

## APPENDIX B: PLANNING PROCESS DOCUMENTATION

---

The following is a compilation of Polk County Multi-Jurisdictional Hazard Mitigation Plan planning process documentation. It contains: Invitations to participate in the planning process, agendas and meeting minutes, Power Point presentations, meeting sign-in sheets, and affidavits of publication for publications in the Des Moines Register.

Original copies of each document can be requested from Polk County Emergency Management.



420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

May 7, 2018

Subject: Polk County Multi-Jurisdictional Hazard Mitigation Plan Update

Dear Partner,

As you may know, Polk County has a countywide FEMA approved Hazard Mitigation Plan. This plan was developed in accordance with the Disaster Mitigation Act of 2000 which 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.

The Polk County Multi-Jurisdictional Hazard Mitigation Plan must be updated by July of 2019. *As with the last update, the planning process requires all school districts to participate in the planning process in order to be eligible for hazard mitigation funding.*

The hazard mitigation planning process is heavily dependent on the participation of representatives from local government agencies and departments, the public, and other stakeholder groups. A Hazard Mitigation Planning Committee will be formed to support this project and will include representatives from the County, cities, school districts, watershed management authorities, and other local, state, and federal agencies in or that serve Polk County.

It will be essential for your jurisdiction to send at least one individual to the Kickoff Meeting listed below. At this meeting, we will discuss the benefits of developing a hazard mitigation plan, the project schedule, and all of the hazards that affect Polk County, such as tornadoes, wildfires, floods, winter storms, hazardous materials, and more. **Polk County requests your assistance in forwarding this invitation to others in your agency or jurisdiction that can benefit from this process. Appropriate persons to be a part of the planning committee include: County/City Clerks, Elected Officials, Public Works Directors, Floodplain Managers, County/City Planners, Economic Development Directors, GIS Staff, School Principals, School Facilities Directors, Watershed Coordinators, and School Superintendents.**

The Hazard Mitigation Planning Committee will meet four times during Phase One of the planning process, all of these meeting dates, time, and location are listed below.

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

**Kickoff Meeting: May 21<sup>st</sup>, 2018**  
**Meeting 2: June 18<sup>th</sup>, 2018**  
**Meeting 3: July 16<sup>th</sup>, 2018**  
**Meeting 4: August 27<sup>th</sup>, 2018**

**All meetings will begin at 2pm at Polk County Emergency Management Agency's Office,  
1907 Carpenter Avenue – Des Moines, Iowa 50314 in Room C11.**

***Please RSVP to these meetings with the names and positions of the attending representatives to  
Allison Riley [ariley@dmampo.org](mailto:ariley@dmampo.org) or (515) 334-0075.***

Polk County Emergency Management has hired the Des Moines Area Metropolitan Planning Organization (DMAMPO) to manage Phase One of the plan update. DMAMPO will facilitate the planning process, collect necessary data, perform the risk assessment, and complete the initial portions of the plan document. However, to successfully complete this project and ensure your organization is eligible for FEMA hazard mitigation assistance funding, we need your participation and input.

As part of this initial step in the planning process we will review and incorporate appropriate information from existing plans, studies, reports, and technical information. Attached is a spreadsheet that we request your jurisdiction complete regarding this initial data request. ***Please return one copy per jurisdiction on or before the Kickoff meeting on May 21<sup>st</sup> to Allison Riley ([ariley@dmampo.org](mailto:ariley@dmampo.org)).*** Attached is a PDF copy of the community profile section (p. 13-81) of the current plan, please reference your jurisdictions previous profile for guidance. If you have questions, please feel free to reach out to the Allison Riley.

Thank you for your attention and responses to this important project. We look forward to working with you.

Sincerely,

Allison Riley  
Associate Planner, Des Moines Area MPO



420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## **Polk County Multi-Jurisdictional Hazard Mitigation Plan Update**

*Kick-off Meeting*

*May 21, 2018 – 2pm*

### **AGENDA:**

Meeting start time: 2:01

#### **1) INTRODUCTIONS**

Attendees were asked to provide...

- Name
- Organization & Role
- Did you participate in the last HMP update?
- What hazard would most profoundly affect your community? OR What hazards is your community least prepared for?

Responses:

- Scott Atzen (Public Works Director, City of Altoona) — Did not participate, Severe weather and Active shooter potential
- Greg Stallman (Chief of Police, City of Altoona) – Did not participate; Active shooter
- Drew Barden (Iowa Department of Public Health) – Did not participate; Disease
- Matt Greiner (Public Works Director, City of Johnston) – Did not participate; Severe weather or flooding
- Jim Clark (Fire chief, Cities of Johnston and Grimes) – has participated in others but not an update for Polk county specifically; severe weather or flooding
- Dillon Lundy (Street Projects Manager, City of Grimes) – did not participate; severe weather or tornados, flooding
- Steve Nolte (City Council, City of Elkhart) – did not participate; not prepared for train derailments
- Jerry Holt (Fire Chief, City of Urbandale) – did participate; severe weather most common, lease prepared for active shooter
- Scott – Urbandale fire department, did not participate, severe weather or active shooter
- Lindsey Williams (Assistant City Administrator, City of Polk City) – did not participate, severe weather, active shooter.

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights



- Pam Rosa (Safety Specialist, Des Moines Public Schools) – did participate, tornado identified threat for last update, concerned about threat of active shooter
- Steven Brown (District Chief, Des Moines) – Des Moines, did participate
- Jim Sanders (City Administrator, City of Johnston) – did participate, flooding is biggest threat
- Dave (Comm. Dev. Director, City of Johnson) – did participate, severe weather
- Aaron Greiner (GIS Manager, City of Des Moines) – did not participate directly (but indirectly by providing data); flooding
- Adam Prilipp (Civic Engineer, City of Des Moines) – flooding related threats
- Norm Bormann (Des Moines Catholic Diocese) – school and church safety, did not participate
- Cody Christensen (PDC Administrator, City of Des Moines) did participate, downtown fires, flooding \*events downtown)
- Phil (community development director) – Least prepared for a tsunami
- Johnathon Gano (Public Works Director, City of Des Moines) – did not participate; tornados
- Brad Rose (Athletic Director for Valley High School, WDMCS) – participated by providing info. about tornado shelters; severe weather, active shooter
- Rick Roe (City of Clive) – did participate, flash flooding, tornado, active shooter
- Doug Otlendike (Community Development Director, City of Clive) – did participate; flash flooding has biggest impact, petroleum tank farm is concerning being hear a creek
- George Smith (Director of Buildings and Grounds, Johnston Community Schools) – what if's, practicing beforehand
- Bruce Amendt (Johnston schools) – for schools active shooter is most threatening
- Bret (Planning Development Manager, Polk County) – did not participate, flooding
- Jennifer Ellison (Planner, Polk County) – did not participate, flooding
- Amanda Grutzmacher (Planner/GIS specialist, City of Clive) – did not participate, flooding
- Josh Swanson (WMA Coordinator, Polk SWCD) – flooding
- Zach (Polk County) – intentional threat, chemical issues, did not participate
- Tracey (Polk County Emergency Management) – severe weather being ignored/people not taking warning seriously
- Randy Carroll (Director of Buildings and Grounds, North Polk Schools) – did participate, active shooter
- \*Inaudible\* -- Flooding and active shooter
- Jamie Xayavong (Acting Fire Chief, City of Pleasant Hill) – active shooters
- Mark (City Council, City of Pleasant hill) – manmade threat
- Dave Burgess (Mayor, City of Windsor Heights) – severe weather and flooding
- Derek Meyer (PD Captain, City of Windsor Heights) – Did not participate
- Sheilah Lizer (Building and Zoning, City of Windsor Height) – have participate in HMP but not for Polk County, flooding
- \*Inaudible\* (Windsor heights) – did not participate; storm water
- John Lins (Des Moines Water Works) –did participate, biggest threat is harmful algae blooms
- Steve Bass (Superintendent, UCSD) – did participate, active shooters
- John (Grounds Keeper) – did not directly participate but helped provide info, active shooter
- Joe – did participate, fires, least prepared for active shooter

- Jerry Loghry (Corporate Security & Safety Manager, EMC Insurance Co.)

**2) PRESENTATION:** Overview of Hazard Mitigation Planning – Allison Riley, DMAMPO (Power Point slides attached).

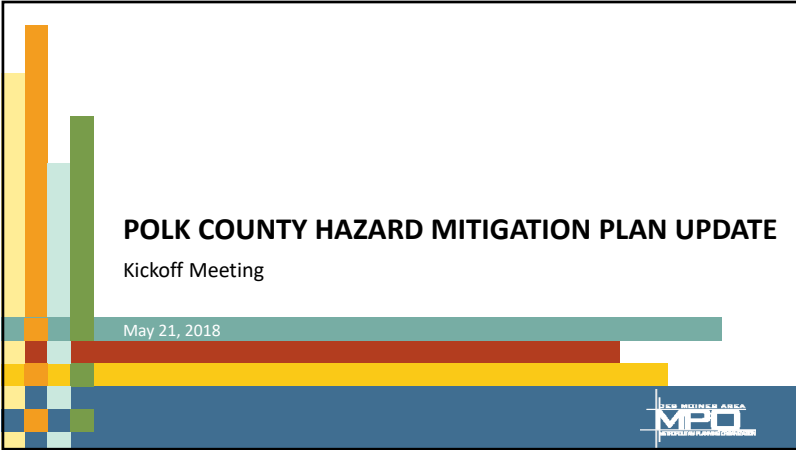
**3) WRAP UP/FINAL DISCUSSION**

Questions:

- Timeline for when forms are due. – ASAP. June 18<sup>th</sup>; but can let us know if they need more time.
- Last time we focused on natural disasters. – Will focus outside of natural disaster. Is up to group. Hearing differently now, we can include different hazards. Up to planning team to decide what we want to tackle.
- Doug Ollendike. Few that are CRS communities; provides direct points. Provided 75% amount of points. Can we structure it so we can get more points? – Can have conversation about it. – AJ: Can use this to better leverage for communities

Meeting end @ 2:32


**Next Meeting: June 18<sup>th</sup>, 2018**



# POLK COUNTY HAZARD MITIGATION PLAN UPDATE


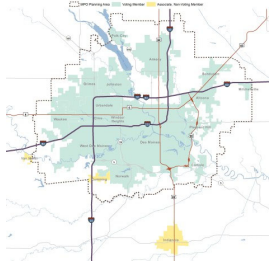
Kickoff Meeting

May 21, 2018




## Des Moines Area MPO

- The Des Moines Area Metropolitan Planning Organization (MPO) is a regional transportation planning entity comprised of local communities and transportation agencies in the Des Moines, Iowa metropolitan region.
- What we do:
  - Provide a regional forum to ensure coordination between public and local, state, and federal agencies
  - Develop both long- and short-range multimodal transportation plans
  - Select and approve projects for federal funding based upon regional priorities
  - Develop methods to reduce traffic congestion




## Introductions

- Name
- Organization & Role
- Did you participate in the last HMP update?
  
