

Hazard Mitigation Plan
February 14, 2013
9:30 am
Macon County Board Room
141 South Main, Room #514

Jim Root, Coordinator of the Macon County EMA, welcomed everyone and thanked them for coming. He introduced himself and John Menninger from Stantec Consulting. John is going to give a presentation on where we stand with the projects at this time. First a couple of housekeeping items: mostly everyone's time is back on how much they have invested in the plan. If you have additional items as far as mitigation projects are concerned, please get those in to Jim. He will go back and start doing the books again and see who has not given their time. We have a match to meet. Right now we are at about half way through what is needed for the match. So anything that you contribute to the plan please let him know so that it can be included, so that we can meet our match.

Jim turned the meeting over to John Menniger, PE-Plan Consultant with Stantec Consulting Services, Inc.

John wanted to know how many people had already been to a Mitigation meeting. Most of the attendees had attended a previous meeting, with a few new people. He discussed what had been done so far in the planning process. Then he will discuss what we need to do to go forward on and to wrap things up, basically the goals of the plan.

John will be going over the current progress of the plan, stepping through each individual action item that has been completed to date. Then we will go forward and look at what still needs completed. The next step is to go through the approval process.

Today's meeting goal is to cover the aspects of identifying and fulfilling mitigation actions for each community, as well as for each hazard that has been previously identified. We have about half completed so far, about half of the communities have built at least one mitigation item for the plan, and about half of the hazards have been identified within those mitigation actions. We would really like to have one item per community and one per hazard type.

This is what he intends to talk about today and will provide some examples. Maybe we can get some ideas going in the group on specific action items we can include in the plan.

John has also included a power point presentation to go along with his talking points. The first slide is the primary aspects of the mitigation plan. He showed the draft of the plan he has put together.

Section 1-discusses the planning process that we went through to develop the plan. Basically it includes summaries of stakeholder input and interaction. Who helped to develop the plan, what resources were used to develop the plan and what the timeline is for plan development. The next piece then, was to identify specific hazards that are a concern for the community. This was done at the first meeting.

The group decided there were nine hazard events. Then risk assessment was done of those nine hazards. The probability of each hazard which could occur and the potential impact the hazard might have on Macon County. Combine those two elements and you get risk. Those hazards were then prioritized as one through nine. Based on what was most important per community and then Macon County as a whole.

Mitigation Strategies were the next piece this was started at the last meeting. Different types of mitigation projects and specific action items were identified. Over the last six months we have had communities providing mitigation actions that they would like to see included in the plan.

Plan review and adoption is next. We will have a thirty day comment period for the public, as well as each jurisdiction, to take a look at the plan, provide comment and then those comments will be incorporated. Finally, it will be sent to the State for review and then to FEMA for review. The final piece then will be adoption of the plan.

Plan Maintenance-Once the plan is adopted, we will proceed to the maintenance portion of the plan. Basically, the idea is for the plan to be a living, working document. Once a mitigation item is completed, we will go back in and fill in an action item sheet, within the plan, stating this is what has been completed to date. We have one living document and we can either update it on a more regular basis or as FEMA requires complete updates every five years.

For the planning process this is the third stakeholder meeting. The first two were the kick-off meeting, where specific hazards of concern were identified. The next was the risk assessment meeting and then this one will round it out with mitigation strategies. A key piece of stakeholder involvement will be review of the plan from local agencies and communities as well as the general public.

Previously we took a look at the probabilities and the vulnerabilities of Macon County to these specific hazards and then we ranked them. There are the nine hazards that were identified in previous meetings. These are Macon County's rankings but in the plan each community actually provided feedback on their specific concerns. Each community has a separate ranking system but for the presentation Macon County rankings are shown.

The remainder of the meeting will focus on mitigation projects. Listed are five general types of mitigation projects that can be included in the plan. The idea is to reduce risk. This can be done in a number of ways.

Removing people out of harm's way, reduces the probability of them being impacted and also reduce damages is one method. Helping people become more prepared so that they can remove themselves out of harm's way ahead of time, will also reduce their vulnerability during an event. Property protection, hardening of structures such as flood proofing would be an example, as would higher wind-rated shingles on homes. Structural projects, for instance flood walls would also be a good method. Also, an Emergency Operations Plan to ensure that during an event we can get the appropriate resources to appropriate locations can help to minimize impacts.

