Plan Purpose

The 2021 Cedar County Hazard Mitigation Plan (HMP) revision is threefold in its purpose. Strictly speaking, the Cedar County Hazard Mitigation Plan provides guidance to substantially and permanently reduce Cedar County and its communities' vulnerability to natural hazards.



This plan revision encompasses the continuation and updating of this original mission by incorporating new GIS technologies, improving its risk assessment methodologies, and recalibrating its mitigation strategies based on an assessment of the previous plan (approved in January of 2016) and the previous plan's usefulness over the past five years.

Secondly, participation in and the adoption of this plan grants the adopting entity the ability to apply for multiple grant funding programs through the Federal Emergency Management Agency (FEMA).

Additionally, a tertiary purpose of the plan is to promote sound public policy and support other local, regional, and state planning efforts which have the effects of protecting citizens, critical facilities, infrastructure, private property, and the natural environment. The development of this plan revision does so by increasing public awareness and education, collaborating with other planning organizations and governments engaged in planning efforts, serving as a reference and resource for the public, various governments, and other entities.

Plan Organization

The Cedar County Hazard Mitigation Plan was developed and organized within the rules and regulations established under the 44 Code of Federal Regulation 201.6. This plan contains sections detailing the planning process, Cedar County's communities, other participating entities and the planning area, a hazard vulnerability and risk assessment, capabilities assessment, and a mitigation strategy designed for the purpose of guiding Cedar County and the plan's participants to become more disaster-resilient communities.

Plan Financing

The Cedar County Hazard Mitigation Plan has been financed by Cedar County and a FEMA Hazard Mitigation Grant Program (HMGP) Grant (HMGP-4386) administered through the State of Iowa's Homeland Security and Emergency Management Department (IA HSEMD), and matching contributions by IA HSEMD. The federal grant provided 75% of the total plan's cost while Cedar County contributes 15% and IA HSEMD provides 10%.

Plan Participation

The Cedar County Hazard Mitigation Plan was developed as the result of an ongoing collaborative effort between the full range of stakeholders in the planning area, local authorities, public school district, municipal jurisdictions, and the State of Iowa. This effort was led by the Cedar County Emergency Management Agency under the Cedar County Emergency Management Commission.

Concerns, capabilities, interests and historical data were gathered through interviews with stakeholders from within the communities, along with a number of electronic datasets, and ongoing planning committee work sessions. The public were granted opportunities to provide their input, influence, share knowledge, and be active participants in the plan's development. This was accomplished through a number of public outreach campaigns in the form of an on-site meeting and internet accessible surveys. Any comments, questions, and discussions resulting from these activities were given consideration in the development of this plan.

Approval & Adoption

The Cedar County Hazard Mitigation Plan was submitted for review to the IA HSEMD on December 8th, 2020. Following the state's review, the plan was submitted to the FEMA Region VII office for federal review. FEMA Region VII granted "Approval Pending Adoption" on February 23rd, 2021.

This plan has officially been adopted by all participating municipalities and school districts.

1.1 – Planning Process

Cedar County's revision process began in November of 2019, when Cedar County contracted Two Rivers Emergency Management (TREM) to facilitate the plan's development under a performance contract.

Two planning events were held throughout the planning process. Plan development kicked-off on 19 December 2019. Stakeholders from every municipality, and public-school district in the county and members of the public were invited to attend and participate. Additionally, neighboring EMAs were invited. The meetings were advertised for period of two weeks in advance.

This meeting delivered an understanding of the planning processes and steps required to update, including the organizing of resources, assessment of hazards, devilment of a mitigation plan, and steps to implementing the plan and monitoring its progress. Most jurisdictions in the county actively participated in the process through solicitation, providing input, or participation in meetings. Details and documentation of stakeholder participation can be found in Section 1.2 and Appendix A – Plan Participation.

Throughout the process the public was given opportunities to review plan drafts, ask questions, and provide input on hazards. They were also invited to provide feedback on mitigation project prioritization, hazard identification, and hazard ranking. This was accomplished through their inclusion in the on-site meetings as well as an extensive online outreach campaign that yielded 12 responses. Details and documentation of the public's participation can be found in Section 1.3 and Appendix A – Plan Participation.

