

## Chapter 9

In this chapter are included the projects that the Hazard Analysis Working Group would like to implement but may not be eligible for FEMA funding. All of the action items can be tied to the listed goals and guidelines and the recommendation(s) in Chapters 4 – 7. The recommendations and the discussions in the earlier chapters provide more background and direction on these action items.

### **Program Action Items –**

#### Non-Eligible FEMA Funded Action Items/Projects

#### **Action Item 1: Improve the EAS System**

The Emergency Alert System (EAS) is a national warning system that utilizes broadcast radio and television stations and local cable televisions systems. Additional equipment will help improve the EAS warning system in the County.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Severe Weather, Flooding, Wildfire, Public Health Emergencies, Civil Disturbances

*Responsible Agencies:* Mackinac Co. Office of Emergency Services

*Cost:* Salary and benefits of any additional staff. Consultant fees to determine needs that would adequately address the County. Equipment purchase, installation, maintenance and recurring costs. Training costs associated with new equipment and software.

*Benefits:* Provides a more improved and reliable method for early warning to citizens and visitors in the County. Early warning and advance notice allows citizens to engage in protective actions. Improved community confidence in government.

*Anticipated Funding Source:* County general fund, dedicated emergency services funds

*Timeline:* December, 2007

#### **Action Item 2: Improve GIS capabilities with up-to-date equipment and software**

By having the best equipment and software the County can expand on the current GIS base and keep track of much more information. Effective management of disasters requires an in-depth understanding of the changing circumstances, as well as a method of maintaining critical building information. This data can be utilized to support response needs (evacuation, traffic routing, shelter management, 911 calls), detailed damage assessments, identifying mitigation projects, establishing environmental baselines, and monitoring changes in land use.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Flooding, Wildfire, Severe Winter Weather, Drought, Subsidence

*Responsible Agencies:* Mackinac Co. Office of Emergency Services, Mackinac Co. 911 Department, Mackinac Co. Equalization Department, Mackinac Co. Road Commission, LMAS Health Department, EUP Regional Planning

*Costs:* Consultant fees, equipment/ software purchase and installation, additional staff salary and benefits. Staff training and development of resource sharing agreements.

*Benefits:* Current digital data assists in locating and identifying service roads in national forest areas, identifies bridges that can be utilized by heavy equipment during forest fire operations. Maximize use of available resources. Provides for current ownership, identification and value of affected property.

*Anticipated Funding Source:* County general funds, Local funds, grant funds available through State Homeland Security Program, ESRI grant program, Kellogg Foundation grant.

*Timeline:* Ongoing

### **Action Item 3: Develop priority routes for snow removal on major arteries during extreme snow storms**

Having priority routes established before snowstorms occur will greatly improve the safety efforts during the many snowstorms this area receives. The OES department along with the Mackinac Co. Road Commission and units of government should establish and map priority routes for dissemination.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Severe Winter Weather, Land Transportation Accidents, Hazardous Materials Transportation Accidents

*Responsible Agencies:* Mackinac Co. OES, Road Commission, EUP Regional Planning, Local municipalities

*Cost:* Staff time to review, plan routes and digitize into GIS system. Supply cost for mapping paper and ink. Overhead costs including costs of printing and dissemination to local road commissions and emergency response agencies.

*Benefits:* More efficient manner to clear main roads leading to improved emergency response time.

*Anticipated Funding Source:* County general fund, Local funds, Mackinac Co. Road Commission funding, Michigan Department of Transportation funds

*Timeline:* Annually

**Action Item 4: Get involved and assessed as a Storm Ready Community**

Work with National Weather Service to become designated as a storm ready community. Following the guidance and implementing the recommendations of the National Weather Service to create a ‘Storm Ready’ community is beneficial to our county.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Severe Weather, Tornados, High Winds, Thunderstorms

*Responsible Agencies:* Mackinac Co. Office of Emergency Services, Local municipalities

*Cost:* Staff time for training, planning, and meetings. Equipment purchase, installation, maintenance and recurring costs.

*Benefits:* To be better prepared for severe weather events. Better protection of property. Following the recommendations for ‘Storm Ready’ communities ensures that specific recommendations from the National Weather Service have been implemented.

*Anticipated Funding Source:* County general funds, Emergency Services funds, National Weather Service

*Timeline:* December, 2007

**Action Item 5: Work with local DNR office and adopt Firewise Strategies**

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Wildfires, Structural Fires

*Responsible Agencies:* Local municipalities, Michigan Department of Natural Resources, U.S. Forest Service

*Cost:* Staff time for training, planning, and meetings. Equipment purchase, installation, maintenance and recurring costs. Information – research, dissemination.

*Benefits:* Public and private property in the urban/wildland interface can be better protected from the risk of damage or destruction by possible wildfires. The scenic and fish and wildlife resources which attract tourists to the area will also be better protected as a result of improved forest management, thereby preventing the loss of important tourism-related income in the local area.

*Anticipated Funding Source:* County general funds, Emergency Services funds

*Timeline:* Ongoing

**Action Item 6: Encourage local community emergency planning to coordinate with County OES Department**

Communities lacking emergency plans should consider working with the OES department to develop plans to work in cooperation with the County. Incorporation of local government support plans ensures activation and coordination of local response and resources during emergencies.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* All

*Responsible Agency:* Mackinac Co. Office of Emergency Services, Local municipalities

*Cost:* Meeting, training and planning costs.

