

Memorandum

To Peoria County Multi-Jurisdictional Multi-Hazard Mitigation Planning Committee (HMPC)
From Cindy Popplewell
Tel / Email (303) 704-8939 / cindy.popplewell@wsp.com
Date March 15, 2023

Subject Minutes from Peoria County Multi-Jurisdictional Multi-Hazard Mitigation Plan Update – MEETING #3 Mitigation Strategy

This memorandum presents the meeting minutes from the March 15, 2023, meeting for the *Peoria County Multi-Jurisdictional Multi-Hazard Mitigation Plan Update*. It provides a review of the planning process and progress, recap of the hazard identification and risk assessment, review of mitigation goals, and mitigation plan update and mitigation ideas.

Attendees

| Last Name | First Name | Organization |
|-------------|-----------------|---|
| Abi-Akar | Reema | Tri-County Regional Planning Commission |
| Braun | Andrew | Peoria County |
| Bruner | Michael | Tri-County Regional Planning Commission |
| Leach | Tim | Greater Peoria Sanitary District |
| Marks | Jason | Director of Emergency Management, Peoria County EMA |
| McLaren | Amy | Peoria County |
| O'Neal | Tony (virtual) | Crisis Management Group, Ameren Illinois |
| Orr | Roger (virtual) | Street Superintendent, Village of Hanna City |
| Blumenshine | Joyce | Sierra Club |
| Nelson | Larry | City of Bartonville |
| Smith | Kyle | American Water |
| Marfell | David | American Water |
| Krider | Kinga | West Peoria |

Goals

The goals of the 2018 State of Illinois Hazard Mitigation Plan, the 2018 Peoria County Hazard Mitigation Plan, and the 2019 Tri-County Hazard Mitigation Plan were reviewed. The following updated goals were agreed upon by the HMPC:

Goal 1: Reduce the vulnerability of current and future people, property, and environment of Peoria County from the effects of natural and man-made hazards.

- Strengthen protection of critical facilities and infrastructure to create a safer, more sustainable community.
- Build and support local capabilities to respond and recovery from natural and man-made hazard events.
- Increase the local floodplain management activities and participation in the NFIP.
- Protect community historic/cultural/environmental resources from identified natural and man-made hazards

Goal 2: Enhance public education programs to raise awareness of and preparedness for hazard events.

Goal 3: Improve and coordinate mitigation activities with surrounding communities, non-profits, and private businesses.

Goal 4 - Incorporate natural and man-made hazard mitigation into community plans, regulations and activities.

Mitigation Actions

The HMPC Committee discussed the development of new mitigation actions utilizing the following criteria:

- Must have two actions for every high and moderate priority hazard
 - “All hazards” actions count as one project for each hazard
 - Emergency Services actions do not count toward this requirement
- Must have at least one Structural or Property Protection action
- CRS communities should have actions in 5 of the 6 FEMA mitigation categories to maximize credit

FEMA’s Mitigation ideas guidance document was provided as a reference with example mitigation projects. A variety of mitigation ideas was then presented to the HMPC for each of the hazard types.

Next Steps

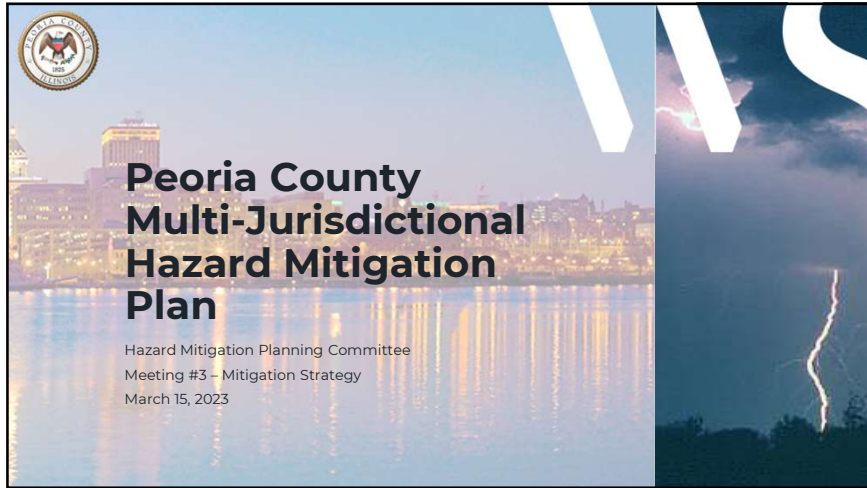
HMPC Members/Attendees

- Review draft documents once received from WSP.
- Finalize and prioritize Mitigation Actions