The 2021 Cedar County Hazard Mitigation Plan encompasses the following 14 jurisdictions:

Cedar County
City of Bennett
City of Clarence
City of Durant
City of Lowden
City of Mechanicsville
City of Stanwood
City of Tipton
City of West Branch

Bennett Community School District Durant Community School District North Cedar Community School District Tipton Community School District West Branch Community School District

1.2 - Stakeholder Engagement

The Cedar County Hazard Mitigation Plan includes the governmental and education entities within Cedar County working together for the development and ongoing maintenance of this plan. The participants are grouped into four categories.

Municipalities

This group consists of representatives from municipal governments within the planning area.

Education Entities

This group consists of representatives from the public-school districts serving Cedar County.

Other Stakeholders

This group consists of representatives from the local community, regulatory authorities, emergency services, commercial interests, neighboring EMAs, and other relevant organizations.

The Public

FEMA requires this planning effort to be open to constant input from interested citizens in compliance with the Sunshine Laws. In Iowa, public meetings must comply with Iowa Open Meetings Law, unless established by statutory exemption. Therefore, any individual citizens who wish to be involved in this effort to mitigate future disasters were encourage to attend the onsite meetings and complete the online mitigation survey to solicit relevant comments and concerns to be incorporated into the content of this plan.

Representatives from each group took part in periodic planning meetings, public meetings and events and individual meetings with TREM and Cedar County EMA staff. Their specific involvement included activities such as collection and development of planning information, providing input into the planning process, reviewing draft editions of the plan and providing written documentation demonstrating their commitment to mitigation and intent to adopt the final approved plan. The neighboring EMAs of Clinton, Johnson, Jones, Linn, Muscatine, and Scott Counties were notified of the project and the kick-off meeting, but none attended.

Each participating entity was expected to attend at least one of the on-site meetings, submit required data as requested, participate in the development of general information for the plan as well as their own individual planning information, mitigation strategies and initiatives, participate in a public review process, and submit the plan for formal adoption through their respective governing body. Information was kept on attendance, input and providing requested documentation. In the event an entity did not provide representation to a meeting, individual outreach was conducted to garner their inclusion.

The following table details the plan participants who participated in the hazard mitigation planning process. This list contains relevant local and state agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and any appropriate neighboring communities that chose to participate in the plan.

