

## Kinsley, KS Technical Assistance Project

Kinsley, KS is located within Edwards County, KS. The current Edwards County Flood Insurance Study and mapping went effective on January 16, 2008. A new base level engineering study is currently being produced as part of the Upper Middle Arkansas Watershed project. A discussion on flooding in Kinsley and mitigation technical assistance was held on June 30, 2022.

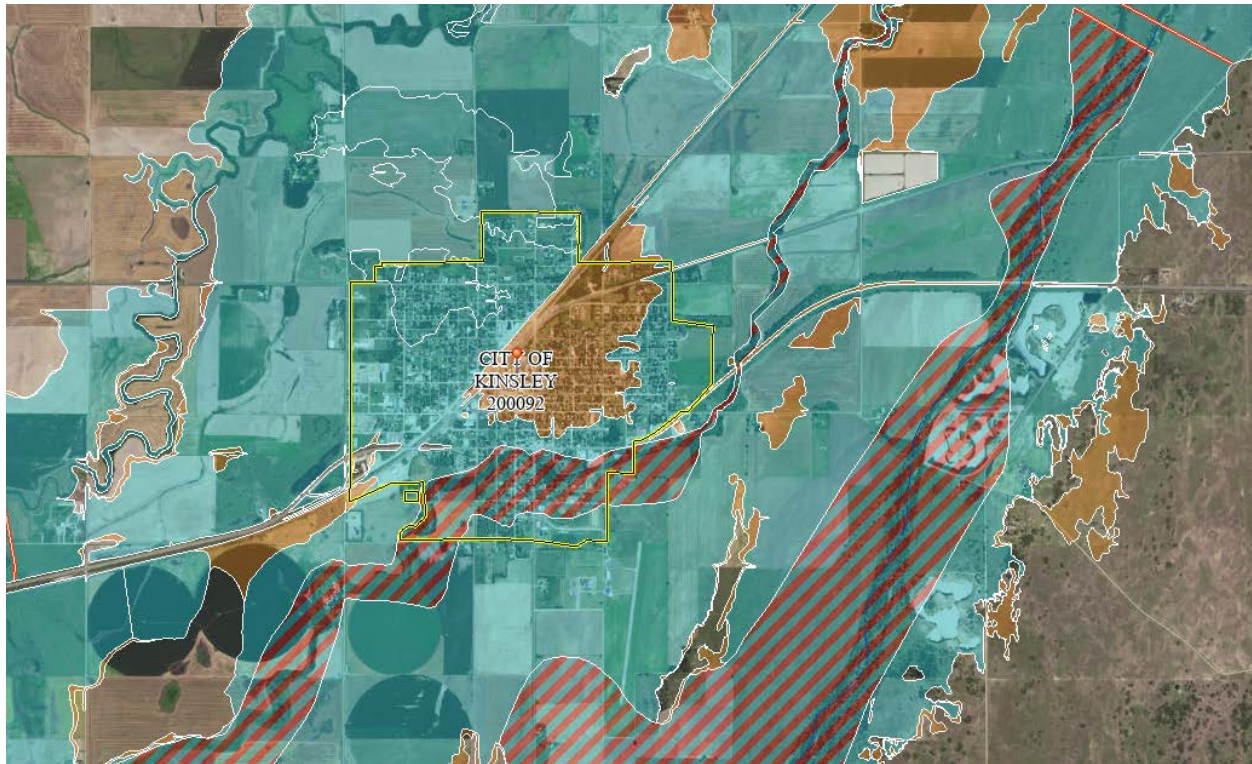


Figure 1: Effective Mapping for Kinsley, KS

BLE modeling for the Upper Middle Arkansas Watershed is currently in progress. The goal of this technical assistance project is to perform a flood mitigation study to develop conceptual flood mitigation alternatives that would reduce the risk of flooding in Kinsley. The technical assistance project will run in conjunction with the BLE project to ensure the modeling is used for both projects. Wood proposes the following scope of work (SOW) for this Technical Assistance Project.

### Scope of Services:

#### 1. Project Coordination & Data Collection:

Wood E&IS will attend up to 3 virtual meetings, with an option for one of these three meetings to be in person. Meetings will be held with key stakeholders to discuss and identify project goals, key areas of concern for the City, and findings and recommendations. No survey budget is included in this scope of work; however, Wood may do up to one day of field reconnaissance and field measurements as part of this project.

## 2. Watershed Analysis & Modeling:

An existing conditions model will be developed as part of the BLE project for the Upper Middle Arkansas Watershed. Enhancements will be made to the BLE model to add detail for Kinsley and surrounding areas. Wood E&IS will evaluate several proposed flood mitigation alternatives that would reduce flooding in the City. A maximum of four key alternatives will be identified and evaluated. Alternatives to mitigate flooding in these areas may include stormwater detention, channel improvements, structure enlargements at crossings, and relocation for future development. Wood will evaluate and document the impacts on the risk of flooding associated with the mitigation alternatives. One of the four alternatives evaluated will be an Arkansas River off-channel detention facility located southeast of Kinsley. The other three alternatives will likely focus on the Coon Creek and Little Coon Creek flood mitigation.

## 3. Cost Estimate of Proposed Improvements:

Wood will develop planning level cost estimates for proposed flood mitigation alternatives as well as provide flood inundation maps that depict the impacts to the 1% annual chance flood risk area.

## 4. Flood Mitigation Report:

Wood E&IS will provide a final report of findings including documentation of the modeling methods, future conditions modeling results, proposed flood mitigation alternatives, and cost estimates.

## Assumptions:

- This scope of work will utilize the modeling developed as part of the Upper Middle Arkansas BLE project. Survey will not be included as part of this project (10 structures on Coon Creek and 2 on the Arkansas River).
- This scope of work does not include any design plans. Further engineering and design would be needed for any structural improvements.

## Deliverables:

- Technical Assistance Report
- HEC-RAS Models for the Alternative Analyses
- Cost Estimates for Conceptual Flood Mitigation Alternatives
- Digital Supporting Data

## Fee:

Wood E&IS will provide this scope of services for a lump sum fee to be paid by FEMA CTP grant if project is approved by FEMA.

## Schedule:

TBD.

