle Incident	E - Almost Certain	11	E - Almost Certain
26	4	Electrical Outage	E - Almost Certain	11	E - Almost Certain
27	+	Aircraft Incident	B - Unlikely	10	C - Probable

Priority	Hazard List	Current Likelihood	Consequence Total	Future Likelihood
28 (A	Telecommunications Interruption	C - Probable	10	D - likely
29	Animal Disease	C - Probable	9	C - Probable
³⁰ 👌	Cyber Security Threat	C - Probable	9	D - likely
31	Fuel Source Interruption	C - Probable	9	C - Probable
32	Air Quality	E - Almost Certain	9	E - Almost Certain
³³ -	Transportation Route Interruption	C - Probable	9	D - likely
34	Freezing Rain or Drizzle	E - Almost Certain	9	E - Almost Certain
း ရ	Hurricane/ Typhoon/High Wind	D - Likely	8	D - likely
36 🔗	Lightning	E - Almost Certain	8	E - Almost Certain
37 🔆 ♥	Space Weather	A - Rare	5	B - Unlikely

Question: Was there any surprises?

Comment: One participant thought flooding would have been higher.

Consequence Scoring Summary

0- None	1 - Low	2 - Medium	3 - High	4 - Extreme
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Here is a visual breakdown of the total scores into each of the sub-categories is reflected in the consequence stacking table.



Hazard Matrix

> Here are the results shown in the Hazard Risk Matrix

	Electoral Area G HRVA Risk Piority Matrix					
	Re	duce		Avoid		
High	Lightning (8)	Snowstorms and Bitzards (12) Motor Vehicle Incident (11) Electrical Outage (11) Air Quality (9) Freezing Rain or Drizzle (9)				E - Almost Certain
	Hurricane/ Typhoon/High Wind (8)	Extreme Cold (13)	Human Disease (20) Lake, River, and Stream Flooding (19) Structure Fire (18)	Wildfire (30)		D - Likely
lihood		Public Health Crisis (17) Water Service Interruption (15) Extreme Heat (14) Public Disturbance (13) Plant Disease (13) Food Source Interruption (12) Drought (12) Telecommunications Interruption (10) Animal Disease (9) Cyber Security Threat (9) Fuel Source Interruption (9) Transportation Route Interruption (9)	Rail Incidents (23) Hazardous Material Spill (23) Dike Failure (20) Oil or Gas Pipeline Spill (20)			C - Probable
Like		Structure Failure (14) Earthquake (13) Landslide (12) Wastewater Interruption (12) Aircraft Incident (10)	Dam and Spillway Failure (23) Explosions (20) Mine Incident (18)			B - Unlikely
Mo	Space Weather (5)					A - Rare
	0-8	9 - 17	18 - 26	27 - 35	36 - 44	
Low	Accept Transfer					High
	Consequences					

Resiliency Strategies



Going back to this idea of how do we use this matrix when looking for Resiliency Strategies look at how the unacceptable and tolerable hazards can be mitigated. Strategies can include ways to reduce the risk, avoid the risk or transfer the risk.

Identifying Risk Reduction Measures

- Emergency Response:
 - Strategies for increasing response capacity and coordination.
- Programs, Services and Education:
 - Strategies for enhancing public awareness and capabilities of response personnel.
- > Social and Non-Structural Mitigation:
 - Plans, Bylaws, Regional Strategies for encouraging safer more sustainable communities.
- Environmental Mitigation:
 - Strategies for repairing or preventing further environmental damage.
- Economic Mitigation
 - Strategies for increasing regional economic resilience.
- Structural Mitigation:
 - Strategies for preventing damage to infrastructure and homes.
- Some examples of risk reductions measures are:
- Village of Granisle, District of Houston and RDBN have an Emergency Preparedness Plan in place.

- > RDBN Protective Services hosts the Annual Seasonal Preparedness meeting.
- > Monthly and semi-annual Regional ESS meeting.
- > Annual NESST conference.
- Voyent Alert System.
- > CN Rail First Responder Training Program
- > PNG/Pipeline Safety Program.
- > RDBN FireSmart Program.
- > RDBN Housing Needs assessment done 2021.
- > RDBN, Topley, Houston, Granisle rural official community plan.
- > Wildfire protection plan.
- > Rural fire protection.
- > Regional Economic Development Plan 2022-2024:
 - Improve or develop critical infrastructure to support economic and social development.
 - Support stability and growth in the agriculture sector and small business.
 - To increase and streamline communications and partnerships within and outside of the region.

Here is an example of a strategy providing Fire Protection to a specified area of the Electoral Area.







Risk Reduction Measures Form

- > When considering your suggestions please consider:
 - What is Practical?
 - What falls under the jurisdiction of the RDBN? What can the RDBN do?
 - What risks does the RDBN to transfer and advocate for?
 - What risks can external agencies reduce?
 - What risk can residents assist in reducing?
 - How to we reduce, transfer and avoid risks? Where are the opportunities.

Question: Are you looking for one suggestion per hazard?

Answer: There is no limit, tell us if there is an area, we can work on to reduce the risk, improve the response, or recovery.

Next Steps

- Host a lunch or dinner with the completion of Draft HRVA and present to the committee.
- > Set a calendar reminder for the committee to submit the Risk Reduction Measure Form.