Table 1.1 – Stakeholders

| Name | Organization | Position |
|-------------------------------|--|------------------------------------|
| Tony Gertz | Two Rivers Emergency Management | Mitigation Planning Manager |
| Jodi Freet | Cedar County Emergency Management Agency | EMA Director |
| Tim Malott | Cedar County Emergency Management Agency | EMA Director (Former) |
| Kate Ehlers | Cedar County Emergency Management Agency | EMA Office Coordinator |
| Steve Agne | Cedar County Board of Supervisors | Chairperson |
| Brad Gaul | Cedar County Board of Supervisors | Supervisor |
| Dawn Smith | Cedar County Board of Supervisors | Supervisor |
| Jeff Kaufmann | Cedar County Board of Supervisors | Supervisor |
| Jon Bell | Cedar County Board of Supervisors | Supervisor |
| Sandy Delaney | Cedar County | Treasurer |
| Cari Dauber | Cedar County | Auditor |
| Mike Dauber | Cedar County | Conservation Director |
| Rob Fangman | Cedar County | Engineer |
| Joe Sparks | City of Bennett | Mayor |
| Nicole Wolf | City of Bennett | City Council Member |
| Michael Anderson | Bennett Fire Department | Fire Chief |
| Kevin Rasdon | Bennett Fire Department | Assistant Fire Chief |
| Brittany Rogers | Clarence Ambulance | Ambulance Director |
| Francis Fisher | Clarence Ambulance Board | Ambulance Member |
| Randy Burken | Clarence Fire Department | Fire Chief |
| Deana Calvin | City of Durant | City Operations Officer/City Clerk |
| Jared Semsch | Durant Fire Department | Fire Chief |
| Orville Randolph | Durant Police Department | Police Chief |
| Mike Meyer | Durant Police Department | Sergeant |
| Jill Cinkovich | City of Lowden | Mayor |
| Kirk Steinke | City of Lowden | Public Works Director |
| Sarah Carlson | City of Lowden | City Clerk |
| Andrew Oberbreckling | City of Mechanicsville | Mayor |
| David Furry | City of Mechanicsville | Mayor (Former) |
| Amy Miller Bishop | City of Mechanicsville | City Council Member |
| Linda Coppess | City of Mechanicsville | Finance Officer/City Clerk |
| Lonni Koch | Mechanicsville Ambulance | Ambulance Director |
| Jacob Koch | Mechanicsville Fire Department | Fire Chief |
| Dan Koch | Mechanicsville Fire Department | |
| Dustin McAtee | City of Stanwood | Firefighter |
| Greg Wagner | City of Stanwood City of Stanwood | Mayor |
| Stephanie VonBerhen | City of Stanwood City of Stanwood | Mayor (Former) |
| Michael Tharp | City of Stanwood City of Stanwood | City Clerk |
| Ryan Pierce | | Council Member Fire Chief |
| Bill Klawiter | Stanwood Fire Department | |
| Bill Klawiter Dakota Adams | Stanwood Fire Department | Fire Chief (Former) |
| | Stanwood Fire Department | Firefighter |
| Brian Carney | City of Tipton | Mayor |
| Brian Wagner | City of Tipton | City Manager |
| Floyd Taber | City of Tipton | Director of Electric Operations |
| Jon Walsh | City of Tipton | Utilities Director |
| Virgil Penrod | City of Tipton | Public Works |
| Brad Ratliff | Tipton Ambulance | Ambulance Director |
| Sean Paustian | Tipton Fire Department | Fire Chief |
| Reece Hall | Tipton Fire Department | Fire Training Officer |
| Oon Villhauer | Tipton Fire Department | Firefighter |
| Mike Rekemeyer Jr. | Tipton Fire Department | Firefighter |
| Roger Laughlin | City of West Branch | Mayor |
| Mike Horrihan | West Branch Police Department | Police Chief (Former) |
| John Hannah | West Branch Police Department | Police Officer |
| Lonnie Luepker | Bennett Community School District | Superintendent |
| Jeremiah Costello | Bennett Community School District | Principal |

1.2 – Stakeholder Engagement

| Tom Wuestenberg | Durant Community School District | Maintenance Director |
|-----------------|---------------------------------------|---------------------------------|
| Bob Dohmen | North Cedar Community School District | Buildings & Grounds Director |
| Jason Wester | Tipton Community School District | Superintendent |
| Loren Mohr | Tipton Community School District | Maintenance Director |
| Marty Jimmerson | West Branch Community School District | Superintendent |
| Ruben Galvan | West Branch Community School District | Maintenance Director |
| Mike Dauber | Cedar County Conservation | Conservation Director |
| Jennifer Fencl | Lower Cedar Watershed | Environmental Services Director |
| Sam Becker | Unknown | Unknown |

1.3 – Public Engagement

The Cedar County EMA provided the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process. The public was notified of open meetings via Cedar County EMA's website, their Facebook page, and a local newspaper, The Tipton Conservative. Additionally, advertisements for the online public survey were put our on their website and Facebook page.

Relevant federal, state, and local governments, private, non-profit, regional organizations, and agencies with the authority to regulate development were invited to provide input and technical expertise through the public notices. They were contacted directly when their expertise was deemed necessary to the success of the plan.

At the public on-site meeting, TREM presented and outlined the mitigation plan update process to the public. During the first stakeholder meeting, TREM presented and outlined the mitigation plan update process and discussed stakeholder participation and expectations. In this meeting, the public and other stakeholders were encouraged to ask questions and provide their input. The final draft of this plan was available for public review via a TREM hosted project for the website. Any and all questions asked were answered.

TREM held a virtual questions and answer session for stakeholders and citizens to comment and provide input on the draft plan on November 12th, 2020. This occurred to launch the draft plan's review period that went on for 2 weeks. The draft of this plan was available for public review via a TREM hosted project for the website. Any and all questions asked were answered.