Plan Matrix-The next slide (slide 10) is the matrix that we have so far. We have communities or different agencies on one side and then across the top are the specific hazards that we know of. We would like to have at least one mitigation action identified for you to implement during the planning process. It doesn't have to be expensive like a flood buyout of 20 homes along the creek. It could be public information that you put out in a newsletter. It could be a bulletin board at your local town center where you could put up information. Those types of aspects are elements that you can do that aren't high funding value type projects.

We got a lot of information on flooding from various communities. As you would expect it was the highest hazard of concern and the highest priority that we got the most mitigation projects for. Drought was a big one as were severe storms. We got a lot of good information on those.

The rest of the meeting will be stepping through each hazard. Examples will be given of what has been provided. Some other examples of potential mitigation actions will also be given. Input on either Macon County as a whole or an individual community is encouraged, if you think any of those fit. We are going to need more detail on each action item; we would like to have specific elements. We'll get bullet points today and then follow up in the next week or two to get those incorporated for the plan.

Harristown's Mayor Gordon Schrishuhn, wanted to know if mitigation actions were new actions or could it include things already in place? If they are ongoing, something you will be doing over the next five years: example a maintenance program cleaning out ditches for storm water to prevent backups onto the street and that is something you do annually is a great example of what you can keep doing. Something that is already done with no more funding going to it can be mentioned in the plan; it is good information to show how proactive a community is being but we would really like to have future events within the plan. For the action items we would really like to have what you are going to do for the next five years.

Flooding-The first action is flooding. We had a lot of information from Macon County, Forsyth, and City of Decatur. One action is to purchase and remove repetitive loss properties. This is one of the most common FEMA mitigation-type projects. The hazard mitigation grant program through FEMA

Funding for repetitive loss can be upwards 90% of a project but if you go through the Hazard Mitigation program itself it's a 75/25, so 25% is the local match. That can be in kind services or straight funding sources. It is what it sounds like it is demolition of homes within a flood plain and preservation of that space as green space forever. It is written into the deed that there is a conservation easement and that no permanent structure can be built. The idea is that if you can show a benefit cost to FEMA, that it is cheaper for them to buy the home and tear it down than it is to keep paying flood insurance claims.

Drainage and storm water improvements, this could be storm sewers, drainage tile projects and detention/retention basins; these were all identified within the plan from different communities.

Another project that is not structural is conducting new or updated flood studies. Steven's Creek is one that may be currently studied. This will help provide better information to mitigate in the

future. An identifying study gives a better idea of risks and is a type of mitigation project that is included within the plan.

The last one is Retrofits for flood-proofing type projects. An example is a historical building that you don't want to demo because it has specific value to your community. Flood proofing often involves homes with basements installing glass block-in windows, backflow preventers on the outgoing sewage lines to a street, the raising of the furnace and other aspects off of the ground to prevent damages if a flood were to occur.

Those are all great projects and those also have quite a bit of funding tied to them. Strengthen floodplain management regulations. Prevent future development within flood prone areas. This will reduce vulnerability over time, but is not an immediate benefit. For communities that don't necessarily have significant flooding issues or don't have the funding right now to pursue these types of projects, the presentation shows a couple of other action items.

Then there is Public Education. Letting people know and be aware of what to do during flood events identifying areas of high water, for roadways that overtop frequently, signage can be put up on that roadway warning individuals of high water events during storms.

Severe Storms- includes flooding and tornadoes but those have been isolated as separate events and we want to focus on other damage from severe storms. Hail, high winds and lightning are the three pieces that are addressed here.

Identified actions: distribution of NOAA weather radios as well as backup power generators at critical facilities. A note about NOAA weather radios: they are a good resource but many times they are handed out and people either don't know how to program correctly or have them set up for alerts they do not need. They end up woken in the middle of the night for fog and then turn the radio off.

