



Hall County Regional Planning Commission

Wednesday, June 5, 2013

Regular Meeting

Item -1

Hazard Mitigation Process

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Hazard Mitigation Planning Process

The Disaster Mitigation Act of 2000 (Public Law 106-390) provides the legal basis for FEMA mitigation planning requirements for State, local and Indian Tribal governments as a condition of mitigation grant assistance. DMA 2000 established a new set of requirements that emphasize the need for State, local, and Indian Tribal entities to closely coordinate mitigation planning and implementation efforts. DMA 2000 established a new requirement for development of State, local, and Indian Tribal mitigation plans.

Preliminary Steps

1. Establish FEMA & NEMA coordination with local officials
2. Establish planning team
 - a. Emergency Mgt.
 - b. Planning Department
 - c. Planning Commission
 - d. NWS-Hastings
 - e. NRD
 - f. Public Involvement

Data Collection

1. Hall County Assessor
2. NWS
 - a. Climate information, past event data
3. FEMA
 - a. Repetitive Loss Properties
4. NRD
 - a. Flood mitigation project updates

Public Participation

1. First public meeting: hazard identification and project survey
2. Second public meeting; public hearing with City of Grand Island City Council

Formal Adoption by all participating agencies and organizations.

Recommendations

HIGHER PRIORITY PROJECTS

Emergency Backup Power Inventory for Critical Facilities

Many of the critical facilities in Hall County have emergency backup power capability. However, an inventory is needed to determine which emergency shelters, emergency responder facilities, vulnerable populations, and other critical facilities are in need of emergency backup capability.

Potential funding sources: Hall County Emergency Management Agency – staff time.

Emergency Backup Power

As witnessed in the major ice storm disaster of December, 2006, entire communities can be left without power for weeks. When a severe winter storm knocks out power, this is also a time when people – especially vulnerable populations – need access to heat and when critical facilities like hospitals need to be able to meet any critical care needs. Large emergency generators can be used to supply power directly to a community's electric grid until outside power can be restored. Also, critical facilities should have emergency backup power capability of their own, not only to be ensure they are able to operate as intended, but also to function as emergency warming centers in extreme cases.

Potential funding sources: The Hazard Mitigation Grant Program (HMGP) is a post-disaster funding program from FEMA. Projects must be identified in this mitigation plan, and these funds will supply up to 75% of the total project cost.

Drainage Improvements

Stormwater problems are common in the flat portions of Hall County, especially in the developed areas of Grand Island. The City and Central Platte NRD have been working to reduce the stormwater problems by constructing detention basins west of the City. The flooding dynamics will continue to change as additional construction occurs around the fringes of existing development.

Potential funding sources:

1. Community Development Block Grant (CDBG) funds are available through the Nebraska Department of Economic Development for planning. Drainage studies and improvements are eligible for funding as long as the City meets low-to-moderate income requirements. Applications are always open, but there are two funding cycles each year.
2. The Central Platte Natural Resources District has funded drainage improvements in the County.
3. The Flood Mitigation Assistance (FMA) program and Pre-Disaster Mitigation program through the Federal Emergency Management Agency (FEMA) receives annual allocations for projects. The Hazard Mitigation Grant Program (HMGP) is a post-disaster funding program, also from FEMA. For all of these programs, projects must be identified in this mitigation plan, and these funds will supply up to 75% of the total project cost.

Floodplain Management

Although not commonly viewed as mitigation, effective floodplain management is the most powerful tool in preventing unwise development in floodprone areas. Every community in Hall County – including Hall County – already participates in the National Flood Insurance Program. These communities will continue to participate and will be able to turn to the Nebraska Department of Natural Resources for technical assistance with specific problems and issues. The main responsibility for the administration of the local floodplain management ordinance has to do with the various aspects of reviewing and issuing floodplain development permits. If there is no or very little floodplain area in a community's jurisdiction or if there is no or very little growth, a community's administration responsibilities in the NFIP will be extremely easy.

