

Hazard Mitigation Plan
August 17, 2012
9:30AM
Macon County Board Room
141 South Main, Room #514

Jim Root, Coordinator of the Macon County EMA, introduced himself to the attendees. Stated that they are running a little behind on the schedule of the plan, making sure all the jurisdictions have had an opportunity to provide data for the plan.

John Menninger, PE- Plan Consultant with Stantec Consulting, Services. Inc.

Local Participating Communities present were the City of Decatur, Villages of Harristown, Long Creek, Niantic, Mt. Zion, Blue Mound, Argenta, and Forsyth and from the City of Maroa. Jim Root, Jennifer Hoffman, and Josh Tanner will be representing Macon County and the unincorporated areas.

Mr. Menninger went over the purpose for the plan which is to protect lives and properties through identification of specific hazards of the county. The goals of the meeting today are to review the hazard profiles and rankings and begin the mitigation development

The Primary Elements are planning; which we have undertaken, Risk Assessment; which we are starting to wrap up now, Mitigation Strategies, Plan Review and Adoption, and Plan Maintenance.

With the data collection he felt like they received a lot of good data from the local communities. He stated they got a listing of over 600 critical facilities within the communities, 460 of them are bridges, and 170 are other infrastructures such as utilities, buildings, schools. He gathered the population data and census data and in addition to that GIS data from the county which provided structure values for each individual parcel within the county and utilized that to determine the vulnerability between the specific buildings within the community.

In the last meeting the hazards that are of most concern were narrowed down to nine specific hazards that will be included in the plan. They are Flooding, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Drought, Extreme Heat, Earthquakes, Dam/Levee Failure, and Nuclear/Hazardous Materials Accident.

Discussion on Risk Analysis is basically two parts, how likely an event will occur and what is its impact. For each of the events they calculated the probability of those occurring for the

communities and the potential damages associated with it and calculated that risk so you can compare each of the hazards together and figure out where your communities specifically wants to devote their mitigation efforts towards.

How data was collected was FEMA has two modules within their HAZUS programs to help develop a detailed look to what would happen in a disaster event. Another was just looking back on historical events (National Weather Service keeps that information). Additional studies by the state with the drought, and then Qualitative Assessments with Dam Failure and Nuclear and Hazardous Materials.

On the Hazard Risk Analysis-Flooding, Mark Smith had a question asking; why in those 29 events are damages unavailable? John Menninger said that they were not in the databases and the data collection that was collected. Mark Smith then asked if FEMA had them and you would have at least the claims for those events. John Menninger said we can go back and look at that and update the number from claims database.

John Menninger discussed the critical facilities that are located within the map flood plains 151 of them are bridges, 14 structures that have been noted are not bridges.

Hazard Risk Analysis-Severe Storms, he stated that there are records for severe storms that are really spotty from 1955-1990, they calculated the probability to a 20 year period. Within the last 20 years there have been 134 events within Macon County of severe storms, mostly hail, wind, damaging lightening. Mark Smith asked why he only went back 20 years. Mr. Menninger stated that the record was not complete. There was not enough information that was reported in those previous years. Gordon Schrishuhn asked if tornadoes are separate from the severe storms, John Menninger stated yes they were.

Severe Winter Storms-the data that is available to us it breaks out in larger regional storm events generally when there is a winter storm that rolls through it affects multiple counties unfortunately NOAA adds the data all up into one number. It is hard to get a handle on the specific impacts on a local community without detail records from the locals. Chuck Hunsinger asked what kind of database Mr. Menninger was using for the weather data, the database is National Climatic Data Center (NOAA).

Hazard Risk Analysis-Tornadoes, the databases that he collected for tornadoes, they went back 55 years, and there were 32 events recorded and 22 individual years within that 55 year period had tornadoes in them. 40% of those 55 years there was a tornado in the county.

Hazard Risk Analysis-Drought, The Illinois State Water Survey did develop a survey on water available for the city of Decatur that came out this year. Menninger said they tried to distill that

information for the data on droughts. According to the Palmer Drought Severity Index this region of the country over the last 100 years has been in drought 10-15% of the time on average. The Illinois State Water Survey took a look at the water available in Lake Decatur, so it did not cover all of the supplemental water supplies there was not a lot of information on that. So if any local communities have information on specific drought plans themselves please let Menninger know. They also mentioned that if the 1930 drought were to occur again there was a 20% chance that Macon County can have severe impact to the water supply.