Continued Public Involvement

Cedar County is dedicated to involving the public in the continual shaping of its hazard mitigation plan and development of its mitigation projects and activities.

The Cedar County EMA will continue to keep the public informed about its hazard mitigation projects and activities through its website. Additionally, it will work to update its website and eventually provide a "comments/suggestions" option for the public to submit their input.

In the event that this hazard mitigation plan undergoes any major developmental changes over its 5-year life cycle, Cedar County EMA will inform the public of these changes via a publicized and open forum meeting.

Copies of the Cedar County Hazard Mitigation Plan will be available on their website for public distribution.

1.4 – Planning Resources

This plan's content includes and was influenced by numerous documents and technical resources provided by the plan's stakeholders and other relevant entities. The following documents and technical resources were reviewed for applicable information to the development of this plan:

Documentation Resources

Cedar County Emergency Management Agency Situation Report – 2020 Derecho

The Cedar County EMA's situation report following the 2020 derecho was reviewed to bolster the severe storms section of the risk assessment. Additionally, information within the report provided ideas for bolstering the mitigation strategy as it pertained to mitigating against wind damage.

Cedar County Hazard Mitigation Plan (2016)

Cedar County is currently covered by a FEMA approved local hazard mitigation plan. The plan was thoroughly reviewed and components have been updated and incorporated throughout.

Comprehensive Plans

Comprehensive plans from Cedar County, Durant, and West Branch were reviewed and laid part of the groundwork for this plan's mitigation strategy. It did so by providing insight into planning and development direction of the planning area and its local governments.

County and City Municipal Codes

Each municipality's local ordinances have been reviewed for provisions relevant to hazard mitigation. This information has been incorporated throughout Section 4 of this plan.

Iowa Comprehensive Emergency Plan – Part B. Iowa Hazard Mitigation Plan (2018)

The State of Iowa's current hazard mitigation plan was reviewed for general guidance in the cases of their comparative statewide risk assessment, their initial selection of at-risk hazards, and local planning technical assistance and development strategy.

School District Facility Master Plans

The latest approved update to this plan was reviewed for demographic and community projection information and their planning process.

Technical Resources

FEMA National Flood Hazard Layer (NFHL)

FEMA's NFHL data was used in mapping floodplain locations and estimating potential flood impacts and loss estimates.

National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC) Weather data and historical events and their narratives were primary provided by NOAA's NCDC.

1.4 - Planning Resources

North American Drought Monitor (NADM)

Since 1999, the USDA, NOAA, and the National Drought Mitigation Center at the University of Nebraska-Lincoln have partnered to centralize nationwide drought monitor maps, situation reports,

drought status, and publish historical data on drought severity. The NADM was the primary source for historical drought data and drought severity assessment used in this plan.

USACE National Inventory of Dams (NID)

The USACE NID is a congressionally authorized database which documents dams in the U.S. and its territories. This database attempts to maintain centralized data for all private and public dams. The NID was consulted and showed no high hazard dams in the planning area.

United States Census Bureau (USCB)

The USCB publicly publishes a number of GIS datasets that were used in developing the basemap layers used throughout this plan.

United States Department of Agricultural (USDA) Statistics Service

The USDA provided GIS data that was used in depicting land cover and the agricultural statistics used in developing the planning area's risk to droughts and grass and wildland fires.

1.5 - Plan Maintenance

The Cedar County EMA has developed a method to ensure monitoring, evaluation, and updating of its HMP. Upon adoption of the Cedar County HMP, the Cedar County EMA will form a subcommittee on mitigation projects comprised of volunteer members from the community. The chair of the subcommittee will be determined by appointment from the Cedar County EMA Director. Additional members may be added based on necessity. The sub-committee will submit an annual report to the Emergency Management Commission.

Monitoring
Situational
Change

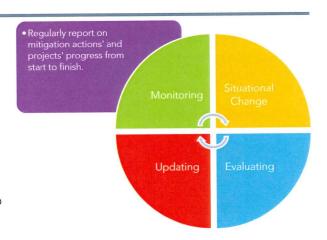
O
Updating
Evaluating

Please see the Cedar County HMP Quarterly Report form at the end of this section.