Also in the floodplain management category, downstream zoning of dams is an idea whose time has come. As a result of the Safety of Dams and Reservoirs Act passed by the Nebraska Unicameral in 2005, zoning of areas downstream of low and significant hazard dams is now possible. The intent is to allow development to be regulated and restricted in these areas since population moving in below a low hazard dam will cause it to be reclassified as a high hazard dam. When this happens, the dam owner would be responsible to undertake costly construction actions to raise the height of the dam, improve the dam to high-hazard specifications, and to ensure regular maintenance and inspections.

Potential funding sources: There is no expense to communities to participate in the NFIP program other than personnel time to administer the program at the local level. Communities are also encouraged to pass zoning regulations for areas downstream of low-hazard and significant-hazard dams.

Flood Control

Flood control and flood damage reduction is one of the primary responsibilities of the Central Platte NRD. Since the NRD was created in 1972, it has constructed numerous flood damage reduction projects in the Hall County. As the population of the County – especially in and around Grand Island – continues to increase and the area of development expands, the need for flood damage reduction measures also increases. The Wood River Diversion project is an example of a completed flood control project and the Prairie/Moores/Silver Creek project is one currently being worked on.

Potential funding sources: Corps of Engineers, Central Platte Natural Resources District, Natural Resources Development Fund through the Nebraska Department of Natural Resources.

Reverse 9-1-1 or New Technology for Warning Dissemination

Reverse 9-1-1 is a system which allows a central location like the 9-1-1 call center or Emergency Operations Center to automatically dial a pre-set list of telephone numbers and issue a recorded warning message. In addition, new technologies are being developed which allow this type of reverse warning system to be put in place with cellular telephones customers, targeted personnel, and geographically targeted populations. These types of warning systems have been implemented on many university and college campuses in light of shootings. In these reverse warning situations, students were informed not to come to the campus or to stay where they were until the situation had been resolved. Essentially, these warning systems would be used when

there is an immediate need for a warning when there is not enough time for people to get to a television or radio.

Potential funding sources: US Department of Homeland Security, Hazard Mitigation Grant Program set-aside funds, Hall County Emergency Management Agency, private through telephone companies.

Purchase NOAA Weather Radio for Critical Facilities

Weather radios are inexpensive enough that communities could purchase them for public critical facilities, such as schools and hospitals. Communities can encourage local businesses to purchase radios, especially elderly care facilities and noisy manufacturing plants which either need to be sure to receive warnings or may not be able to hear outdoor warning sirens.

Potential funding sources: A brief online search of sites which offer NOAA Weather Radios for sale show several options with the average price being about \$30-50. Depending on how many radios communities would need for critical public facilities, they might be able to purchase them. Some of Nebraska's emergency management agencies have acquired weather radios at a discounted cost and have distributed them in interested communities. The Hall County Emergency Management Agency could perform a similar service. They are also eligible for FEMA's Hazard Mitigation Grant Program set-aside funds if they are purchased for critical facilities.

NOAA Weather Radio Public Education

The public may not be aware that weather warnings are available to them by purchasing an inexpensive weather radio. The cost for new radios is about \$30 and they have the capability to weed out warnings for unneeded counties. The Hall County Emergency Management Agency can educate the public about these radios in their educational/outreach programs. Grand Island was a Project Impact community in the late 1990s, and they used those grant funds to purchase and hand out several thousand weather radios.

Potential funding sources: Hall County Emergency Management, no cost for education. Homeowners.

Public Tornado Shelters

Given Hall County's history with tornadoes, public tornado shelters should be considered. They are fundable under FEMA's non-flood mitigation programs, and most states in FEMA Region VII (Nebraska, Iowa, Missouri, Kansas) have successfully implemented them. However, Nebraska currently has only funded one public tornado shelter: a community building in Cortland after the devastating Hallam Tornado of 2004. Shelters can be built in as new construction or as a retrofit – retrofits are more expensive. The most popular public shelters have been public schools and in areas of large concentrations of population in the summer months such as fairgrounds and parks.