Hazard Risk Analysis-Extreme Heat, John Menninger stated that it is hard to specifically identify what is the impact to the local area because it is reported over such a broad area. This data was through the last 20 years. Josh Tanner asked what kind of damages occurs with Extreme Heat. John Menninger said not likely to have damages, looking more at life loss.

Hazard Risk Analysis-Earthquakes, There has never been an earthquake with its epicenter in Macon County, with that being said it is hard to determine if it will occur since it has not yet occurred. HAZUS can perform a hypothetical earthquake in the general area and even with a 5.2 magnitude there is only \$30,000 to the county. Basically what it is saying is that earthquakes are pretty far down on the priority list.

Hazard Risk Analysis-Dam/Levee Failure (Lake Decatur Dam), during the data collection they gathered the Operations of Maintenance Plan of Lake Decatur but they do not have information of what would happen if the dam were to breach. They looked down stream to see if there were any vulnerable areas. The more significant impact with the failure of the dam would be the loss of water for the community. He stated that what they are going to consider in the plan is the potential issue with the levee around the treatment plant. Besides just looking at the specific value of the infrastructure there is no real probable realistic way to figure out what the likely hood of the levee failing would be. Chuck Hunsinger stated that if the dam were to go it would go over the top of the levees at the Sewage Treatment Plant. He also stated that the Sewage Treatment Plant has statistics on damages inside the plant for the flooding of the plant. Mark Smith asked what about structure damage if the dam were to fail. Menninger stated that looking down stream there are two bridges that would likely be impacted and those will be included in the plan.

Hazard Risk Analysis- Hazard Material/ Nuclear Accidents, there is not a lot of information on that, John Menninger and Jim Root will work on that for the specific risks involved with it. He stated in a Mitigation Plan they would for this hazard identify the risk and discuss the general locations of the hazardous materials and their potential impacts of the surrounding communities and focus more on the mitigation piece of it. To determine the likely hood of a spill occurring would be more guess work. Chuck Hunsinger asked if he had talked to the city of Decatur about

some of their water supply hazardous spill studies in Lake Decatur. John Menninger mentioned he does not have that plan but can incorporate that into the report.

John Menninger then talked about the prioritization of each individual community as far as what hazard would impact them. It breaks it up into historical probability, vulnerability, and severity of impact. The chart is not final and some adjustments will be made. Mark Smith asked him to explain the vulnerability, John Menninger stated that each of the three categories have a score 1-3 so your highest score possible for a hazard is a 9 and the lowest score is a 3. Julie Miller asked shouldn't we have the communities that their water source is Decatur as the same as Decatur, for example Mt. Zion should be a 7 the same as Decatur because that is where Mt. Zion gets their water. Also she stated among the data we had were only in the last 20 years but in the historic probability were using 50 years, should that be adjusted to be a more accurate reflection since we do not have 50 years of data on several of the categories. John Menninger stated that she is correct, but they like to look back 50 years because you can always have variation in climates and weather patterns. Initially looking at 50 years because they were leaning on the locals on the historic knowledge of the events, but they will fix that.

Jim Root asked on the risk analysis, say there is a problem area where there are a couple houses that get flooded, when we develop our mitigation plan and apply for the grant money do they go back and look at our risk analysis to determine whether or not we would be eligible for those funds? Mr. Menninger stated: No, because you might not have the information currently to determine the probability of that area is. If you do not have that information now, it would be a good idea to put in the mitigation plan that you would like to find out more about that problem. The project that you include in the plan should be projects you want to move forward in.

The next part of the plan is the Mitigation Projects themselves. He encourages each community to develop a list of mitigation projects that they would like to implement and incorporate into the plan.

Mitigation Project Goals are; Preventative Action, Property Protection, Emergency Services, Structural Projects, and Public Information. A mitigation project either reduces the probability or reduces the impacts associated with an event.

Jim Root asked if John Menninger would be assisting us with providing the information on the estimated benefits, he stated yes they will help develop it.

A question was asked on the projects that are listed on the handout, what benefit is that for the community to have it in the mitigation plan. John Menninger stated; (1) it helps to go through the planning process, (2) if it is in the plan it has a better chance of getting FEMA Mitigation dollars. In general the grant programs that FEMA does provide have a 75-25 split, so that 75 would come from FEMA and 25 would come from Local.

Next step is for the communities/Stakeholders to review and provide input on Hazard Prioritization and continue Development of Mitigation Goals. John Menninger and his team will make follow up calls to each community, complete the Risk Analysis, and Develop Mitigation Projects.

Meeting was adjourned at approximately 10:35AM.