WSP

- Finalize Draft Document

Attachment A – Powerpoint Presentation



1


2

3

| DMA Process | CRS Process |
|--|---|
| Phase I – Organize Resources | |
| \$201.6(c)(1) | Step 1. Organize to Prepare the Plan |
| \$201.6(b)(1) | Step 2. Involve the Public |
| \$201.6(b)(2) & (3) | Step 3. Coordinate |
| Phase II – Risk Assessment | |
| \$201.6(c)(2)(i) | Step 4. Assess the Hazard |
| \$201.6(c)(2)(ii) & (iii) | Step 5. Assess the Problem |
| Phase III – Mitigation Strategy | |
| \$201.6(c)(3)(i) | Step 6. Set Goals |
| \$201.6(c)(3)(ii) | Step 7. Review Possible Activities |
| \$201.6(c)(3)(iii) | Step 8. Draft an Action Plan |
| Phase IV – Plan Maintenance | |
| \$201.6(c)(5) | Step 9. Adopt the Plan |
| \$201.6(c)(4) | Step 10. Implement, Evaluate, and Revise the Plan |

4

wsp



Phase II: Risk Assessment

Hazards Profiled

- Dam/Levee Failure
- Drought
- Earthquake
- Extreme Temperatures
- Flood
- Land Subsidence/Sinkhole
- Landslide
- Severe Thunderstorm (hail, lightning, and wind)
- Severe Winter Storms
- Tornado
- Wildfire
- Hazardous Materials Incidents
- Terrorism Event
- Active Shooter

Profile the Hazards:


- Hazard Description
- Geographic Location
- Magnitude/Severity
- Past Occurrences
- Probability of Future Occurrence
- Future Conditions

Peoria County, IL Hazard Mitigation Plan Update

5

5

wsp



Hazard Description

- High (18) - More than 25% of population
- Medium (12) - 10 to 25% of population
- Low (6) - less than 10% of population

Geographic Location

- High (18) - 5+ fatalities, property destroyed/damaged (\$15,000,000), or 3+ days of shutdown for essential facilities.
- Medium (12) - Serious injuries (more than 50), property destroyed/damaged (\$1M to \$15M), or 24-72 hrs of shutdown for essential facilities.
- Low (6) - Minor injuries (under 50), property destroyed/damaged (under \$1M), or less than 24 hr shutdown for essential facilities.

Magnitude/Severity

- High (18) - More than 60 occurrences
- Medium (12) - 13 to 60 occurrences
- Low (6) - 0 to 12 occurrences

Past Occurrences

- High (18) - More than 60 occurrences
- Medium (12) - 13 to 60 occurrences
- Low (6) - 0 to 12 occurrences

Probability of Future Occurrence

- High (18) - More than 60 occurrences
- Medium (12) - 13 to 60 occurrences
- Low (6) - 0 to 12 occurrences

Future Conditions

Planning Significance


- Severe - 49 to 60 points
- High - 37 to 48 points
- Elevated - 25 to 36 points
- Guarded - 13 to 24 points
- Low - 0 to 12 points

Peoria County, IL Hazard Mitigation Plan Update

6

6

wsp



Hazard Summary


| Hazard | Geographic Location (Percentage of People) | Probability of Future (Frequency) | Magnitude/Severity | Hazard Rating | Hazard Rating Variation for other jurisdictions |
|-------------------------------|--|-----------------------------------|--------------------|---------------|---|
| Earthquake | Low | Low | Low | Low | |
| Wildfire | Medium | Low | Low | Low | |
| Land Subsidence | Medium | Low | Low | Guarded | Chillicothe, Peoria Heights |
| Landslide | Low | Medium | Low | Guarded | Low Hanna City |
| Dam/Levee Failure | Low | Low | High | Elevated | Chillicothe, Hanna City |
| Drought | High | Low | Low | Elevated | |
| Terrorism Events | Low | Low | High | Elevated | |
| Active Shooter | | | | Elevated | |
| Hazardous Materials Incidents | Medium | High | Low | High | |
| Extreme Temperatures | High | Medium | Medium | High | |
| Flood | Medium | High | High | Severe | Low - Hanna City Guarded - Chillicothe, Peoria Heights |
| Severe Thunderstorms | High | High | Medium | Severe | |
| Tornado | High | Medium | High | Severe | |
| Severe Winter Storm | High | High | Medium | Severe | |