The Cedar County EMA may request a non-scheduled report on the monitoring, evaluation, or updating of any portion of the HMP due to irregular progress on mitigation actions and or projects, in the aftermath of a hazard event, or for any reason deemed appropriate.

Plan Monitoring

Plan monitoring can be defined as the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives. In the more limited approach, monitoring may focus on tracking projects and the use of the agency's resources. In the broader approach, monitoring also involves tracking strategies and actions being taken by partners and non-partners, and figuring out what new strategies and actions need to be taken to ensure progress towards the most important results.



A monitoring report will be written and submitted to the Emergency Management Commission annually during one of their quarterly commission meetings or when triggered by a situation change. The monitoring report will answer the following questions:

- Is the mitigation project under, over, or on budget?
- Is the mitigation project behind, ahead of, or on schedule?
- Are there any changes in Cedar County's capabilities which impact the HMP?
- Are there any changes in Cedar County's hazard risk?
- Has the mitigation action been initiated or its initiation planned?
- If applicable, has participation in a mitigation action's collaboration been regular?
- If any, what plan updates occurred, why they occurred, and what is their impact?

The plan maintenance process is cyclical and maintenance items can operate simultaneously within the process.

Plan Evaluating

A plan evaluation is a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making.

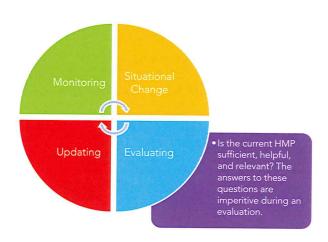
An evaluation report will be written and submitted to Cedar County EMA's Director when the situation dictates. The following situations are typical examples of when an evaluation will be necessary:

- Post hazard event
- Post training exercise
- Post tabletop or drill exercise
- Significant change or completion of a mitigation project
- Significant change or completion of a mitigation action

An evaluation report will ask the following questions in response to the previously listed events:

- Do the mitigation objectives and goals continue to address the current hazards?
- Are there new or previously unforeseen hazards?
- Are current resources appropriate for implementing a mitigation project?
- Was the outcome of a mitigation action/project expected?
- Are there implementation problems?
- Are there coordination problems?

• Training, exercises, project completions, and hazard events are all examples of situations that could demand a change in the plan. Updating Evaluating



Plan Updating

Typically, a HMP update is initiated upon the completion of a plan evaluation and even then, only when the evaluation determines an update is appropriate. Additionally, when new hazard data becomes

available it will be added to the HMP. New data will be confirmed or denied along with the annual HMP report. For whatever reason, a HMP update can be written anytime it is deemed necessary by the Cedar County EMA.

Cedar County will begin their update process three years from this plan's adoption according to FEMA DMA2000 guidelines on local mitigation plan updates under the direction of the EMA's Emergency Manager.



Cedar County Mitigation Planning Committee Cedar County Hazard Mitigation Plan Annual Report

| Hazard N | 1 itiaation | Plan | Sub | Committee | Chair: |
|----------|--------------------|------|-----|-----------|--------|
|----------|--------------------|------|-----|-----------|--------|

Meeting Date:

Plan Approval Date:

Plan Expiration Date:

Have there been any disasters or training events since the last report? If so, list them below:

| Disaster Number/Training Event | Hazard Type(s) | Was the hazard expected or unforeseen? | ls a plan update required? |
|--------------------------------|-------------------|--|-------------------------------|
| | | | |
| | | | |
| Example: DR-1000 | Volcanic Eruption | Unforeseen | Yes |
| Example: Annual Training | Flash Flooding | Expected | No |

Mitigation Projects:

| Project Name | Participating Jurisdictions | Proposed/Schedules/In Progress/Completed | Behind/Ahead/ On-Schedule | Estimated Completion Date |
|------------------------|--------------------------------|---|------------------------------|------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Example: Floodproofing | Tipton | In Progress | On-Schedule | 1/1/2020 |

Miscellaneous Notes: