HRVA

Prioritizing Risk & Resiliency Strategies

September 26, 2022 2:00 pm

Microsoft Teams

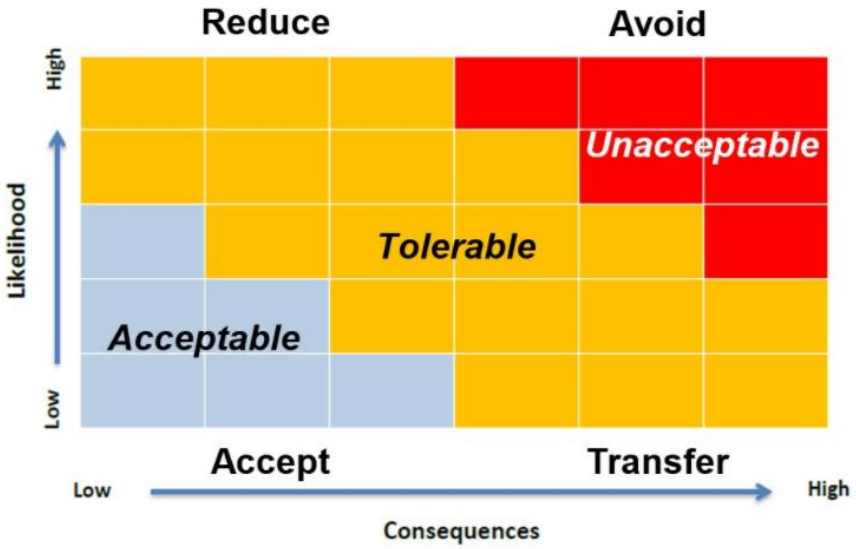
In Attendance

- Director Mark Fisher
- Jeff Walsh
- Megan D'Arcy
- Eva McNulty
- John Johnson
- Matt Herzog
- Megan Glover
- Derek Dickson

Regrets

- Jason Majore
- Dean Klubi
- Anastasia Ledwon
- Debby Meissner
- Don Ford
- Cormac Hikisch
- Lindsay Newman
- Jaclyn Drygas
- Jay Moreton

Introduction Summary Hazard Matrix



- This is the common Hazard Risk Matrix.
- The hazard list referenced within this report is based on the 37 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.

