HRVA

Prioritizing Risk & Resiliency Strategies

October 6, 2022 10:00 am

Microsoft Teams

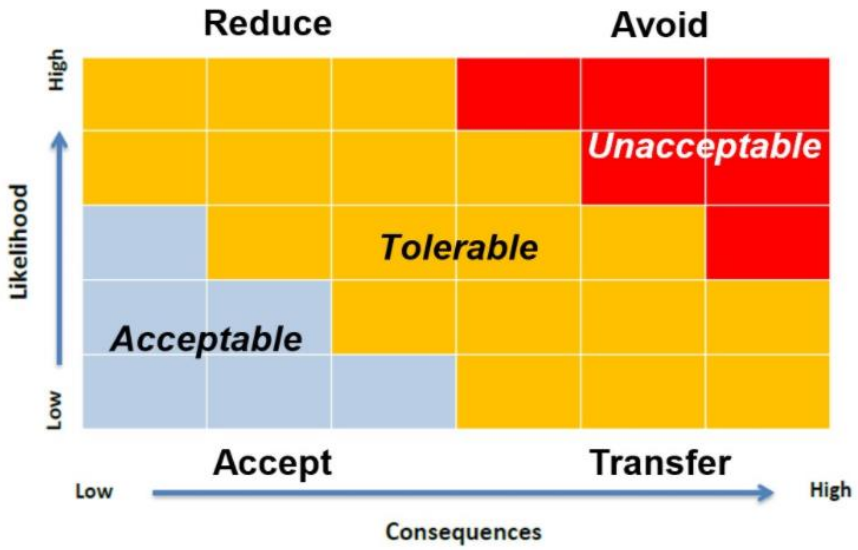
In Attendance

- Director Tom Greenaway
- Ryan McVey
- Nicole McVey
- Jeremiah Louis
- Cam McCormick
- Christopher McLean

Regrets

- Cynthia Hill
- Kayla Pierre
- Charlene Tom
- Vale Gainor
- Jason Bouwman
- Erika Wadelius
- Paul Broen
- Drew Hunsaker
- Nancy Schlamp
- Craig Houghton
- Chelsea Heyer
- Jafar Gadzhiev
- Jana Gainor
- Keith Gordon
- Cheryl Peterson

Introduction Summary Hazard Matrix



- This is the common Hazard Risk Matrix.
- The hazard list referenced within this report is based on the 39 of the 57 hazards, the Hazard Risk Matrix, as shown here, is a useful tool for a local authority during the process of determining the level of risk and the potential consequences 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:
  - For the Likelihood Scoring – we used the Median Score.
  - For the Consequence (impact expressed in numbers) Scoring we used 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.

