

Chapter 9 - Mitigation Strategies and Priorities

The next step in the hazard mitigation planning process is to identify mitigation actions suitable to the community, evaluate the effect the action will have on the specified mitigation objective and prioritize actions to decide what sequence or order these actions should be pursued.

Mitigation Categories

Mitigation actions can be grouped into six broad categories:

1. Prevention: Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.

2. Property Protection: Actions that involve modification of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

3. Public Education and Awareness: Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

4. Natural Resource Protection: Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

5. Emergency Services: Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.

6. Structural Projects: Actions that involve construction of structures to reduce the hazard impact. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

Presque Isle Mitigation Planning Committee (LEPC): subcommittee meeting to update risk and vulnerability assessment, goals and objectives, and mitigation strategies, June 14, 2012.

Presque Isle Mitigation Planning Committee (LEPC): Review draft plan and approve for review and comment.

Identification of Mitigation Projects and Actions

The public was invited to a meeting held in Presque Isle County on November 20, 2012 to discuss and identify hazards and possible mitigation actions. Communities, agencies, LEPC and general public were invited to attend the workshop that was held in conjunction with the Presque Isle County Local Emergency Planning Committee.

Evaluation and Prioritization of Mitigation Actions

The Presque Isle LEPC met on June 14, 2012, to evaluate and prioritize the list of mitigation actions. Governmental level, agencies and organizations that could carry responsibility for completing the action and possible funding sources were also identified. Evaluation criteria included: social impacts, technically feasible, administrative capabilities, political impacts, legal issues, cost effectiveness environmental, and overall benefit to the community. Appendix C shows the projects and associated evaluation criteria.

The committee used a normative ranking process to rank the list of projects compiled at earlier sessions. The planning team chose to use an approach termed “multi-voting.” Actions were ranked by hazard type. Each team member was given half the total number of potential actions to use as individual votes. In other words, if there were 20 mitigation actions for wildfires, participants could vote for 10 of the actions. The total number of votes was tabulated for each action, and based on that score, actions were ranked, and reflected under priorities on the following Mitigation Action tables. Those items that did not qualify as “priority projects” are included at the end of the list for each hazard type, if they were considered applicable to the county situation. Therefore, all actions that were considered relevant by the committee are included somewhere on the project list. Next, the committee identified possible responsible governments, agencies and organizations that might provide general funding for the respective projects. Specific site application and an anticipated timeframe for completing the actions were also estimated.

