

# Osceola County Hazard Mitigation Plan

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## *Part 3 - Mitigation Strategy*

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## **Overview**

### **Strategy**

The strategy of the Osceola County Hazard Mitigation Plan is to reduce the impact of hazards on citizen life, health and economic well-being based upon a continuing hazard, risk and vulnerability analysis.

### **Goals**

As a multi-jurisdictional plan representing multiple agencies and jurisdictions, shared agreement exists about the need to mitigate the following hazards throughout the planning area.

1. Seek and promote hazard mitigation activities that will reduce harm to individuals, property and the environmental in Osceola County.
2. Seek and promote hazard mitigation activities that will make county and local infrastructure more resistant to the impacts of natural hazards.
3. Promote public awareness of hazards and activities that individuals, families, and businesses can do to reduce hazard impacts and vulnerability.
4. Find and promote other hazard mitigation opportunities to address any of the hazards within this plan.

### **Types of Mitigation Actions**

The types of mitigation actions that reduce long-term vulnerability include:

- *Local plans and regulations*, including government authorities, policies, or codes that influence the way land and buildings are developed and built;
- *Structure and infrastructure projects*, including modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area;
- *Natural systems protection*, actions that minimize damage and losses and also preserve or restore the functions of natural systems;
- *Education and awareness programs*, actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them.

### **Identification of Mitigation Actions**

The risk assessment indicates general hazard risks through its scoring system, but hazard mitigation actions cannot simply be prioritized on the basis of estimated overall risks. Mitigation actions are prioritized based on the greatest opportunity for loss reduction. Communities, departments, agencies and residents identify potential actions based on current mitigation goals and submit their proposal on the Mitigation Action Proposal form to the Mitigation Committee for review.

Since many hazards are intertwined, project prioritization favors activities with the potential to lessen the impact of more than one hazard. The prioritization process also favors projects that include collaborations and support from multiple entities, thus favoring project accountability, wide-spread project impact and other positive qualities.

A formal cost-benefit analysis will be added to the physical/structural projects as part of a formal application process for federal grants and other appropriate funding sources when necessary. All other projects will be given informal consideration to cost/benefit.

The Mitigation Committee meets at least annually to review and score the mitigation action proposals according to the Mitigation Action Scoring Matrix (Table 3.1) and evaluate the status of ongoing mitigation projects. Upon evaluation, the Mitigation Committee may group similar actions to increase the likelihood of success or increased loss reduction where possible.

The resulting scores are used to prioritize mitigation actions for funding and implementation. All mitigation actions are assigned to jurisdictions and/or agencies for administration and tracked with a unique identification number to facilitate review by the Mitigation Committee.

Local Mitigation Strategies provide a specific breakdown of hazard mitigation actions, priorities, and capabilities that are acceptable for local jurisdictions participating in this multi-jurisdictional plan.

Table 3.1: Mitigation Action Scoring Matrix

Scoring Factor		Max Points Avail.	Scoring Details	Points
<b>Support</b>				
1	<b>Cooperative Initiative</b> The number of entities which have proposed or support the action	5	5 or more entities	5
			4 entities	4
			3 entities	3
			2 entities	2
			1 entity	1
2	<b>Public Support</b> Demonstrated public support and acceptance of the action	2	Public support demonstrated	2
			Public support not demonstrated	0
<b>Intent</b>				
3	<b>Hazards</b> The number of hazard the action is intended to address	5	1 hazard	1
			2 hazards	2
			3 hazards	3
			4 hazards	4
			5 or more hazards	5
4	<b>FIRM</b> Location of action in relation to FEMA FIRMs	5	V-zone	5
			A-zone	3
			Outside Flood Plain	0
<b>Impact</b>				
5	<b>Local Population Benefited</b> Estimated percentage of population in jurisdiction which would benefit from action	5	76 - 100%	5
			51 - 75%	4
			26 - 50%	3
			11-25%	2
			10% or less	1
6	<b>County Population Benefited</b> Estimated percentage of population in county which would benefit from action	5	76 - 100%	5
			51 - 75%	4
			26 - 50%	3
			11-25%	2
			10% or less	1
7	<b>Jurisdictions Benefited</b> The number of jurisdictions which would benefit from this action	3	4 or more jurisdictions	3
			3 jurisdictions	2
			1-2 jurisdictions	1
8	<b>Effective Life Expectancy</b> The estimated effective life expectancy of the action	3	More than 25 years	3
			Less than 25 years	2
9	<b>Environment</b> Environmental impacts of the action	1	Positive environmental impact	1
			No environmental impact	0
			Negative environmental impact	-1

