

# HAZARD MITIGATION PLAN for Saline Township

December 2004



**HAZARD MITIGATION PLAN ADOPTION AND RESOLUTION FOR  
SALINE TOWNSHIP**  
(Resolution No. \_\_\_\_\_)

Whereas Saline Township, Michigan has experienced disasters that have resulted in loss of life or injury, damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges, and presented general public health and safety concern and

Whereas as of November of 2004 the Federal Emergency Management Agency (FEMA) requires that communities have an adopted Hazard Mitigation Plan as a requirement to receiving funding under certain FEMA programs,

Whereas the *Hazard Mitigation Plan* ranks hazards for the community, and identifies goals, objectives and strategies to reduce overall damage and impact from natural and technological hazards, and

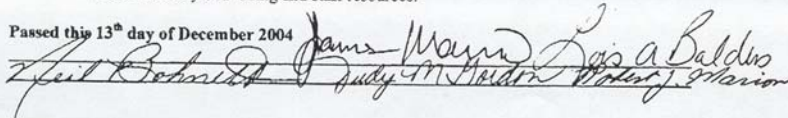
Whereas Saline Township has worked with Washtenaw County to prepare a *Hazard Mitigation Plan*, by participating in the planning process and providing comments with respect to hazards, vulnerable areas and strategies,

Whereas residents, community officials, business owners, educational institutions, neighboring jurisdictions and the Michigan State Police Division of Emergency Management have had the opportunity to review the plan and their comments have been incorporated;

Now, therefore, be it resolved that:

1. The Hazard Mitigation Plan is hereby adopted as an official plan of Saline Township.
2. The Hazard Mitigation Plan will be an annual agenda item for the Saline Township Board of Trustees to review. The annual review shall include the following:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects or revised action items. Such recommendations shall be subject to approval by this Saline Township Board of Trustees.
3. The Hazard Mitigation Plan will be updated every five years as required by FEMA, with the assistance of Washtenaw County.
4. The Saline Township Supervisor, will be responsible for ensuring that the strategies in the Plan are implemented, with the understanding that implementation is based on the availability of funding and staff resources.

Passed this 13<sup>th</sup> day of December 2004

  
James Wayne Lewis  
Luis a Baldos  
Arlene Robinson  
Judy M. Martin  
Patricia J. Marion

## Table of Contents

	Page
1.0 INTRODUCTION_____	1
1.1 Purpose_____	1
1.2 Plan Organization_____	1
1.3 Public Participation_____	1
2.0 COMMUNITY PROFILE_____	3
2.1 Historic Overview_____	3
2.2 Natural Features_____	3
2.3 Land Use Patterns_____	3
2.4 Transportation_____	3
3.0 HAZARDS_____	4
3.1 Hazard Ranking_____	4
3.2 Hazard Assessment_____	4
4.0 HAZARD GOALS, OBJECTIVES AND STRATEGIES_____	7
4.1 Non-Hazard Specific Goals, Objectives and Strategies_____	7
4.2 Hazard Specific Goals, Objectives and Strategies_____	7
5.0 IMPLEMENTATION, AND MONITORING_____	11
5.1 Implementation_____	11
5.2 Sources of Financial Assistance_____	12
5.3 Monitoring_____	12

### Tables

Table 1: Hazard Ranking Table_____	4
Table 2: Vulnerability Assessment Summary_____	5

### Figures

Figure 1: Natural Features_____	2
Figure 2: Assets_____	6
Figure 3: Tornado Warning Siren Coverage and Past Events_____	8

### Attachments

- Attachment 1: County Hazard Plan
- Attachment 2: Federal and State Funding Sources

# Saline Township

# Saline Township

## 1.0 INTRODUCTION

Hazard Mitigation is defined as any action taken before, during or after a disaster to permanently eliminate or reduce risks to human life and property from natural, technical or societal hazards. Saline Township has experienced hazards at varying degrees, and can expect to encounter hazards in the future. The value of a Multi-Hazard Mitigation Plan (Plan) lies in reducing future emergencies to events; by implementing mitigation strategies set forth in this Plan, the expectation is for hazard occurrences to result in fewer deaths and injuries to people, and lessened damage or destruction to structures and the environment. Response and recovery costs should also be reduced.

The Federal Emergency Management Agency (FEMA) provides assistance to local units of government when faced with disasters through the Robert T. Stafford Disaster Relief and Emergency Assistance Act the Stafford Act. Recognizing that planning for hazards is an important component of hazard preparedness, response and recovery programs, the Stafford Act was amended in 2000 to require governments to have an adopted Hazard Mitigation Plan as condition of receiving financial assistance through the FEMA Hazard Mitigation Grant Program by November of 2004.

### 1.1 Purpose

There are three purposes of this Plan: 1) to identify and rank hazards in Saline Township; 2) to analyze areas particularly vulnerable to hazards; and 3) to identify feasible mitigation strategies that can be acted upon after adoption of the Plan. The mitigation goals and strategies should also be incorporated into the Saline Township General Development Plan, and other plans, as applicable.

## 1.2 Plan Organization

This Plan was prepared by Washtenaw County on behalf of Saline Township. Individual plans were prepared for each local unit of government in recognition of their unique circumstances and potential differences in priorities, goals and mitigation strategies. General information, such as community profile data and hazard descriptions, is contained in the County plan (Attachment 1).