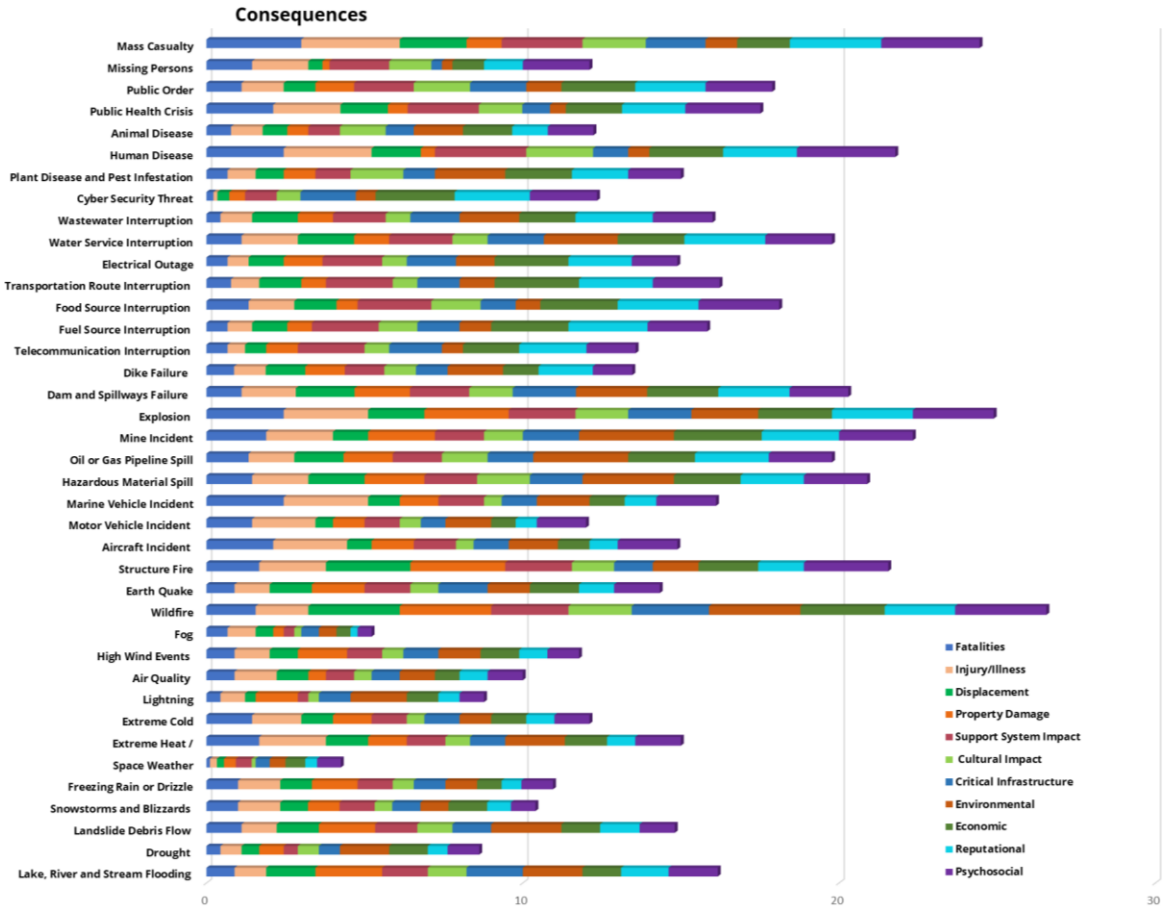
Priority	Hazard List	Current Likelihood	Consequence Total	Future Likelihood
1	Wildfire	D - Likely	27	E - Almost Certain
2	Explosions	B - Unlikely	25	B - Unlikely
3	Mass Casualty	B - Unlikely	24	B - Unlikely
4	Mine Incident	C - Probable	22	C - Probable
5	Human Disease	D - Likely	22	D - Likely
6	Structure Fire	D - Likely	22	D - Likely
7	Hazardous Material Spill	C - Probable	21	C - Probable
8	Dam and Spillway Failure	B - Unlikely	20	D - Likely
9	Oil or Gas Pipeline Spill	C - Probable	20	C - Probable
10	Water Service Interruption	B - Unlikely	20	C - Probable
11	Food Source Interruption	C - Probable	18	C - Probable
12	Public Disturbance	C - Probable	18	C - Probable
13	Public Health Crisis	C - Probable	18	D - Likely
14	Transportation Route Interruption	C - Probable	16	C - Probable
15	Lake, River, and Stream Flooding	D - Likely	16	D - Likely
16	Marine Vessel Incident	C - Probable	16	C - Probable
17	Electrical Outage	D - Likely	16	D - Likely
18	Fuel Source Interruption	C - Probable	16	C - Probable
19	Extreme Heat	C - Probable	15	D - Likely
20	Plant disease and Pest Infestation	C - Probable	15	D - Likely
21	Aircraft Incident	C - Probable	15	C - Probable
22	Wastewater Interruption	B - Unlikely	15	B - Unlikely
23	Landslide/Debris Flow	C - Probable	15	C - Probable
24	Earthquake	B - Unlikely	14	B - Unlikely
25	Telecommunications Interruption	C - Probable	14	C - Probable
26	Dike Failure	B - Unlikely	13	B - Unlikely
27	Cyber Security Threat	B - Unlikely	12	C - Probable
28	Animal Disease	C - Probable	12	C - Probable
29	Extreme Cold	D - Likely	12	D - Likely

