Middle Kansas Watershed Flood Study Review Meeting

August 9, 2017

10 AM ◆ Wabaunsee County Courthouse ◆ Alma, Kansas

1:30 PM ◆ Wamego City Hall ◆ Wamego, Kansas

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Draft Data FTP site:

This ftp site can be a bit tricky so follow these instructions. Copy and paste the ftp address into the address bar at the top of WINDOWS Explorer (not Internet Explorer), hit enter. RIGHT-click in the folder area and select "Login As", enter username and password. Folder is called **MK_FSR_Draft_Data**.

ftp://kda-ftp.kda.ks.gov
Login: floodplain
Password: Needh2o

*If you have any problems with the FTP site, please contact Dane or Tara (contact information listed above).

Important Upcoming Dates

Schedule is delayed to finish studies outside of the Middle Kansas Watershed in Wabaunsee County. When those studies are complete, the digital flood hazard data will be countywide and move forward together.

1. Deadline to submit FSR Meeting comments	**October 6, 2017**
2. Estimated Preliminary Distribution of DFIRM	September 2018
3. Estimated Community Coordinator's Officer Meeting	October 2018
5. Appeals Period ** Dates depend on publication in Federal Register.*	January 2019 – April 2019
6. Letter of Final Determination ** No changes to the map are made after this time. This date is exactly six months prior to effective date of new maps.*	August 2019
7. Effective Date of New Maps	February 2020

Please note that all dates are subject to change, particularly after preliminary distribution as there are occurrences out of KDA or AMEC's control that can affect schedule, such as publishing in the Federal Register. The number of comments and appeals can also affect schedule, which is part of the reason why we believe it is important to discuss potential issues or questions early on in the process. We appreciate your participation at this time and look forward to working with you throughout the continuation of this process.

Process to create the maps

In 2016, the Middle Kansas Watershed was selected to have a watershed RiskMAP project as a result of needs identified from communication with local officials at the Discovery Meeting for the watershed in 2015. New detailed studies for the City of Wamego were performed for East Unnamed Creek, East Unnamed Creek Tributary 1, and East Unnamed Creek Tributary 2. A limited detail Zone AE study was performed for Mill Creek near the City of Paxico. New floodplains for the remaining streams that were either mapped previously or had 1 square mile of drainage were created using Zone A analysis. The topography used to create the maps is LiDAR flown in 2012.

For the Wamego detailed Zone AE streams, hydrology was developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events. Hydrology was developed from rainfall runoff modeling. Hydraulic Hec-Ras models were created using LiDAR topography to determine cross-section geometry. Bridges, culverts, weirs, and other structures were surveyed in the field and included the hydraulic models for the enhanced studies. For East Unnamed Creek Tributary 2, there is a portion that was studied using 2D analysis to capture the different flow paths taken for the area – this area is a Zone AH and is located east of Walsh Road/Balderson Boulevard.

The hydrology for Mill Creek was developed from a rainfall-runoff model calibrated to a Gage on Mill Creek, which was applied to the Zone A and Zone AE portions of the stream and its tributaries. Structures near Paxico were field measured to obtain the structure dimensions and material and the channel shape. These structures were included in the Zone AE portion of the hydraulics. Hydraulic Hec-Ras models were created using LiDAR topography to determine cross-section geometry. The hydrologic and hydraulics analysis for this stream was developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events.

For the Zone A streams in Wabaunsee County in the Middle Kansas Watershed, hydrology was developed for the 10, 4, 2, 1, 1+ and 0.2-percent-annual-chance flood events. Hydrology was developed from USGS regression equations for those areas outside of the Mill Creek Watershed. Hydraulic Hec-Ras models were created using LiDAR topography to determine cross-section geometry.