<i>Mitigation Action Scoring Matrix (cont'd)</i>				
<b>Funding</b>				
10	<b>Potential Funding</b> The availability of funds and potential for future funding	3	Funding now available	3
			Funding expected to be available in 2-5 years	2
			Funding expected to be available in over 5 years	1
11	<b>Matching Funds</b> Matching funds required	3	No matching funds required	3
			Matching funds required and available	2
			Matching funds required; will delay initiative	1
			Matching funds not available	0
12	<b>Benefit-Cost</b> The benefit/cost ratio of the action	5	Cost Effective	5
			Not Cost Effective	0
<b>Implementation</b>				
13	<b>Time Frame</b> The estimated time from inception of funding commitment to accomplishment of action plan	5	Within 1 year	5
			Within 2 years	4
			Within 3 years	3
			Within 4 years	2
			Within 5 years	1
			Over 5 years	0

## **Mitigation Strategies & Actions**

Mitigation Strategies & Actions includes possible mitigation actions by strategy and hazard as identified by best practices and proposals from stakeholders and the community. These strategies and actions are not prioritized but instead gathered for reference. Strategies and actions are prioritized in a later section with consideration for the hazard analysis and variations between communities.

### ***Inclement Weather***

*(Including hailstorms, lightning, thunderstorms, and fog)*

#### **Local plans and regulations**

- Ensure building codes and building code enforcement meet current standards for withstanding inclement weather, specifically hail and lightning.
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan.

#### **Structure and infrastructure projects**

- Improve utility undergrounding
- Install and maintain lightning protection on public infrastructure
- Maintain and improve early warning systems

#### **Natural systems protection**

- None identified

#### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Conduct presentations to school groups and neighborhood organizations
- Maintain county StormReady accreditation and promote principles to local jurisdictions and related entities

## ***Tornadoes***

*(Including severe wind)*

### **Local plans and regulations**

- Ensure building codes and building code enforcement meet current standards for withstanding tornadoes and severe winds.
- Amend and enforce local codes to require structural bracing, where appropriate, in all new residential and commercial construction, including manufactured homes
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan.

### **Structure and infrastructure projects**

- Improve utility undergrounding
- Install and maintain lightning protection on public infrastructure
- Properly brace and strengthen vulnerable public facilities
- Maintain and improve early warning systems

### **Natural systems protection**

- None identified

### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Conduct presentations to school groups and neighborhood organizations
- Maintain county StormReady accreditation and promote principles to local jurisdictions and related entities

## **Severe Winter Weather**

*(Including extreme (cold) temperatures, ice and sleet storms, and snowstorms)*

### **Local plans and regulations**

- Ensure building codes and building code enforcement meet current standards for withstanding severe winter storms and cold temperatures.
  - Amend and enforce local codes to require structural bracing, where appropriate, in all new residential and commercial construction, including manufactured homes
  - Establish housing/landlord codes for enforcing heating and insulation requirements
  - Ensure proper building/site design and code enforcement relating to snow loads; roof slope; and snow removal, home and public maintenance to prevent roof and wall damage from “ice dams”
- Facilitate coordination between preparedness agencies and rural agriculture entities to ensure farmer preparedness to address livestock, crop, and irrigation needs/problems.
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan, specifically the Severe Weather Annex.

### **Structure and infrastructure projects**

- Improve utility undergrounding
- Properly brace and strengthen vulnerable public facilities
- Maintain and improve early warning systems, including use of the National Weather Service Doppler radar

### **Natural systems protection**

- None identified

### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Conduct presentations to school groups and neighborhood organizations
- Maintain county StormReady accreditation and promote principles to local jurisdictions and related entities

## **Fires**

*(Including scrap fires, structure fires, and wildfires)*

### **Local plans and regulations**

- Building code enforcement coupled with fire safe construction including designs that include use of firewalls and sprinkler systems (especially in tall buildings, dormitories, attached structures, and special facilities).
- Developing site emergency plans for schools, factories, office buildings, shopping centers, hospitals, correctional facilities, stadiums, and recreation areas, and other appropriate sites.
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan, specifically the Wildfire Annex
- Policies for regulated disposal and management of scrap storage, and enforcement of regulations related to them, including:
  - Separation of stored scrap from other materials;
  - Limits on concentration;
  - Minimum distances between concentrations and property lines;
  - Covering, chemically treating, or shredding to limit mosquito/pest breeding;
  - Providing for fire vehicle access to hazard areas;
  - Training responders in emergency response procedures for identified sites;
  - Installation of earthen berms or other barriers around storage areas;
  - Limiting site storage volume
- Proper siting of tire storage and processing facilities; land use planning that recognizes scrap tire sites as a real hazard and environmental threat.
  - A policy and program allowing local government to acquire scrap sites and suitably dispose of the scrap materials

### **Structure and infrastructure projects**

- Maintain and improve early warning systems for wildfires

### **Natural systems protection**

- Implementation of a program such as the NFPA's Firewise to enable proper maintenance of property in or near wild land areas and promote fire prevention practices through public education.

### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Establishing and promoting a formal family public education and fire prevention program through fire departments, schools, and other community groups to promote family fire safety preparedness. Critical aspects include:
  - Proper installation and maintenance of smoke detectors and fire extinguishers,
  - Pre-planned escape routes and fire alert responses,
  - Posting of fire emergency telephone numbers in accessible places,

- Safe installation, maintenance, and use of electrical outlets and wiring,
- Proper installation and maintenance of heating systems (especially those requiring regular cleaning, those using hand loaded fuels such as wood or propane),
- Safe use and maintenance/cleaning of fireplaces and chimneys (with spark arresters and proper storage of flammable items),
- Safe and responsible use of electric and “space” heaters,
- Education and practice of safe cigarette and lighter handling and disposal,
- Obtaining adequate insurance.
- Establishing and promoting a formal business public education and fire prevention program through fire departments and businesses to promote business fire safety preparedness. Critical aspects include:
  - All aspects of the family fire prevention program listed above,
  - Proper workplace procedures, training and exercising, and handling of explosive and flammable materials and substances.
- Improved and continuing training for emergency responders, and provision of improved firefighting equipment.

## **Flooding**

*(Including dam failures, riverine/urban flooding, and shoreline flooding and erosion)*

### **Local plans and regulations**

- Establishment and enforcement of basic flood mitigation building code requirements including:
  - Dry flood proofing of structures (strengthening walls, sealing openings, use of waterproof compounds or plastic sheeting on walls);
  - Wet flood proofing of structures (controlled flooding of structures to balance water forces and discourage structural collapse during floods);
  - Elevating mechanical and utility equipment;
  - Use of check valves, sump pumps and back-flow preventers in homes and buildings;
  - Enforcing either the relocation or proper anchoring of manufactured homes to permanent foundations
- Establish higher engineering standards for drain and sewer capacity
- Promoting and actively participating in the National Flood Insurance Program (NFIP)
- Osceola County's Flood Insurance Rate Maps (FIRMs) are undergoing an update; many communities within Osceola County are willing to adopt the revised maps in order to participate in the NFIP
- Participating in the Community Rating System (CRS)
- Real estate disclosure laws that identify home's location within the dam's hydraulic shadow
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan, specifically the Flooding Hazard Annex.
- Developing and exercising site emergency plans and community response plans for schools, hospitals, and other vulnerable populations
- Planning acceptable uses for areas prone to flooding
- Farmland and open space preservation
- Wetlands protection regulations and policies
- Government acquisition, relocation, or condemnation of structures within floodplain or floodway areas
- Purchase or transfer of development rights – to discourage development in floodplain areas

### **Structure and infrastructure projects**

- Garnering community support for removal or repair of dams in disrepair
- Regular monitoring of water levels with stream gauges and trained monitors
- Maintain and improve early warning systems
- Structural projects to channel water away from people and property or to increase drainage or absorption capacities
- Installing (or re-routing or increasing the capacity of ) storm drainage systems, including the separation of storm and sanitary sewer systems

- Increasing functioning and capacity of sewage lift stations and treatment plants (installation, expansion, and maintenance)
- Construction of elevated or alternative roads that are unaffected by flooding, or making roads more flood-resistant through better drainage and/or stabilization/armoring of vulnerable shoulders and embankments

#### **Natural systems protection**

- Maintenance of natural drainage channels
- Employing natural erosion control techniques and measures

#### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Conduct presentations to school groups and neighborhood organizations
- Maintain county StormReady accreditation and promote principles to local jurisdictions and related entities
- Training for local officials on flood fighting, floodplain management, flood-proofing, etc.
- Promoting public participation in the National Flood Insurance Program (NFIP)

## ***Drought***

*(Including extreme (heat) temperatures)*

### **Local plans and regulations**

- Regulate storage of water for use in drought events (especially for human needs during extreme temperatures)
- Measures or ordinances to prioritize or control water use (especially when needed to fight fires)
- Preparation of drought contingency plans for critical facilities such as schools and hospitals
- Facilitate coordination between public safety agencies and utility companies supported by the Emergency Plan.