Peoria County, IL Hazard Mitigation Plan Update

7

7

wsp



2023 Peoria County Mitigation Goals

Goal 1: Reduce the vulnerability current and future people, property, and environment of Peoria County from the effects of natural and man-made hazards.

- Strengthen protection of critical facilities and infrastructure to create a safer, more sustainable community.
- Build and support local capabilities to respond and recovery from natural and man-made hazard events.
- Increase the local floodplain management activities and participation in the NFIP.
- Protect community historic/cultural/environmental resources from identified natural and man-made hazards

Goal 2: Enhance public education programs to raise awareness of and preparedness for hazard events.

Goal 3: Improve and coordinate mitigation activities with surrounding communities, non-profits, and private businesses.

Goal 4 - Incorporate natural and man-made hazard mitigation into community plans, regulations and activities.

Peoria County, IL Hazard Mitigation Plan Update

8

8

Mitigation Action Plan Requirements

- Must have two actions for every high and moderate priority hazard
 - “All hazards” actions count as one project for each hazard
 - Emergency Services actions do not count toward this requirement
- Must have at least one Structural or Property Protection action
- CRS communities should have actions in 5 of the 6 FEMA mitigation categories to maximize credit

FEMA Mitigation Categories:

- Prevention
- Property Protection
- Natural Resource Protection
- Structural Projects
- Emergency Services
- Public Education & Awareness

9

Mitigation Action Plan Requirements



Scoring Example

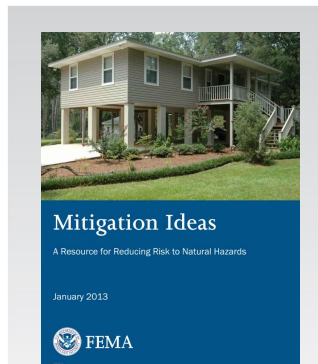
| | Severe Winter Storms | Tornado | Severe Thunderstorms | Flood | Extreme Temperatures | Drought | Dam/Levee Failure | Landslide | Land Subsidence | Wildfire | Earthquake | Hazardous Materials Incidents | Active Shooter | Terrorism | All Hazard |
|----------------------------------|----------------------|---------|----------------------|-------|----------------------|---------|-------------------|-----------|-----------------|----------|------------|-------------------------------|----------------|-----------|------------|
| Bartonville | 1 | 1 | | 7 | 1 | | | | 2 | | | | | | 4 |
| Chillicothe | | | | 8 | | | | | | | | | | | 5 |
| Greater Peoria Sanitary District | | | | 3 | | | 3 | 1 | 1 | | | | | | 1 |
| Hanna City | | 1 | | 4 | | 1 | | | | | | | | | 7 |
| City of Peoria | | | | 5 | | | 1 | | | | | | | | 7 |
| Peoria Heights | | | | 8 | | | | | | | | | | | 5 |
| Peoria County | 1 | | | 14 | | 1 | 3 | | 1 | | 1 | 1 | | | 14 |

10



Mitigation Ideas

- FEMA resource
- Provides example mitigation actions for 16 natural hazards
- Actions are categorized into four types:
 - Local Planning & Regulations
 - Structure & Infrastructure Projects
 - Natural Systems Protection
 - Education & Awareness Programs



Peoria County, IL Hazard Mitigation Plan Update

11

11



Mitigation Ideas – Multi-Hazard Actions

- Limit or regulate development in high-hazard areas:
 - Encourage cluster development to position lots outside hazard areas
 - Prohibit capital improvements or critical facilities development in hazard areas
 - Protect hazard areas with conservation easements
 - Designate hazard areas and development restrictions in the zoning ordinance
 - Develop a post-disaster redevelopment plan and/or post-disaster recovery ordinance
- Create local funding mechanisms for mitigation
- Install backup generators for critical facilities
- Create a public education campaign