Prioritized Hazard Mitigation Projects and Actions

See following tables

Mitigation Actions & Implementation Strategies A. Multi-Hazard Actions, #1	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Continue to develop Emergency Response Team program to help prepare for all hazard events in the county.	High	A, D, W	A, H, T	Countywide	Good team development/training in place	On going	On going
2. Provide trained, equipped, and prepared search and rescue teams.	High	A, D, W	C, H, T	Countywide	Several teams available for deployment	Short-term	Short-term
3. Promote need and implement study re-installation of siren system across county	High	A, D, W	T	Countywide	Continue to assess		
4. Identify feasible sites for public early warning systems and networks and seek funding to install.	High	A, D	T	Rogers City, Onaway, Posen	EAS and LP-1 and 2 in place	Short-term	Short-term
5. Ensure that the County and individual communities have adequate equipment, staff, and training to respond to transportation-related accidents specific to their needs.	High	A, D, W	C, T	Countywide	Good structure in place for fire and ems	Ongoing	Ongoing
6. Communities will acquire and maintain an adequate level of emergency power generators to supply emergency water needs, wastewater processing, emergency communications, emergency health care, and shelters.	Medium	A, D, W	C, Q, T	Countywide	Good progress, and ongoing	Mid-term	Mid-term
7. Review current status and provide back-up generators to maintain community infrastructure at acceptable operating levels during extended power failures.	Medium	A, B	C, T	Countywide	Continuing to address and improve	Mid-term	Mid-term
8. Develop and enhance security and anti-terrorist/sabotage/civil disturbance measures.	Medium	A	Q, T	Countywide	Ongoing	Long-term	Long-term
9. Develop and implement strategy to provide more planning for response to terrorist acts.	Medium	A, W, F	Q, T	Countywide	Ongoing	Long-term	Long-term
10. Review and develop site emergency plans for schools, factories, office buildings, shopping malls, hospitals, correctional facilities, etc. to cover all potential hazards.	Medium	A, R, D, W	T	Rogers City, Onaway, Posen	Ongoing	Ongoing	Ongoing
11. Organize outreach program to vulnerable populations during and after hazard events, including wildfires, extreme winter and summer weather events, periods of extreme temperatures, public health emergencies, and other hazards that can impact the community.	Medium	A, H	C, T, I	Countywide	Utilize 211 and volunteer agencies	Short-term	Short-term
12. Encourage residents to develop a Family Disaster Plan that includes the preparation of a Disaster Supplies Kit.	Medium	A	C, H, T, I, N	Countywide	Ongoing	Mid-term	Mid-term
13. Promote and implement solutions for keeping roads and driveways accessible to vehicles and fire equipment.	Medium	D	Q, T	Countywide	Ongoing	Ongoing	Ongoing
14. Encourage continuation of house numbering program	Medium	B	T	Countywide	Ongoing	Ongoing	Ongoing
15. Conduct workshops at community gatherings to encourage residents to develop a Family Disaster Plan, which includes the preparation of a Disaster Supplies Kit.	Low	A, I	C, H, T, I, N	Countywide	Ongoing	Mid-term	Mid-term
16. Build the capabilities of the county GIS program to function as a tool to address multiple hazards. This effort would require the creation/updating of datasets such as parcels/ownership, location of all structures, driveways with ingress/egress conditions, roads, forest types, ownership types, floodplains, utilities (power lines, gas lines and water lines), wetlands, water features, bridges and culverts, (SARA III sites)	Low	B	C, T, I	Countywide	New GIS system in place with continued upgrades	Long-term	Long-term
17. Increase usage of NOAA Weather Radio by subsidizing purchase and distribution of radios to county residents, organizations and businesses. Use NOAA radios as a community emergency alert system to information on hazard events.	Low	M, K	T	Countywide	Working with the NWS to improve reception	Mid-term	Mid-term

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B. County	H. District Health Dept.	N. Civic Gr. & Churches	T. Federal Government
C. Local Units of Gov.	I. American Red Cross	O. National Weather Service	U. landowners
D. Local Fire Dept.	J. USFS & MDNR	P. Utility Company	V. Salvation Army
E. County Road Commission	K. Insurance Companies	Q. State	W. Police
F. NEMCOG	L. Real Estate Co.	R. Schools	

