

GEORGIA HAZUS USER GROUP

Meeting Minutes

01/24/2012

I. Call to order

Moses Wilkins, called to order the regular conference call meeting of the GAHUG at 10:00am.

II. General HAZUS Update

Jamie Caplain- Will host monthly National Hazus user group conference call 1-570-720-0113 pin 186250# you may also get more information about the national call and activities on usehazus.com. The next call is schedule for February 28, 2012 at 2:00pm eastern.

Also you may visit the GAHUG webpage. It will be the vehicle for future announcements and forums. Using the below link, please check in for more updates about the HUG

(<http://www.usehazus.com/gahug>).

A. Software Updates

1. HAZUS 2.1 was scheduled to be out the end of November, but the release date has changed to February at the latest.
2. 2.1 will be compatible with 64-bit computers, a first for Hazus.
3. It will also use ArcGIS 10.1
4. When it becomes available, you can order it here: <https://msc.fema.gov/>

B. Model Updates

1. FEMA has confirmed that the Tsunami model will be the next model to be released in Hazus.
2. They have funded the project and anticipate its release in 2013.

III. Recent & Upcoming Training at EMI and virtual training capability

- A. HAZUS for Earthquake: December 19 – 21 at EMI
- B. HAZUS for Hurricane : January 9 – 12, 2012
- C. Application of Hazus for Risk Assessment : January 16 – 19, 2012
- D. Hazus for Disaster Ops : February 13 – 16, 2012
- E. Basic Hazus : April 2 – 5, 2012
- F. A new course *E-176 Hazards United States-Multi-Hazards (Hazus-MH) for Floodplain Manager*: April 23-26, 2012
- G. There will also be a Basic HAZUS course available online through ESRI by the end of the year. I believe there will be 12 modules to work through.

We may have a training opportunity soon in Georgia. To leverage this opportunity, we've discussed possible virtual training. In the past, we tested this concept of virtual training twice and "lessons learn" to be published soon.

There are some minimal requirements to host a virtual training.

The facility:

1. Should accommodate at least 10 participants
2. Should have computers, with minimal specs to allow installation of the current version of HAZUS 2.0. You may view the minimal requirement at http://www.fema.gov/plan/prevent/hazus/hz_reqmnts.shtm
3. Should have Internet connections and able to use Adobe Connect meeting.
4. Should have Phone connections
5. Should Have a HAZUS Subject Matter Expert (SME) present to assist in any technical problems during the training, as well as able to address local concerns and/or questions.

IV. **Guest Speaker** - Our guest speaker **Jason Brown** from Dewberry, showed us how Hazus was used in a Pilot Study of a Dam Break (completed in Cobb County 2010).

Slide 1

- Reasons for conducting study:
 - To determine Environmental, Economic and Social impact of a dam breach
- Decisions and methods of using HAZUS
- Combine the study into the Hazard Mitigation Plan
- Conceptualizing Mitigation Actions
- Lessons Learned

Slide 2 - Background of Project

- As a result of the 1977 Kelly Barnes Dam Breach in Toccoa Falls, the state of Georgia created the Dam Safety Program. Over the past 30 plus years, the program has significantly grown and now has control over 3,900 Dams. Approximately 500 of them are categorized as category 1 Dam. Category 1 Dams are defined as dams are those for which improper operation or dam failure would result in probable loss of human life. Situations constituting 'probable loss of life' are those situations involving frequently occupied structures or facilities, including but not limited to, residences, commercial and manufacturing facilities, schools, and churches."
- In Georgia, a category 1 Dam is required to have an Emergency Action Plan.

Slide 3 - Background of Project

- Example of Dam breach in Georgia.

Slide 4 - Background of project

- Several products were developed like Depth grids, Velocity and a new concept Danger zones.
- For the hazus analysis, depth grids were created by using the HEC-RAS model.

Slide 5 - Examples of Depth Grids, Velocity Grids and Danger Zones maps.

- Also compared, dam inundation zones and 100 yr floodplain to see possible impact.

Slide 6

- Image of Dam Breach

Slide 7

- Created a user define database by collecting tax assessors and building footprints data.

Slide 8

- Challenges Adopting HAZUS Riverine Module to Dam Break Scenario
- Only accounts for damages due to depth of flooding, does not consider velocities
- Damage estimates extremely sensitive to each structures X, Y location attributed in HAZUS database.
- Due to the small area studied, any aggregate data not updated is subject to high uncertainty.

Slide 9

- HAZUS drops a few of the decimal points on the Lat, Long coordinates therefore shifting the LAG point approximately 25 feet or less.
- Other data was used LI-DAR for analysis.

Slide 10 - Components for the Study

- HEC – RAS model
- Accurate Terrain
- Depth Grid
- User Defined Facility (UDF) inventory
- Latest version of HAZUS

Slide 11 - How to Apply this to Hazard Mitigation Plans?

- Profile the Hazard
- Identify the structures at risk
- Estimate the potential losses
- Analyzed Development Trends

Slide 12 Conceptualizing Mitigation Actions

- The Attributes highlighted in yellow are the ones we thought was very important
- The Highlighted attributes we used to conceptualized mitigation action.

Slide 13

- Example of Mitigation Matrix
- Presented the finding to the community to start a dialogue on possible mitigation action and areas of vulnerability.

Slide14

- Lessons Learned
- In order to have an accurate hazus report. Locations of a structure point have to be specificity placed on the lowest adjacent grade.
- Important to update aggregated datasets and may be completed by using FEMA CDMS.

Slide 15

- Can help provide data to dam safety officials.
 - Assist State/Local Emergency Responders
 - Identify how Inundation dataset can assist dam safety officials in developing EAP
 - Can help promote EAP development
- Products developed during the pilot can potentially become enhanced Risk MAP products and even used for inclusion in a Hazard Mitigation Plan.

Questions:

- How do you share this data? Many agencies have concerns with releasing data on inundation zones.

V. **Open Discussion**

- A. The group agreed that having a guest speaker was something they wanted to continue. They liked the variety of topics that we have focused on in the past.
- B. Suggestion was to showcase troubleshooting techniques in Hazus. Not everyone uses Hazus regularly. By showing the group how to do certain tasks via a Webinar, the beginners will be more likely to successfully navigate Hazus. We could also look at new program releases and have a speaker show the updated functionalities.
- C. The group agreed to have Bi-monthly calls.

Champions of the GAHUG

Moses Wilkins and Rama Sivakumar (siva)

Adjourn