Peoria County, IL Hazard Mitigation Plan Update

12

12



Mitigation Ideas – Severe Winter Weather

- Installing redundancies and loopfeeds.
- Ensuring the development and enforcement of building codes for roof snow loads.
- Retrofitting public buildings to withstand snow loads and prevent roof collapse.
- Identifying specific at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.
- Including safety strategies for severe weather in driver education classes and materials.



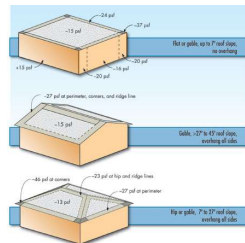
Mitigation Ideas - Tornado

- Require wind-resistant building techniques such as structural bracing, straps and clips, anchor bolts, etc.
- Encourage construction of safe rooms at manufactured home parks, fairgrounds, shopping malls, and other vulnerable public structures



Mitigation Ideas – Severe Thunderstorms

- Encourage structural bracing, shutters, laminated glass, hail resistant roof coverings and sheathing
- Install lightning rods and grounding on communication infrastructure and critical facilities
- Install surge protection on critical electronic equipment
- Encourage wind-resistant roof shapes and architectural designs that limit potential for wind-borne debris
- Establish standards for tree pruning around power lines



NOTE: Design pressure of eave on enclosed building with the same basic wind speed of 10 mph, exposure B, and 30' wall height.



Mitigation Ideas - Flood

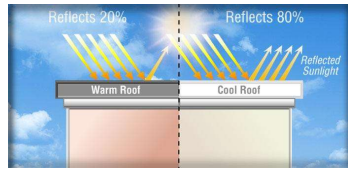
- Acquisition or relocation of high-risk or repetitive loss structures
- Use land use planning to guide development away from flood prone areas
- Establish watershed-based planning initiatives to address flood hazards with neighboring jurisdictions
- Install, re-route, or increase storm drainage system capacity
- Conduct regular drainage system maintenance
- Limit allowable impervious surface
- Protect and preserve wetlands
- Adopt higher regulatory standards





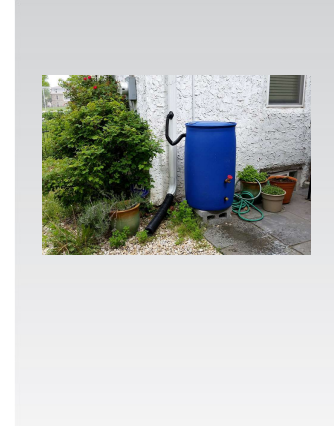
Mitigation Ideas – Extreme Temperatures

- Increase tree plantings around buildings and public rights-of-way to increase shade
- Assist vulnerable populations by providing and publicizing the availability of cooling centers
- Encourage the installation of green roofs and/or cool roofs



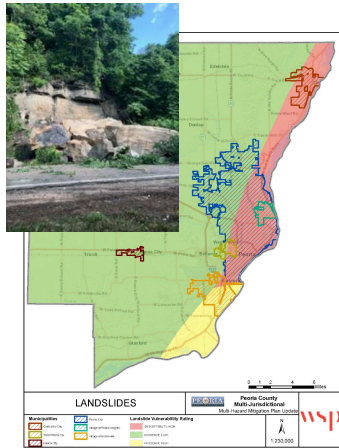
Mitigation Ideas - Drought

- Develop a drought emergency plan with criteria for drought-related actions
- Establish mandatory water conservation measures during drought emergencies
- Encourage drought-tolerant landscaping such as xeriscaping
- Promote permeable paving to reduce runoff and promote groundwater recharge
- Educate residents on water saving measures
- Encourage the installation of graywater systems