Mitigation Actions & Implementation Strategies A. Multi-Hazard Actions, #2	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
18. Study and evaluate methods to improve NOAA Weather radio reception in county.	Low	O	T	Countywide	Working with the NWS for additional towers	Mid-term	Mid-term
19. Explore and implement plan for distribution of NOAA radios throughout community	Low	A – I	T, B	Countywide	Ongoing	Short-term	Short-term
20. Develop an all hazards education and awareness program in schools, which includes classroom presentations and incorporating wildfire and weather hazard preparedness into school curriculums.	Low	A, B, C, R,	B, T	Rogers City, Onaway, Posen	Ongoing	Mid term	Mid term
21. Produce and distribute family emergency preparedness information relating to all natural hazards affecting County.	Low	A, B, C, I, R	B, C, Q	Countywide	Available at County offices and website	Ongoing	Ongoing
22. To address multiple hazards in the county improve tree trimming and maintenance efforts to prevent limb breakage and safeguard nearby utility lines. The end goal is to create and maintain a disaster-resistant landscape in public rights-of-way.	Low	P	P	Countywide	Ongoing	Ongoing	Ongoing
23. Study and implement development of public information to cover hazards effecting county.	Low	A, B, C, Q, T	B, C, T	Countywide	Ongoing	Ongoing	Ongoing
24. Where feasible and cost effective (more densely populated areas) bury and protect power and utility lines.	Low	P	P	Countywide	Continue to encourage	Long-term	Long-term
25. Review and improve program to provide regular maintenance and equipment checks of all critical equipment.	Low	A, B, C, Q	A, B, C	Countywide	Ongoing	On going	On going
26. Study and promote installation of automatic NOAA radio systems in new residential construction.	Low	B, Q	B, Q	Countywide	None	Long-term	Long-term
27. Explore methods to provide NOAA radios at cost or as reward for completing "Family disaster Plan"	Low	A – I	T, B	Countywide	Ongoing	Mid-term	Mid-term
28. Develop plan to identify and inform residents of "Safe Areas" during festivals/events. (include signs and directions to shelters)	Low	B	A, B, C	Countywide	In development	Mid-term	Mid-term
29. Communities will work with the Federal Emergency Management Agency (FEMA) to identify flood plains.	Low	A, B, C	T	Countywide	Ongoing	Short-term	Short-term
30. Ensure key gasoline stations have the capacity to pump gasoline during power outages.	Low	B, C	M, T	Rogers City, Onaway, Posen Countywide	Some in place... Ongoing	Mid term	Mid term
31 Pre-planning for debris management staging and storage areas ...	Low	B, C	B, C	Countywide	COMBINED WITH SUMMER WEATHER	Mid term	Mid term
32. Expand community awareness of evacuation plans.	Low	A, B, C	B, C	Countywide	Ongoing	Mid term	Mid term
33. Identify escape routes and emergency snow routes.	Low	A, E	A, E	Countywide	Protocol in place	Mid term	Mid term
34. Review and improve strategy for providing public with emergency telephone numbers	Low	A	B, C, Q	Countywide	EAS and Radio	Mid term	Mid term

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F. NEMCOG	L. Real Estate Co.	R. Schools	

Mitigation Actions & Implementation Strategies B. Severe Winds	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Review regulations and implement necessary changes to insure proper anchoring of manufactured homes and exterior structures...	High	B, C, K	T	Countywide	Ongoing	Mid-term	Mid-term
2. Encourage securing loose materials, yard and patio items indoors or where winds cannot blow them about.	High	A, K	T	Countywide	Ongoing	Short-term	Short-term
3. Review current and proposed improvements to wind engineering measures and construction techniques to strengthen public and private structures against severe wind damage	Medium	B	T	Countywide	Ongoing	Mid-term	Mid-term
4. Acquire portable signs to inform motorists of high wind area, lake effect snow area and road glazing area on major highways.	Medium	A, O	O	Countywide	In Place	Long-term	Long-term

Mitigation Actions & Implementation Strategies C. Infrastructure Failure	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Review and improve mutual aid assistance for failures in utility and communications system.	High	A, B, D, W	B, C, Q	Countywide	In place	Long-term	Long-term
2. Review and develop strategies to identify and employ generators for backup power at critical facilities.	High	A, B, C	M, T	Rogers City, Onaway, Posen	Ongoing... funding issues	Mid-term	Mid-term
3. Review and develop strategies to insure redundancies in utility and communications systems, especially "lifeline" systems.	Medium	A	M, T	Countywide	Ongoing	Long-term	Long-term
4. Identify electrical systems that will fail due to overload and develop "Rolling blackout" strategy	Medium	P	P	Countywide	Ongoing	Long-term	Long-term
5. Identify sites and obtain support to improve critical road/stream crossings.	Medium	C, E, N,	C, E, N	Countywide	In place	Mid-term	Mid-term