- What hazard would most profoundly affect your community?  
OR
- What hazards is your community least prepared for?



## 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.




### What is Mitigation Planning?

**Mitigation:** sustained actions taken to reduce or eliminate long-term risk to life and property from hazards.


- Protect public safety and prevent loss of life and injury.
- Reduce harm to existing and future development.
- Prevent damage to a community's unique economic, cultural, and environmental assets.

- FEMA Local Mitigation Planning Handbook




### What is Mitigation Planning?

- **It aims to:**
  - Analyze Risk
  - Reduce Risk
  - Insure Against Risk
- It is *actionable*, meaning the end result is a written document that has:
  - Specific Projects
  - Policy Recommendations
  - Actions for each jurisdiction





### What is Mitigation Planning?

- Mitigation actions are implemented to reduce disaster damages:
  - Outreach programs that increase risk awareness
  - Projects to protect critical facilities
  - Removal of structures from flood hazard areas



### Importance & Benefits of Mitigation Planning

- The unpredictability of storms makes it difficult to predict their human and financial consequences.
- The number of disasters each year is increasing but only 50% of events trigger Federal assistance.
- Having a plan in place before the next disaster is the most effective way to reduce harmful impacts.
  - Identifies policies, actions, and tools that will result in the reduction of risk.



### Importance & Benefits of Mitigation Planning

- Reducing the impact of such events also reduces need for disaster relief.
- FEMA estimates that every \$1 of FEMA funds used towards hazard mitigation prevents \$4 in losses.
- The Disaster Mitigation Act of 2000 makes the jurisdictions that participate eligible for FEMA funds:
  - Flood Mitigation Assistance
  - Pre-Disaster Mitigation Assistance
  - Hazard Mitigation Grant Program



### 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



### Organize Resources

- Determine which jurisdictions and organizations will participate and who will be the representatives involved.
- Establish what information is needed:
  - Opinions
  - Background data
  - Hazard data
  - Asset data
  - Information on capabilities and local planning resources.
- Outline of plan structure and public participation process.
- Draft community profile for the planning area.



### Community Participation

- Representation from each jurisdiction during meetings.
- Provide insight and comments during planning meetings.
- Complete all surveys and planning activities as relevant to you.
- Assist with data request.



### Benefits of Community Participation

- Your ideas, insights, and information are heard and influence plan to make it better.
- Participation usually leads to buy-in for the plan implementation.



### Initial Surveys & Data Collection

- First up:
  - Planning capabilities: **One Rep per jurisdiction fills out with comments from others.**
- Requests to come:
  - Community services and infrastructure: **One rep per jurisdiction fills out with comments from others.**
  - Provide maps and related data as requested.



Table 2.12 Des Mines Mitigation Capabilities

Capabilities	Status	Comments
Planning Capabilities		
Comprehensive Plan	Yes, 1999	
Budget Plan	No	
Climate Management Plan	Yes, 2014-15	
Local Emergency Plan	No	
Local Recovery Plan	No	Polk County EMA
County Recovery Plan	No	
Local Mitigation Plan	Yes, 2008	
County Mitigation Plan	Yes, 2008	Polk County EMA
Local Mitigation Plan (Draft)	No	
County Mitigation Plan (Draft)	No	
Electronic Communications Plan	No	
Transportation Plan	No	Mitigation Planning Organization
Land Use Plan	Yes	See appendix item 3
Financial Assistance	No	
Plan, No		
Waterfront Plan	Yes	
Presence of other sea navigation plan	No	
Climate Mitigation Plan	N/A	
Climate Resilience Plan	No	
Mitigation-Response-Recovery (MRR) Plan/Ordinance	No	Homeland Security
Zone Ordinance	Yes	Chapter 134 of City Code
Building Code	Version: 2012 International	Chap. 130, 131 and Chapter 24 of City Code
Floodplain Ordinance	Yes	Chapter 16 of City Code
Seawall Ordinance	Yes	Chapter 154 of City Code
Tide Training Ordinance	Yes	Chapter 122 Sec. 10 of City Code
Insurance Ordinance	Yes	Chapter 42 Sec. 96-104 of City Code
Bloom Water Ordinance	Yes	Numerous plans in City Code
Drainage Ordinance	Yes	Numerous plans in City Code
Site Plan Review Requirements	Yes	Chapter 82 of City Code
Design, Construction Ordinance	Yes	Chapter 84 of City Code
Landmarks Ordinance	Yes	Chapter 84 of City Code
Irrevocable and Riparian Area Conservation Plan	No	Site Plan Policies
Debris Management Plan	Not Reported	
Signage		Chapter 134 Sec. 1101-1108
Control and Use Restrictions	Yes	Chapter 246 and Chapter 122 of City Code
Coast Building Set-Back	Yes	
National Flood Insurance Program (NFIP) Participation	Yes	
National Flood Insurance Program (NFIP) Community Rating System (CRS) Participation	Yes, Class 7	
Community Awareness Program	Yes	Fire Department, CRS



### Next Meetings

- Meeting 2: June 18<sup>th</sup>, 2018
- Meeting 3: July 16<sup>th</sup>, 2018
- Meeting 4: August 27<sup>th</sup>, 2018

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



### Contact Information

Allison Riley, Associate Planner  
[ariley@dmampo.org](mailto:ariley@dmampo.org)  
515-334-0075

Andrew Collings, Senior Planner  
[acollings@dmampo.org](mailto:acollings@dmampo.org)  
515-334-0075





**Polk County Multi-Jurisdictional Hazard Mitigation Plan Update Kickoff Meeting**  
**May 21, 2018 - 2pm - Polk County Emergency Operations Center - 1907 Carpenter Ave - Des Moines, IA**

First Name	Last Name	Title	Jurisdiction/Agency	Email	Signature
Drew	Barden	Preparedness Coord	IDPH	drew.barden@idph.iowa.gov	
Steve	NOIK	FF/ Council	Elkhart	freedom.stolte@gmail.com	
Derek	Mayer	PD / Captain	WHPD	dmayer@windsorheights.org	
Pam	Rosa	Safety specialist	DMPS	<del>dm@schook</del> Pamela.rosa@dmschook.org	
Dillon	Lundy	Street Projects Manage	City of Grimes	dlundy@grimesiowa.gov	
Tim	Clark	Fire Chief	JOMFD	tclark@cityofjohnston.com	
Aaron	Grainger	GIS Manager	City Des Moines	amgrainger@dm.gov	
Steve	Bass	Supt - UCSA	UCSA	basss@urbandaleschools.com	
JOHN	LOES	B/G MANAGER	UCSD	loesj@urbandaleschools.com	
Jennifer	Ellison	Planner	Polk County	jennifer.ellison@polkcountyia.gov	
Barb	Malone	Council	PHill	barb.malone@phillia.com	
Matt	Grainger	PW Director	Johnston	mgrainger@cityofjohnston.com	
GREEN STALLMAN	ALTOONA	CHIEF			
	BRANDT		CATHY DISLEY		
Lindsay	Williams	Asst City Admin	Polk City	williams@polkcityia.gov	
Bruce	Amendt	Assoc. Supt	Johnston Schools	bamandt@johnston.k12.ia.us	
PHIL	DELAFIELD	DIRECTOR	COM CO	phildelefield@dm.gov	
Cody	Christensen	Permit & Development Admin	EDMED	cchristensen@dm.gov	
BRAD	Rose	A.D. VANEY	WDMCS	brrose@wdmcs.org	
Jeff	Hilsaback	EHS Mgr - LEPE	Polk Co	hilsaback@polkcountyclearing.com	
Dave	Burgess	Mayor	Windsor Heights	dburgess@windsorheights.org	
Jim	SANDERS	CITY ADMINISTRATOR	JOHNSTON	jsanders@cityofjohnston.com	
Cheryl	Larsen	CITY ADMN	W Heights	chlarsen@windsorheights.org	
Shailah	Lizer	Planning & Building	W Heights		
John	LINS	Incident Mgr	DMWW	lins@dmww.com	
Jerry	Lochry	Corps Sec Safety	EMC	jerryd.lochry@emc.com	
	BORNHORN		CATHY DISLEY		







420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## Polk County Multi-Jurisdictional Hazard Mitigation Plan Update

*Meeting #2*

*June 18<sup>th</sup>, 2018 – 2pm*

### **AGENDA:**

Meeting started: 2:03pm

- 1) REMARKS FROM DIRECTOR MUMM**
- 2) INTRODUCTIONS**

City of Des Moines - Permit, new Polk county FEMA flood map  
Community Development of Des Moines - Levee systems up to standards  
City of Des Moines, levee and floods  
Fire chief, West Des Moines, growing community  
Joe , west des Moines, growth in our community  
Building official city of West Des Moines, flood plain  
Matt Noble, change legislation at federal level  
Increasing development  
City of Altoona, growing community  
Chief of police in Altoona, elementary growth  
Jones, mayor of Alleman, slow but continued growth  
George smith, Johnston schools, different levels of security for active shooter, vehicle  
Bruce, super intendent of Johnston, growth/building modifications  
Kurt bailey, engineer, changing technology  
Scott, Urbandale fire department, issues with growth  
Jerry, Urbandale Fire, growth and role succession  
City of Johnston assistant to grounds, new building in two years  
Vernon, Des Moines water work, maintaining water supply for growing metro  
Mitchellville, verge of growth  
Karla, city of Urbandale HR, age edible, eoc, unemployment work, change in admin enroll, having different climate  
Matt Greiner, public works, losing institutional knowledge