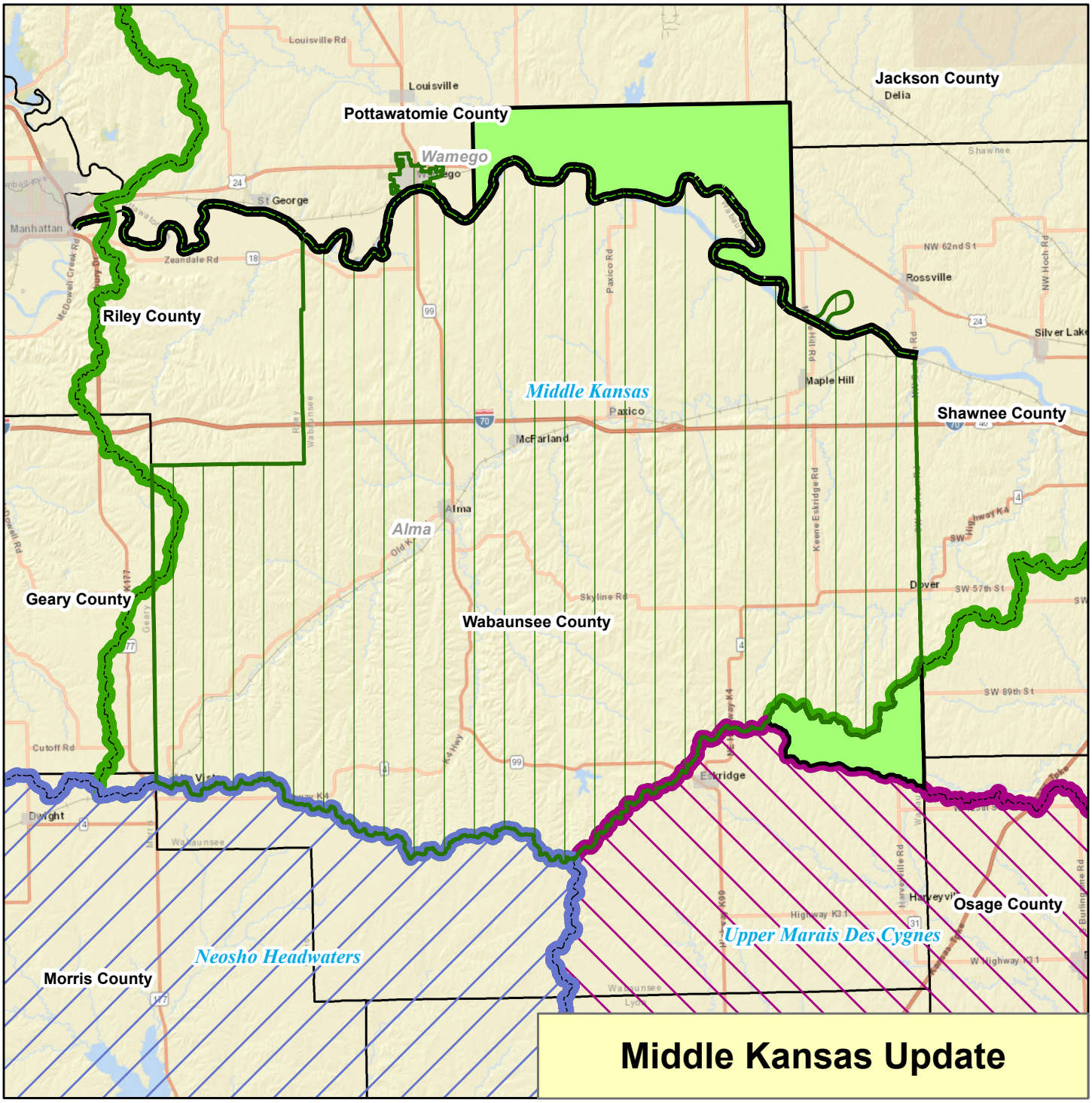
Data on FTP site:

