

# MINUTES

## *Kansas Hazard Mitigation Team*

### **Date of Meeting**

June 18, 2019

### **Attendees**

See Sign-in Sheet

### **Introductions**

Mr. Steve Samuelson, KDA Division of Water Resources, opened the meeting with introductions. Ms. Jeanne Bunting, Kansas Department of Emergency Management, State Hazard Mitigation Officer, will be the temporary replacement at the September meeting. Attendees introduced themselves around the meeting room. Ken Wade and Brian Rast, USACE, wrote minutes.

### **Presentation(s)**

**Mr. Brownie Wilson, Kansas Geological Survey**, presented about drought hazard in Kansas in his presentation, Conditions and Trends in the Kansas High Plains Aquifer.

- High Plains Aquifer, largest in world
- Water Information Storage and Retrieval Database, WIZARD, wells, largest inventory depth of water inventory in KS
- Kansas Index Well Program, wet year so not as active
- Depth to Water, aquifer ranges from at surface to 400 feet
- Few states have this good of a water use database
- Kansas Index Well- recovery curves, Thomas County well hydrograph, wells turned off and see recovery, conservation strategies...Reductions in use by selected wells...can be challenging to impose on land users
- Even though wet, distinct efforts still needed in usage management (pumping) are needed
- Questions and Answers:
  - o Jeanne Bunting asked about the lawsuit with Nebraska a few years ago. This was regarding surface water or stream flow, actually, because ground water actually flows into Nebraska, subject of compact...pumping out of Republican River

**Mr. David Barfield, DWR, Chief Engineer, Life of Aquifers in Western Kansas**

- Life of aquifer, this problem and solutions

- KS 1945 Water Appropriation Act, based on prior appropriation (1st in time, 1st in right), sort a water development act... by 1978 amended it to require water right
- Groundwater Management Districts GMD, requirement that pumped water be used beneficially, 5 GMDs currently, the GMDs stopped development from occurring, but haven't done much to scale back pumping
- Tools, IGUCAs and LEMAs and WCAs
- Intensive Groundwater Use Control Areas, IGUCAs, some GMDs reject IGUCAs, 4 looked at 20% reduction
- Local Enhanced Management Areas LEMA, Sheridan 6 was adopted, has been successful, but needs everyone to be involved/committed, more restrictive than District wide LEMA
- Water Conservation Areas, WCAs, approved water management plans, some flexibilities, growing use, Wichita County WCA proposal was approved with milestones from 2017-2045, WCAs seem to encourage more conservation by users, like turning on later
- Questions and Answers:
  - o Jeanne last year of PDM...anyway this can play into Barfield's work? He's not sure, but Jeanne is considering large infrastructure projects...discussion...Efficiency improvements is really best option
  - o Jude, KS Bio, any more lawsuits? Not a lot, Garrison and Quivira heading there
  - o Martin, any discussion of forming new GMDs...could they be an applicant for HMG? No.
  - o Joe, does KS wave watershed district authority? That authority is mainly for dams. Iowa doing for water quality, EPA 319.

**Mr. Scott Satterthwaite, KDHE**, in role of administering the EPA 319 grants, briefed about opportunities to treat rain where it falls and addressing both water quantity and water quality with better land use practices in agriculture.

- Soil health movement is important opportunity that large companies are using, like commercial partners, Kellogg's
- System framework of farmed infiltration basins to improve farm health, goals to reduce nutrients runoff
- Farmed infiltration basins increase organic content to ~7%... Most at 1-2% infiltration, equivalent to 1 inch / hour infiltration, so theory is to reduce flood flows, he was working with Dane Bailey and Tom Morey, former KDA DWR and KHMT team members, want to map soil health through a scenario and get to some implementation, example in Cottonwood Creek...NRCS and KDHE agreed there to improve water quality...edge of field monitoring in flumes to measure quality...improve soil health until we get the infiltration we need...like living roots in the ground year-round.. corporations plus agencies in a Soil Health Institute and Soil Carbon Cowboys, Iowa watershed management associations came together after HUD grants and Hurricane Sandy funding and have been pursuing...not for big rivers but 2nd and 3rd order streams

- EPA Section 319 grants offer a funding mechanism to this end, but the funding has been slashed in recent year to just \$2 million
- Universities and NGOs involved: Kansas State University research, Living Roots, Organic Matter in Soil, Soil Health Institutes, and Iowa Flood Center
- Terraces and grass waterways are at risk with climate change and more intense rainfalls, so these could treat rain where it falls
- Scott wants to see more property owners make that connection

### **KDA/DWR Update**

Mr. Steve Samuelson briefed.

- Little flooding, new maps they didn't believe until this year

### **USACE Silver Jackets Program**

Mr. Brian Rast presented.

- Old projects: Recurring Flood ID, Repetitive Loss Update, Historic High Water Signs
- New projects:
  - o Rossville Nonstructural Assessment: Leaves up to 5 benchmarks on private properties space throughout city to aid with property owner follow-up on Elevation Certificates.
  - o Ottawa Floodplain Management Plan
- Proposals
  - o The Lead Silver Jackets Coordinator for Kansas submitted 4 proposals in April 12, 2019 for the KHMT.
  - o USACE HQ will announce the selected proposals in late July.

### **Hazard Mitigation Project Updates**

Mr. Charlie McGonigle, KDEM, briefed. See handout.

- HMGP
  - o DR-4347
  - o DR-4403
  - o DR-4417
  - o FM-5170
- PDM/FMA Funding FY18/19
  - o Harper recreation Commission is continuing; awaiting approval

### **Planning Update**

Ms. Jeanne Bunting, KDEM, briefed.

- SE and SC (Regions G and H) Plans approved
- Region L (Johnson, Leavenworth and Wyandotte County) has just expired
- BRIC Program, next year, any infrastructure anyone proposes helpful

#### **New and Unfinished Business**

Mr. Scott Satterthwaite's briefing turned into discussion earlier that appears to be New Business for the KHMT. Several agreed this needs to be presented again and also discussed as Unfinished Business in the September meeting.

#### **Presentation/Training for next meeting**

- September 17th
- Speaker Discussion:
  - o ...native tribe has good plan
  - o ... Two dams came close to breaking. Nemaha Brown WD No. 7 ...nobody did TLC of CMP pipe replacement... Barfield authorized complete breach and drain, since rain pending next week, Dam 3113, until pipe replacement finished
  - o Success with flood maps from KBS, Jude Kastens