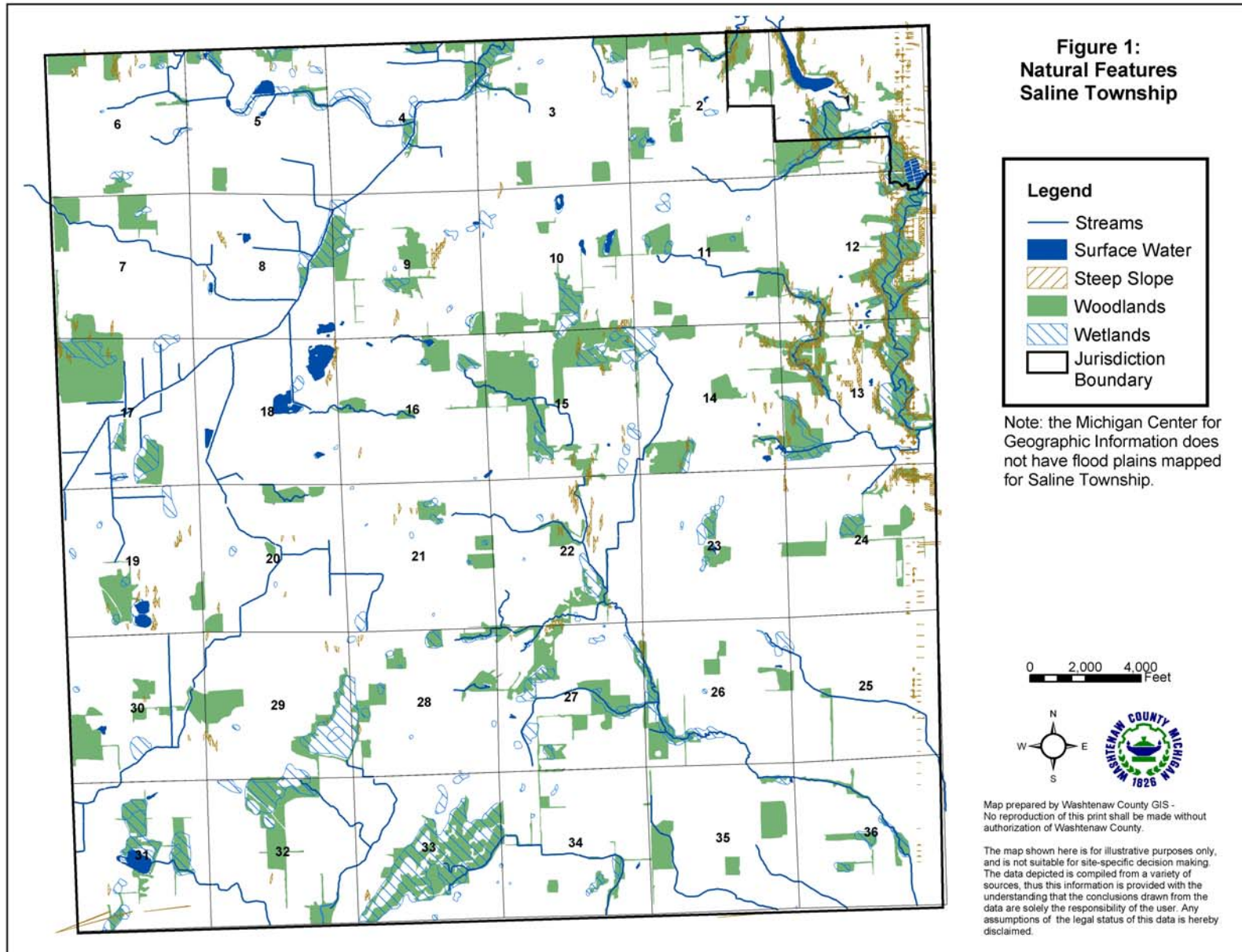
## 1.3 Public Participation

Representatives from Saline Township worked with the Washtenaw County Emergency Management Division and Department of Planning and Environment to draft the hazard mitigation plan. An opportunity for the citizens of Township to comment on the draft plan was provided in June of 2004, when five regional planning workshops were held at various locations around the county in conjunction with the Comprehensive Plan for Washtenaw County. Another workshop was held on June 9, 2004 for commission, board and council members from every community. The draft plan was introduced and copies were available for review at every workshop. Regional workshops were advertised in the local newspapers.

The Township Board of Trustees also provided an opportunity for public comment prior to adopting the plan December 13, 2004.

Continued public participation is encouraged through Washtenaw County through website postings, emails, and general contact with local governments. Any comments received by the County on the plan concerning Saline Township will be shared with the Township.

# Saline Township



# Saline Township

## 2.0 Community Profile

### 2.1 Historic Overview

Saline Township was settled in 1834. This region was originally known for salt springs, long before Saginaw. The salt springs drew both Indian and French influences. The French actually gave the area its name, Saline. Today the area is primarily agricultural, and the pressure for development is not as strong as it is in other rural areas of the County.