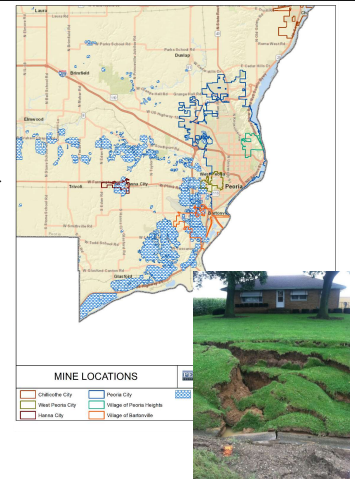
Mitigation Ideas - Landslide

- Creating a plan to implement reinforcement measures in high-risk areas.
- Incorporating economic development activity restrictions in high-risk areas.
- Applying soil stabilization measures, such as planting soil-stabilizing vegetation on steep, publicly-owned slopes.
- Installing catch-fall nets for rocks at steep slopes near roadways.



Mitigation Ideas - Subsidence

- Restricting development in areas with soil that is considered poor or unsuitable for development.
- Educating design professionals about where to locate information on subsidence rates and maps.
- Monitoring areas where natural resources are removed from underground.
- Promoting community awareness of subsidence risks and impacts.
- Offering GIS hazard mapping online for residents and design professionals.





Mitigation Ideas - Wildfire

- Address mitigation during permitting of new development through access, signage, fire hydrants, water availability, vegetation management, and special building construction standards
- Implement a fuels management program
- Join the Firewise Program
- Create defensible zones around power lines, oil and gas lines, and other infrastructure systems



Project Schedule and Next Steps



Project Schedule

Planning Process Timeline and Milestones

March

Meetings

- HMPC Meeting #3 – New Mitigation Actions; Document Review Process
- Hold Public Meeting #2 – VIRTUAL - Document Review Process and Comment Period

Tasks

- March 20 – WSP to provide Draft Plan Document

Thank you

WSP Planning Consultant & Contact Info

Cindy Popplewell – cindy.popplewell@wsp.com



wsp.com



| Last Name | First Name | Jurisdiction | Organization | Email | Signature |
|-------------|------------|----------------------------------|---|--|---|
| Abi-Akar | Reema | Stakeholder | Tri-County Regional Planning Commission | rabiakar@tricountyrpc.org |  |
| Baylor | Brian | Hanna City | Village of Hanna City | administrator@hannacityil.com | |
| Blumenshine | Joyce | Stakeholder | Sierra Club | joblumen@yahoo.com |  |
| Braun | Andrew | Peoria County | Peoria County | abraun@peoriacounty.org |  |
| Bruner | Michael | Stakeholder | Tri-County Regional Planning Commission | mbruner@tricountyrpc.org | |
| Callear | John | Stakeholder | Home Builders Association | candlhomes@hotmail.com | |
| Cooper | Jeremy | Chillicothe | City of Chillicothe - Police Department | jcooper@chillicothepe.org | |
| Corrie | Richard | Stakeholder | Lutheran Hillside Village | rick.gorrie@lssliving.org | |
| Crider | Beth | Stakeholder | Peoria Regional Office of Education | bcrider@peoriaroe.org | |
| DeWitte | Dori | Stakeholder | Women's Council of Realtors | doridewitte@gmail.com | |
| Erbentrout | Troy | Stakeholder | OSF St. Francis | Troy.W.Erbentraut@osfhealthcare.org | |
| Haines | Cody | Peoria Park District | Peoria Park District | chainses@peoriaparks.org | |
| Hathaway | Guy | Stakeholder | American Red Cross | Hathaway_Guy@yahoo.com | |
| Heiden | Shelly | Stakeholder | Lutheran Hillside Village | shelly.heiden@lssliving.org | |
| Johnson | Brian | Greater Peoria Sanitary District | Greater Peoria Sanitary District | bjohnson@gpsd.org | |
| Kirchhofer | Patrick | Stakeholder | Peoria County Farm Bureau | pcfmanager@sbcglobal.net | |
| Krider | Kinga | Peoria - West Peoria | City of West Peoria | administrator@cityofwestpeoria.com | |
| Krolicki | Ryan | Stakeholder | Illinois American Water | ryan.krolicki@amwater.com | |
| Krost | Mike | Stakeholder | Friends of River Beach Drive | mkrost@mchsi.com | |

| | | | | | |
|----------------|---------|------------------------------|----------------------------------|--|---|
| Leach | Tim | Greater Peoria Sanitary Dist | Greater Peoria Sanitary District | tleach@gpsd.org |  |
| Learned | Julie | Stakeholder | Red Cross | Julie.Learned@redcross.org | |
| Marks | Jason | Peoria County | Peoria County | jmarks@peoriacounty.org | |
| Maroon | Sie | Peoria | City of Peoria | smaroon@peoriagov.org | |
| McLaren | Amy | Stakeholder | Peoria County | amclaren@peoriacounty.org |  |
| Meyer | Patrick | Bartonville | Village of Bartonville | pmeyer@mtco.com | |
| Miller | Mike | Peoria Park District | Peoria Park District | mmiller@peoriaparks.org | |
| Naven | Joshua | Peoria | City of Peoria | jnaven@peoriagov.org | |
| Nelson | Larry | Bartonville | Bartonville ESDA | lnelson@mtco.com |  |
| O'Neal | Tony | Stakeholder | Ameren Illinois | e132606@ameren.com | |
| Orr | Nick | Stakeholder | OSF Healthcare Systems | Nicholas.V.Orr@osfhealthcare.org | |
| Rezba | Eric | Stakeholder | American Red Cross | eric.rezba@redcross.org | |
| Rogers | Lisa | Stakeholder | Friends of River Beach Drive | lsealine@yahoo.com | |
| Ruhland | Terry | Stakeholder | Local Homebuilders Association | terry@plumcreekbuilders.com | |
| Shake | Melody | Stakeholder | Heartland Health Services | m.shake@hhsil.com | |
| Stanley | Heather | Stakeholder | National Weather Service | heather.stanley@noaa.gov | |
| Sutton | Dustin | Peoria Heights | Village of Peoria Heights | dsutton@heightspd.com | |
| Tamm | Alan | Stakeholder | US Army Corps of Engineers | alan.tamm@usace.army.gov | |
| Traenkenschuff | Gerald | Stakeholder | Retired | GerryT1@comcast.net | |
| Urban | Kathi | Peoria County | Peoria County | kurban@peoriacounty.org | |

| Last Name | First Name | Jurisdiction | Organization | Email | Signature |
|-------------|------------|----------------------------------|---|--|---|
| Abi-Akar | Reema | Stakeholder | Tri-County Regional Planning Commission | rabiakar@tricityrpc.org | |
| Baylor | Brian | Hanna City | Village of Hanna City | administrator@hannacityil.com | |
| Blumenshine | Joyce | Stakeholder | Sierra Club | joblumen@yahoo.com | |
| Braun | Andrew | Peoria County | Peoria County | abraun@peoriacounty.org | |
| Bruner | Michael | Stakeholder | Tri-County Regional Planning Commission | mbruner@tricityrpc.org |  |
| Callear | John | Stakeholder | Home Builders Association | candlhomes@hotmail.com | |
| Cooper | Jeremy | Chillicothe | City of Chillicothe - Police Department | jcooper@chillicothepepd.org | |
| Corrie | Richard | Stakeholder | Lutheran Hillside Village | rick.gorrie@lssliving.org | |
| Crider | Beth | Stakeholder | Peoria Regional Office of Education | bcrider@peoriaroe.org | |
| DeWitte | Dori | Stakeholder | Women's Council of Realtors | doridewitte@gmail.com | |
| Erbentrout | Troy | Stakeholder | OSF St. Francis | Troy.W.Erbentraut@osfhealthcare.org | |
| Haines | Cody | Peoria Park District | Peoria Park District | chains@peoriaparks.org | |
| Hathaway | Guy | Stakeholder | American Red Cross | Hathaway_Guy@yahoo.com | |
| Heiden | Shelly | Stakeholder | Lutheran Hillside Village | shelly.heiden@lssliving.org | |
| Johnson | Brian | Greater Peoria Sanitary District | Greater Peoria Sanitary District | bjohnson@gpsd.org | |
| Kirchhofer | Patrick | Stakeholder | Peoria County Farm Bureau | pcfmanager@sbcglobal.net | |
| Krider | Kinga | Peoria - West Peoria | City of West Peoria | administrator@cityofwestpeoria.com |  |
| Krolicki | Ryan | Stakeholder | Illinois American Water | ryan.krolicki@amwater.com | |
| Krost | Mike | Stakeholder | Friends of River Beach Drive | mkrost@mchsi.com | |

| | | | | | |
|----------------|---------|------------------------------|----------------------------------|--|---|
| Leach | Tim | Greater Peoria Sanitary Dist | Greater Peoria Sanitary District | tleach@gpsd.org | |
| Learned | Julie | Stakeholder | Red Cross | Julie.Learned@redcross.org | |
| Marks | Jason | Peoria County | Peoria County | jmarks@peoriacounty.org |  |
| Maroon | Sie | Peoria | City of Peoria | smaroon@peoriagov.org | |
| McLaren | Amy | Stakeholder | Peoria County | amclaren@peoriacounty.org | |
| Meyer | Patrick | Bartonville | Village of Bartonville | pmeyer@mtco.com | |
| Miller | Mike | Peoria Park District | Peoria Park District | mmiller@peoriaparks.org | |
| Naven | Joshua | Peoria | City of Peoria | jnaven@peoriagov.org | |
| Nelson | Larry | Bartonville | Bartonville ESDA | lnelson@mtco.com | |
| O'Neal | Tony | Stakeholder | Ameren Illinois | e132606@ameren.com | |
| Orr | Nick | Stakeholder | OSF Healthcare Systems | Nicholas.V.Orr@osfhealthcare.org | |
| Rezba | Eric | Stakeholder | American Red Cross | eric.rezba@redcross.org | |
| Rogers | Lisa | Stakeholder | Friends of River Beach Drive | lsealine@yahoo.com | |
| Ruhland | Terry | Stakeholder | Local Homebuilders Association | terry@plumcreekbuilders.com | |
| Shake | Melody | Stakeholder | Heartland Health Services | m.shake@hhsil.com | |
| Stanley | Heather | Stakeholder | National Weather Service | heather.stanley@noaa.gov | |
| Sutton | Dustin | Peoria Heights | Village of Peoria Heights | dsutton@heightspd.com | |
| Tamm | Alan | Stakeholder | US Army Corps of Engineers | alan.tamm@usace.army.gov | |
| Traenkenschuff | Gerald | Stakeholder | Retired | GerryT1@comcast.net | |
| Urban | Kathi | Peoria County | Peoria County | kurban@peoriacounty.org | |

1. Summary

Meeting title Peoria County Hazard Mitigation Plan - MITIGATION STRATEGY MEETING
Attended participants 3
Start time 3/15/23, 1:06:35 PM
End time 3/15/23, 2:40:06 PM
Meeting duration 1h 33m 31s
Average attendance time 1h 1m 35s

2. Participants

| Name | First Join | Last Leave | In-Meeting Duration | Email | Participant ID (UPN) | Role |
|-------------------|---------------------|---------------------|---------------------|------------------------------|------------------------------|-----------|
| Popplewell, Cindy | 3/15/23, 1:27:32 PM | 3/15/23, 2:40:06 PM | 1h 12m 34s | cindy.popplewell@woodplc.com | cindy.popplewell@woodplc.com | Organizer |
| ONeal, Tony S | 3/15/23, 1:28:51 PM | 3/15/23, 2:29:25 PM | 1h 33s | AONeal@ameren.com | E132606@ameren.com | Presenter |
| Roger Orr | 3/15/23, 1:34:39 PM | 3/15/23, 2:26:18 PM | 51m 38s | streets@hannacityil.com | streets@hannacityil.com | Presenter |

3. In-Meeting Activities

| Name | Join Time | Leave Time | Duration | Email | Role |
|-------------------|---------------------|---------------------|------------|------------------------------|-----------|
| Popplewell, Cindy | 3/15/23, 1:27:32 PM | 3/15/23, 2:40:06 PM | 1h 12m 34s | cindy.popplewell@woodplc.com | Organizer |
| ONeal, Tony S | 3/15/23, 1:28:51 PM | 3/15/23, 2:29:25 PM | 1h 33s | AONeal@ameren.com | Presenter |
| Roger Orr | 3/15/23, 1:34:39 PM | 3/15/23, 2:26:18 PM | 51m 38s | streets@hannacityil.com | Presenter |