Priority	Hazard List	Current Likelihood	Consequence Total	Future Likelihood
30	Missing Persons	D - Likely	12	D - Likely
31	Motor Vehicle Incident	E - Almost Certain	12	E - Almost Certain
32	Hurricane/ Typhoon/High Wind	D - Likely	12	D - Likely
33	Freezing Rain or Drizzle	D - Likely	11	D - Likely
34	Snowstorms and Blizzards	E - Almost Certain	10	E - Almost Certain
35	Air Quality	C - Probable	10	D - Likely
36	Lightning	D - Likely	9	E - Almost Certain
37	Drought	C - Probable	9	C - Probable
38	Fog	C - Probable	5	D - Likely
39	Space Weather	B - Unlikely	4	B - Unlikely

Consequence Scoring Summary

0- None	*1 - Low*	*2 - Medium*	*3 - High*	*4 - Extreme*

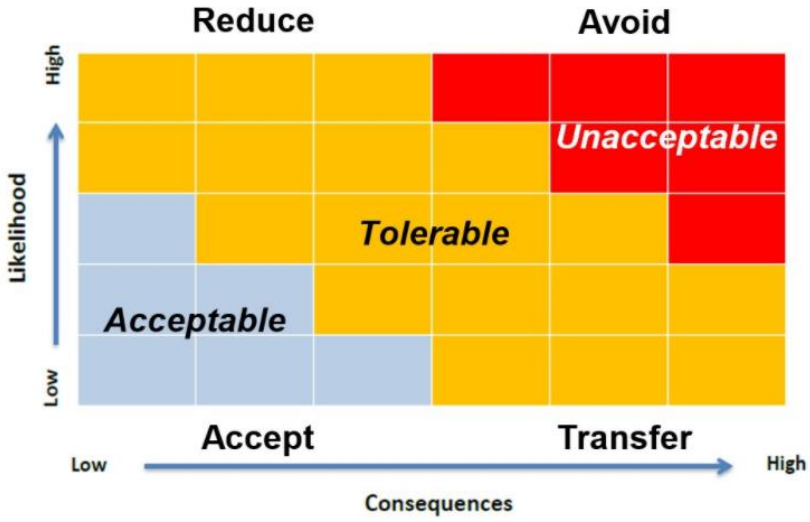
- Here is a visual breakdown of the total scores for the Consequence Scoring, based on the 11 sub-categories, which were totaled and into are reflected in the consequence stacking table.



Hazard Matrix

Here are the results shown in the Hazard Risk Matrix.

Resiliency Strategies



- Going back to the idea of how we use the Hazard Matrix when looking for Resiliency Strategies, the highest priority Risk Reduction Ideas would be for the Unacceptable and

Tolerable hazards. Strategies can include ways to reduce the risk, avoid the risk or transfer the risk.

