



POLK COUNTY HAZARD MITIGATION PLAN UPDATE

Meeting 2: Hazards and Vulnerabilities

June 18, 2018

Introductions



- Name
- Organization & Role
- What is one change over the next 5 years in your jurisdiction that will affect your position on staff?

Why is this Plan being Updated?

- The Disaster Mitigation Act of 2000 requires all local governments and special districts to develop a plan to assess their risks to hazards and identify actions that can be taken in advance to reduce future losses.
- The law requires Hazard Mitigation Plans to be updated every five years in order for jurisdictions to maintain eligibility for certain FEMA Hazard Mitigation Assistance grants.
- Polk County's countywide FEMA approved Hazard Mitigation Plan was last updated in 2014.

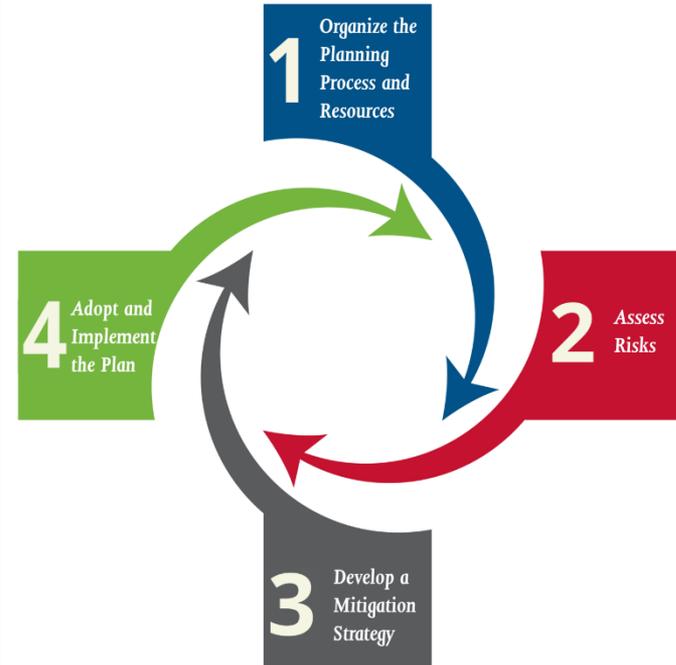
Completing Plan

- Plan update:
 - Review 2014 Polk County Hazard Mitigation Plan to determine which information is remains relevant and what needs to be changed.
 - Provide comments in new plan based on changes from old plan.
- Multi-jurisdictional plan
 - General information that applies to all jurisdictions:
 - Common planning process, hazards, goals, collaborative actions, plan maintenance process.
 - Specific information that varies by all jurisdictions
 - Geographically specific hazards; unique risks; specific goals and actions; individualized responsibility for participation and adoption.

Completing Plan

The plan follows FEMA's prescribed planning process. Its 4 main elements include:

- Organize resources
- Assess risks
- Write mitigation strategy
- Implement plan



Assessing Risk: Our Process

Step 1—Identify Hazards
Step 2—Profile Hazard Events
Step 3—Inventory Assets
Step 4—Estimate Losses



Section 3.1 – Hazard Identification
Section 3.2 – Assets at Risk
Section 3.3 – Future Land Use and
Development
Section 3.4 – Hazard Profiles and
Vulnerabilities
Section 3.5 – Hazard Analysis
Summary

Assessing Risk: Identifying Hazards

Hazard: A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

The risk assessment process **identifies and profiles relevant hazards** and **assesses the exposure of lives, property, and infrastructure** within Polk County, Iowa to these hazards. The goal of the risk assessment is to **estimate the potential loss in the planning area**, including loss of life, personal injury, property damage, and economic loss, from a hazard event.

The risk assessment process **allows communities in the planning area to better understand their potential risk to the identified hazards** and **provides a framework for developing and prioritizing mitigation actions** to reduce risk from future hazard events.

Assessing Risk: Previously Listed Hazards

2013 Iowa State & 2014 Polk County Hazard Mitigation Plan Hazards

Animal/Plant/Crop Disease
Dam Failure
Drought
Earthquake
Expansive Soils
Extreme Heat
Flash Flood
Grass/Wildland Fire
HAZMAT Incident
Human Disease
Infrastructure Failure
Landslide
Levee Failure
Radiological Incident (<i>State Only</i>)
River Flooding
Sinkholes
Structural Fire (<i>Polk County Only</i>)
Terrorism (<i>State Only</i>)
Thunderstorm/Lightning/Hail
Tornado
Transportation Incident
Windstorm
Winter Storm

Assessing Risk: Additional Consideration

- Climate Change
 - Heavy Precipitation and Flooding
 - Increase in extreme heat days
 - Drought & humidity
- Effects agriculture, human health, air pollution, tornadoes
- Any others?



Today's Activity – Assessing Risk

- Working with the representatives from your community, please complete the worksheet provided
- On the first column: Mark an 'X' next to hazards that have the potential to affect your community
- Following Columns: Score the Probability, Magnitude/Severity, Warning Time, and Duration on a scale of 1-4 in your community
- *Repeat for regional assessment of risk*

Probability Scoring

Reflects the likelihood of the hazard occurring again in the future, considering both the hazard's historical occurrence and the projected likelihood of the hazard occurring in any given year

1 – Unlikely: Less than 10% probability in any given year (up to 1 in 10 chance of occurring), history of events is less than 10% likely or the event is unlikely but there is a possibility of its occurrence.

2 – Occasional: Between 10% and 20% probability in any given year (up to 1 in 5 chance of occurring), history of events is greater than 10% but less than 20% or the event could possibly occur.

3 – Likely: Between 20% and 33% probability in any given year (up to 1 in 3 chance of occurring), history of events is greater than 20% but less than 33% or the event is likely to occur.

4 - Highly Likely: More than 33% probability in any given year (event has up to a 1 in 1 chance of occurring), history of events is greater than 33% likely or the event is highly likely to occur.

Magnitude/Severity Scoring

Assessment of severity in terms of injuries and fatalities, personal property, and infrastructure and the degree and extent with which the hazard affects the jurisdiction.

- 1—Negligible: Less than 10% of property severely damaged, shutdown of facilities and services for less than 24 hours, and/or injuries /illnesses treatable with first aid.
- 2—Limited: 10% to 25% of property severely damaged, shutdown of facilities and services for more than a week, and/or injuries/illnesses that do not result in permanent disability.
- 3—Critical: 25% to 50% of property severely damaged, shutdown of facilities and services for at least 2 weeks, and/or injuries/illnesses that result in permanent disability.
- 4—Catastrophic: More than 50% of property severely damaged, shutdown of facilities and services for more than 30 days, and/or multiple deaths.

Warning Time Scoring

Rating of the potential amount of warning time that is available before the hazard occurs. This should be taken as an average warning time.

- 1 - More than 24 hours warning time
- 2 - 12 to 24 hours warning time
- 3 - 6 to 12 hours warning time
- 4 - Minimal or no warning time (up to 6 hours warning)

Duration Scoring



A measure of the duration of time that the hazard will affect the jurisdiction.

- 1 - Less than 6 hours
- 2 - Less than 1 day
- 3 - Less than 1 week
- 4 - More than one week

Data Collection

- First Round:
 - Planning capabilities: **One Rep per jurisdiction fills out with comments from others. DUE ASAP**
- Next up:
 - Current and Future Land Use maps, and language describing development changes in your community: **One per jurisdiction. DUE JUNE 29th**

Next Meetings

- Meeting 3: July 16th, 2018
- Meeting 4: August 27th, 2018

2:00pm at Polk County Emergency Management Agency's Office
1907 Carpenter Avenue, Room C11
Des Moines, Iowa 50314

Contact Information



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