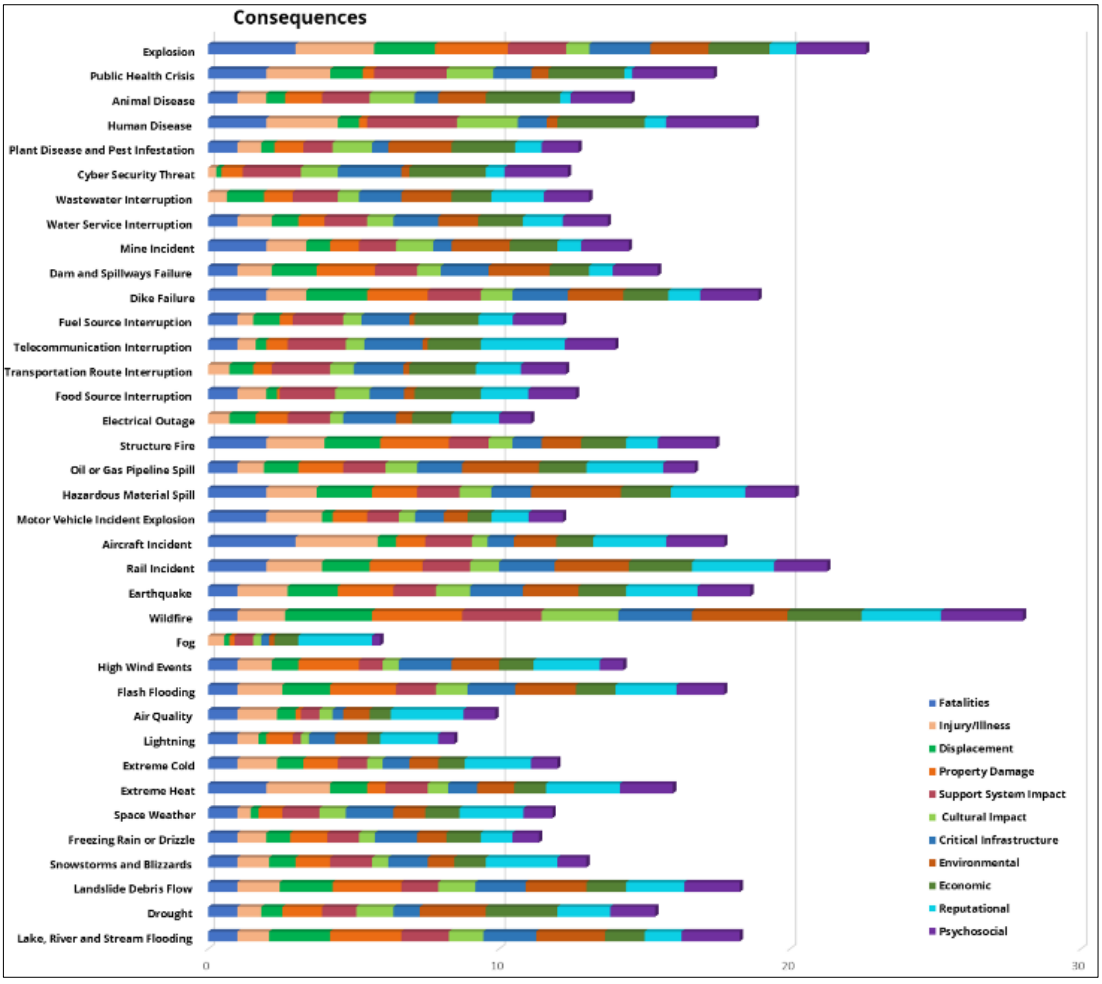
Priority	Hazard List	Current Likelihood	Consequence Total	Future Likelihood
1	Wildfire	D - Likely	28	D - Likely
2	Explosions	B - Unlikely	23	B - Unlikely
3	Rail Incidents	D - Likely	21	D - Likely
4	Hazardous Material Spill	D - Likely	20	D - Likely
5	Dike Failure	B - Unlikely	19	C - Probable
6	Human Disease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

Priority	Hazard List	Current Likelihood	Consequence Total	Future Likelihood
29	Fuel Source Interruption	C - Probable	12	D - Likely
30	Motor Vehicle Incident	E - Almost Certain	12	E - Almost Certain
31	Extreme Cold	D - Likely	12	D - Likely
32	Space Weather	B - Unlikely	12	B - Unlikely
33	Freezing Rain or Drizzle	E - Almost Certain	11	E - Almost Certain
34	Electrical Outage	E - Almost Certain	11	E - Almost Certain
35	Air Quality	E - Almost Certain	10	E - Almost Certain
36	Lightning	E - Almost Certain	8	E - Almost Certain
37	Fog	E - Almost Certain	6	E - Almost Certain

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.



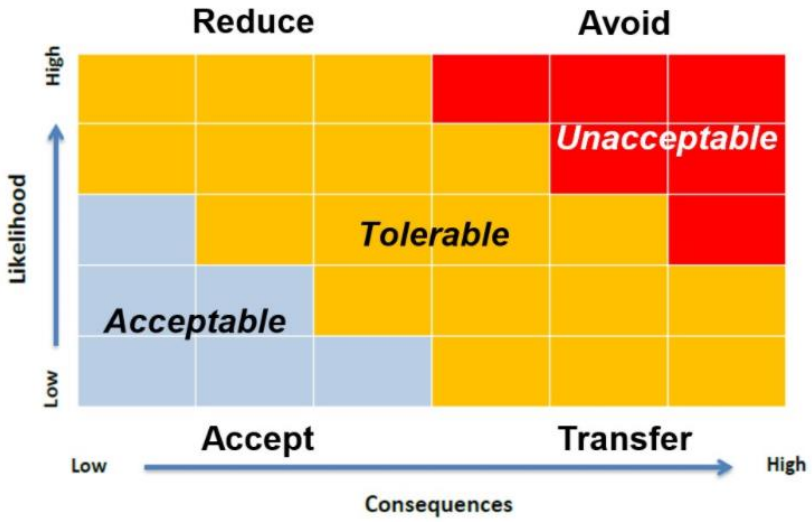
Hazard Matrix

Here are the results shown in the Hazard Risk Matrix.