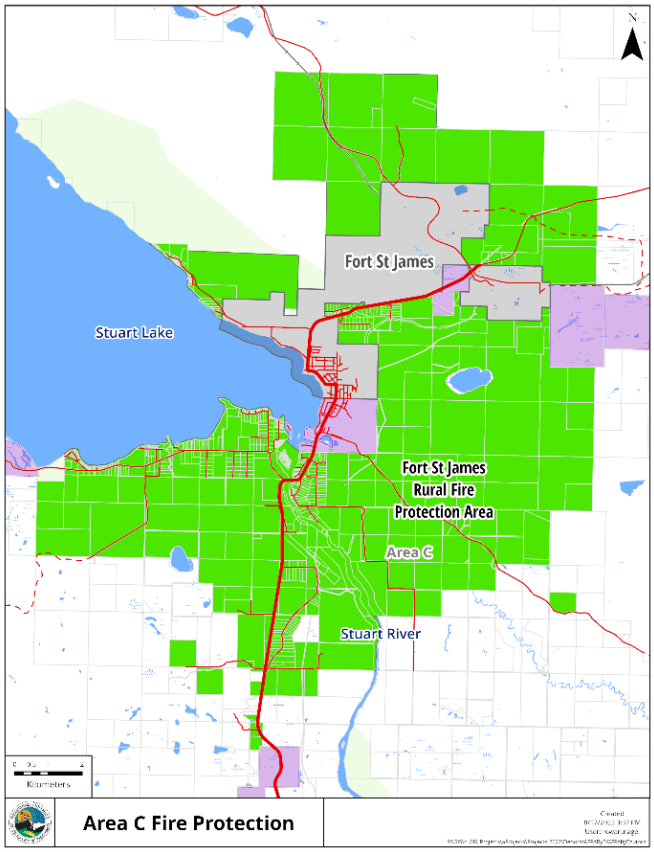
Identifying Risk Reduction Measures

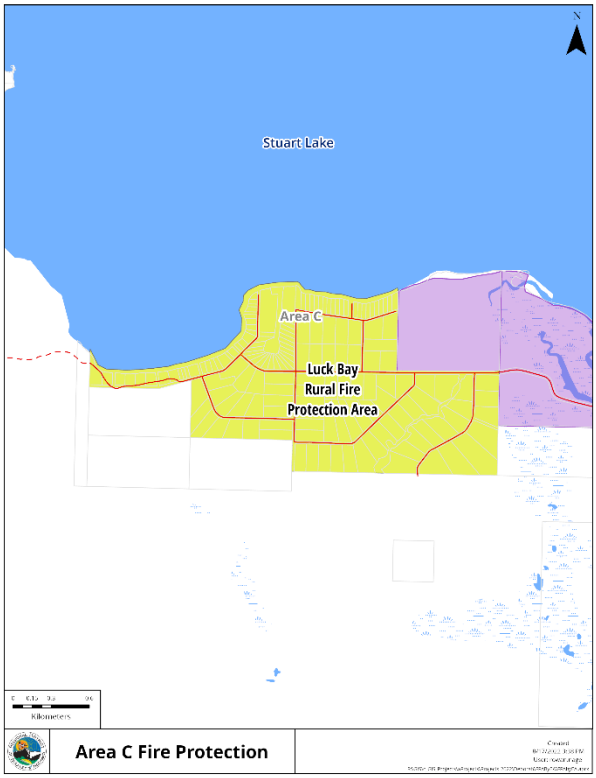
- Emergency Response:
  - Strategies for increasing response capacity and coordination.
- Programs, Services and Education:
  - Strategies for enhancing public awareness and capabilities of response personnel.
- Social and Non-Structural Mitigation:
  - Plans, Bylaws, Regional Strategies for encouraging 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:

- FireSmart Program.
- The Luck Bay and District of Fort St. James Rural Fire Protection Service Areas are an example of a strategy providing Fire Protection to a specified area of the Electoral Area.


N
Area C
Kilometers
Area C Fire Protection


N
Fort St James
Stuart Lake
Fort St James
Rural Fire
Protection Area
Area C
Stuart River
Kilometers
Area C Fire Protection


N
Stuart Lake
Area C
Luck Bay
Rural Fire
Protection Area
Kilometers
Area C Fire Protection

Comments/Questions:

- Since wildfire aspect has been designated as the highest risk by the committee, would it be beneficial to submit a report on the risk mitigation activities (FireSmart, CRI) that we have in place?
  - Yes, if you could provide this information to us we will include this in the existing strategies in place and provide this to the committee.
- In the future we should hold a community review for the residents to have an opportunity to provide feedback.
  - We (RDBN) do plan to host a public meeting in each electoral area.
  - The reports will be posted on the RDBN website.

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 do we reduce, transfer, or avoid risks? Where are the opportunities.

Next Steps

- Return completed Risk Reduction Measure Form by ***Friday October 21 by 4:30 pm***.
- The RDBN will be hosting a lunch or dinner once the draft HRVA is completed and will present the document to the committee.