### 2.2 Natural Features

Saline Township is rich with natural resources. There are many lakes, generally located along the western portion of the township, and the Saline River flows through the northwest corner and eastern border of the community. Drains and creeks are less likely to appear in this area. The area has no recorded flood plains associated with the river.

Groundwater recharge areas lie beneath much of the Township. The topography of the area can be described with gently rolling. Soils with severe septic limitations are located throughout the Township. Small pockets of steeply-sloped areas are scattered around the area.

### 2.3 Land Use Patterns

Saline Township totals approximately 23,040 acres. The majority of land in Saline Township is in active agriculture use (77%). Single-family residential and commercial uses are generally located in the northeast corner of the Township, around the City of Saline. There are no multiple family residential uses in the Township.

### 2.4 Transportation Network

The transportation network consists of a principle arterial, Michigan Avenue (US- 12), major and minor collectors, local streets and roads and gravel roads. Austin, Macon and

Michigan Avenue provide access to the west, southwest from the City of Saline.

# Saline Township

## 3.0 HAZARDS

Saline Township is susceptible to a variety of natural, technological, and societal hazards. The purpose of this section is to rank the hazards for Saline Township, analyze the risks for each hazard, and identify vulnerable areas for the Township, and appropriate goals and mitigation strategies for certain hazards.

### 3.1 Hazard Ranking

The ranking of hazards for Saline Township is presented as Table 1. The ranking of hazards was determined on a county-wide basis, and adjusted based on input from Local Units of Government. The ranking order was developed by the Washtenaw County Emergency Management Division using a program provided by the Michigan State Police Emergency Management Division. The model takes into account worst-case scenario data for frequency of occurrence, likelihood of occurrence, significance of impact/threat, potential size of geographic area impacted and total population impacted.

### 3.2 Hazard Assessment

The purpose of the hazard assessment is to map out where hazards exist and gain information about their frequency of occurrence, and potential for harm using worst-case scenario estimates. Different levels of risk analysis are performed, depending on the significance of the hazard for the community:

- **Cursory:** A short statement explaining why the hazard is not a threat, prepared for hazards that have little impact or are unlikely to occur.
- **Standard:** An explanation of concerns with limited quantitative research, prepared for hazards likely to occur and impact our communities.

**Table 1: Hazard Ranking**

Hazard	Ranking
Convective Weather (Severe Winds, Tornadoes, Lightning, Hail)	1
Hazardous Materials Incidents: Transportation	2
Hazardous Materials Incidents: Fixed Site	3
Severe Winter Weather Hazards (Snow Storms and Ice/Sleet Storms)	4
Infrastructure Failures	5
Transportation Accidents: Air and Land	6
Drought	7
Extreme Temperatures	8
Flood Hazards: Riverine/Urban Flooding	9
Fire Hazards: Wildfires	10
Fire Hazards: Structural Fires	11
Flood Hazards: Dam Failures	12
Public Health Emergencies	13
Sabotage & Terrorism	14
Nuclear Power Plant Accidents	15
Earthquakes	16

# Saline Township

- **Advanced (Vulnerability):** A vulnerability determination using probabilities, prepared for hazards that have the highest frequency of occurrence and/or the most potential to cause death, injury or damage to personal property.