*Benefits:* Collaborative planning efforts improve emergency preparedness, response, and recovery efforts during emergencies and disasters.

*Anticipated Funding Source:* County Emergency Services fund, Local funds

*Timeline:* December, 2007

**Action Item 7: Purchase and stockpile equipment/supplies for emergency needs**

Determine equipment and supplies needed such as emergency generators, cots/blankets, food, water, sand bags, etc., purchase, and house.

*Specific Vulnerable Areas:* Designated shelters.

*Specific Hazard(s) Addressed:* Severe Winter Weather, Tornados, Infrastructure Failures, Public Health Emergencies

*Responsible Agency:* Mackinac Co. Office of Emergency Services, Local Municipalities, Red Cross

*Cost:* Equipment purchase and storage, Staff training, Study/evaluate functionality of existing assets.

*Benefits:* By stockpiling specific items such as cots, blankets, food, water, sandbags the emergency needs can be met at the time of the emergency or disaster. Utilize existing resources. Maximize use of existing assets.

*Anticipated Funding Source:* County general fund, Local funds, Centers for Disease Control – HRSA grant, American Red Cross, Community Emergency Response Team Grant

*Timeline:* December, 2007

### **Action Item 8: Building Code Improvements**

Enforce and maintain construction codes to ensure buildings' ability to withstand severe weather. Enforce and maintain codes and standards to maintain and preserve a safe and orderly community that mitigates development of blighted conditions, older structures and neighborhoods and eliminates potential dangers while maintaining public services and quality of life.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Extreme Temperatures, Severe Winter Weather, Fire, Flooding, Subsidence, Winds

*Responsible Agency:* Mackinac County Board of Commissioners, Local municipalities

*Costs:* Staff time, training, and studies/consultants.

*Benefits:* Maintain quality of community through sound structure and protected property values.

*Anticipated Funding Source:* County general fund, Local funds

*Timeline:* Ongoing

### **Action Item 9: Improved Code Enforcement**

Seek training for building department staff on the natural hazards aspects of the Building Codes, regulation of mobile home installation, flood protection, wetland protection, erosion and sediment control and best management practices provisions.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Severe Winter Weather, Flooding, Tornadoes, Subsidence, Extreme Temperatures

*Responsible Agency:* Building Departments, Local municipalities

*Cost:* Additional staff salary/benefits, training/education costs

*Benefits:* Ensure quality of community through sound structure and protected property values.

*Anticipated Funding Source:* County general fund, Local funds

*Timeline:* Ongoing

**Action Item 10: Improved Address Database**

Continue to maintain newly acquired structure location database.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Extreme Temperatures, Severe Winter Weather, Fire, Flooding, Subsidence, Winds, Civil Disturbances, Accidents – Transportation/Hazardous Materials

*Responsible Agency:* Mackinac Co. Equalization, Mackinac Co. 911, Local municipalities

*Cost:* Staff salary/benefits, overhead associated with communication, supplies, etc., purchase of sign material, installation of signs.

*Benefits:* Improved GIS capabilities, improved site location for emergency response, improved confidence in community government

*Anticipated Funding Source:* County general funds

*Timeline:* December, 2007

**Action Item 11: Maintain normal hospital operations during an epidemic/disaster**

To assure normal hospital function during a time of health epidemic (or other event affecting large numbers of people such as a terrorist event). Develop and maintain cooperative support between hospitals, health departments and county Emergency Management annex members for the establishment of Alternative Care Center (ACC) and Neighborhood Emergency Health Center (NEHC) when needed. Utilize emergency exercises at the county level to implement the ACC and NEHC.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Excess surge capacity at hospital that could disrupt normal operations, Public Health emergency, Terrorism

*Responsible Agency:* Mackinac Straits Hospital and Health Care Center, LMAS District Health Department, County Annex members listed in the county Emergency Action Guidelines (EAG).

*Cost:* Staff salary/benefits, overhead associated with communication, supplies, equipment set-up/transport, etc., during exercises, training opportunities.

*Benefits:* Improved site location for ACCs and NEHCs, improved interaction between all annex members, hospital and health department ability to meet responsibilities is enhanced, improved confidence in community government. Increase in trained man-power.

*Anticipated Funding Source:* Hospital, health department and County general funds.

*Timeline:* December, 2007

**Action Item 12: Establish and maintain a Community Emergency Response Team (CERT) and Medical Reserve Corps (MRC).**

Establish and maintain groups to promote a partnering effort between emergency services and the people they serve. Train members of local neighborhoods, community organizations, or workplaces in basic response skills to use as a source of man-power during times of emergencies.

*Specific Vulnerable Areas:* County-wide

*Specific Hazard(s) Addressed:* Excess surge capacity at hospital that could disrupt normal operations, Public Health emergency, Terrorism

*Responsible Agency:* Mackinac Straits Hospital and Health Care Center, LMAS District Health Department, County Annex members listed in the county Emergency Action Guidelines (EAG).

*Cost:* Staff salary/benefits, overhead associated with communication, supplies, equipment set-up/transport, etc., during exercises, training opportunities.

*Benefits:* Improved interaction between all annex members, hospital and health department ability to meet responsibilities is enhanced, improved confidence in community government. Increase in trained man-power.

*Anticipated Funding Source:* Hospital, health department and County general funds.

*Timeline:* December, 2007