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

John, city of Urbandale, support services, everything echoed  
Steve, Des Moines fire, downtown, homeless population  
Eric brown, conservation, park superintendent, popularity of parks, more campers, influx of people  
Rick rose, city of Clive, regional growth, city of Clive  
Community devilmint city of Clive, regional consideration for water manage  
Des Moines public works, separation of  
Adam smith, Des Moines public works, aging infrastructure  
LEPC, the security upgrades, adding chemicals of interest, trying to leave with new additions/aging building  
Franny, emergency management  
Amanda Brown, conservation district, water quality  
Jeff, city of Windsor heights, recruitment and retention  
Brenda, mercy emergency, what effects outside of hospital affects us  
Technology changes  
Dave, Bondurant, continued growth,  
Jamie, pleasant hill fire, interim chief, growing community  
John wise, Urbandale schools, district growth  
Training of future administrator  
Polk county health department, biological terrorism  
Joe Sullivan, Red Cross, being as prepared as we can for next disaster  
City of Altoona, growth – sewer and water  
Allison, making sure transportation is reliable for all people (not leaving anyone behind)


**3) PRESENTATION:** Assessing Risk – Allison Riley, DMAMPO

- a. Additional Consideration
- b. Climate Change
- c. Any others?
  - i. Building falls down? → Structural failure
  - ii. Cyber issues // vulnerabilities on infrastructure
    1. Should be included in terrorism?
  - iii. Terrorism, active shooter
  - iv. Water quality (E.coli exposure)?
- d. Activity – Assessing Risk

**4) WRAP UP/FINAL DISCUSSION**

Meeting concluded: 3:27pm


**Next Meeting: July 16<sup>th</sup> - 2pm - Polk County Emergency Management - 1907 Carpenter Ave**



## 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

The diagram shows a clockwise cycle of four steps: 1. Organize the Planning Process and Resources (blue), 2. Assess Risks (red), 3. Develop a Mitigation Strategy (grey), and 4. Adopt and Implement the Plan (green).



### 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 (State Only)
River Flooding
Sinkholes
Structural Fire (Polk County Only)
Terrorism (State Only)
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 29<sup>th</sup>**



### Next Meetings

- Meeting 3: July 16<sup>th</sup>, 2018
- Meeting 4: August 27<sup>th</sup>, 2018

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



Contact Information

Allison Riley, Associate Planner  
[ariley@dmampo.org](mailto:ariley@dmampo.org)  
515-334-0075

Andrew Collings, Senior Planner  
[acollings@dmampo.org](mailto:acollings@dmampo.org)  
515-334-0075





Polk County Multi-Jurisdictional Hazard Mitigation Plan Update Meeting #2  
 June 18, 2018 - 2pm - Polk County Emergency Operations Center - 1907 Carpenter Ave - Des Moines, IA

First Name	Last Name	Title	Jurisdiction/Agency	Email	Signature
Karmel	Jones	Mayor	Alleman	bjones@alleman.org	[Signature]
Kathy	Moline	Deputy Mayor	De Moines Schools	kathy.moline@deschools.com	[Signature]
Rick	Roe	Fire Chief	Clive	rick.roe@clive.org	[Signature]
John	Lees	Blizzard	UCSD	lees@ucsd.edu	[Signature]
Dean	MCGHEE	COUNCIL		MCGHEE@MCGHEE.COM	[Signature]
Adam	Smith	Deputy Mayor	De Moines	asmith@deschools.com	[Signature]
Joe	Fory	Deputy Dir	De Moines	jofory@deschools.com	[Signature]
Scott	Atkinson	Director	Alleman	scott@alleman.org	[Signature]
Bob	Van Gendepren	Deputy, Chief	U.D.M	bob.vangendepren@udm.org	[Signature]
Jeff	Hilsoset	SHS Mgr.	USC Public	hilsoset@uscpub.org	[Signature]
Chris	McCarthy	Chief	WV P/ED	cmccarthy@wvped.org	[Signature]
James	Drummond	Chief	Arkoma Fire	jd@arkomafire.org	[Signature]
Chris	Seaman	Chief	Arkoma PD	chris@arkomapd.org	[Signature]
Justin	Bailey	P.C. Eng	PEPD	justin@pepd.org	[Signature]
Steven	Brown	District Chief	DMFD	sbrown@dmfd.org	[Signature]
Joe	Solem	Chief OPS	ARC	joe.solem@arc.org	[Signature]
Matt	Gardner	Public Works Dir	Johnston	mgardner@cityofjohnston.com	[Signature]
Janie	Katavong	Chief	Des Moines Hill	janie@desmoineshill.org	[Signature]
Serly	Hoff	Chief	Urbandale	serly@urbandale.org	[Signature]
Phil	DELAFFIELD	COM DEV DIR	COM DEV DIR	phil@desmoines.gov	[Signature]
Bruce	Arnold	Assoc. Supt	UCSD	bruce@ucsd.edu	[Signature]
Paul	Christensen	Building Official	Des Moines	pchristensen@desmoines.gov	[Signature]
Dale	QUENKLE	COM DEV DIR	CLIVE	dale@clive.org	[Signature]
Adam	PELLIPP	Civil Engineer	DES MOINES	apellipp@desmoines.gov	[Signature]
Kevin	Lower	De Dir.	Urbandale	klower@urbandale.org	[Signature]
Dan	Pritchard	Civil Engineer	De Moines	dpritchard@desmoines.gov	[Signature]



First Name	Last Name	Title	Jurisdiction/Agency	Email	Signature
Scott	Waller	Assistant Chief	UPD	slip@polkcountyia.gov	
David	Waller	Director	Polk SWCD	dw@polkcountyia.gov	
George	Smith	Director of Administration	Polk SWCD	gsmith@polkcountyia.gov	
Matt	Noble	Planner	IA HSEMD	matt.noble@polkcountyia.gov	
Amanda	Brown	Coordinator	Polk SWCD	amanda.brown@polkcountyia.gov	
Karen	Oppe	Asst. Dir. of Admin.	Altoona	kopperthal@altoonawater.com	
Vern	Rask	Sr. Engineer	Polk SWCD	vrask@polkcountyia.gov	
Gene	Kentner		US Bendale	gene.kentner@usbendale.com	
Debra	Lee	First Child	West Polk	debra.lee@westpolk.org	
Peggy	Sweeney	PERT	Polk	peggy.sweeney@polkcountyia.gov	
Bryan	Mathews	MM & Parks Sup	Polk	bryan.mathews@polkcountyia.gov	
Frank	Bryun	Parks Sup	Polk	frank.bryun@polkcountyia.gov	
Yann	Kosa	Safety	Des Moines	yann.kosa@desmoines.gov	
Tom	Bryan	ASST. Dir. of Admin.	Polk	tom.bryan@polkcountyia.gov	
Karen	Oppe	Asst. Dir. of Admin.	Polk	karen.oppe@polkcountyia.gov	
Mark	Brown	Asst. Dir. of Admin.	Polk	mark.brown@polkcountyia.gov	
Sheila	Lizer	Building Mgr.	Windsor Heights	sheila.lizer@windsorheights.org	



420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## Polk County Multi-Jurisdictional Hazard Mitigation Plan Update

*Meeting #3*

*July 16<sup>th</sup>, 2018 – 2pm*

### **AGENDA:**

Meeting starts: 2:02pm

#### **1) REMARKS FROM DIRECTOR MUMM**

- a. Comments on flash flooding. Lessons learned/silver linings—can feed our hazard analysis, mitigation projects.
- b. Follow-up on discussion about active shooter/threat. Not including it in this HMP update. Could include more than shooter (driver). This is not something FEMA would fund.
- c. This is being covered/included in the work Active Threat Working Group has doing. Communities (including people in room) already provided input to this process over the last many months. Concept of operations—a plan makes it sound like we'll instruct how professionals (fire, PD, etc.) do their jobs. How they interact/act in a unified operational. Active Threat Working Group – what that threat means and how these groups work together.

#### **2) INTRODUCTIONS**

*Include: Name; Organization and Role; Describe any lessons learned from recent flash flooding event; how it will influences your job/community.*

Bruce, Johnston Schools – Flash flooding. Because of the magnitude of water, we had much more water in flatter areas (not usual sites for extra water)

George, Johnston Schools – Never had water that high. Store things on higher ground.

Joe, South East Polk – Small lessons when we hosted people from their flooded out homes.

Scott, City of Altoona – Open communication with EMS, etc. Saw flash flooding in areas we've never seen it before.

How small communities comes together to help each other out. Many people who didn't see damage came out to help those who did.

Rick, FIRE – Walnut Creek flood levels. Value of mutual aids.

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

Clive planner – Big lesson, proactively looking. Getting ready to update comp plan.

Lewis, WDSM Fire – commination with public safety division with getting word out in City.

Adam, city of Des Moines engineer – one lesson is proposed areas for Polk County are accurate (places outside of floodplain can flood).

With the masses amount of data collected during flood event, know having a standardized way of collecting it and sharing it is crucial.

FIRE chief, the search process for someone washed away. 4 hours looking for someone. 6 people who were taken/washed out. Getting resources like boats and buses to get people out of area (quickly).

Jerry, FIRE – coordinate better, make sure everyone is on the same page

Johnston/Grimes – Past mitigation efforts worked to a certain extent. Magnitude of water overwhelmed those plans.