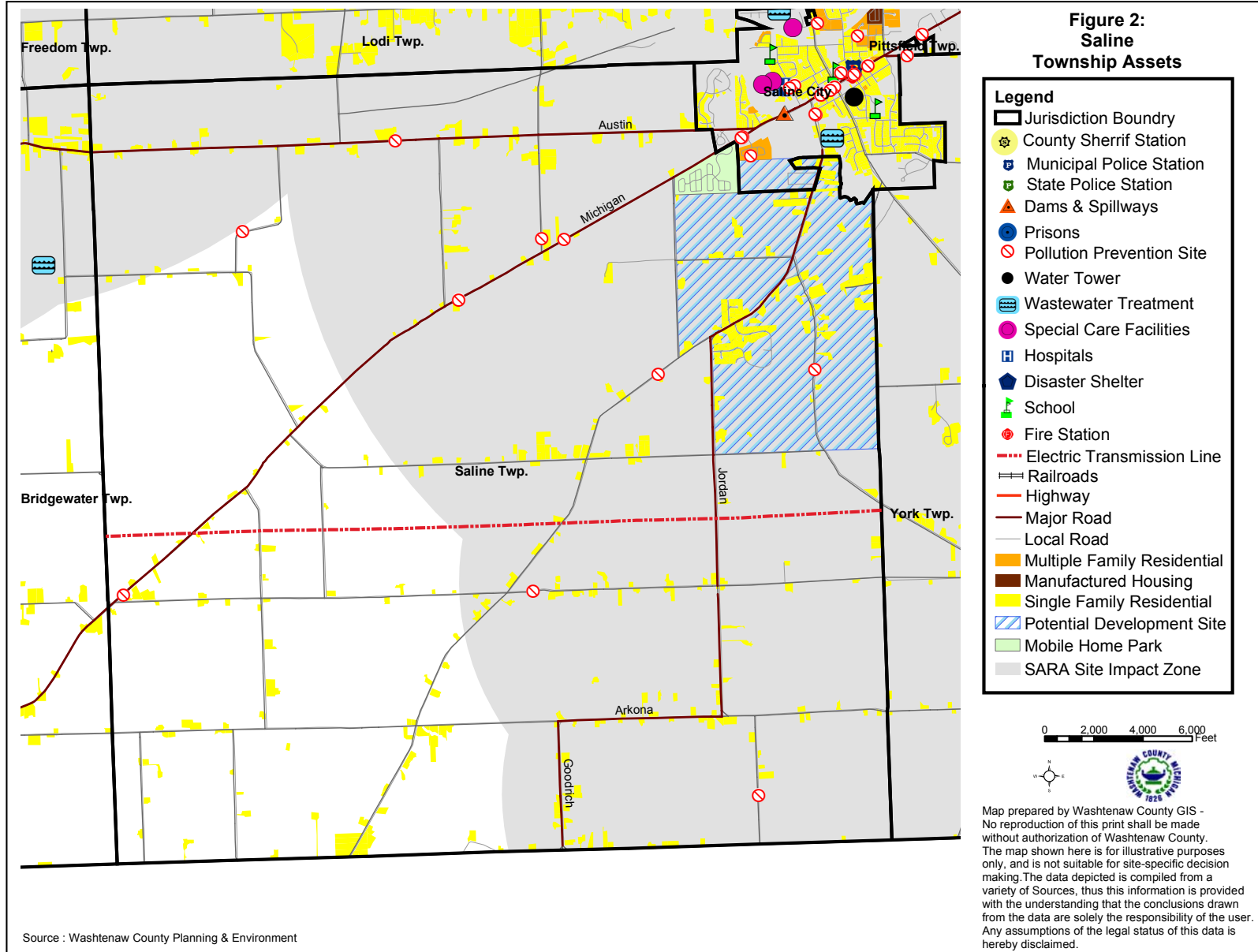
Vulnerability assessments were prepared for convective weather, hazardous materials transportation incidents, hazardous materials fixed site incidents, infrastructure failures and severe winter weather hazards. The goal is to quantitatively measure the threat experienced by Washtenaw County communities. By placing a monetary value on hazards, a cost-benefit comparison can be made: the benefit of implementing a mitigation strategy compared to the cost of the hazard event.

Table 2 presents the results of the vulnerability assessment. The value of the vulnerability assessment is to provide a cost by which the mitigation strategies may be compared. A discussion of the determination is provided in the hazard section of the County Plan (Section 3.2). The methodology for each is presented in Appendix A of the County Plan.

**Table 2. Vulnerability Assessment Summary**

Rank	Hazard	Estimated Annual Cost
<b>#1</b>	<b>Convective Weather</b>	
	Tornado	\$5,078,755
	Severe Winds and Lightning	\$90,242,418
	Hail Storm	\$3,738,153
<b>#2</b>	<b>Hazardous Material Transportation Incidents</b>	\$6,838,963
<b>#3</b>	<b>Hazardous Material Fixed Site Incidents</b>	\$2,913,038
<b>#4</b>	<b>Severe Winter Weather</b>	\$36,191,763
<b>#5</b>	<b>Infrastructure Failure</b>	\$6,139,214

# Saline Township



Source : Washtenaw County Planning & Environment

# Saline Township

## 4.0 Hazard Goals and Strategies

The following sections present goals and strategies by hazard. Figure 2 presents the assets and hazards identified for Saline Township, and may be referred to in the following sections. Table 3 presents a summary of the mitigation strategies detailed for each hazard. The goals, objectives and strategies are not an inclusive list; rather the goals, objectives and strategies are those that the Township is focusing on at this time.

Where possible, cost estimates were provided for the strategy. The repetition of strategies reflects the need for their implementation, not the duplication of services. For example, distribution of educational materials should not be performed several times, throughout the year per hazard, rather one mailing regarding family preparedness kits would address all hazards for which this strategy is listed.

### **4.1 Non-Hazard Specific Goals, Objectives and Strategies**

Goal: Integrate mitigation strategies into the Township General Development Plan

Objective: Amend plan goals, objectives and policies to include mitigation strategies.

#### Mitigation Strategy: Plans

- Amend the Master Plan to include hazard mitigation goals and strategies, as applicable.

Goal: Promote hazard mitigation and enhance Township response capabilities

#### Mitigation Strategy: Plans

- Continue to support Washtenaw County with regard to implementation of the Washtenaw County Emergency Action Guidelines.

#### Mitigation Strategy: Training

- Continue to train, equip, and support and a Hazardous Material Response Team through the Saline Area Fire Department.

## **4.2 Hazard Specific Goals, Objectives and Strategies**

### **Convective Weather**

Goal: Reduce the Township's vulnerability to convective weather storm hazards, minimize loss of life and injury, and damage to public property

#### Mitigation Strategy: Warning Sirens

- Secure funding for installation of warning sirens. A portion of the Saline Township population is covered by a warning siren (Figure 3). The siren is located in the center of the Township and would reach approximately 487 persons, according to the 2000 US Census. Sirens should be located to reach all residents. Areas to first target include the primary residential district planned in the eastern side of Township and the manufactured housing park, currently not located within the siren coverage area.