Potential funding sources: The Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) programs from FEMA. The Community Development Block Grant (CDBG)

program can also be used to assist with the funding of public tornado shelters if the community meets certain federal income guidelines.

Information about Tornado Safe Rooms

Tornado safe rooms are areas built into existing or new construction which offer safety from severe weather events. The information about these safe rooms exists and is available, so it would be a matter of educating the availability of this information and encouraging property owners and construction firms to consider building or retrofitting a safe room in their developments.

Potential funding sources: Federal Emergency Management Agency (publications), Hall County Emergency Management Agency, property owners – no cost for education.

Tornado Shelter Assessment

Identify and designate tornado shelters. Any shelters that are identified should be entered into a GIS coverage for spatial analysis of shelter distribution and needs. Publicize the locations of all public tornado shelters to increase public awareness – perhaps with a sign on the building. The Hall County Emergency Management Agency should be the project leader for this activity.

Potential funding sources: Hall County Emergency Management Agency, consultants

Requiring Power Line Burial

Communities can require new developments to bury power lines. Most communities already currently have this as standard building code.

Potential funding sources: No cost to implement, but staff training and enforcement

Power Line Burial Projects

For stretches of exposed transmission, distribution, and service lines which routinely experience problems – whether by ice, wind, or other natural hazard – line burial is an option. Burying power line is more expensive up-front, but essentially eliminates the potential for future line outages.

Potential funding sources: FEMA's non-flood mitigation programs, Southern Public Power District, City of Grand Island, homeowners

Warning Siren for New Development

As development takes place, it can be easy to forget about the need for warning siren coverage. Communities should explore options available to them to increase warning siren coverage as they expand.

Potential funding sources: Hall County Emergency Management Agency, communities, Hazard Mitigation Grant Program set-aside funds.

Urban Tree Management Plan

For all communities in Hall County, it would be beneficial to develop a comprehensive urban forest management plan, especially for public areas and in areas of communities which experience tree-related problems. Smaller communities should request a tree inventory from the Nebraska Forest Service which would give recommended actions to local tree boards. A common misconception is that a tree management plan will mean that the community is liable for damages if they do not take action based on the inventory's findings. In reality, each community is already liable for tree-related damages on public property. An inventory can be completed which stipulates that only trees in public areas will be assessed. Outside of an inventory or urban forest plan, homeowners should also know how to maintain trees on their property since they are responsible for them.

Potential funding sources: Instead of assessing the need for financial assistance, interested communities should send a letter to the Nebraska Forest Service, requesting a community tree inventory. Tree inventories are a free service from the NFS and are beneficial in determining tree-related activities which should be taken immediately or in the near future. Even in communities that have had a tree inventory completed in the last ten years, an updated inventory would be beneficial for local tree boards or other tree-related groups to assess required actions to reduce vulnerability.

Severe Weather Awareness Education

For awareness, severe weather safety tips could be made public by newspaper or other media outlets. Such a campaign should include practical tips like staying indoors when lightning is around and could be combined with awareness campaigns from other disasters, and could take place during Severe Weather Awareness week every March.

Potential funding sources: This is another activity which would not need to require financial resources other than staff time. Severe weather awareness campaigns can be done through various media, in cooperation with the National Weather Service, Hall County Emergency Management Agency, Central Platte Natural Resources District, Nebraska Emergency Management Agency, Nebraska Department of Natural Resources, Federal Emergency Management Agency, U.S. Army Corps of Engineers, and other agencies at all levels.

Flood Awareness Education

A flood awareness program would require the commitment of staff time from each interested community. Agencies such as the Central Platte NRD, Nebraska Department of Natural Resources, Nebraska Emergency Management Agency, Federal Emergency Management Agency, and US Army Corps of Engineers could provide assistance and educational materials. An on-going flood awareness education program might attract interested members of the public to assist as volunteers.

Potential funding sources:

Most education and outreach programs would not require funding. The only commitment would be staff time, time and money spent advertising meetings, and the cost of printing materials.