### **Structure and infrastructure projects**

- Develop structure for storage of water for use in drought events (especially for human needs during extreme temperatures)

### **Natural systems protection**

- None identified

### **Education and awareness programs**

- Utilize websites, social media, television, radio and related outreach to promote preparedness (developing a disaster plan, preparing a disaster supply kit and utilizing NOAA weather radios)
- Conduct presentations to school groups and neighborhood organizations
- Encouragement of water-saving measures by consumers (especially during irrigation and farming)

## Specific Mitigation Strategies

The Mitigation Committee identified and prioritized the following general mitigation strategies based on the hazard analysis. Mitigation Strategies by Jurisdiction (Table 3.2) provides a summary of these hazard mitigation strategies, as prioritized by each community based on their concerns and capabilities.

Current community NFIP participation and use of digital Flood Insurance Rate Maps (FIRMs) is also noted as “Y” for yes and “N” for no.

1. **Communications:** Actions to bolster the dependability of emergency communication systems
2. **Warning:** Actions to strengthen and maintain emergency notification systems
3. **NFIP:** Giving consideration to the potential benefits of active NFIP participation
4. **Flood mitigation:** Coordinating in the voluntary purchase of developed properties with structures at risk from significant and regular flooding, or other actions associated with floodplain management
5. **Severe Weather:** Severe weather mitigation, including:
  - tracking and identification of warning system needs
  - promotion of public awareness/education
  - investigation of new warning technology and shelter sites
  - consideration or use of emergency generators
  - training of emergency responders and community officials
  - participation in exercises and planning activities
  - keeping resources/equipment prepared for response and recovery activities.
6. **Infrastructure:** Consideration of and coordination in infrastructure-strengthening activities and studies, which may include drainage needs, other infrastructure and utilities, to maintain and improve capabilities and performance
7. **Fire Preparedness:** Fire-related actions such as prevention and awareness activities, evaluating staffing, training, and resource needs, consideration of fire-related regulations, evaluation of equipment and water supplies, wildfire risks, firebreak and Firewise protective activities

### Community Mitigation Strategies

The following communities have expressed specific concerns or ideas/needs for hazard-related actions, as follows. Implementation details are provided in the Local Community Mitigation Strategy annexes. Local and county stakeholders coordinated upon these issues to produce this list of community-specific concerns. These ideas and concerns are meant to enhance the local relevance of hazard mitigation action list in this plan, not replace or contradict that list. Nor are the local ideas and needs necessarily eligible for federal hazard mitigation grant funds, but they are appropriate to in some way lessen local vulnerabilities.

**Table 3.2: Mitigation Strategies by Jurisdiction**  
**Priorities are given highest (1) to lowest (7)**

	Communications	Warning	NFIP	Flood	Severe Weather	Infrastructure	Fire	NFIP Participation	Digital FIRMs	Warning Siren
Burdell Twp.	5	3	7	6	1	4	2	N	N	N
Sherman Twp	4	2	6	7	1	3	5	N	N	N
LeRoy Twp	-	-	-	-	-	-	-	N	N	N
Rose Lake Twp.	3	2	6	7	1	5	4	N	N	N
Lincoln Twp.	-	-	-	-	-	-	-	N	N	N
Cedar Twp	-	-	-	-	-	-	-	N	N	N
Richmond Twp	-	-	-	-	-	-	-	Y	N	N
Hersey Twp.	6	4	7	1	2	5	3	Y	N	N
Highland Twp	-	-	-	-	-	-	-	N	N	N
Marion Twp	5	4	6	2	1	7	3	N	N	N
Hartwick Twp	-	-	-	-	-	-	-	N	N	N
Middle Branch Twp	3	1	6	7	5	4	2	Y	N	N
Osceola Twp	-	-	-	-	-	-	-	Y	N	N
Sylvan Twp	4	5	2	1	3	7	6	Y	N	N
Orient Twp	-	-	-	-	-	-	-	N	N	N
Evert Twp	-	-	-	-	-	-	-	N	N	N
Hersey Village	6	4	7	1	2	5	3	Y	N	N
Tustin Village	-	-	-	-	-	-	-	N	N	N
LeRoy Village	-	-	-	-	-	-	-	N	N	N
Marion Village	-	-	-	-	-	-	-	Y	N	N
City of Evert	4	5	2	1	3	7	6	Y	N	Y
City of Reed City	4	5	2	1	3	7	6	Y	N	Y