Another potential mitigation action may be multi-tiered notification systems. Last year Macon County EMA did a project with Walgreens. They sold NOAA radios and our office went to their location and programmed them for those who purchased the radios. We are willing to do that for communities if they want to put something like that into their projects. The community would let us know the time and place and we would try to get staffing out to do the programming. If your community is interested in doing this as part of your Severe Weather/Storms public awareness, our agency is willing to provide that service.

Other options may be with your cell phone where you can sign up for notifications from the National Weather Service, there is also a Weather Radio App for smart phones that you can download, cost varies for this service. The general public may not be aware of these mobile alert programs if they have not been told. That would be a public awareness piece for the plan. Cost varies. The Weather Radio App can be set up for the types of events you would like to be notified for. It could be set just for tornadoes, severe storms or flooding. It narrows the band down to a specific polygon that the National Weather Service has identified. So it is not just a county wide or community wide aspect, it is stretched to the impact area of that severe storm warning. It actually utilizes the GPS feature on the phone.

Question for Jim, is Code Red used for tornadoes? No they don't because the amount of time that it takes to get information into the program. It is possible that it can be done but it is a registry database and a lot of people aren't aware that it exists so they don't register for it. It may give a false sense of security that people will expect to get notifications of this kind.

There is a new system that is coming out in Illinois that is called IPAWS. It is basically an alert system that will have the ability to actually hit a cell tower and send a message out to that tower specifically and any phones that are connected to it will receive a warning alert informing them there of a hazardous materials spill, tornado or other emergency event. Those are capabilities that will be available to the public in the future.

There are other pieces for severe storms that may be of interest to certain communities that they may have programs that are in place. These include maintaining utility corridors, keeping trees trimmed, making sure that during high wind events that power is not knocked out by tree limbs falling onto the lines.

Winter Storms-The mitigation actions for winter storms are, a lot of times, very similar to severe storms. A lot of the public awareness notification type aspects and the power outage mitigation pieces are very similar for severe storms to winter storms.

One thing that was identified is the potential for long term power outages during cold weather. This is a concern that a lot of communities have. One thing that could be done to begin mitigating for that is to create a public awareness campaign. Identification of vulnerable populations and critical facilities such as nursing homes or other types of medical facilities that require power are good examples.

A Power Restoration Priority Plan, identifying and helping to coordinate with utilities on making sure that the most vulnerable, at risk facilities, are the ones restored first or are put in priority along with other high priority locations. Jim stated that was usually done through the Emergency Operations Center. We have a representative from Ameren, which is our power supply distributor. They look at specifically the number of people out in an area and decide if they can replace a certain transformer that can get 300 people back on line. A lot of times there will be a location that needs power before that and it can put into higher priority. We already have that avenue available to us. A Public Awareness Campaign could give these types of facilities a point of contact to report to and inform them about how to get added to the list.

Drought-Drought is a primary concern here locally, especially the City of Decatur and those that use the City as a water source. There have been several mitigation projects that are going to be included within the plan regarding emergency water source transmission from other sources. Silt is an issue as it reduces lake capacity. Helping to reduce silt loads into the lake would both improve its capacity and reduce how often dredging is needed. Silt dams to capture runoff going into Lake Decatur, could be an option.

Additional potential actions are Public Awareness Campaigns on reducing consumption of water. Not just during a drought but as a continuous basis. Another potential could be working with local soil and water conservation districts upstream, in the Upper Sangamon River Basin, to reduce erosion at the source. Working with farmers to implement erosion conservation practices could be another piece. Also, extreme restoration projects to reduce bank erosion. The primary concern with erosion is capacity. That as erosion ends up in the water shed brings sediment down into Lake Decatur, it fills up the lake making it lose capacity for storage during droughts. Does your Community, if not dependent on Lake Decatur for their water source, have any concerns? New wells, more wells, backup water supplies for the well supplied communities. These have been identified.

An action does not have to be narrowed specifically to a hazard if a mitigation action fits multiple categories it can be listed as multiple actions. Some of the Public Awareness campaigns will cover multiple mitigation action items. It will show in the matrix which action area it falls in. We will then try to apply it to these other projects.

Tornadoes-This fits together with severe storms. Weather radios are identified specifically for tornadoes. Another is Warning sirens either installing new or maintaining/updating existing sirens.