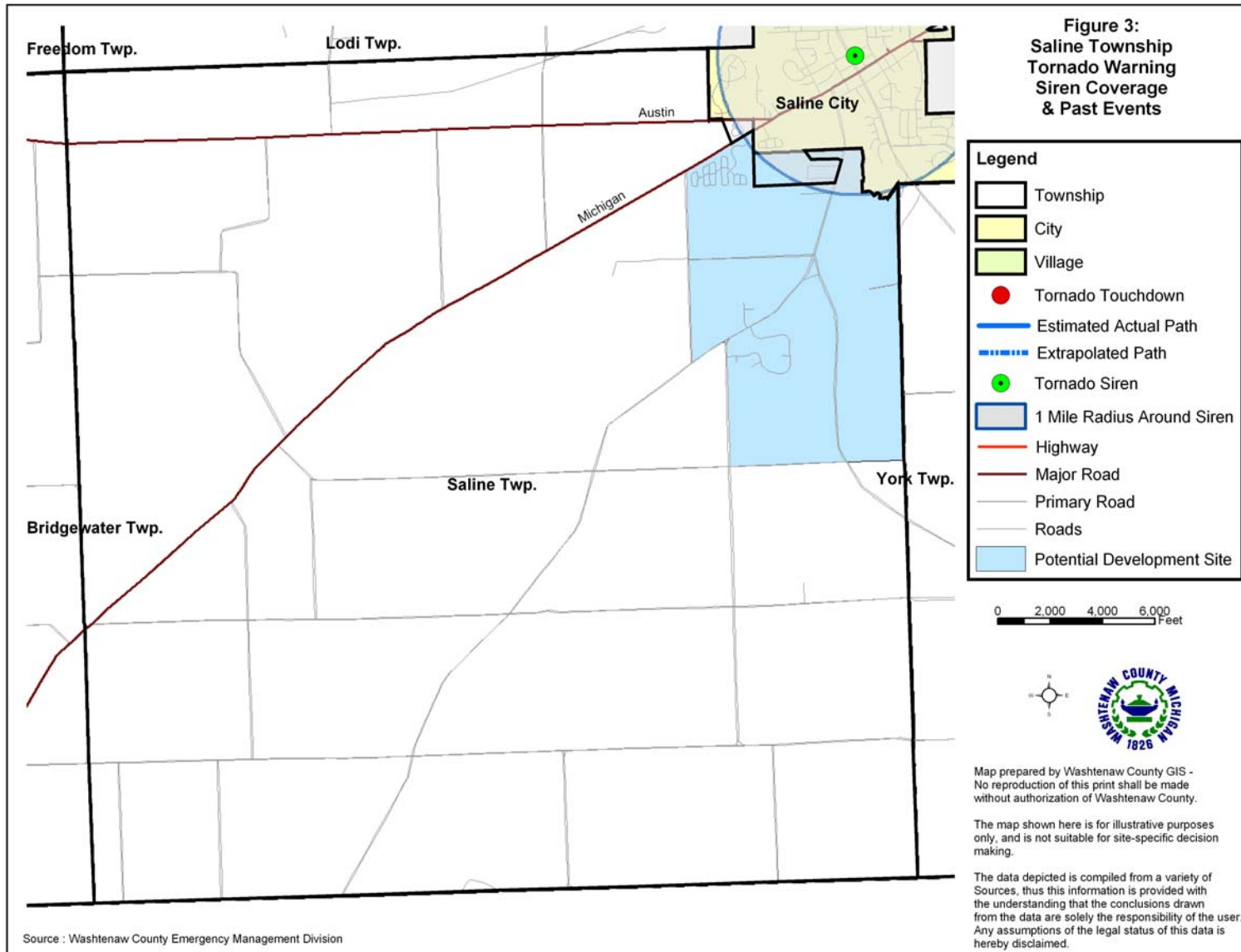
#### Mitigation Strategy: Emergency Generators

- Secure funding to install an emergency generator. A generator should be installed at the Township Hall to allow the Township to function and assist residents in the event of a disaster.

#### Mitigation Strategy: Public Education

- Distribute Emergency Preparedness materials to inform residents about actions to take during an event, or actions to minimize damage caused by an event. (See Family Preparedness Kit information box).

# Saline Township



# Saline Township

## Mitigation Strategy: Maintenance

- Distribute annual reminders to ground utility providers, encouraging them to keep power lines clear of trees and tree limbs. This may reduce the potential for an electrical power failure to impact Township residents and businesses.

## Mitigation Strategy: Training

- Encourage residents to enroll in the Washtenaw County Emergency Management Division on Skywarn Spotter training program. *Training is free of charge to anyone 18 years of age or older who is interested in being trained in severe weather identification, protection, and reporting procedures.*

## Mitigation Strategy: Manufactured Home Communities

- Encourage manufactured housing community owners to provide shelters for park residents and ensure that units are properly secured to the foundations. Assist unit owners with proper fastening of units if not already anchored properly. (Note: making shelters in MHC a requirement of the ordinance requires approval by the Mobile Home Commission).
- Assist unit owners with obtaining funds through FEMA to fasten units, if not already anchored properly.