City of Urbandale – Making sure that everyone at the front end knows what is happening; consistent messaging.

Scott, Urbandale FIRE – Watching over the years that have been spent on good projects

Eric – From a city standpoint, identify who is going to be public relations person and who is going to call the shots. Haven't practiced plan.

City of Ankeny FIRE – Expectation that people can get stuff to the curb you're going to take it away. Curbside pickup not same as garage pickup. Importance of public communication getting story straight.

West Des Moines Schools – none of buildings were affected. Even though there were issues with sub pumps.

Valley High School – Impressed with social media getting message out (the good and bad); appreciate the communication.

Michael, Polk County – Pumping basements. The organization, getting all of those resources organized.

Polk County – caution people on buying properties, even properties not in floodplain can flood.

Matt Noble, Homeland Security – Recover division, damage assessment. Still busy with dealing with aftermath.

Burn, Des Moines water works – when Raccoon River is up, makes them a big bathtub. Have seen phase improvements, which help get that amount of water out quickly.

Cameron – Figure out what wasn't flooded so employees knew how to get in. Communications.

Joe Sullivan, Red Cross – Getting structure put in place. Many ways to do damage ..... Clean up kits.

Tracy – Human error.

DSM Public Schools – Communications. That if someone knows something they pass it on.

Catholic Diocese – problems with roofs that could not handle rain coming down. Surprised by the TV coverage and the amount of info was being shared.

City of Windsor Heights – Vacation out all week

Urbandale superintendent – didn't realize how much damage would be done to football fields. Impressed/thankful for the people who stepped up to clean up and did the work needed. Grateful for not being in school session during event.

Weezer – reinforced that preventative maintenance is important that even if you feel like you don't have the time, need to find the time for such preventative maintenance measures (even if just small). Limited damage because of sub pumps.


**3) PRESENTATION:** Assessing Risk – Allison Riley, DMAMPO

**4) ACTIVITY:** Mapping the Ripple Effect of Hazards

**5) WRAP UP/FINAL DISCUSSION**


Meeting concluded: 3:13pm

**Next Meeting: August 28<sup>th</sup> - 2pm - Polk County Emergency Management - 1907 Carpenter Ave**




**POLK COUNTY HAZARD MITIGATION PLAN UPDATE**  
Meeting 3: Hazards and Vulnerabilities

July 16, 2018




**REMARKS FROM DIRECTOR MUMM**



**Introductions**

---


- Name
- Organization & Role
  
- Describe any lessons learned from recent flash flooding event.
- How will this influence your community or staff in mitigating, preparing for or responding to flash flooding?



**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: 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
HAC/M&I Incident
Human Disease
Infrastructure Failure
Landlide
Levee Failure
Radiological Incident (State Only)
River Flooding
Sinkholes
Structural Fire (Polk County Only)
Terrorism (State Only)
Thunderstorm/Lightning/Hail
Tornado
Transportation Incident
Windstorm
Winter Storm

Suggested additions from our last meeting:

- Water Quality
- Consider climate change throughout:
  - More intense precipitation and flooding
  - Increase in extreme heat days
  - Drought & humidity
  - Effects on agriculture, human health, air pollution, tornadoes




### Preliminary Results from Regional Risk Assessment

Hazard	Risk Score
Animal/Plant/Crop Disease	1.8
Dam Failure	2.2
Drought	1.8
Earthquake	2.2
Expansive Soils	2.0
Extreme Heat	2.4 *
Flash Flooding	2.7 *
Grass/Wildland Fire	1.9
HAZMAT Incident	2.4 *
Human Disease	2.0*
Infrastructure Failure	2.3
Levee Failure	2.4 *
River Flooding	2.6 *
Sinkholes/Landslide	1.9 *
Structural Fire	1.5 *
Thunderstorm/Lightning/Hail	2.6 *
Tornado	2.7 *
Transportation Incident	2.4 *
Windstorm	2.5 *
Winter Storm	2.6 *

Score	Risk Level
1.0 - 1.9	Low
2.0 - 2.9	Moderate
3.0 - 4.0	High


Scoring weights:  
 Probability: 45%  
 Severity: 30%  
 Warning Time: 15%  
 Duration: 10%

\* Denotes localized high level risks




### Today's Activity - Examining the Ripple Effect of Hazards

- Working with representatives from your community, use the maps provided to identify areas affected by our recent flash flood event and analyze how this one hazard created others.
  - Example: Flash flooding in Windsor Heights led to transportation incidents & sinkholes
  - Example: Flash flooding in Des Moines led to transportation incidents & structural fires
- Repeat for River Flooding, Winter Storms, Extreme Heat, and any others your group choses applicable.*
- Then start to brainstorm ways to reduce the risks of these incidents.
  - REMEMBER: Mitigation aims to reduce loss of life and property damage.
- Finally, complete risk assessment for water quality hazard.*



### Data Collection


- Currently due:
  - Planning capabilities: **One Rep per jurisdiction fills out with comments from others. DUE ASAP**
  - Current and Future Land Use maps, and language describing development changes in your community: **One per jurisdiction. DUE ASAP**
- School districts will receive a data request later this week regarding CIPs



### Final Meeting for Phase I

**Meeting 4: August 27<sup>th</sup>, 2018**

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





Contact Information

Allison Riley, Associate Planner  
[ariley@dmampo.org](mailto:ariley@dmampo.org)  
515-334-0075

Andrew Collings, Senior Planner  
[acollings@dmampo.org](mailto:acollings@dmampo.org)  
515-334-0075











420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## **Polk County Multi-Jurisdictional Hazard Mitigation Plan Update**

*Meeting #4*

*August 27<sup>th</sup>, 2018 – 2pm*

### **AGENDA:**

Meeting began: 2:05pm

- 1) PRESENTATION:** Phase I Overview – Allison Riley, DMAMPO
- 2) DISCUSSION**

*In a perfect world, what mitigation strategy would your jurisdiction implement, and why?  
What mitigation strategy has had the most impact on your community to date?*

- Joe – South East Polk School District – driving in inclement weather
- Altoona – inclement weather, whether it's tornadoes, install tornado structures more frequently placed
- Brad Rose from WDSM Schools – Designing a designated
- George Smith – Johnston Schools – Extra safety locations to put students and staff
- Hardened roofs?
- City of Ankeny – retrofitting safe rooms in all of the buildings and schools
- Public Works – upgrade storm sewers to mitigate flash flooding
- Chad Carlson – Bondurant-Farrar – Hard spaces, FEMA grade shelters
- West Des Moines – levy and storm water system
- Kurt Bailey – Polk County – more roads, bridges, storm water storages in urban areas
- City of Bondurant – upgrading and making sure infrastructure is designed properly to handle storms, and proper infrastructures for tornado safety
- Iowa Homeland Security Emergency Management – detention base to slow the water down and infiltrate for both flash flooding and infiltration, acquisition and demolition of structures that were previously flooded and turning them into green spaces
- Jenifer Ellison – Polk County – No more construction in flood plains
- Get rid of large rocks used for levy material in case of tornado
- City of Des Moines engineer – properties that were grandfathered out for storm water and bring them up to current standards
- Cody – City of Des Moines – buyout properties in flood-prone areas;
- Steve Brown – Fire Chief, City of DSM – fire checks, extinguisher
- Elkhart – flashflood water mitigation

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights


- City of Mitchellville - larger water management for fire hydrants, road connections
- Updating the system, maintain architectural integrity and accessibility
- Vern Rash - DMWW - Flash flooding deterrence within DMWW facilities
- Getting first response throughout the community
- Windsor Heights - infrastructure, sewer, sanitary backflow
- Chad McCluskey - Windsor Heights - infrastructure replacement,
- North Polk Schools - safe rooms
- Gary - Urbandale - safe rooms in schools, expand ability to handle the runoff, and work in conjunction with the south, communication systems
- Swimming lessons and life-saving skills education for citizens, buy out properties in flood plains
- Catholic diocese and schools - safe rooms, flood mitigation
- Safe rooms, buy out properties in flood plains

**3) FINAL PHASE I Activity**

**4) WRAP UP/FINAL DISCUSSION**

Meeting Concluded: 3:22pm


**Next Meeting: TBD When Phase II RFP process is finalized. Fall 2018**



## POLK COUNTY HAZARD MITIGATION PLAN UPDATE


Meeting 4: Phase I Wrap-Up

August 27, 2018




### Agenda for Today

- Hazard Mitigation Planning Overview
- Hazard Profile Overview
- Risk Assessment Overview
- What to expect from Phase II?
- Brief Discussion
- Last Phase I Activity



### 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.



### The 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.



## 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.



## Hazard Profile Updates

- Regional risk assessment
- Hazard description
- All data tables and maps, with additions in some profiles
  - Extent, previous occurrences, hazard caused insurance claims, extremes, vulnerabilities, potential losses, future development, etc.
  - Regional and local considerations
- Community and health impacts
- Climate change
- Local risk assessment



Note: Modified from U.S. Geological Survey and Oregon Partnership for Disaster Resilience Models.



## Preliminary Results from Regional Risk Assessment

Hazard	Risk Score
Winter Storm	2.7*
Tornado	2.7*
Thunderstorm/Lightning/Hail	2.6*
Flash Flooding	2.6*
River Flooding	2.5*
Structural Fire	2.5*
Windstorm	2.5*
Transportation Incident	2.4*
HAZMAT Incident	2.4*
Infrastructure Failure	2.3
Extreme Heat	2.3*
Earthquake	2.1
Levee Failure	2.1*
Dam Failure	2
Human Disease	2.0*
Drought	1.9
Grass/Wildland Fire	1.8
Sinkholes/Landslide	1.8*
Expansive Soils	1.8
Animal/Plant/Crop Disease	1.8

Score	Risk Level
1.0 - 1.9	Low
2.0 - 2.9	Moderate
3.0 - 4.0	High

Scoring weights:  
 Probability: 45%  
 Severity: 30%  
 Warning Time: 15%  
 Duration: 10%

\* Denotes localized high level risks

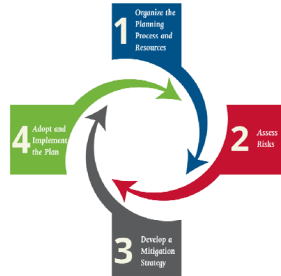
## Preliminary Results from Local Risk Assessment

	Extreme Flooding/Coastal Flooding	Winter Storms	Flash Flooding	Thunderstorms	Expansive Soils	Expansive Soils	Grass/Wildland Fire	HAZMAT Incident	Transportation Incident	Infrastructure Failure	Levee Failure	Dam Failure	Human Disease	Drought	Sinkholes/Landslide	Expansive Soils	Animal/Plant/Crop Disease	Tornado	Thunderstorm/Lightning/Hail	Structural Fire	Windstorm	Winter Storm
Polk County	2.7	2.7	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Adair	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Boone	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Clark	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Des Moines	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Johnston	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Marshalltown	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Polk City	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Waukee	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Urbandale	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Johnston (continued)	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
City of Windsor Heights	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Des Moines Water Works	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Arkansas Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Booneville Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Grass Lake Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Elkader Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Des Moines Independent School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Waukee Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
North Park Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Leadbelt Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Winterset Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Winterset Community School District (continued)	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
Winterset Community School District (continued)	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7
West Des Moines Community School District	2.6	2.6	2.1	2.2	2.1	2.5	1.9	1.9	1.9	2.1	1.9	2.2	2.2	2.2	1.9	1.9	1.9	2.7	2.7	2.7	2.7	2.7

## Next Steps

### Phase II: Mitigation Strategies & Adoption

- Determine mitigation goals and objectives
- Update previous mitigation project progress
- Develop and prioritize new mitigation projects
- Identify funding sources
- Approval and adoption by cities, PCEM, IHSEMD, and FEMA



## Discussion

- Name
- Organization
- Role
- In a perfect world, what mitigation strategy would your jurisdiction implement? Why?
- What mitigation strategy has had the most impact on your community to date?



## Final Activity in Phase I

*Please take a moment to validate critical facilities counts for your community and final local risk assessment.*

- *Denotes community facilities found within Polk County boundaries.*
- *If there is a hazard you would like to rescore, please talk to MPO staff.*



## Contact Information

Allison Riley, Associate Planner  
[ariley@dmampo.org](mailto:ariley@dmampo.org)  
 515-334-0075

Andrew Collings, Senior Planner  
[acollings@dmampo.org](mailto:acollings@dmampo.org)  
 515-334-0075















420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## Polk County Multi-Jurisdictional Hazard Mitigation Plan Update

*Meeting #5*

*December 3<sup>rd</sup>, 2018 – 2pm*

### **AGENDA:**

Meeting started: 2:04pm

- 1) **PRESENTATION:** Phase II Overview, Allison van Pelt, DMAMPO
- 2) **DISCUSSION:** Goals and Priorities

### Comments/Edits to Current Goals

**PROACTIVE:** Is there an opportunity put proactive actions such as dimensions of climate change - watersheds should be taken into account to anticipate what would happen in the next 20-30 years.

- Proactive vs. mitigation
- For Goal #3, data collection, **projections**, use and sharing to reduce the impact of hazards
  - Data collection needs to have measurable outcomes to compare and improve future planning
  - “data driven decision making for positive future outcomes”

**PREVENTION:** The current goals focus a lot on how to fix something that has been impacted already. Needs more policies and action items about preventing new development from hazards. Needs to be more than increase public awareness, need more actions to prevent.

- Objectives in the middle of goals?
- Goals and actions?
- Yes to both questions (AJ) – start at the big picture, then what needs to be done, then how

Goal #5 Keywords: within a **regional** context - one community needs to think of what’s best for the whole region, not just itself; limit poor decision, resulting in preventing hazardous impacts; mitigating the problems versus “moving it down”; “hazards from occurring”

Collaborate on regional best practices to lessen impacts from hazards

Collaborate regionally on local best practices to lessen impacts of hazards

Collaborate locally on regional best practices to prevent or lessen impacts of hazards

- Prevention is different from protection
  - Hazards may still happen, but not damages (ex, buildings were not developed in flood hazard areas, so that even though there were hazards, there wouldn’t be damages)

**Voted: Combine goals #2 & #5 to have a total of 4 goals, and a really long goal #2**

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

Comment: As a school district, putting in safe rooms through FEMA is next to impossible. For actions, make it something that are feasible through FEMA.

- School district workshops?
- Comment (AJ): Looking back at past plans and what had been successful and using it as a guide to implement new action items

### **3) WRAP UP/FINAL DISCUSSION**

Meeting concluded: 3:01pm

**Next Meeting: Optional workshop: January 15<sup>th</sup>, 2019**

**Final HMP Meeting: February 25<sup>th</sup>, 2019**



420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

November 16, 2018

Subject: Polk County Multi-Jurisdictional Hazard Mitigation Plan Update - Phase II

Dear Partner,

As you may know, Polk County has a countywide FEMA approved Hazard Mitigation Plan. This plan was developed in accordance with the Disaster Mitigation Act of 2000 which 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.

The Polk County Multi-Jurisdictional Hazard Mitigation Plan must be updated by July of 2019. *As with the last update, the planning process requires all school districts to participate in the planning process in order to be eligible for hazard mitigation funding.*

The hazard mitigation planning process has been and will continue to be heavily dependent on the participation of representatives from local government agencies and departments, the public, and other stakeholder groups. A Hazard Mitigation Planning Committee has been formed to support this project and will include representatives from the County, cities, school districts, watershed management authorities, and other local, state, and federal agencies in or that serve Polk County.

It continues to be essential for your jurisdiction to send at least one individual to the Phase II meetings listed below. At these meetings, we will review Phase I, draft plan goals and objectives, review STAPLEE guidelines, review the list of projects submitted for each jurisdiction in 2014 to determine progress and add new projects, determine funding sources, and more. **Polk County requests your assistance in forwarding this invitation to others in your agency or jurisdiction that can benefit this process. Appropriate persons to be a part of the planning committee include: County/City Clerks, Elected Officials, Public Works Directors, Floodplain Managers, County/City Planners, Economic Development Directors, GIS Staff, School Principals, School Facilities Directors, Watershed Coordinators, and School Superintendents.**

Polk County Emergency Management has hired the Des Moines Area Metropolitan Planning Organization (DMAMPO) to manage Phase II of the plan update. DMAMPO will facilitate the planning process, collect necessary data, finalize the report, and hold a 30-day public comment period. However, to successfully complete this project and ensure your organization is eligible for FEMA hazard mitigation assistance funding, we need your participation and input.

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights



The Hazard Mitigation Planning Committee will meet three times during Phase II of the planning process, all of these meeting dates, time, and location are listed below.

Meeting 1: December 3<sup>th</sup>, 2018

Meeting 2: January 14<sup>th</sup>, 2019

Meeting 3: February 25<sup>th</sup>, 2019

All meetings will begin at 2pm at Polk County Emergency Management Agency's Office,  
1907 Carpenter Avenue - Des Moines, Iowa 50314 in Room C11.

*Please RSVP to these meetings with the names and positions of the attending representatives to  
Allison van Pelt [avanpelt@dmampo.org](mailto:avanpelt@dmampo.org) or (515) 334-0075.*

In preparation for the Phase II process early next week MPO staff will distribute mitigation project spreadsheets containing projects each jurisdiction submitted for the 2014 hazard mitigation plan. Before December 3<sup>rd</sup>, we are asking that each jurisdiction to please take time with your staff to review these, make note of any progress, and bring this to the first Phase II meeting.


If you have any questions during this process please do not hesitate to contact me by email or phone.

Thank you for your attention and responses to this important project. We look forward to working with you.

Sincerely,

Allison


**Allison van Pelt** | Associate Planner  
**Des Moines Area MPO** | 420 Watson Powell, Jr. Way, Suite 200, Des Moines, IA 50309  
p. 515.334.0075 | e. [avanpelt@dmampo.org](mailto:avanpelt@dmampo.org) | w. [www.dmampo.org](http://www.dmampo.org)



## POLK COUNTY HAZARD MITIGATION PLAN UPDATE


Meeting 5: Phase II Kick-off

December 3, 2018




### Agenda for Today

- Hazard Mitigation Planning Overview
- Phase I Review
- Timeline of Phase II
- Develop 2019 Polk County HMP Goals - *Activity*
- Overview of Developing New Mitigation Actions
- “Home” work



### 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. New plan due July 2019.



### The 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.*




## 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.




## Results from Regional Risk Assessment

Hazard	Risk Score
Winter Storm	2.7*
Tornado	2.7*
Thunderstorm/Lightning/Hail	2.7*
Flash Flooding	2.7*
River Flooding	2.6*
Windsorm	2.5*
Structural Fire	2.4*
Transportation Incident	2.4*
HAZMAT Incident	2.3*
Infrastructure Failure	2.3
Extreme Heat	2.3*
Earthquake	2.0
Levee Failure	2.0*
Dam Failure	2.0
Drought	2.0
Human Disease	1.9*
Grass/Wildland Fire	1.8
Sinkholes/Landslide	1.8*
Expansive Soils	1.7
Animal/Plant/Crop Disease	1.7

Score	Risk Level
1.0 - 1.9	Low
2.0 - 2.9	Moderate
3.0 - 4.0	High


Scoring weights:  
 Probability: 45%  
 Severity: 30%  
 Warning Time: 15%  
 Duration: 10%

\* Denotes localized high level risks




## Hazard Profile Updates

- Regional risk assessment
- Hazard description
- All data tables and maps, with additions in some profiles
  - Extent, previous occurrences, hazard caused insurance claims, extremes, vulnerabilities, potential losses, future development, etc.
  - Regional and local considerations
- Community and health impacts
- Local risk assessment
- Further Consideration: Climate change




Note: Modified from U.S. Geological Survey and Oregon Partnership for Disaster Resilience Models.