Some additional options included are community tornado shelters which can be located at public parks or other outdoor areas, possibly mobile home parks. This would provide shelter for areas that do not have them incorporated within their buildings. FEMA has provided funding in the recent past for individual safe rooms for homes. It is a program that has been available on and off. Every now and then they have funding for it. The applications typically far outnumber the funding.

Earthquakes-we don't have any mitigation actions identified yet, either at the local or county level for an earthquake hazard. As previously discussed in meetings, Macon County has never had an earthquake with its epicenter within the county. There have been some felt from outside of the county. Especially from Southern Illinois which has quite a bit of earthquake activity on the New Madrid Fault that goes down toward St. Louis. Hazard analysis identified the risk as pretty low in terms of average annual loss associated with this event. However, in the far extreme it is a 1 in 2500 yr. event. If one were to occur we could have considerable damage within the county. Don't say it will never happen. The best mitigation action here would be to let the community know that it is a possibility and damages could be significant if this very remote possibility were to occur. The best way would probably be as a Public Awareness campaign. Also, doing drills with the state next year such as "the great shake-out".

This could be done on the website, EMA's website or through an individual community website. Some other options could be to take a look at the local geology and identify potentially higher risk earthquake zones. Given the remote likelihood of an earthquake zoning and limiting development within high fraction areas would be needed but are options.

A question was asked if we have had any issues with mine subsidization or mapping of the mines. Could the mines be an issue in the event of an earthquake? It is possible. Subsidence was discussed during identification of hazards that were going to be included in the plan. At the

time, the consensus was that there wasn't identification of any events that had occurred with mine subsidence; not that it can't happen but was not identified as high risk. There is a section within the plan that discusses the risk associated with each event and it can be included in there.

A question of whether FEMA has funding for the filling of old mines? John had heard there are organizations/groups funding the filling of old/abandoned mines. He believes the funding actually came from the Department of Transportation, the primary concern being highways. There may be some if there is a nexus within a certain infrastructure that might be where that would come in account. Would there be funding where you could fill the mines with the silt from the lake? You might not get funding for the project but that may be the best place to put the silt. That could be an option.

Extreme Heat-danger is primarily for those who don't have air conditioning, or in the event of a power outage, those that have health issues that would be exacerbated by extreme heat. There could be some infrastructure damage issues with extreme heat such as road buckling and sagging power lines that have the potential of causing a power outage.

Some mitigation options would be implementing green space, reducing pavement within urban areas to reduce urban heat island effect. Identifying and assisting vulnerable populations. Getting out and letting people know the risk associated with this hazard through Public Awareness campaigns.

It was brought up that there are programs for fan giveaways in our community. The fan giveaways sponsored in part by Ameren, community organizations and local churches. The local media gets involved by requesting that citizens get involved by purchasing fans and donating them. They usually have a truck set up at a location for collection of the new fans, usually Walmart or Kmart. This is not a local government program. Mostly it is charitable organizations and local businesses.

Dam Failure-four dams were identified for potential impacts of dam failure primarily the Lake Decatur dam. AE Staley cooling pond dam was another dam that was looked at. This is a rare event but it could have extreme consequences should it occur. Potential mitigation actions could be continuing to implement the operations and maintenance plan associated with the facility. This includes annual inspections to make sure that problems are identified prior to a disaster.

Another piece is an emergency action plan for a dam failure. Jim indicated that the City of Decatur has an Emergency Action Plan for the Lake Decatur Dam. An emergency action plan develops a notification chart on identifying the specific entities in response to a failure occurring. This would include involving local police and fire departments to help with evacuation. It usually also includes a breach analysis of the dam. A model is done of what would happen if the lake were to release. It identifies who might be at risk and it provides a time to impact. Usually there is an extended period simulation that identifies that this roadway will overtop in 30 minutes. It gives an idea for the emergency response team on when they would have to get roadway closure signs out. This is a good mitigation type project.

Public Awareness would be beneficial since a lot communities don't even know that they live downstream from a dam or that they could be impacted by a dam failure. A campaign to help them to understand the risks associated with a failure has public relations issues that need to be thought through, you don't want to create panic but do want to make that population aware of the risks.