MEDIUM PRIORITY PROJECTS

Since these projects are not of a high priority, potential funding sources are not as important to identify at this stage.

Provide Tree Planting/Selection Information to Citizens

This information is already available from multiple sources. It would be a question of having communities receive the informational brochures and to have the information available in an accessible location.

Water Supply Augmentation

The Village of Alda and Village of Wood River both have water supply issues which could make their citizens more vulnerable to drought than communities which have an adequate water supply. The State has some revolving loan programs which could be tapped to expand their water supply.

Local Demand Reduction/Conservation Programs

When communities face a water shortage, it is important to reduce the demand on the limited water supply. These programs could be as simple as restricting lawn watering or could get more drastic depending on need. No matter what, a pipeline for disseminating the restrictions is needed.

LOWER PRIORITY PROJECTS

Since these projects are not of a high priority, potential funding sources are not as important to identify at this stage.

Acquisition and Demolition of Floodprone Structures

Some natural resources districts in Nebraska have existing floodway acquisition programs. The Central Platte NRD could initiate a similar program. One of the benefits of a countywide hazard mitigation plan is that all properties in the County will be eligible for FEMA funding from its annually-funded mitigation programs. The City of Grand Island would be an excellent sponsor for the repetitive loss property within its jurisdiction. This alternative was put in the "Lower" category due to the low number of targetable buyout candidates in Hall County.

Specific areas targeted for acquisition projects are:

- Repetitive loss properties listed for Grand Island and Hall County
- All floodprone areas in the County will be considered for buyouts, as requested

Emergency Backup Power for Critical Facilities

This was rated in the Lower category not because it is not needed, but because an inventory should first be completed to know where there a need.

Become a Tree City USA

Grand Island and Doniphan are already Tree City USA communities. Other communities in Hall County can receive the benefits of becoming a Tree City USA.

Hail Education

Some of the most damaging natural hazards events in Hall County have been severe hail storms. There is not a lot that can be done to prevent hail damage to existing homes, but there are things that can be done to reduce future damage to new homes and to vehicles. For new homes, building options would be metal roofs instead of wood shake or traditional asphalt shingles. Another building improvement would be metal siding instead of vinyl or wood, which can be destroyed by hail strikes. Improved warning times would allow owners to move their vehicles to a protected location.

Secure At-Risk Development like Manufactured Homes

Mobile home tie-downs are an easy way to prevent them from rolling during high winds. However, implementing a mitigation project for these types of buildings is problematic since they are often rented and the owners lack the financial capability to install them. Under the Project Impact program in the late 1990s, Grand Island offered these tie-downs as a project and received no takers.

Flood Insurance Education for Homeowners

Information on how to obtain flood insurance should be provided to private property owners – it would be at their discretion to actually purchase the insurance coverage. Since the passage of the National Flood Insurance Reform Act of 1994, lenders have been required to determine if the property to be insured is in a floodplain. If it is, lenders will require flood insurance as a condition of protecting their loan. This is only for loans which are federally-backed such as mortgages or home improvements. For this potential project, “education” could mean something as easy as having FEMA flood insurance brochures available at city/village halls and public libraries to inform the public.

Emergency Snow Route Development and Signage

The City of Grand Island already has this in place, which is the highest priority based on population concentration, and the State takes care of clearing highways. Other communities have a general snow removal plan, but do not have a route identified.

Water Supply Emergency Response Programs/Drought Contingency Plans

Develop contingency plans, including worst case scenarios, in case of an emergency water supply shortfall which cannot be met by voluntary restrictions to reduce demand.

Plan Evaluation

Future plan monitoring, evaluating, and updating will follow this process:

1. Unless otherwise designated by the Hall County Board, Hall County Regional Planning Commission (HCRPC) staff will oversee the plan evaluation and revision process. Alternate staff could be from the Hall County Emergency Management Agency.
2. To assist with the monitoring of the plan, as a recommended project is completed, a detailed timeline of how that project was completed will be written and attached to the plan in a format selected by HCRPC staff. Items to be included will be: timelines, agencies involved, area(s) benefited, total funding (if complete), etc.