## Timeline

**Phase II: Mitigation Strategies & Adoption**


- Determine mitigation goals – Today**
- Update previous mitigation action progress – December/January
- Develop new mitigation action – December/January
- Finalize and prioritize mitigation action – January 2019
- Final HMP Draft Presented – Meeting #7 – February 25, 2019
- Public comment period: February 25 – March 27, 2019
- Approval and adoption by cities, PCEM, IHSEMD, and FEMA – April/May






### Drafting New Goals

- **Goals** are general guidelines that explain what you want to achieve. Goals are defined before considering how to accomplish them so that they are not dependent on the means of achievement. They are usually long-term, broad, policy-type statements.
- **Mitigation Actions** are specific actions that help achieve goals.




### 2013 State of Iowa HMP Goals

1. Protect the health, safety and quality of life for Iowa citizens while reducing or eliminating property losses, economic costs, and damage to the natural environment caused by a disaster.
2. Ensure government operations, response, and recovery are not significantly disrupted by disasters.
3. Expand public awareness and encourage intergovernmental cooperation, coordination and communication to build a more resilient community against all hazards.



### 2014 Polk County HMP Goals


1. Protect the public health, safety, and welfare by increasing public awareness of hazards and by encouraging collective and individual responsibility for mitigating hazard risks.
2. Improve capabilities, coordination, and opportunities at municipal and county levels to plan and implement hazard mitigation projects, programs, and activities, *including incorporation of lessons learned from previous events and exercises.*
3. Improve data collection, use, and sharing to reduce the impact of hazards.
4. Protect the most vulnerable populations, buildings, and critical facilities through the implementation of cost-effective and technically feasible mitigation actions.



### What changes should be made to these goals for 2019-2023?

1. Protect the public health, safety, and welfare by increasing public awareness of hazards and by encouraging collective and individual responsibility for mitigating hazard risks.
2. Improve capabilities, coordination, and opportunities at municipal and county levels to plan and implement hazard mitigation projects, programs, and activities, *including incorporation of lessons learned from previous events and exercises.*
3. Improve data collection, use, and sharing to reduce the impact of hazards.
4. Protect the most vulnerable populations, buildings, and critical facilities through the implementation of cost-effective and technically feasible mitigation actions.

**Activity:** *Discuss with those around you any changes for these goals in this update.*



## VOTE ON 2019 UPDATE GOALS




## Next Step: Developing Mitigation Actions

- Review 2014 HMP Community Mitigation Actions
- Update progress
- Determine new mitigation actions for 2019 HMP


**Keep in mind:**

- Risk assessment & Phase I planning process discussions & outcomes
- Community goals and capabilities; regional and local plans and initiatives
- State hazard mitigation goals & priorities
- Projects will be scored based on STAPLEE matrix
- FEMA Hazard Mitigation Assistance eligible activities
- Use MPO staff or other subject matter experts as a resource



## State of Iowa High Priority Actions

- Long-term successes take priority in project selection:
  - Local hazard mitigation planning
  - Critical facilities protection
  - Infrastructure drainage
  - Electrical retrofit
  - Property acquisition/relocation/elevation
  - Safe rooms
  - NOAA weather radio transmitter installation
  - Trainings, workshops, mitigation related legislation



## STAPLEE Mitigation Action Scoring

S	Social	Is the proposed measure acceptable to the community? Will the measure treat all individuals and groups equitably? Will the measure result in an inadvertent negative treatment of one or more segments of the population?
T	Technical	Will the measure reduce losses in the long-term? Is the measure a whole or partial solution to the problem? Does the measure solve the problem instead of the symptoms?
A	Administrative	Do the agencies responsible for implementing the measure have the skill, experience, knowledge, ability, staffing, funding, and maintenance capability to do so?
P	Political	Does the measure have the support of elected officials, public or private agencies, and the general public?
L	Legal	Does the jurisdiction responsible for implementing the measure have the legal authority to do so? Is there a legal basis (local code/ordinance, state law, or federal law) for the measure?
E	Economic	Do the measure's benefits exceed the costs? Does the measure contribute to the overall economic goals of the community? Are there current sources of funds to implement the measure? Will the measure impose an increased burden on the tax base or the local economy?
E	Environmental	How does the measure impact the natural environment? Does the measure comply with local, state, and federal environmental laws? Is the measure consistent with current environmental goals?

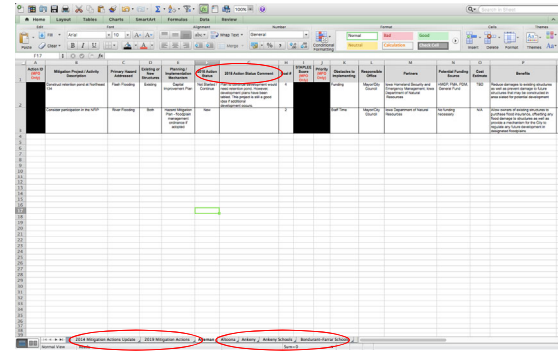
  

STAPLEE Worksheet		
Name of Jurisdiction		
Action or Project		
Action/Project Number:		
Name of Action or Project:		
Mitigation Category:		
STAPLEE Criteria		
Criteria	Qualitative Rating	Score
S - Is it socially acceptable?	Indefinite (0-1) - 0 Highly (2) - 1 Moderately (3) - 2 Not at all (4) - 0	
T - Is it technically feasible and potentially successful?		
A - Does the jurisdiction have the Administrative capacity to execute this action?		
P - Is it politically acceptable?		
L - Does it have legal authority to implement?		
E - Is it economically beneficial?		
E - Will the project have either a neutral or positive impact on the natural environment?		
Will historic structures be saved or preserved?		
Could it be implemented quickly?		
STAPLEE SCORES		
Mitigation Effectiveness Criteria	Qualitative Rating	Score
Will the implemented action result in a net benefit?	Range from 0-10 points based on the likelihood of success (0=not likely)	
Will the implemented action result in a net burden on the tax base or the local economy?	Range from 0-10 points based on the relative probability of burden/benefit	
<b>MITIGATION EFFECTIVENESS SCORE</b>		
<b>NET SCORE (EFFECTIVENESS - BURDEN)</b>		
<input type="checkbox"/> High Priority (20+ points)	<input type="checkbox"/> Medium Priority (10-19 points)	<input type="checkbox"/> Low Priority (0-9 points)
Prepared by: _____ Date: _____		

### “Home” work

- Prior to optional workshop on January 15<sup>th</sup>:
  - Complete mitigation action workbook and submit to MPO
    - 2014 Mitigation Action Progress Summary
      - » Mitigation Action Completion/Continuation/Deletion Details
    - 2019 Mitigation Action Implementation Strategy
      - » Details of new or continuing projects; Columns blacked out will be filled in by MPO staff
  - This sheet and all HMP meeting presentations can be found on MPO’s website.
- During the optional workshop we will finalize the drafting of mitigation projects.

### 2014 Community Mitigation Action Workbook



### 2014 Mitigation Strategy Progress Summary

Jurisdiction	Completed Actions	Continuing Actions (ongoing or modify)	Deleted Actions			
Adel	3	10	1			
Completed Actions (include 2014 Action ID)	Completion Date	Cost	Funding Source	Partners	Office Responsible	Obstacles to Implementation
Adel 1	10/17/16	\$ 638,544.00	Capital Improvement Program	ISWEP	Public Works	Funding & Policy
Deleted Actions (include 2014 Action ID)	Reason for Deletion					
Adel 1: Implement a stormwater utility to maintain drainage infrastructure.	No political support at this time.					
Continuing Actions (include 2014 Action ID)	Progress Towards Completion	Timeline for Completion				
Adel 4	Funding secured, construction to begin in Spring 2019	1 year				

### 2019 Mitigation Action Implementation Strategy

Action ID (MPO Only)	Mitigation Project/ Activity Description	Primary Hazard Addressed	Existing or New Structures	Planning/ Implementation Mechanism	2018 Action Status	2019 Action Status Comment	Goal #	STAPLEE Score (MPO Only)	Priority (MPO Only)	Obstacles to Implementing	Responsible Office	Partners	Potential Funding Source	Cost Estimate	Benefits	Timeline
	Update stormwater warning system	Tornado	Both	Hazard Mitigation Plan	In Progress	Update has been done but still need file to add new items	4			Funding	Mayor/City Council	Local Hazardous Security and Emergency Management; Park County Emergency Management	HMGP 5%	TBD	Improve the City's ability to provide outdoor warning of severe weather, including advising residents to take life-saving actions.	5 years



**QUESTIONS?**



**Contact Information**

Allison van Pelt, Associate Planner

[avanpelt@dmampo.org](mailto:avanpelt@dmampo.org)

515-334-0075

Andrew Collings, Senior Planner

[acollings@dmampo.org](mailto:acollings@dmampo.org)

515-334-0075







Polk County Multi-Jurisdictional Hazard Mitigation Plan Update Meeting #5  
 December 3, 2018 - 2pm - Polk County Emergency Operations Center - 1907 Carpenter Ave - Des Moines, IA

First Name	Last Name	Title	Jurisdiction/Agency	Email	Signature
Troy	Mertes	Lieutenant	Waukee Police	tmspr@waukee.org	
Joe	Libby	Executive Director	WDMAS	libbyj@wdmas.org	
Trace	Kendry	Police Unit	Polk City		
Amanda	BROWN	Pol. Coord.	Polk S.W.C.D	amanda.brown@polk.iowa.net	
Ridney	Tucker	EM	Polk Co	ridneyt@polk-emt.org	
Eric	Len	Fire Chief	WDM	eric.lenc@wdm.com	
Don	Kum	D-SMPS	WDM	skunk@wdm.com	
Kurt	Barley	Polk Co Engineer	Polk Co Public Works	on fire	
Paul	allendile	Law Dep	Clive	allendile@cityofclive.com	
Jim	Harlow	ENGINEER	ALTONA	jhanson@altona-iowa.com	
John	Horton	Public Work Director	Bowling Green	johnh@cityofbowlinggreen.com	
Rick	Flae	Fire Chief	Clive		





## Polk County Multi-Jurisdictional Hazard Mitigation Plan Update Meeting #5

December 3, 2018 - 2pm - Polk County Emergency Operations Center - 1907 Carpenter Ave - Des Moines, IA

First Name	Last Name	Title	Jurisdiction/Agency	Email	Signature
Steve	Bass	ICS0 Supt.	urb Comm Sch	bass@urbandaleschools.com	
Dan	Schaller	DSU CHIEF	AMSU	DSCHALLER@AMSUTIAVA.IA	
Randy	Carroll	Dir of Bldg + brks	North Polk CSN	randy.carroll@northpolk.org	
Chris	McCurly	PS Director	WW	cmccurly@windsor-hi.org	
John	Lees	PLG manager	UCSD	lees@urbandaleschools.com	
Serry	Holt	Fire Chief	Urbandale	holt@urbandale.org	
Aaron	Kreider	Fire Chief	Bancroft	akreider@cityofbancroft.com	
Scott	Lyons	IT	Urbandale	slions@urbandale.org	
Matt	Greiner	Director Public Services	Johnston	mgreiner@cityofjohnston.com	
David	Bishop	Der Bldg Officer	Des Moines	dbishop@dm.gov.iya	





420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## Polk County Multi-Jurisdictional Hazard Mitigation Plan Update

*Meeting #6*

*February 25<sup>th</sup>, 2018 – 2pm*

### **AGENDA:**

Meeting started: 2:07pm

#### **1) INTRODUCTIONS**

*Which of the goals means the most to you in your role, and how will you ensure that it is met in your community?*

Jim Clack (Ankeny) - #2

WDM – Public Safety, #1, #2 – make sure all the departments are involved

Des Moines - #4 & #5 floodplain management

DMWW – flood protection, preventing problems with treatment due to floods – all the prompts apply

Randy Carroll - #4

Steve Brown – DSM Fire - #2 – mitigation

George Smith, Johnston Schools – high grounds

Johnston Schools – academic aspect with #1 with drills (fire, tornado, lockdown, etc.) – teaching individuals what to do in case of an emergency

City of Johnston, PublicWorks - #1 – increasing public awareness, #3 data driven decision making

Jim Clark – Fire Chief, Johnston and Grimes - #1 get people to take more personal responsibilities and having their own plans

#1&#2 – working with partners and surrounding areas

Polk City – work #1 & #2 together, using social media and campaigns for hazard education

Dallas County – all applicable

Urbandale fire - #3 & #4, vulnerable populations\*

Urbandale fire #2

All of the above

John Horten? Public Works - #2&#3

Evan – Delaware Fire - #2&#3, incorporation of lesson learned (implementing), data driven decisions

Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART  
Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk City • Polk County  
Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

WDM – planner - #4, protecting the most vulnerable people, buildings, to mitigate hazard impacts

#4

Scott – public works – all of them, #2 sticks out

National Weather Service - #4, protect the most vulnerable population

Urbandale schools - #4 protecting the most vulnerable population

Polk Co Health Dept – protecting public health, most vulnerable population

Windsor Heights - #1, tell people why

??? Schools - #4,

#4 – protect our assets, and #2 improve capabilities

DSM Public Schools - #4, improve capabilities with partners

Polk Co public works - #2

Urbandale – all four, in the risk field, #4

Polk County Emergency Management - #4 help jurisdictions to best implement health & safety mitigation

Polk County Emergency Management - #4

Planner Polk Co - #1 & #3, health and safety evaluated for everything


MPO – all four

**2) PRESENTATION:** Draft Plan Overview, Allison van Pelt, DMAMPO

**3) NEXT STEPS/ WRAP UP/FINAL DISCUSSION**

Meeting concluded: 3:11pm






# POLK COUNTY HAZARD MITIGATION PLAN UPDATE



Meeting 6: Draft Plan Review

February 25, 2019




## Agenda for Today

- Introductions
- Draft HMP Overview
- Next Steps





## Introductions

- Name
- Organization
  
- Which of the goals means the most to you in your role, and how will you ensure that it is met in your community?





## Timeline

1. Organize Planning Process and Resources  
- May 2018
2. Assess Risks  
- Summer 2018
3. Develop Mitigation Strategy  
- Winter 2018/2019
4. Adopt and Implement the Plan  
- Spring 2019, and beyond





## The Plan: Contents

- Executive Summary
- Introduction and Planning Process
- Plans and Capabilities
- Risk Assessment
- Mitigation Actions
- Plan Maintenance and Implementation

## Executive Summary


- Acknowledgements
- Scope of work
- **Goals**
- **Model Resolution**

## Chapter 1: Introduction and Planning Process


- Purpose
- Background and Scope
- Plan Organization
- Planning Process

Phase	Community Rating System (CRS) Planning Steps (Activity 510)	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
Phase I	Step 1: Organize	Task 1: Determine the Planning Area and Resources Task 2: Build the Planning Team 44 CFR 201.6(c)(1)
	Step 2: Involve the public	Task 3: Create an Outreach Strategy y 44 CFR 201.6(b)(1)
	Step 3: Coordinate	Task 4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Phase II	Step 4: Assess the hazard	Task 5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (ii)
	Step 5: Assess the problem	Task 6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i); 44 CFR 201.6(c)(3)(ii); and 44 CFR 201.6(c)(3)(iii)
Phase III	Step 6: Set goals	Task 7: Review possible activities
	Step 7: Review possible activities	Task 8: Draft an action plan
	Step 8: Draft an action plan	Task 9: Review and Adopt the Plan
Phase IV	Step 9: Adopt the plan	Task 10: Implement, evaluate, revise
	Step 10: Implement, evaluate, revise	Task 11: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)



## Chapter 2: Planning Area Profile and Capabilities

- Profile
  - Geography
  - Climate
  - Population demographics
  - History
  - Occupation
  - Agriculture
- Jurisdictional Capabilities
  - Adoption of plans
  - Codes and ordinances
  - Staff and departments
  - Local funding availability
  - DMWW overview
  - CSD's building inventories, planning, staff, and programs



### Chapter 3: Risk Assessment

- Existing mitigation plans
- Disaster declaration history
- Identify hazards
- Scoring methodologies
  - Jurisdiction assessments
  - hHAP – Health Hazard Assessment and Prioritization

Hazard	Probabilty	Health Severity	Community Impact	Public Health System Impact	Healthcare System Impact	Total Hazard Score
Animal/Plant/Crop Disease	x	2	0	2	0	4
Dam Failure	x	3	1	1	2	7
Drought	x	1	0	1	1	3
Earthquake	x	1	1	1	4	7
Extreme Cold	x	1	0	0	2	3
Extreme Heat	x	2	2	2	2	8
Fresh Flooding	x	2	3	1	2	8
Grass/Wildland Fire	x	0	0	0	0	0
HAZMAT Incident	x	2	1	3	2	8
Human Disease	x	3	3	4	3	13
Infrastructure Failure	x	4	3	2	4	13
Leaves Fallers	x	1	2	1	1	5
River Flooding	x	1	3	1	2	7
Seiche/Wave/Surge	x	0	0	0	2	2
Structural Fire	x	2	1	2	2	7
Thunderstorm/Lightning/Hail	x	2	1	1	1	5
Tornado	x	1	3	3	2	9
Transportation Incident	x	2	1	1	3	7
Wildfire	x	1	0	0	1	2
Winter Storm	x	2	4	2	3	11



### Chapter 3: Risk Assessment... Continued

- Population and building counts and exposures
- School district inventory
- **Critical facilities** (p. 3.21)
- Natural, recreational, and cultural assets
- Employers

Jurisdiction	Population	Employment	Schools	Healthcare	Government	Education	Industry	Commercial	Public Works	Other	Total
Adair	1,500	1,000	10	5	2	1	1	1	1	1	10,000
Adair County	1,500	1,000	10	5	2	1	1	1	1	1	10,000
Adair County (continued)											
...	...	...	...	...	...	...	...	...	...	...	...
Totals	8,225	84,115	51	21	24	13	13	13	13	13	1,200,000



### Chapter 3: Risk Assessment... Continued

- County-wide population and housing changes and projections
- Community profiles
  - Past and future land use and development
  - Community zoning and land use maps
- School district past and future developments



### Chapter 3: Risk Assessment... Continued

- Hazard Profiles and Vulnerabilities
  - Hazard description
  - Geographic location and extent
  - Previous occurrences
  - Probability of future occurrences
- Potential losses to existing and future development
- Community and health impacts
- Hazard summaries by jurisdiction



### Chapter 3 Risk Assessment... Continued

- 20 hazards profiled
  - Largest profile:
    - River flooding
  - Shortest profile:
    - Earthquakes & Expansive Soils
  - All important and have potential for occurring somewhere within the county

Jurisdiction	Expansive Soils	Earthquakes	Severe Weather	Wildfire	Water Quality	Water Quantity	Water Supply	Water Treatment	Wastewater	Infrastructure	Transportation	Public Safety	Public Health	Energy	Telecommunications	Information Technology	Government Services	Other
City of Adair	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Albany	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Ankeny	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Boone	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Burlington	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Clarinda	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Council Bluffs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Des Moines	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Johnston	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Marshalltown	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Pella	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Polk	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Urbandale	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Waukee	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of West Des Moines	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Windsor Heights	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of York	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Yorkville	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Ottumwa	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Harlingen	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Davenport	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Muscatine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Keosauqua	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Monticello	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Ames	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Hickman	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Iowa Falls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Sikeston	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Bertram	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Booneville	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Parkersburg	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Nevada	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Holbrook	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Shenandoah	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Leosauka	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Gresham Park	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Excelsior	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Stockbridge	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Parkersburg	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Waverly	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Booneville	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Waterloo	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City of Iowa Falls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

### Chapter 3: Risk Assessment... Continued

- Items of special interest
  - Hazard score calculations
  - Hazard score summaries
  - 500-year flood maps
  - Repetitive loss and NFIP data
  - Consideration of climate change

Probability	Magnitude/Severity	Hazard Score Calculation			Level
		Warning Time	Duration	Weighted Score	
		3	4	25	
1	3	3	4	25	Moderate
	Health Severity	Community Impact	Public Health System Impact	Healthcare System Impact	
	3	3	4	25	

### Chapter 4: Mitigation Strategy

**2019 Polk County Multi-Jurisdictional Hazard Mitigation Plan Goals**

- Protect the public health, safety, and welfare by increasing public awareness of hazards and by encouraging collective and individual responsibility for mitigating hazard risks.
- Improve capabilities, coordination, and opportunities at municipal and county levels to plan and implement hazard mitigation projects, programs, and activities, including incorporation of lessons learned from previous events and exercises to prevent or lessen impacts from future hazards.
- Improve data collection, use, and sharing to improve data-driven decision making and future outcomes.
- Protect the most vulnerable populations, buildings, and critical facilities through the implementation of cost-effective and technically feasible mitigation actions.


