

MINUTES
Kansas Hazard Mitigation Team
March 3, 2020
9:30 a.m. – 12:00 p.m.
Kansas State Historic Preservation Office
6425 SW 6th Ave, Topeka, Kansas 66615-1099

Minutes by Brian Rast, USACE. Sign-in sheets are available. Handouts: Floodplain Mapping Projects and Hazard Mitigation Plan Expiration Status (Steve Samuelson, Kansas Department of Agriculture, Division of Water Resources).

- **Introductions**

- Steve Samuelson, KDA DWR, facilitated the kickoff and beginning of introductions. Multiple new faces from the federal agencies attended.

- **Presentation 1: Kansas Dam Safety Program, Terry Medley, KDA/DWR**

- He mentioned several of the DWR authorized programs. DWR's **Water Structures Program**:
 - Dam Safety
 - Stream Permits Team
 - Floodplain Management Team
- Dams may be high hazard or significant hazard. High being >25 feet or 6 feet and >50 acft in volume (see more details in PowerPoint presentation).
- Exemptions. May be reconsidered to be Low hazard <30 ft and <125 acft auxil and a wastewater storage structure for a confined feeding facility approved by the secretary of the Kansas Department of Health and Environment
- National Inventory of Dams (NID). As of June 2018: 6,154 dams in Kansas, which is **2nd in nation**. 258 are High Hazard, 170 are Significant Hazard.
- With recent legislation changes, more dams are now **unregulated**.
- USACE manages the NID.
- Emergency action plans (EAPs) are required for High Hazard and Significant Hazard dams
- 2d models have helped as the better risk understanding allows lowering classification for some dams.
- Inspection once every 5 years for Significant, once every 3 years for High
- Administers Watershed District Act, like new one by Clay Center, Water Structures Program has not done before
- Every state has a dam safety program, except Alabama

- Case history after-action review (AAR) (lessons learned): The dam south of and near Sebetha, KS in 1992, was built 38 ft high 145 acft of volume for the normal pool. At water surface elevation (WSEL) 506 it is at level of the auxiliary spillway. In 2016 a significant hazard occurred, May 28th Memorial Weekend. Basically, erosion from internal piping near principle spillway and about 500 acft (approaching spillways WSEL). On May 30, false reports were made that the dam failed. The National Weather Service (NWS) issued an imminent alert of failure or flash flood warning. He called the public information officer (PIO) to correct information. On June 2 water level dropped, but NWS expected much more rain. He therefore wrote a draft breach order. As part of the after-action review (AAR): No EAP on file, although an inundation map was available. The worse lessons was about the calling tree: none existed. Another lesson learned is the recommendation to only use ONE form of communication, because Terry explained how the group texts were very disorganized. On the site of the dam, 200 people loitered around the dam, which made it extremely hard for officials to find other dam safety officials. This calls for official apparel (jackets or hats, etc). Finally, he asked Chad Omit, NWS, why inconsistent forecasted water levels. Doing a sunny day breach is process. NID data is available, federal definition.

- **Presentation 2: HAZUS, Mike D'Attilio, GIS Coordinator KDEM**

- He worked in E911 industry, using the FEMA HAZUS computer software. Good training on HAZUS is available at FEMA's Emergency Management Institute: courses 0313, 0317 and 0172
- Using HAZUS is well explained on the FEMA web page. Search web for these key words: Inundation Mapping PDF flyers and handouts
- Must have the expensive GIS software by ESRI and have the Advanced edition, plus spatial analyst module
- HAZUS has Levels 1, 2, and 3
 - 1 is Basic, 3 hours hazard analysis
 - 2 user defined input >8 hours
- Several natural hazards may be analyzed, like earthquake, tsunami, and flood
- Inputs, Flood: damage curves, depth grids, DEM, DFIRM data
- Inventory data
 - General building stock, type, attributes like floor area and replacement value
 - Census data
 - Aggregate data...building type residential, commercial, public? agri, gov
 - Building type concrete, wood
- Models differ for flood as riverine, coastal, Great Lakes
- Mapping schemes
- HIFLD Open as default
- Outputs: Direct Physical Damage, Induced Damage, Direct Losses and average annualized loss

- Flood Model, generates hazard data from nationwide data sets, but whether a particular building is affected specifically can not be known using HAZUS: You only get conglomerate results
- Computationally intensive and takes long time to run
- Many are run for state hazard mitigation plan revisions
- Questions
 - Jude Kastner, KS Bio Survey, can it use your own flood maps: yes
 - Michelle Wolfe, FEMA, any user groups active? He's not sure, but some around
- **KDA/DWR Update, Current Projects, Steve Samuelson, KDA DWR**
 - He referred team members to map handout.
- **Silver Jackets, Brian Rast, USACE, as Lead Silver Jackets Coordinator**
 - He described status for the projects below.
 - Ottawa Floodplain Management Plan: Draft final Word document is being developed.
 - Abilene Emergency Action Plan: Word document has been drafted. Content is being added, including specific public alert messages for levee overtopping and at least one other scenario for interior drainage system failure.
 - Rossville Nonstructural Analysis: Analysis is considering recent FEMA grant developments and adjusting analysis to best suit the community to obtain one of these grants.
 - Hutchinson Public Messaging: This project is now scoped and a project management plan is being drafted. USACE Tulsa District will develop public alert messaging for 5 different levees around the community, primarily for overtopping scenarios. Some interior drainage system related messaging will be considered. Some short SMS messages will be considered as well.
 - EPA Flood Induced Contamination Mapping: Allen Chestnut, USACE, Flood Plain Management Services Program Manager, described the status for the project with EPA Region VII and KDHE, Flood Induced Contaminant Mapping. Both he and Joanna R, KDA DWR, may have to switch scope of project from petroleum to fertilizer/nutrient if inventory of needed technical elements is incomplete.
- **Hazard Mitigating Project Updates, Charlie McGonigle, KDEM**
 - \$14 million on hand. Jeanne submitted the FY19 applications
 - DR-4287 – 1 Safe room
 - DR-4304 – 2 Safe rooms
 - DR-4319 – 1 Planning, 1 Acquire, 7 Safe rooms

- DR-4347 – 1 Advance assist, 1 Acquire.
- DR-4403 – 1 Siren, 1 Acquire, 1 Safe room, Weather Radios
- DR-4417 – 1 Radios, 1 Siren, 1 Generator, 1 Pumps
- DR-4449 – 1 Siren, 1 Safe room, 1 Acquire, 1 Generator, TBD
- FM-5170 – 1 Fire fuel reduction, 3 Safe rooms

- **PDM/FMA Funding FY18/19/20, Jenny Ellerman, KDEM**

- Submitted for FY19:
 - Anderson Co., City of Garnett Safe Room – 48K
 - USD 463, Udall, School Safe Room – 600K
 - Fanestil, City of Emporia, Acquire/Demolition – 2.4M
- FY18 – Harper Rec Commission, \$355k

- **Planning Update**

- Region G, H, J, K, L, E are complete
- Region F is at FEMA for review
- Regions C and D are in process
- Region I kickoff is on 6 Mar 2020

- **New and Unfinished Business**

- Tara Lanzrath, KDA DWR, requested the team be looking at possible actions for technical assistance project ideas for current grant applications. Team members may use PDF on KDA/DWR web page

- **Presentation/Training for next meeting**

- The next KHMT meeting is June 16, 2020.