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Mitigation Actions & Implementation Strategies D. Structural Fire	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Develop strategy to standardize equipment so all firefighters in County system can operate any piece of equipment.	High	A,B, C,D	Q, T	Countywide	In place with ongoing training	Mid-term	Mid-term
2. Increase use of CRTC Regional Fire Training Center for County Fire Departments.	High	A,D,	T	Countywide	Full partnership in place	Mid-term	Mid-term
3. Identify adequate water supplies for emergency firefighting, areas lacking adequate water supplies and develop strategy to construct dry hydrants.	Medium	C , D, U	Q, T	Countywide	In place	Mid-term	Mid-term
4. Develop integrated water supply system using multi-tankers to well-located water supplies, with easy year around access.	Medium	A, D, U	Q, T	Countywide	In place with ongoing training	Mid-term	Mid-term
5. Increase volunteer recruitment, and study offering paid training.	Medium	A,B,C,D	T	Countywide	Ongoing	Mid-term	Mid-term
6. Develop program to encourage landlords and families to install and maintain smoke detectors and fire extinguishers. Train residents in use a fire extinguisher.	Low	D	Q, K	Countywide	Ongoing	Ongoing	Ongoing
7. Develop public education and school programs related to use of stoves, heaters, fireworks, matches/lighters, etc.	Low	D	Q, K	Countywide	In place, ongoing	Ongoing	Ongoing
8. Develop information and programs about safe and responsible use of electric and "space" heaters.	Low	D	Q, K	Countywide	Ongoing	Ongoing	Ongoing
9. Review and develop programs to raise community awareness on proper installation and maintenance of heating systems.	Low	D	Q, K	Countywide	Ongoing	Ongoing	Ongoing
10. Communicate to residents information related to handy household items that can be used as fire	Low	D	D	Countywide	Ongoing	Ongoing	Ongoing

Mitigation Actions & Implementation Strategies E. Winter Weather Hazards	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Establish heating centers/shelters for vulnerable populations	High	A, I , R	C, H, T	Countywide	In place and expanding	Short-term	Short-term
2. Compile a listing of homes and facilities with vulnerable residents such as elderly, infirmed and disabled individuals; and establish outreach procedures for assisting residents after severe winter storm events	High	A, H , I	C, H, T	Countywide	Ongoing	Short-term	Short-term
3. Prearrange for shelters for stranded motorists/travelers and others	Medium	A - I	C, H, T	Rogers City, Onaway, Posen	In place	Short-term	Short-term
4. Complete and inventory problem sections of roads. Place snow fences or "living snow fences" (rows of trees or vegetation) to limit blowing and drifting of snow over critical roadway segments	Medium	E	C, H, T	Countywide	System in place	Short-term	Short-term

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Mitigation Actions & Implementation Strategies F. Transportation Accident, #1	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Provide more training for fireman, police and first responders to school bus and commercial bus accidents.	High	A, D, W	T	Countywide	Ongoing	Short-term	Short-term
2. Meet local industries from surrounding counties to determine type of products transported over county highways, and provide local HAZ/MAT team and fire agencies with this information.	High	A	T	Countywide	Ongoing	Short-term	Short-term
3. Continue upgrade protocols in Central Dispatch.	High	A, W,B	T	Countywide	Ongoing	Ongoing	Ongoing
4. Encourage strict enforcement of trucking y highway speed	Medium	W	T	Countywide	Ongoing	Short-term	Short-term
5. Inventory current heavy equipment, wreckers and jaws units within 30 minutes of county locations.	Medium	A	T	Countywide	In place, ongoing	Short-term	Short-term
6. Promote and conduct annual review of school buses and emergency exits, plus new features.	Medium	A, R	T	Rogers City, Onaway, Posen	In place, ongoing	Short-term	Short-term
7. Review and/or develop Regional EMS response plan to assist county's mass casualty plan.	Low	A, R, I, S	T	Countywide	In place, ongoing	Mid-term	Mid-term
8. Provide training, planning, and preparedness for mass-casualty incidents involving all modes of public transportation.	Low	A,W,S	T	Countywide	In place, ongoing	Mid-term	Mid-term
9. Provide for exercise gasoline or propane accidents.	Low	A	T	Countywide	In place, ongoing	Mid-term	Mid-term
10. Arrange and conduct meeting with all local bus providers and review their emergency plans.	Low	E,R,W,	T	Countywide	Ongoing	Short-term	Short-term
11. Exercise a 60-person accident involving a bus and logging truck.	Low	A – D – W – R	T	Countywide	In planning stages now	Mid-term	Mid-term
12. Arrange and conduct meeting with all agencies responding to Lake Huron accidents to determine roles.	Low	A, B, C, D, M	T	Rogers City, Presque Isle Twp	Regular meetings with USCG	Mid-term	Mid-term
13. Study location where ships could be off-loaded or boarded to respond to fire.	Low	D, M	T	Countywide	Plans in place with USCG	Mid-term	Mid-term