Figure 3.1a: Osceola County Warning Siren Coverage Map

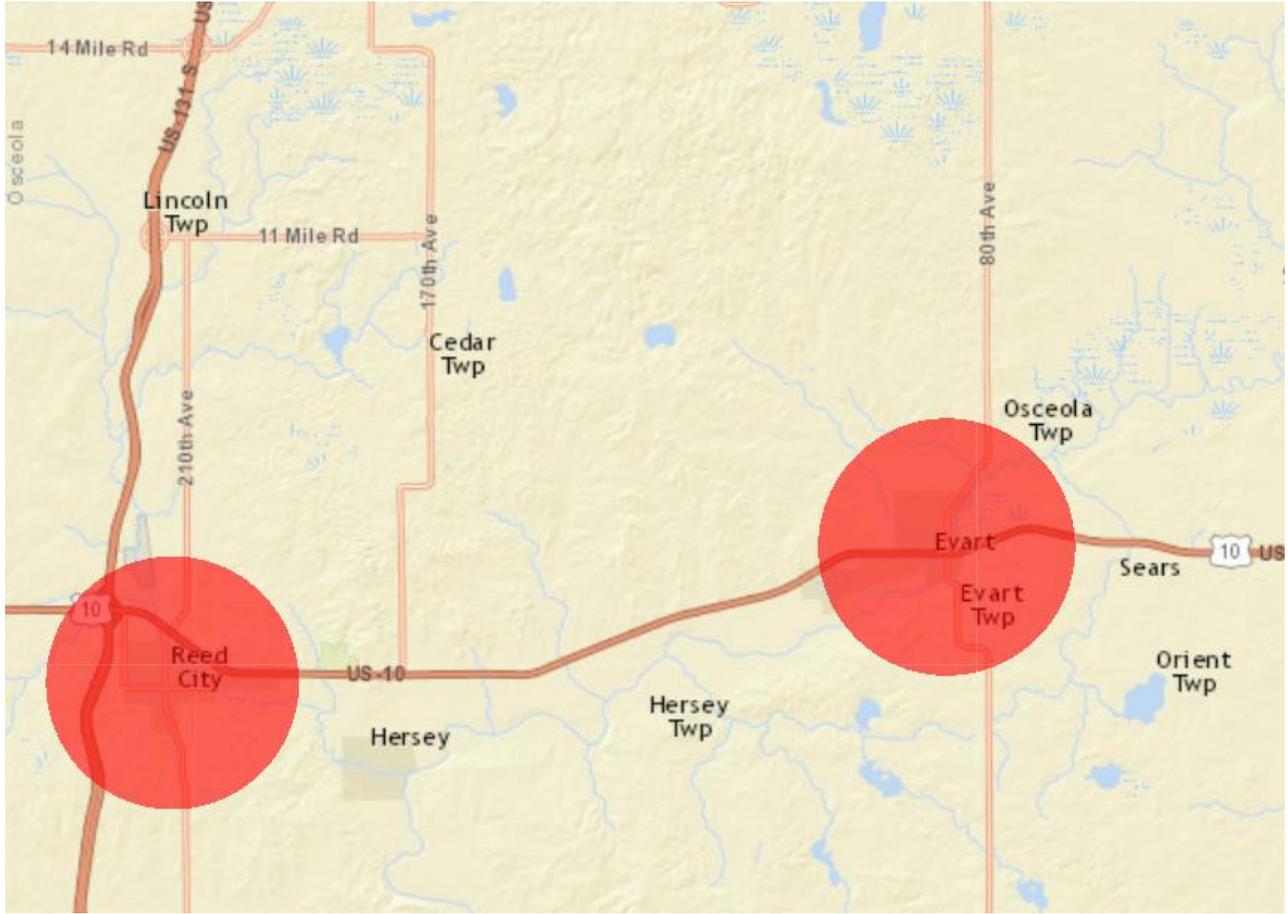


Figure 3.1b: Reed