Question:

- For clarification regarding the Hazard Matrix. When reading this matrix, the reduce and avoid is at the top, it looks like the reduce encompasses the first three columns and avoid encompasses the three columns to the right. Is this correct?
  - Avoid is in the mid - upper section, you would want to avoid the yellow section as these are a high consequence.

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

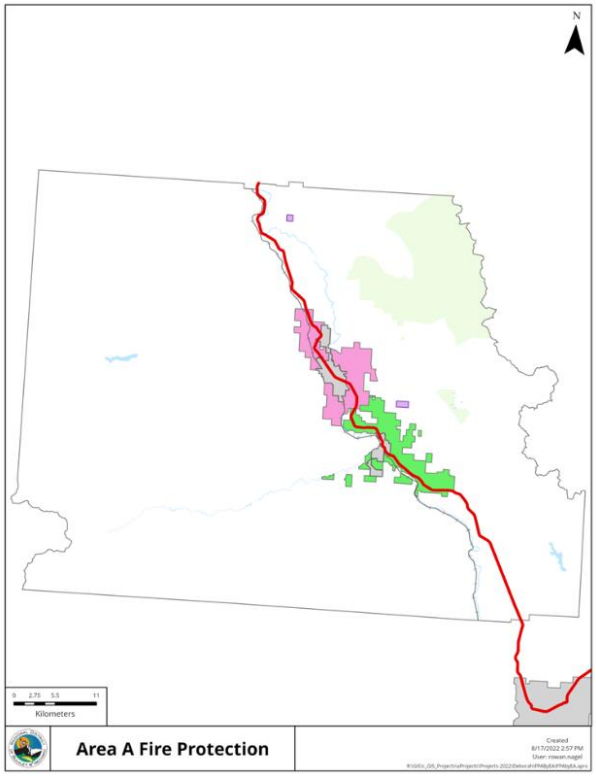
Tolerable hazards. Strategies can include ways to reduce the risk, avoid the risk or transfer the risk.

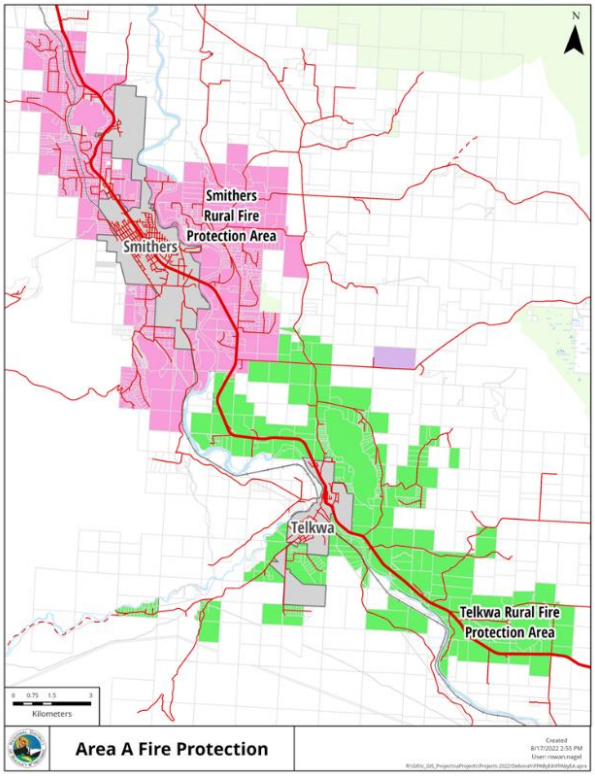
Identifying Risk Reduction Measures

- 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 Telkwa and Town of Smithers Rural Fire Protection Service Areas are 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 do we reduce, transfer, or avoid risks? Where are the opportunities.

Next Steps

- Return completed Risk Reduction Measure Form by ***Tuesday October 11 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.