Hazardous Material and Nuclear Accidents- The last item identified was concern about the nuclear plant north of Macon County as well as the release of other hazardous materials. One we could include is documenting the implementation of the existing hazardous materials plan.

Other potential actions if your specific community is concerned could be developing response plans specific to your jurisdiction. Potentially, if you have a high hazard facility located near potential residential development areas, you would want to add a buffer to your zoning to reduce risks to having population adjacent to a high risk facility.

Another piece would be the creation of a public awareness campaign to inform people of what to do during different types of potential incidents. There are different responses that you should have for a chemical release as opposed to a radiological release.

Something else to consider may be hazardous material disposal days and pickups thus promoting the safe disposal of hazardous materials such as household items. This would be small scale but would affect local individuals.

These were the mitigation items identified and feedback from individual community's interest in one of the items or if you have an idea that you would like to include. We would like see each community have at least one action item for the plan. The state is going to want to see at least one mitigation item, per community, to approve the plan.

If you are a community that does not have an item, you don't have to have it today but you do need to get it submitted soon. Jim stated that if you have already submitted items and you want to add by all means submit another sheet and we will include it with what you have already submitted. We will be including another item for Harristown since an additional item has been identified within the last couple of weeks.

The last part of the plan deals with what you're going to do with the plan during the next five years. We will include a sheet in the back of the plan to track mitigation items as they are implemented. A lot of communities like to do a yearly review by getting stakeholders back together and discuss what was in the plan and what the plans are for going forward. This helps to reduce the level of effort at the five year cycle when the plan has to be updated again. This eliminates back tracking to get all of the information again.

It is a good idea to maintain the plan on a website. This gives people a place to reference it throughout the cycle. This will be done by the Macon County Emergency Management office.

Remaining schedule for the mitigation plan- this is a draft and the numbers can be adjusted. Ideally we would like to get all of the remaining action items incorporated by March 1st. Then we can begin a Public Review of the plan during the month of March. We plan on having 30 days of public comment and review. We need to have that completed before it is off to the State.

Assuming that we don't get a hundred comments on the last day of March we should be able to be updating the parts of the plan we get comments on. We will try to get it sent out to the State the first week of April. There are 30 days for the State to review it and provide comment. Then it will take a couple of weeks to incorporate the State's comments. There will then be 30 days for FEMA to review the plan. We will be looking at plan adoption sometime in the summer.

Jim questioned whether the adoption of the plan is part of the closeout for the grant? We have a deadline of June 30th for completion. If adoption includes that then we need to allow for, the jurisdictions that have monthly meetings in the first part of June, to make sure those adoptions are included in the first part of June. This is something we will have to check with State about. Jim is thinking that's going to be part of it. The primary concern is funding and getting reimbursement. If we can get most of the local match and the funding complete by that point and at least the County approval, John believes we will be fine.

That is John's understanding of the process. Once you get the county approval you've got a plan and each individual jurisdiction that wants to be included in the plan has to pass a resolution to get added to the plan. The resolutions from individual jurisdictions are actually put in the plan.

The plan document looks to be large, however, the body of the plan is a small portion of the document, with the remainder of the document being the appendices and backup information. The first appendix is the resolutions or executive orders associated with adoption of the plan. Then there are meeting minutes, other planning process documentation as well as backup information on the hazard analysis and other items. Not all of that needs to be read during the review period, there are about 50 pages and a couple sheets in the appendix for action items to be reviewed.

A question was posed as to whether a model ordinance could be prepared for adoption by the smaller communities involved? Yes, that will be provided. It will be provided in Microsoft Word so that adjustments can be made to fit specific needs. That language will be provided.

John is available for questions as is Jim. Please continue to keep track of your time and if you have something that you still need to submit send Jim an email or give him a call and let him know what you have invested, as far as time, so that we can get it recorded for the match. That time should include today's meeting but also when you go back to your community and are looking up information or talking with individuals about the plan.

If anyone needs to go back and look at previous presentations, those are available on the Macon County EMA website. The minutes are also posted there.

This concludes today's meeting.