Mitigation Actions & Implementation Strategies F. Transportation Accident, #2	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Provide more training for airfield emergencies involving all county fire departments.	LOW	A, D,S,W	D, Q	Rogers City & Onaway	Ongoing	Mid-term	Mid-term
2. Meet with trucking industry to coordinated transport times to avoid school transport times.	LOW	A , D, R, W	A, M	Countywide	Ongoing	Mid-term	Mid-term
3. Encourage strict highway speed enforcement during school transport times.	LOW	W	W	Countywide	Ongoing	Mid-term	Mid-term
4. Explore placement of computerized weather kiosks at major Lake Huron marinas in conjunction with U.S. Power Squadron.	LOW	N	T	Bearinger & Presque Isle Twp & Rogers City	Ongoing	Short-term	Short-term
5. Hold annual meeting with trucking industry and local fire and law enforcement agencies.	LOW	N/A		Countywide		Mid-term	Mid-term
6. Encourage long-term planning that provides more connector roads for reduced congestion of arterial roads.	LOW	C, E, Q	B, C, E	Countywide	Detour routes identified	Long-term	Long-term
7. Develop strategy to provide more mass casualty medical equipment to handle 100 to 220 survivors of heavy jet transport or marine accident.	LOW	S, W	Q, T	Countywide	In place with regional assets	Long-term	Long-term
8. Research and develop medical airlift plan for plane accidents.	LOW	A, D, S	D, S	Countywide	Ongoing		
9. Arrange for heavy jet training event to provide full sense of situation.	LOW	N/A		Countywide			
10. Program load type into CAMEO and develop pre-evacuation plans by material type.	LOW	N/A		Countywide			

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Mitigation Actions & Implementation Strategies G. Hazardous Material Transportation Incidents	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Maintain and enhance trained, equipped and prepared local hazardous materials emergency response teams	High	A, B,C, D	C, T	Countywide	Three regional response teams in place	Short-term	Short-term
2. Provide for trained, equipped, and prepared search and rescue teams	High	A, B, C, D	C, T	Countywide	In place, ongoing	Short-term	Short-term
3. Develop evacuation plans and community awareness of them	Medium	A	C, T	Countywide	Ongoing	Mid-term	Mid-term
4. Improve capability of agencies to carry-out road closures and to provide traffic control in accident areas	Medium	E	E, Q	Countywide	Ongoing	Mid-term	Mid-term
5. Increase coverage and use of NOAA Weather Radio (which can provide notification to the community during any period of emergency, including large scale hazardous material incidents)	Low	A, N, O	Q, T	Countywide	NWS issues remain. EAS and radio used	Mid-term	Mid-term

Mitigation Actions & Implementation Strategies H. Summer Weather Hazards Actions	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Compile a listing of homes and facilities with vulnerable residents such as elderly, infirmed and disabled individuals. Establish outreach procedures for assisting residents after severe summer storm events	High	A, C, H, R	C, H, T	Countywide	In place, ongoing	Short-term	Short-term
2. Develop or update emergency response plans for schools, campgrounds, fairgrounds, parks, community events and marinas	High	A, B, R, S	C, T	Countywide	Ongoing	Short-term	Short-term
3. Continue training and increased use of weather spotters.	Medium	A, O, U	O	Countywide	Ongoing classes in place	Short-term	Short-term
4. Identify campgrounds, fairgrounds, parks, and outdoor recreational facilities that lack and need "Safe Areas." Where necessary construct safe areas and storm shelters.	Medium	A	C, T	Countywide	In place, ongoing	Mid-term	Mid-term
5. Increase usage of NOAA Weather Radio by subsidizing purchase and distribution of radios to county residents, organizations and businesses	Low	A, N	T	Countywide	Ongoing despite signal issues	Mid-term	Mid-term
6. Include safety strategies for severe weather events in driver education classes and materials	Low	R	T	Rogers City, Onaway, Posen	Ongoing	Mid-term	Mid-term
7. Continue pre-planning efforts for debris management staging and storage areas	Low	A, E	B, C, T	Countywide	In place, ongoing	Mid-term	Mid-term
8. Amend building codes to require anchoring of manufactured homes and exterior structures such as carports and porches	Low	C	B, Q	Countywide	Ongoing	Long-term	Long-term
9. Amend building codes to require installation of weather radios in new structures, similar to smoke detectors	Low	C	B, Q	Countywide	Ongoing	Long-term	Long-term
10. Require new mobile home parks to have tornado/wind shelters	Low	A, B, C	A, B, C	Countywide	No new parks	Long-term	Long-term

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Mitigation Actions & Implementation Strategies I. Fixed Site Hazmat	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Review and/or implement strategy to train, equip, and prepare site and local hazardous material emergency response teams.	High	A,D	D, T	Onaway, Rogers City	Regional teams in place	Mid-term	Mid-term
2. Provide annual training to County Fire Departments related to on site products, and how they are handled.	High	C,D	D, T	Countywide	Ongoing	Short-term	Short-term
3. Research and develop contingency plans for worker and public protection, including inclusion of rescue and evacuation procedures for well hazard areas in emergency plans.	High	D,J	T	Countywide	Ongoing	Mid-term	Mid-term
4. Enforce community and operator compliance with Oil/gas industry safety regulations and standards	Medium	D, J	Q, T	Countywide	In place, ongoing	Short-term	Short-term
5. Develop and/or expand public warning systems and networks for hazardous material releases.	Medium	A, C	T	Onaway, Rogers City	In place, ongoing	Short-term	Short-term
6. Provide training in and compliance with all safety procedures and systems related to the manufacture, storage, transport, use, and disposal of hazardous materials.	Low	A, J, Q	Q, T	Countywide	In place, ongoing	Mid-term	Mid-term
7. Continue emphasis on policies and training stressing importance of safety above other considerations.	Low	A-D-E-W-R	Q, T	Countywide	In place, ongoing	Ongoing	Ongoing
8. Educate public and implement steps to encourage "shelter in place" response to Hazmat incidents.	Low	A,C,D	Q, T	Onaway, Rogers City	In place, ongoing	Short-term	Short-term
9. Emphasize locating industrial areas away from schools, nursing homes, hospitals, in future planning.	Low	B,C	Q, T	Countywide	In place, ongoing	Long-term	Long-term
11. Inform public and support pollution control, enforcement and cleanup; proper disposal of chemicals and scrap materials.	Low	A,G,J	Q, T	Countywide	In place, ongoing	Mid-term	Mid-term
12. Provide inventory and secure debris, yard items or stored objects (including oil, gasoline and propane tanks, and paint and chemical barrels) in flood plain that might pose hazard.	Low	N/A	Q, T	Countywide	Ongoing	Long-term	Long-term
13. Develop and exercise site emergency plans and community response plans as required under SARA Title III.	Low	N/A	Q, T	Countywide	In place, ongoing	Mid-term	Mid-term
14. Protect public contact with contaminated sites or waters (including flood waters)	Low	N/A	Q, T	Countywide		Long-term	Long-term
15. Continue brownfield cleanup activities.	Low	Q, T	Q, T	Rogers City, Onaway	Ongoing	Mid-term	Mid-term
16. Identification of radioactive soils and high-radon areas.	Low	N/A	Q, T	Countywide	Ongoing	Long-term	Long-term
17. Provide public education to help identify and eliminate clandestine neighborhood drug labs in the County.	Low	N/A	Q, T	Countywide	Annual training for law/fire/ems	Mid-term	Mid-term
18. Reinforce planning emphasis on proper separation and buffering between industrial areas and other land uses.	Low	N/A	Q, T	Countywide	Ongoing	Ongoing	Ongoing

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Mitigation Actions & Implementation Strategies J. Public Health	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Encourage residents to receive immunizations against communicable diseases.	High	H,I,S	H, T	Countywide	Ongoing	Ongoing	Ongoing
2. Review and maintain public health system with sufficient disease monitoring and surveillance capabilities ...	High	H,S	H, T	Countywide	In place, ongoing	Ongoing	Ongoing
3. Develop and implement program to inform public and increase support of free or reduced-expense community clinics and school health services.	High	H,R,S	H, T	Countywide	Ongoing	Ongoing	Ongoing
4. Increase public awareness of causes, symptoms and protective actions for disease outbreaks and other potential public health emergencies.	High	A,H,I	H, T	Countywide	In place, ongoing	Ongoing	Ongoing
5. Review and insure community water and sewer infrastructure is maintained at acceptable operating standards.	Medium	C,E,H	H, Q, T	Countywide	In place, ongoing	Ongoing	Ongoing
6. Protect public contact with contaminated sites or waters (including flood waters)	Medium	D,H	T	Countywide	In place, ongoing	Ongoing	Ongoing
7. Review location, installation cleaning, monitoring and maintenance of septic systems	Low	H,C,E	C, Q	Countywide	Ongoing	Ongoing	Ongoing
8. Increase public awareness of radon dangers and prevention efforts....	Low	H	T	Countywide	Ongoing	Ongoing	Ongoing
9. Re-institute "Farm Safety Programs"	Low	A,G,S	C	Countywide	Ongoing	Short-term	Short-term
10. Explore methods to provide free mailing of Radon kits to public.	Low	B, H, Q	H, Q, T	Countywide	Ongoing	Mid-Term	Mid-Term
11. Develop program to demolition and clear vacant condemned structures to prevent rodent infestations.	Low	B, C	B, C	Countywide	In place, ongoing	Mid-Term	Mid-Term

Mitigation Actions & Implementation Strategies K. Extreme Temperatures	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Study and improve location and design and maintenance of water and sewer systems (to include insulation of critical components to prevent damage from ground freeze)	High	C,F,G,P	Q, T	Onaway, Rogers City, Posen	In place, ongoing	Long term	Long term
2. Develop housing/landlord codes to enforce heating requirements.	High	B, C	Q	Countywide	In place, ongoing	Mid-term	Mid-term
3. Improve and/or enact landlord/tenant ordinances.	Medium	B, C	B, C	Countywide	Ongoing	Mid-term	Mid-term
4. Identify location and organize outreach to vulnerable populations during periods of extreme temperatures...	Medium	A, B, C, N	A, B, C, N	Countywide	In place, ongoing	Mid-term	Mid-term

A. County Emergency Management Office	G. MSU Extension	M. Local Businesses	S. Medical
B. County	H. District Health Dept.	N. Civic Gr.& Churches	T. Federal Government
C. Local Units of Gov.	I. American Red Cross	O. National Weather Service	U. landowners
D. Local Fire Dept.	J. USFS & MDNR	P. Utility Company	V. Salvation Army
E. County Road Commission	K. Insurance Companies	Q. State	W. Police
F. NEMCOG	L. Real Estate Co.	R. Schools	

Mitigation Actions & Implementation Strategies L. Wildfire, #1	Priority	Responsible Agency	Funding Sources	Application	Progress	Original Status	New Status
1. Conduct annual wildfire planning with all fire departments and MDNR.	High	A,D,J,Q	Q, T	Countywide	In place	Ongoing	Ongoing
2. Develop a program to instruct residents on proper procedures for wildfire evacuation, ...	High	A,D,J,Q	C, D, Q, T	Countywide	In place through DNR	Short-term	Short-term
3. Conduct multi-agency, inter-county emergency management response exercises for fire suppression	High	A,B,C,D.	T	Countywide	In place	Short-term	Short-term
4. Identify communities or neighborhoods to develop "Firewise" demonstration projects.	High	A,C,D,J,U	Q, T	Countywide	Annual education offered	ASAP	ASAP
5. Develop and implement strategy to introduce "Firewise" program in risk communities.	Medium	A,C,D,J,U	Q, T	Countywide	In place	Short-term	Short-term
6. Coordinate countywide wildfire education program: distribution of materials via direct mailings, school presentations;	Medium	A,D,J R,	C, Q, T	Onaway, Rogers City, Posen	Ongoing	Mid-term	Mid-term
7. Work with insurance companies to provide wildfire safety information to area residents, and consider reduction of insurance premiums if homes meet "Firewise" criteria.	Medium	A,B,C,D,K,L,Q, U	Q, T	Countywide	Ongoing	Mid-term	Mid-term
8. Community Chipper Days – Organize a program to provide a chipper for properly disposing of woody debris, in conjunction with composting programs and spring clean-up days.	Medium	C,D,U	C, T	Countywide	Funding issues	Mid-term	Mid-term
9. Distribute wildfire education materials to homeowners and businesses through tax bill receipts.	Medium	B C	C, D, Q, T	Countywide	Not yet in place	Mid-term	Mid-term
10. Review and strict enforcement of open burning regulations.	Medium	A,B,C,D,J,W	C, D, Q, T	Countywide	In place with local law/DNR	Ongoing	Ongoing
11. Promote creation of defensible space around structures in fire-prone wildland areas.	Medium	A,B,C,D,K	T	Countywide	Ongoing	Mid-term	Mid-term
12. Promote media broadcasts of fire weather and fire warnings	Medium	A,B,C,D,J	T	Countywide	In place	Mid-term	Mid-term
13. Develop Countywide solution for funding fire service.	Low	n/a		Countywide			
14. Organize neighborhood wildfire safety coalitions to plan how to work together to prevent wildfire	Low	n/a		Countywide			
15. Develop program to inspect campsites in public forest areas to insure safe open fires, where allowed.	Low	D, Q	D, Q	Countywide	In place	Mid-term	Mid-term
16. Promote and implement fuel management by thinning of flammable vegetation, creation of fuel breaks, use of fire-retardant materials/vegetation and selective thinning...	Low	B, Q	B, Q	Countywide	Ongoing	Mid-term	Mid-term
17. Review and develop a regional base for air-firefighting wildfire support at Rogers City Airport.	Low	A,D,J,Q	Q, T	Countywide	In place	Long Term	Long Term
18. Study and develop GIS layers to include water supply location, Tier II sites, gas and oil wells.	Low	B	B	Countywide	GIS now in place	Mid-term	Mid-term
19. Explorer enlisting aid of insurance companies to provide evacuation information.	Low	n/a		Countywide		Mid-term	Mid-term
20. Develop program to form Wildfire Safety Coalition to develop neighborhood watch program to instruct others about escape routes, sprinkler systems, power lines, etc...	Low	n/a		Countywide		Mid-term	Mid-term

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