### Chapter 4: Mitigation Strategy... Continued

- Previous plan: 157 actions
  - 24 completed
  - 28 deleted or combined
  - 107 continued
- This update: 221 actions
  - 114 new actions

FEMA calculates mitigation saves society an average of \$4 saved for every \$1 spent. Pew Research estimates \$6!


### Chapter 5: Plan Maintenance and Implementation

- Monitoring, evaluating, and updating
  - Role of Hazard Mitigation Planning Committee
    - Act as forum for idea sharing and issues
    - Keep mitigation at forefront of community decision making
  - Plan Maintenance Schedule
    - HMPC will meet after hazard events to monitor progress of actions and update mitigation strategy
  - Plan Maintenance Process
    - Make changes when actions fail or are deemed not feasible




### Chapter 5: Plan Maintenance and Implementation... Continued

- Incorporation into existing planning mechanisms
  - Use this document during CIP and plan development
  - HMPC members are delegated to promote integration of this plan into others
  - MPO will collect action updates during TCIP process annually
- Continued public involvement
  - When possible involve the public in the implementation process
  - Publicize success stories




### This Plan is a Living and Breathing Document

- *Please* don't just put this on the shelf
- Areas of particular interest:
  - Hazard Profiles
    - Data, mapping, figures, etc.
    - MPO can provide raw data used to the jurisdictions for their use
  - Mitigation Actions
    - Utilize and update during budget season and before (re)development



### Next Steps: Final Additions by MPO Planning Team

- Meeting attendance for this meeting
- Final public participation notes/adjustments after public comment period
- If your community did not sign off at Meeting #3 on critical facilities inventory, please look over this table (p. 3.21) and send MPO corrections by March 25<sup>th</sup>
- MPO will provide link to draft plan for review and further promotion to community members



### Next Steps: Approval and Adoption County-wide

- During April and May the plan should go before jurisdiction executive committees
- Model resolution available in Executive Summary
- Return approved resolutions to MPO no later than May 31<sup>st</sup>
- June 1<sup>st</sup> plan moves to IHSEMD and FEMA for approval
- Tentatively, July 1<sup>st</sup> this update will go into effect



**QUESTIONS? COMMENTS?**



### Contact Information

Allison van Pelt, Associate Planner  
[avanpelt@dmampo.org](mailto:avanpelt@dmampo.org)  
515-334-0075

Andrew Collings, Senior Planner  
[acollings@dmampo.org](mailto:acollings@dmampo.org)  
515-334-0075















DES MOINES AREA METRO PLANNING  
420 WATSON POWELL JR WAY STE  
200  
DES MOINES IA 503091611

## AFFIDAVIT OF PUBLICATION

State of Wisconsin

County of Brown, ss.:

The undersigned, being first duly sworn on oath, states that The Des Moines Register and Tribune Company, a corporation duly organized and existing under the laws of the State of Iowa, with its principal place of business in Des Moines, Iowa, the publisher of

### THE DES MOINES REGISTER

newspaper of general circulation printed and published in the City of Des Moines, Polk County, Iowa, and that an advertisement, a printed copy of which is attached as Exhibit "A" and made part of this affidavit, was printed and published in The Des Moines Register on the following dates:

Ad No.	Start Date:	Run Dates:	Cost:
0003267822	11/29/18	11/29/18	\$15.53

Copy of Advertisement  
Exhibit "A"

Polk County Multi-Jurisdictional  
Hazard Mitigation Plan Update  
Public Meetings  
Meeting 1: December 3th, 2018  
Meeting 2: January 14th, 2019  
Meeting 3: February 25th, 2019  
All meetings will begin at 2pm at  
Polk County Emergency  
Management Agency's Office,  
1907 Carpenter Avenue - Des  
Moines, Iowa 50314 in Room C11.

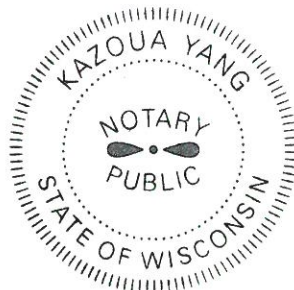
Kacz  
Staff member, Register Media

Subscribed and sworn to before me by said affiant this

8th day of March, 2019

Kazoua Yang  
Notary Public

11/9/20  
Commission expires





DES MOINES AREA METRO PLANNING  
420 WATSON POWELL JR WAY STE  
200  
DES MOINES IA 503091611

## AFFIDAVIT OF PUBLICATION

State of Wisconsin

County of Brown, ss.:

The undersigned, being first duly sworn on oath, states that The Des Moines Register and Tribune Company, a corporation duly organized and existing under the laws of the State of Iowa, with its principal place of business in Des Moines, Iowa, the publisher of

### THE DES MOINES REGISTER

newspaper of general circulation printed and published in the City of Des Moines, Polk County, Iowa, and that an advertisement, a printed copy of which is attached as Exhibit "A" and made part of this affidavit, was printed and published in The Des Moines Register on the following dates:

Ad No.	Start Date:	Run Dates:	Cost:
0003391127	2/20/19	02/20/19	\$16.53

#### Copy of Advertisement Exhibit "A"

Polk County Multi-Jurisdictional  
Hazard Mitigation Plan Update  
Final Public Meeting  
February 25th, 2019 at 2pm at Polk  
County Emergency Management  
Agency's Office,  
1907 Carpenter Avenue - Des  
Moines, Iowa 50314 in Room C11.  
30-Day Public Comment Period  
open February 25th through  
March 25th, 2019  
Plan can be reviewed and  
commented on at dmampo.org

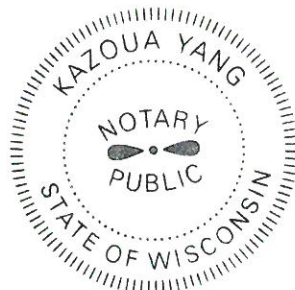
Kevin Yang  
Staff member, Register Media

Subscribed and sworn to before me by said affiant this

20th day of February, 2019

Kazoua Yang  
Notary Public

11/9/22  
Commission expires





Name	Org	Position
Suan Cadenillas	Polk Co Health Dpt	Public Health Planner
Scott Slater	" "	Deputy Health Director
Pat Sweeney	Polk Co. Health Dept.	Emergency Preparedness Coord.
Drew Barden	Healthcare Coalition	Preparedness coord.
Burke McGraw	Meracy Med Cent	Emergency Management Coord.
Kolleen Dahl	UnityPoint Health-Des Moines	Emergency Preparedness Coordinator
Peggy Jiradafornkul	POLK COUNTY HEALTH DEPT	DISEASE PREVENTION SUPERVISOR
Susie Potterveld	Des Moines University	MPH/DO Student
Marta Andelson	intern	DUM/MPH student

Health Hazard Risk Assessment  
 Focus Group. 8/30/18 @ 10:30am



OPPOWAL WITH GRAND SWARMING WORKSHOP

H MGP. MAD Finalize

Event: 1-14-19  
 Date: 9:00  
 Time: EOC  
 Location:



1907 Carpenter Avenue  
 Des Moines, Iowa 50314  
 515-286-2107

	Name	Organization	Phone	Email
1	Jim Clark	Johnston - Grimes	515-251-7690	jclark@cityofjohnston.com
2	Matt Guerner	Johnston	515-278-0822	mguerne@cityofjohnston.com
3	JOHN LASS	URBANDALE SCHOOLS	515-306-4191	jeesid@urbanale.com
4	JONATHAN GAND	CITY OF DES MOINES	515-237-1425	kgand@dmgov.org
5	David Carlsson	BFCSD	515-967-7819	carlsonc@bfschools.org
6	ADAM PHILIP	CITY OF DES MOINES	515-283-4096	APRILIP@DMGOV.ORG
7	TOM DAVIS	POLK EMA	515-286-2107	T.DAVIS@polkcountymn.gov
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

H MGP- MPO Finalize  
 1-14-19  
 1:00  
 EOC

1907 Carpenter Avenue  
 Des Moines, Iowa 50314  
 515-286-2107



	Name	Organization	Phone	Email
1	Jim Clark	Johnston - Grimes	515-251-7690	jclark@cityofjohnston.com
2	Matt Greiner	Johnston	515-278-0822	mgreiner@cityofjohnston.com
3	JOHN LESS	URBANDALE SCHOOLS	515-306-4191	leesj@urbandaleschools.com
4	JONATHAN GAND	CITY OF DES MOINES	515-237-1425	jjgand@dmgov.org
5	Chad Coulson	BFCSD	515-967-7819	carlsouc@bfschools.org
6	ADAM PHILIPP	CITY OF DES MOINES	515-283-4096	APPRILIPP@DMGOV.ORG
7	TOW AAVIS	POLK EMA	515-286-2107	TOW.AAVIS@POLKCOUNTYEMM.IOWA.GOV
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				