City Warning Siren Coverage Map

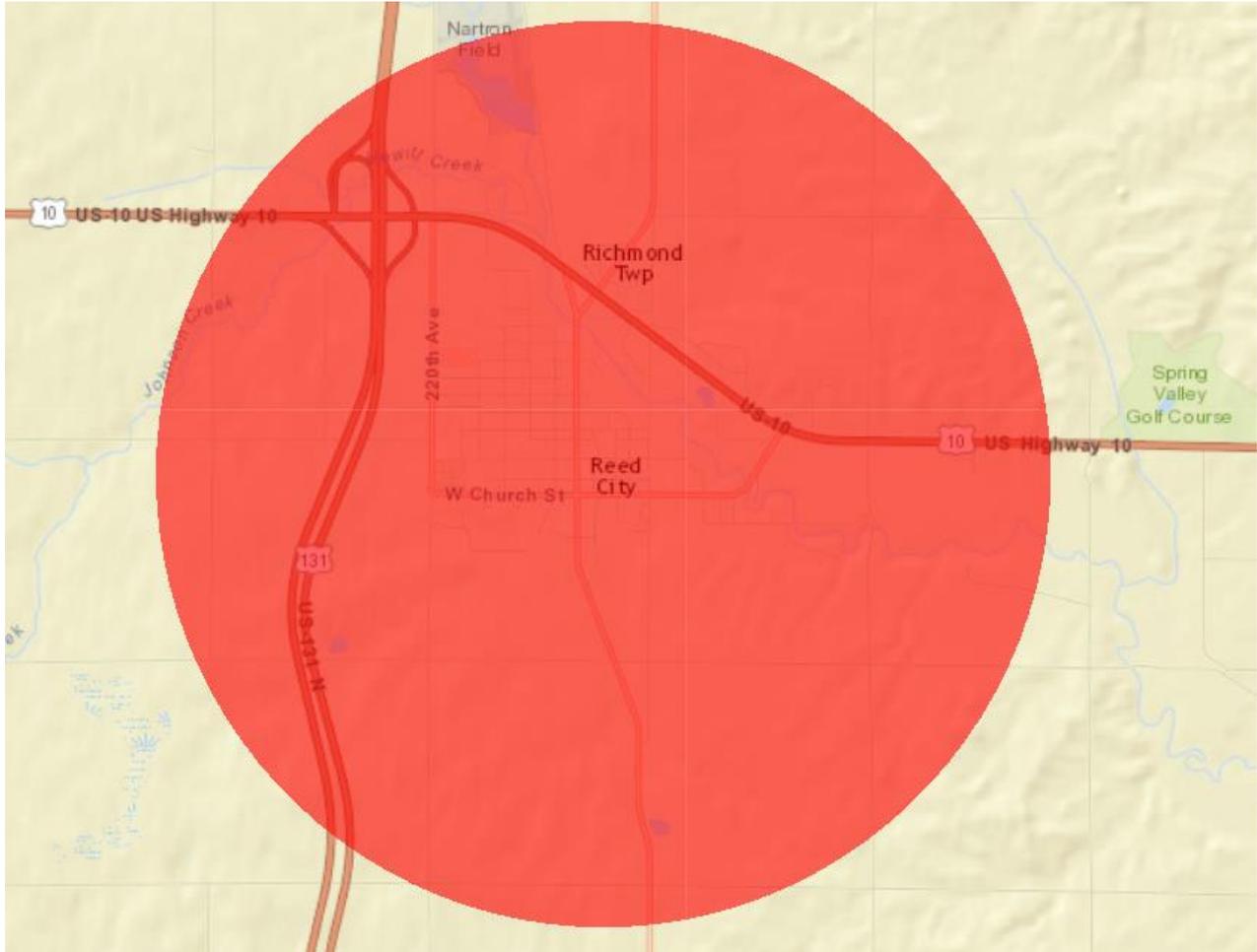
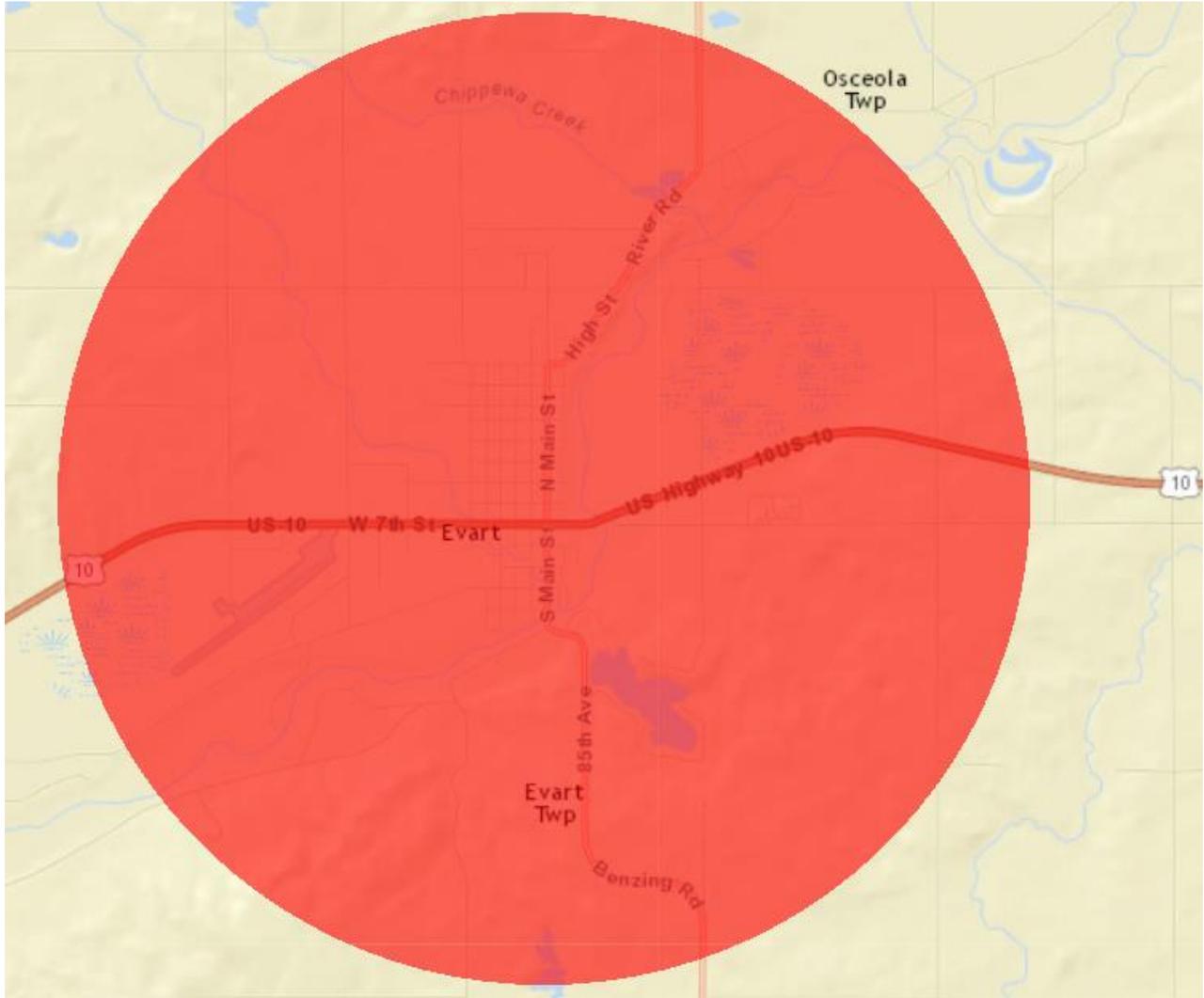


Figure 3.1c: Evert Warning Siren Coverage Map



### ***Community Capabilities***

Each community has a unique set of capabilities, including authorities, policies, programs, staff, funding, and other resources available to accomplish mitigation and reduce long-term vulnerability. Specific mitigation strategies and actions take into consideration how these local capabilities may be improved to reduce losses in the future. This information is especially useful in the planning process where local capabilities vary.

While local community leaders may be aware of the capabilities within their jurisdiction, this consideration serves to inform neighboring communities and involved agencies of capabilities that may be shared in joint mitigation efforts.

The planning team also identified the capabilities and resources available through other government entities, such as the county, which provide technical assistance to many of the townships, villages, and cities.

The identified capabilities will be utilized to develop the Local Mitigation Actions by addressing the hazards and risks identified in the Hazard Analysis.

### ***Planning & Regulatory***

Planning and regulatory capabilities are based on the implementation of ordinances, policies, local laws and State statutes, and plans and programs that relate to guiding and managing growth and development.

### ***Administrative & Technical***

Administrative and technical capability refers to the community's staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. It also refers to the ability to access and coordinate these resources effectively.

### ***Financial***

Financial capabilities are the resources that a jurisdiction has access to or is eligible to use to fund mitigation actions. The costs associated with implementing mitigation activities vary. Some mitigation actions such as building assessment or outreach efforts require little to no costs other than staff time and existing operating budgets. Other actions, such as the acquisition of flood-prone properties, could require a substantial monetary commitment from local, State, and Federal funding sources.

### ***Education & Outreach***

This type of capability refers to education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information.

***National Flood Insurance Program***

As a participant in the National Flood Insurance Program (NFIP), a community develops capabilities for conducting flood mitigation activities. As such, the plan describes each jurisdiction's participation in and compliance with the NFIP.

***Safe Growth***

The planning team identified gaps in the communities' growth guidance instruments and improvements that could be made to reduce vulnerability to future development.

### ***Prioritized Mitigation Actions***

**#1-1** Ensure multi-agency interoperability via improved 800mhz & VHF system management amongst public safety agencies

**Hazard(s) Addressed:** All

**Vulnerability(ies) Addressed:** Personal injury, property damage, environmental damage

**Primarily Responsible Entity:** Osceola County

**Initiatives Needed:** Funding Source

**Cost(s):** Unknown

**Benefit(s):** Reduce threat of personal injury, property damage and environmental damage

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#1-2** Promote government-public interoperability via integration of national mutual aid channels into the communications planning process

**Hazard(s) Addressed:** All

**Vulnerability(ies) Addressed:** Personal injury, property damage, environmental damage

**Primarily Responsible Entity:** Osceola County

**Initiatives Needed:** Funding Source

**Cost(s):** Unknown

**Benefit(s):** Reduce threat of personal injury, property damage and environmental damage

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#2-1** Investigate and acquire effective warning technology as they becomes available.

**Hazard(s) Addressed:** All

**Vulnerability(ies) Addressed:** Personal injury

**Primarily Responsible Entity:** Burdell Township

**Initiatives Needed:** Funding Source

**Cost(s):** Unknown

**Benefit(s):** Reduce risk for personal injuries

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#2-2** Survey needs and add sirens to parks and campgrounds as needed

**Hazard(s) Addressed:** Severe Weather, Tornado

**Vulnerability(ies) Addressed:** Personal injury

**Primarily Responsible Entity:** Middle Branch Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$22,000 per siren

**Benefit(s):** Reduce risk for personal injuries

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#3-1** Promote community participation in the National Flood Insurance Program (NFIP)

**Hazard(s) Addressed:** Flooding

**Vulnerability(ies) Addressed:** Property damage

**Primarily Responsible Entity:** Osceola County

**Initiatives Needed:** None

**Cost(s):** None

**Benefit(s):** Less potential for repetitive flood damage

**Implementation:** In progress

**Anticipated Funding Sources:** N/A

**#4-1** Take measures to mitigate flood damage and reduce vulnerability to existing structures

**Hazard(s) Addressed:** Flooding

**Vulnerability(ies) Addressed:** Property damage

**Primarily Responsible Entity:** Hersey Township

**Initiatives Needed:** Funding source

**Cost(s):** 8 wood frame structures at \$40,000 = \$320,000 (based on average property values)

**Benefit(s):** Less potential for repetitive flood damage

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#4-2** Purchase property vulnerable to flooding as funds become available

**Hazard(s) Addressed:** Flooding

**Vulnerability(ies) Addressed:** Property damage

**Primarily Responsible Entity:** Hersey Township

**Initiatives Needed:** Funding source

**Cost(s):** 30 lots at \$100,000 = \$3,000,000 (based on average property values)

**Benefit(s):** Less potential for repetitive flood damage

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#4-3** Identify and enforce existing building and zoning regulations to limit and manage new construction and alterations in flood plains

**Hazard(s) Addressed:** Flooding

**Vulnerability(ies) Addressed:** Property damage

**Primarily Responsible Entity:** Osceola County

**Initiatives Needed:** Hire Code Enforcement Officer

**Cost(s):** 1 Code Enforcement Officer @ \$60,000

**Benefit(s):** Better enforcement and less likelihood of future flood damage claims

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#5-1** Identify additional emergency shelter sites and adding back-up power and infrastructure to these sites

**Hazard(s) Addressed:** Severe Weather

**Vulnerability(ies) Addressed:** Personal injury

**Primarily Responsible Entity:** Hersey Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$40,000 per generator

**Benefit(s):** Less potential for personal injury

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#5-2** Educate township residents on the risks of severe weather, identify at-risk residents and aid them in installing equipment necessary to survive severe weather

**Hazard(s) Addressed:** Severe Weather

**Vulnerability(ies) Addressed:** Personal injury

**Primarily Responsible Entity:** Hersey Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$10,000

**Benefit(s):** Less potential for personal injury

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#5-3** Severe weather response training for emergency services personnel

**Hazard(s) Addressed:** Severe Weather

**Vulnerability(ies) Addressed:** Personal injury

**Primarily Responsible Entity:** Burdell Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$10,000

**Benefit(s):** Less potential for personal injury

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources

**#6-1** Consider utility undergrounding

**Hazard(s) Addressed:** Severe Weather

**Vulnerability(ies) Addressed:** Infrastructure

**Primarily Responsible Entity:** Osceola County

**Initiatives Needed:** Funding Source

**Cost(s):** Unknown

**Benefit(s):** Less potential for loss of critical infrastructure

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants, private utility company grants, as well as other funding sources

**#7-1** Expanding public education and awareness about fire hazards

**Hazard(s) Addressed:** Fire

**Vulnerability(ies) Addressed:** Personal injury, property damage, environmental damage

**Primarily Responsible Entity:** Hersey Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$10,000

**Benefit(s):** Reduce risk for fire damage and injuries

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants, Firewise, as well as other funding sources

**#7-2** Identify and develop additional rural water supplies and purchase new four wheel drive brush truck for fire department.

**Hazard(s) Addressed:** Fire

**Vulnerability(ies) Addressed:** Personal injury, property damage, environmental damage

**Primarily Responsible Entity:** Burdell Township

**Initiatives Needed:** Funding Source

**Cost(s):** \$35,000

**Benefit(s):** Reduce risk for fire damage and injuries

**Implementation:** To be considered when funding is available

**Anticipated Funding Sources:** Federal Mitigation grants as well as other funding sources