## **Hazardous Materials Transportation Incidents**

Michigan Avenue (US-12) diagonally traverses the Township from southwest to northeast. Haulers of hazardous materials may use this route to reach destinations within the Township, or as a thoroughfare to reach destinations outside of the Township. Haulers are not restricted to US-12, and may travel on local roads as well.

## **Family Preparedness Kits**

1. Have Emergency Supplies at the ready:
  - A three-day supply of water one gallon/person/day and food that won't spoil
  - One change of clothing, footwear, and blanket/sleeping bag per person
  - First aid kit including family prescription medications
  - Tools: flashlight, battery-powered radio and extra batteries
  - Extra car keys, credit cards, cash or travelers checks
  - Sanitation supplies
  - Special items for infant, elderly or disabled family members
  - Extra pair of glasses
  - Locate the fuse box, water service main, propane tank, or natural gas main and learn how to turn on and off.
2. Create a disaster plan where to meet, contact numbers, who will take care of the family pet, take first aid, learn how to use a fire extinguisher, etc.
3. Practice the Plan and maintain supplies!

If having electric power is extremely important to you, consider having a qualified electrician install an emergency generator before a disaster strikes!

For more information, see FEMA's website at <http://www.fema.gov/pdf/library/yfdp.pdf>

# Saline Township

Goal: Reduce the risk of damage, loss of life, and other costs resulting from hazardous material transportation incidents

## Mitigation Strategy: Warning Sirens

- Secure funding for installation of warning sirens, which are sounded in the event of a hazardous materials incident. See strategy under Convective Weather for further discussion.

## Mitigation Strategy: Training and Support

- Continue to support training and equipment for the Saline Area Fire Department Hazardous Materials Response Team.

## Mitigation Strategy: Hazardous Spills Expense Recovery Ordinance

- Adopt the Hazardous Spills Expense Recovery Ordinance, a vehicle whereby a local unit of government may recover costs of response and recovery to a release of hazardous materials.

## **Hazardous Materials Fixed Site Incidents**

There are several facilities located in Saline Township that store hazardous materials, and therefore have the potential for impacting people and causing environmental impact.

Goal: Reduce the risks of hazardous material fixed site incidents in the Township by increasing the ability to respond and minimizing the impacts to the citizens, environment and economy.

## Mitigation Strategy: Warning Sirens

- Secure funding for installation of warning sirens, which are sounded in the event of a hazardous materials incident. See strategy under Convective Weather for further discussion.

## Mitigation Strategy: Training and Support

- Ensure that the Washtenaw County Hazardous Material Response Team and Saline Area Fire Department Hazardous Materials Response Team are knowledgeable of the locations and chemicals stored at Sara Title III facilities facilitates response to incidents.
- Support and cooperate with the Washtenaw County Pollution Prevention Program.

## Mitigation Strategy: Hazardous Spills Expense Recovery Ordinance

- Adopt the Hazardous Spills Expense Recovery Ordinance, a vehicle whereby a local unit of government may recover costs of response and recovery to a release of hazardous materials.

## **Severe Winter Weather Hazard**

Above ground power supply, coupled with mature trees can be a disaster when heavy snows or freezing rain occurs. The weight of the frozen precipitation causes tree limbs to fall on power lines, causing power outages, which is a significant problem. Loss of power in the winter generally means loss of heat and water for Township residents. Falling tree limbs also damage property, block emergency routes and roadways, endanger lives and are very costly to clean up and remove.

Goal: Reduce the damage and impacts caused by severe winter weather hazards continue to reduce the impact of such an event on the community.

## Mitigation Strategy: Emergency Generators

- Secure funding to install emergency generators. See strategy under Convective Weather for further discussion.

# Saline Township

## Mitigation Strategy: Public Education

- Distribute Emergency Preparedness materials to residents. See strategy under Convective Weather for further discussion.

## Mitigation Strategy: Shelters

- Work with Red Cross to establish shelter locations for residents in the event of heat loss. Warning shelters should have emergency generators.

## Mitigation Strategy: Maintenance

- Distribute annual reminders to ground utility providers, encouraging them to keep power lines clear of trees and tree limbs, specifying addresses and locations of problem trees.

## **Infrastructure Failures**

Goal: Decrease the Township's vulnerability to infrastructure failures and continue to strengthen the Township's ability to assist its citizens during an event.

## Mitigation Strategy: Emergency Generators

- Secure funding to install emergency generators. See strategy under Convective Weather for further discussion.

## Mitigation Strategy: Maintenance

- Distribute annual reminders to ground utility providers, encouraging them to keep power lines clear of trees and tree limbs, specifying addresses and locations of problem trees.

## Mitigation Strategy: Public Education

- Distribute Emergency Preparedness materials to residents. See strategy under Convective Weather for further discussion.

## **5.0 Implementation, Funding and Monitoring**

The purpose of this plan is to identify mitigation strategies that will be implemented before, during or after a disaster to permanently eliminate or reduce risks to human life and property from natural, technical or societal hazards. The following sections present implementation actions, funding sources, and the method for monitoring the plan.

### **5.1 Implementation**

The following schedule is given for hazard mitigation strategies described in Section 4.0. Completion dates have not been included as such dates are subject to uncertain factors, and will only begin after the mitigation strategy has been approved. While all strategies are important, priority is has been given to those that may be funded by a FEMA hazard mitigation grant program (see Section 5.2). Action on strategies will depend upon staff, resource and funding availability.