3. At the discretion of the HCRPC, a local task force may be used to review the original draft of the mitigation plan and to recommend changes.
4. The persons overseeing the evaluation process will review the goals and objectives of the previous plan and evaluate them to see that they are still pertinent and current. Among other questions, they may want to ask themselves:
 - Do the goals and objective address current and expected conditions?
 - If any of the recommended projects have been completed, did they have the desired impact on the goal for which they were identified? If not, what was the reason it was not successful (lack of funds/resources, lack of political/popular support, underestimation of the amount of time needed, etc.)?
 - Have the nature, magnitude, and/or type of risks changed?
 - Have there been implementation problems?
 - Are current resources appropriate to implement the plan?
 - Were the outcomes as expected?
 - Are there other agencies which should be included in the revision process?
5. Any projects that have been completed since the previous plan will be noted in a "Previous Mitigation Projects" section and removed from further consideration for new projects.
6. If no further action has been made on the recommended projects of the previous version of the plan, HCRPC staff will document this fact.
7. Before incorporating the changes to the plan that are identified as necessary as a part of the monitoring and evaluating portions, the public will be invited to comment through the same process used in the development of the original plan: public notification through newspaper article/public notice, public meetings, and by letter of invitation to relevant stakeholders.
8. At its discretion, the HCRPC may opt to use the plan evaluation, update, and revision worksheets given in this plan in **Appendix B**.

For future reviews, the following minimum procedures must be followed:

Task A: Evaluate the effectiveness of the planning process.

1. Reconvene a Planning Team
2. Review your Planning Process

Items to Discuss:

 - a. Building the Planning Team
 - b. Engaging the Public
 - c. Data Gathering and Analysis
 - d. Coordinating with other Agencies

Task B: Evaluate the effectiveness of your actions.

1. What were the results of the implemented action? Did the results achieve the goals/objectives outlined in the plan? Did the actions have the intended results?
2. Were the actions cost-effective? Did (or would) the project result in the reduction of potential losses?
3. Document actions that were slow to get started or not implemented

Task C: Determine why the actions worked (or did not work)

1. Lack of available resources
2. The political or popular support for or against the action

3. The availability of funds
4. The workloads of the responsible parties
5. The actual time necessary to implement the actions

Incorporation into Existing Planning Mechanisms

There is a lack of regional planning documents into which this countywide plan could be incorporated. At the discretion of the participating communities, this plan could be incorporated into the comprehensive plans of these communities. This would ensure that the mitigation component of the comprehensive plan would be consistently revisited and reviewed. However, care must be taken so that this mitigation plan is reviewed and updated every five years.

Upon the local adoption of the mitigation plan, each participating community will make sure that it adopts, and is enforcing, the minimum standards established in the building code used in the State of Nebraska. This is to ensure that life/safety criteria are met for new construction.

Any capital improvement planning that occurs in the future will also contribute to the goals in this hazard mitigation plan. This is another item which may be administered at the local level and is not necessarily overseen by the County. However, the County may be able to work with capital improvement planners to secure high-hazard areas for low risk uses.

Hall County All-Hazard Mitigation Survey June 2013

Name: _____

Community: _____

Please follow the instructions given to complete the boxes below. Complete the form with your own community in mind.

Hazard Type	Likely to Happen (Yes/No)	Risk (High, Medium, Low)	Impact to Community (5=Full, 0=None, UKN=Unknown)
Flood			
Earthquake			
Tornado			
Landslide			
Wildfire			
Severe Winter Storm			
Severe Summer Storm			
Dam Failure			
Major Crime/Terrorism			
Other			

Evaluate Current Mitigation Efforts:

Considering projects identified in the previous All-Hazards Mitigation Plan (2007),

Potential Mitigation Projects

Please list potential mitigation projects you would like considered for your community. Be thinking about specific infrastructure-related problems, recent and historic events:

List your local Critical facilities and infrastructure:

1/2/12