- **Draft_DFIRM**
  - Shapefiles of the draft DFIRM data.
- **Changes Since Last FIRM (CSLF)**
  - This a shapefile showing the changes in the Special Flood Hazard Area from effective data to the new proposed data. This is the file that is portrayed on the web map viewer (website listed below).
- **Profiles**
  - PDFs of the profiles for Zone AE studies.
- **FWDTs** (floodway data tables)
  - Excel spreadsheets of the floodway data tables for streams with the floodways.
- **Comments (due October 6, 2017)**
  - Please send comments via email to Dane Bailey (Dane.Bailey@kda.ks.gov) and Joanna Rohlf (joanna.rohlf@amecfw.com). Comments can also be made through the KDA Web Map.
- ***MK_FSR.mxd***
  - MXD with data on the FTP site loaded and symbolized. It does not contain topography or imagery, but they can be added to the MXD.

Project Web Sources

KDA is hosting a project website at: http://agriculture.ks.gov/divisions-programs/dwr/floodplain/mapping/mapping-projects/lists/mapping-projects/middle-kansas

- This site features information about the project including the Hydrologic and Hydraulic reports and a web map to view the Middle Kansas CSLF data.
- The web map can be accessed directly at: http://gis2.kda.ks.gov/gis/Middle_KS/
  - Comments may be directly submitted through the web map using a comment tool. Use the tool to draw a box around the area in question and fill out the associated text boxes with the pertinent comment information.



Kansas River will be studied in 2018 to allow a smooth transition across county lines.

Streams in the City of Wamego and Wabaunsee County were studied in the Middle Kansas Project and available for review in this FSR meeting.

The Neosho Headwaters Watershed project includes new studies for streams identified as having mapping needs. This includes the streams in the watershed located in Wabaunsee County. This work will be completed in 2018.

This Upper Marais Des Cygnes Watershed project includes new studies for streams identified as having mapping needs. This includes the streams in the watershed located in Wabaunsee County. This work will be completed in 2018.

Streams studied in 2017 in the Middle Kansas and are available for review.

Streams in these areas have been added to the Middle Kansas project for completion in 2018.

Additional Information

Middle Kansas Addition for Wabaunsee & Pottawatomie Counties

- Kickoff Meeting: Late 2017
- Engineering Analysis: October 2017 to June 2018
- Flood Study Review Meeting Follow up: July 2018
- See Page 1 for additional schedule details

Neosho Headwaters for Wabaunsee County

- Kickoff Meeting: Late 2017
- Engineering Analysis: October 2017 to June 2018
- Flood Study Review Meeting: July 2018
- Wabaunsee County portion joins with Middle Kansas for Preliminary Issuance and remaining schedule. Check out the KDA project page at:

  http://agriculture.ks.gov/divisions-programs/dwr/floodplain/mapping/mapping-projects/lists/mapping-projects/neosho-headwaters

Upper Marais Des Cygnes for Wabaunsee County

- Kickoff Meeting: Late 2017
- Engineering Analysis: October 2017 to June 2018
- Flood Study Review Meeting: July 2018
- Wabaunsee County portion joins with Middle Kansas for Preliminary Issuance and remaining schedule. Check out the KDA project page for this project at:

  http://agriculture.ks.gov/divisions-programs/dwr/floodplain/mapping/mapping-projects/lists/mapping-projects/upper-marais-des-cygnes

Map Review Process Prior to Preliminary Map Issuance

- Amec Foster Wheeler Internal Review
- Independent Technical Review (ITR)
- KDA Review
- Community Review
  - This is where we are at now for Part 1 of the Middle Kansas, but there will be further opportunity in association with the Flood Study Review meetings listed above.
- Public Review
  - This will be conducted by county, not by watershed
- Public Open House
  - This will be conducted by county, not by watershed
- The goal is to have all comments and questions answered prior to Preliminary Issuance, which will allow for a smoother process further along in the project.
- Official Comment/Appeal Period after Preliminary Issuance