### **High Priority Strategies**

#### Warning Sirens

*Responsible Agencies:* Saline Township and Washtenaw County Emergency Management Division

*Estimated Cost:* \$18,000 for siren and first year of maintenance fees, \$500 annually thereafter (does not include replacement parts).

#### Emergency Generator at Township Hall

*Responsible Agencies:* Saline Township

*Estimated Cost:* \$5,000 per generator.

#### Work with manufactured home community for shelter installation and assist unit owners with proper anchoring of units

*Responsible Agency:* Saline Township, community/unit owners

*Estimated Cost:* To be determined.

# Saline Township

## Other Important Strategies

### Public Education (brochures, mailings regarding Family Preparedness kits)

*Responsible Agencies:* Saline Township and Washtenaw County Emergency Management Division

*Estimated Cost:* \$600 annually.

### Training

- Encourage residents to attend Skywarn Spotter Training provided by the Washtenaw County Emergency Management Division)
- Continued training, equipment and maintenance for Saline Area Hazardous Material Response Team

*Responsible Agency:* Saline Township and Washtenaw County Emergency Management Division

*Estimated Cost:* To be determined.

### Adopt Spill Cost Recovery Ordinance and Fire Protection Ordinances

*Responsible Agency:* Dexter Township

*Estimated Cost:* Staff time.

### Maintain tree clearance by sending annual reminders to utility providers

*Responsible Agency:* Saline Township

*Estimated Cost:* Staff time.

### Amend Master Plan to incorporate hazard mitigation goals, strategies

*Responsible Agency:* Saline Township

*Estimated Cost:* Staff time.

### Support and participate with the Washtenaw County Emergency Action Guidelines

*Responsible Agencies:* Saline Township, Washtenaw County Emergency Management Division

*Estimated Cost:* Staff time.

## 5.2 Sources of Financial Assistance

Implementation of the mitigation strategies is often dependent on funding assistance from Federal and State sources. FEMA provides funding for “bricks-and-mortar” projects through the hazard mitigation grant programs. These include the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Assistance Program, and the Flood Mitigation Assistance Program.

FEMA emphasizes the implementation of structural mitigation strategies. The strategies that are a priority for FEMA are not a priority for Saline Township at this time. The strategies listed in this plan that qualify for FEMA funds include emergency generators and warning sirens.

Financial support for other mitigation strategies proposed in this plan may be sought through alternative funding sources. For example, funds for public outreach, equipment and training may be obtained through the FEMA Emergency Management Performance Grant (EMPG). Projects may be implemented with the assistance of non-profit organizations, or funds secured from Community Foundations. There are many State and Federal programs that are available to local governments, as provided in Attachment 2.

## 5.3 Monitoring of the Plan

The plan will be monitored on a regular basis, and is the responsibility of the Township Supervisor. The plan will be an annual agenda item for the Saline Board of Trustees. At a minimum, during its review, the Board will discuss the monitoring of the plan, the number of projects pursued, or

## Saline Township

reasons for lack of pursuit for approved projects. Prior to the meeting, the Washtenaw County Emergency Management Division can be contacted for updates or recommended amendments to the plan.

To assist with the annual evaluation and review of the plan, the Township may consider forming a local hazard mitigation committee. The committee could also be charged with identifying methods of obtaining public input.

Although review of the plan will occur annually, and a formal revision may not be needed each year, an update of the plan will be prepared every five years, based on annual reviews, amendments, monitoring, evaluation and accumulation of official feedback and public input. The revised plan will again be adopted by the Saline Township Board of Trustees.



**Attachment 1  
County Hazard Plan**



**Attachment 2  
Alternative Funding Sources**

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Emergency Community Water Assistance Grants		√							√		√		√					√	√								√
Emergency Conservation Program		√							√													√			√		√
Emergency Flood and Shelter National Board Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Institute-Resident Ed Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Institute-Training Assistance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Performance Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management-State and Local Assistance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Operations Flood Response and Post-Flood Response								√	√	√																√	
Emergency Rehabilitation of Flood Control Works								√	√																	√	
Engineering Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Farmland Protection Program									√																	√	
Fire Suppression Assistance							√																			√	
Fisheries Disaster Relief		√					√	√	√	√	√	√							√							√	
Flood Insurance								√	√	√																	√
Flood Mitigation Assistance									√	√																	√
Flood Plain Management Services								√	√	√																	√
Food Control Projects								√	√																		√
Forestry Incentives Program																						√			√	√	
Forestry Research									√	√												√			√	√	
Grants for Public Works and Economic Development								√	√	√			√													√	

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Grants-in-Aid for Railroad Safety-State Participation												√												√			√
Habitat Conservation																											√
Hazard Mitigation Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
HazMat Training Program for Implementation of SARA											√	√															√
Health Program for Toxic Substances and Disease Registry											√							√									√
Highway Planning and Construction													√														√
Historic Preservation Funds Grants-In Aid						√			√	√										√	√	√	√		√		√
HOME Investment Partnerships Program									√	√										√	√	√					√
Hydrologic Research		√						√	√	√																	√
Individual and Family Grant Program		√	√	√			√	√	√	√																	√
Planning Grants (HazMat Emergency Preparedness Grant)											√	√															√
Motor Carrier Safety												√															√
National Dam Safety Program							√																				√
National Pollutant Discharge Elimination System Related State Program Grants																√	√	√									√
National Urban Search and Rescue Response System			√										√						√					√			√
North American Wetlands Conservation Fund								√	√																		√
Nursing Homes						√																					√
Planning (Land and Water Conservation Fund Grants)									√																		√
Physical Disaster Loans	√		√		√	√			√	√			√						√	√	√	√	√		√	√	√
Pipeline Safety																√	√										√

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Project Impact: Building Disaster-Resistant Communities	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Protection Clearing and Straightening Channels									√																		√
Protection of Essential Highways, Highway Bridge Approaches, and Public Works								√	√																		√
Public Assistance Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Public Health and Social Services Emergency Fund (Post-Declaration Only)																		√									√
Public Telecommunications Facilities Planning and Construction																									√		√
Railroad Safety												√												√			√
Resource Conservation and Development		√	√	√			√	√	√																		√
Rivers, Trails, and Conservation Assistance								√	√																		√
Rural Business Opportunity Grants								√																			√
Rural Development Grants								√					√														√
Rural Electrification Loans													√									√	√	√	√	√	√
Rural Housing and Economic Development	√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	√	√	√	√	√	√	√	√
Rural Housing Site Loans and Self-Help Housing and Development Loans								√																			√
Snagging and Clearing for Flood Control								√	√																		√
Soil and Water Conservation		√	√	√			√	√	√																		√
State and Community Highway Safety													√											√			√
State Domestic Preparedness Equipment, Support Program																			√								√
Superfund State Site-Specific Cooperative Agreements											√							√									√
Superfund Technical Assistance Grants for Citizen Groups at Priority Sites											√																√
Surveys, Studies, Investigations and Special Purpose Grants											√	√			√	√	√	√									√

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Technology Development for Environmental Management												√			√												√
Very Low Income Housing Repair Loans/Grants				√		√	√		√												√	√	√			√	√
Very Low to Moderate Income Housing Loans				√		√	√		√												√	√	√			√	√
Water and Waste Disposal System for Rural Communities									√		√		√					√	√							√	
Water/Waste Disposal Loans/Grants									√		√		√					√	√							√	
Watershed Protection and Flood Prevention								√	√	√								√								√	√
Watershed Surveys and Planning		√							√																		√
Weatherization Assistance for Low-Income Persons				√																							√
Wetlands Protection-Development Grants								√	√																	√	
Wetlands Reserve Program								√	√	√																√	√
Wildlife Habitat Incentive Program								√																		√	

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>STATE OF MICHIGAN</b>																											
<b>Department of Agriculture</b>																											
Energy Conservation Program									√														√			√	√
Groundwater Stewardship Program											√							√								√	√
Intercounty Drain Program (available to Drain Commissioner only)								√	√	√																	√
<b>Economic Development Corporation</b>																											
Community Development Block Grant									√	√			√													√	
Urban Land Assembly									√																	√	
<b>Environmental Quality</b>																											
Abandoned Well Mgmt. Program																		√								√	
Alternate Water Supply Replacement Program									√	√	√		√					√								√	
Brownfield Redevelopment Grants											√							√								√	√
Drinking Water Revolving Loan Fund													√					√	√							√	
Municipal Landfill Cost-Share Grant Program																		√								√	
Non-community Water Supply Program Grant																		√								√	
Scrap Tire Collection Site Cleanup Grants					√																					√	
State Revolving Loan Fund									√	√			√					√								√	
Wellhead Protection Program																		√								√	
Wetland Program Development									√	√																√	

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>STATE OF MICHIGAN</b>																											
<b>Housing Development Authority</b>																											
Community Development Block Grants/Housing Resource Fund						√			√	√										√		√			√	√	
Home/Property Improvement Loans						√			√	√										√		√			√	√	
<b>Department of Natural Resources</b>																											
Habitat Improvement Fund Project Grants									√																	√	
Land and Water Conservation Fund									√																	√	
Natural Resources Trust Fund						√			√																	√	
Recreational Trails Program Grants									√																	√	
Urban and Community Forestry Program																						√	√		√	√	
Volunteer Fire Assistance					√	√	√																			√	
<b>State Police</b>																											
Emergency Management Performance Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Flood Mitigation Assistance									√	√																√	√
Hazard Mitigation Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Individual and Family Grant Program									√	√			√													√	

# Saline Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petro/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>STATE OF MICHIGAN</b>																											
<b>State Police (continued)</b>																											
Interagency HazMat Public Sector Training and Planning Grants (HazMat Emergency Preparedness Grant)											√	√		√	√	√	√									√	
Project Impact	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Public Assistance Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
<b>Department of Transportation</b>																											
Rail Loan Assistance Program												√	√													√	
Trans. Econ. Development Fund								√	√	√																√	
<b>Department of Treasury</b>																											
Municipal Bond Authority-Local Government Loan Program				√		√			√	√			√						√	√	√	√	√	√		√	
Municipal Bond Authority-State Aid Note Program				√		√			√	√			√						√	√	√	√	√	√		√	

