



**Kansas Department of Agriculture-Division of Water Resources  
Cooperating Technical Partners  
Mapping Activity Statement**

**Statement 4 –Digital Flood Insurance Rate Map (DFIRM) Production**

In accordance with the Cooperating Technical Partners (CTP) Memorandum of Agreement dated September 1, 2000, between Kansas Department of Agriculture-Division of Water Resources and the Federal Emergency Management Agency (FEMA), Mapping Activity Statement 4 is as follows:

- 1. Statement Objective and Scope:** The objective of this Mapping Activity for Reno County, KS is to develop a new or updated Digital Flood Insurance Rate Map(s) (DFIRM) and Flood Insurance Study (FIS) report(s) for Reno County, KS. The FIS and DFIRM will be produced in countywide DFIRM format.

The Mapping Partners listed below will complete this project:  
Kansas Department of Agriculture-Division of Water Resources and MCC.

The activities, and who will complete them, are summarized in the table below.

The following sections describe the specific mapping activities associated with this mapping project. Each activity description identifies the responsible Mapping Partners, the Standards that must be met, and resultant map component.

<b>Activity</b>	<b>CTP Cooperating Technical Partner</b>	<b>MCC Map Coordination Contractor</b>
Activity 1 – Field Surveys and Reconnaissance	N/A	
Activity 2 – Topographic Data Development	N/A	
Activity 3 – Independent QA/QC of Topographic Data	N/A	
Activity 4 –Hydrology	N/A	
Activity 4A – Coastal Hazard Analyses	N/A	
Activity 5–Independent QA/QC of Hydrology	N/A	
Activity 5A–Independent QA/QC of Coastal Hazard Analyses	N/A	
Activity 6 – Hydraulics	N/A	
Activity 7 – Independent QA/QC of Hydraulics	N/A	
Activity 8 – Floodplain Mapping (Detailed Riverine or Coastal Analysis)	N/A	
Activity 8A – Floodplain Mapping (Redelineation Using Effective Profiles)	N/A	
Activity 8B – Floodplain Mapping (Refine/Establish Zone A)	N/A	
Activity 9 – Independent QA/QC of Floodplain Mapping	N/A	
Activity 10 – Base Map Acquisition and Preparation	X	
Activity 11 – DFIRM Production (Non-Revised Areas)	X	
Activity 11A – Independent QA/QC of DFIRM Production (Non-Revised Areas)		X
Activity 12 – Merge Effective and Revised Information	N/A	
Activity 12A – Apply DFIRM Graphic Specifications		X
Activity 12B – Independent QA/QC of DFIRM Graphics		X
Activity 13 – Issue Preliminary FIS and FIRM		X
Activity 14 – Post-Preliminary Processing		X

### **Activity 8B – Floodplain Mapping (Refinement or Creation of Zone A)**

This activity is not applicable for digitization of existing flood hazard data.

### **Activity 9 - Independent QA/QC Review of Floodplain Mapping**

This activity is not applicable for digitization of existing flood hazard data.

### **Activity 10 - Base Map Acquisition and Preparation**

Responsible Entity: Kansas Department of Agriculture-Division of Water Resources

Scope: This is a required activity when Activities 8, 8A, 8B, and 11 are performed. This activity consists of obtaining the digital base map DOQQ for the project. Kansas Department of Agriculture-Division of Water Resources shall:

- Obtain digital files (raster or vector) of the base map;
- Secure necessary permissions from the map source to allow FEMA's use and distribution of hardcopy and digital map products using the digital base map, free of charge;
- Certify that the digital data meet the minimum standards and specifications that FEMA requires for DFIRM production; and
- Populate the DFIRM database for base map features and applicable data.

Standards: All work conducted under this Activity shall conform to the standards specified for this Activity in Section 3 of this Mapping Activity Statement.

Products: In accordance with the TSDN format described in Section 2, Kansas Department Of Agriculture-Division of Water Resources shall make the following products available to FEMA.

- Written certification that the digital data meet the minimum FEMA standards and specifications; and
- Documentation that FEMA can use the digital base map.

### **Activity 11 - DFIRM Production (Non-Revised Areas)**

Responsible Entity: Kansas Department of Agriculture-Division of Water Resources

Scope: Kansas Department of Agriculture-Division of Water Resources will convert the effective FIRM panels to digital format in conformance with FEMA's DFIRM specifications. Kansas Department of Agriculture-Division of Water Resources will use the base map acquired under Activity 10 of this Mapping Activity Statement for the conversion. The scope of this Activity covers the digitization of 64 FIRM panels. Kansas Department of Agriculture-Division of Water Resources also will incorporate LOMCs issued by FEMA since the current effective FIRM for each affected community.

Standards: All work conducted under this Activity shall conform to the standards specified for this Activity in Section 3 of this Mapping Activity Statement.

Products: In accordance with the TSDN format described in Section 2, Kansas Department of Agriculture-Division of Water Resources shall make the following products available to FEMA.

## **Activity 12A – Application of DFIRM Graphic Specifications**

Responsible Entity: MCC

Scope: MCC shall apply the final FEMA DFIRM graphic specifications to the DFIRM mapping files. This work will include adding all required annotation, line patterns, area shading, and map collar information (e.g., map borders, title blocks, legends, notes to user).

Standards: All work conducted under this Activity shall conform to the standards specified for this Activity in Section 3 of this Mapping Activity Statement.

Products: In accordance with the TSDN format described in Section 2, MCC shall make the following products available to FEMA.

- DFIRM mapping files in one of the GIS file and database formats specified in FEMA's DFIRM Specifications, provided on CD-ROM;
- DFIRM database files in one of the database formats specified in FEMA's DFIRM Specifications, provided on CD-ROM;
- Metadata files describing the DFIRM data including the required information based on the examples shown in FEMA's DFIRM Specifications;
- Complete set of plots of the DFIRM panels showing all the details at the scale(s) agreed upon in the "Scope of Project;" and
- A QA/QC report that includes a description and the results of all automated or manual quality assurance steps taken during the preparation of the DFIRM.

## **Activity 12B - Independent QA/QC Review of DFIRM Graphics**

This activity is not applicable because MCC applied DFIRM Graphic Specifications.

## **Activity 13 – Preparation and Issuance of Preliminary FIS and DFIRM**

Responsible Entity: MCC

Scope: This Activity consists of the final preparation, review, and distribution of the Preliminary copies of the FIRM and FIS report for community and public review and comment. The activities to be performed are summarized below.

- *FIS Report Preparation:* Unless instructed otherwise by FEMA, MCC will prepare the revised FIS report in the format of the existing FIS report, revising the report only to reflect current conditions and include updated data tables and flood profiles. At a minimum, the FIS report will include the following: text; cover; vicinity map; data tables; photographs (if available); flood profiles; floodway schematic; and, when necessary, transect schematic and transect location map.
- *Quality Assurance/Quality Control:* Final QA/QC review of the FIS report, including all data tables, profiles, and other components of the FIS, as appropriate, and the news release will be conducted. The QA/QC procedures will be consistent with FEMA standards outlined below for this activity.

from affected communities. For a typical appeal and protest, the following activities will be conducted: initial processing of the appeal/protest, performing a technical review of the appeal/protest, preparing letters to request additional data, performing revised analyses, and preparing a proposed resolution for FEMA's review. MCC will mail all associated correspondence upon authorization by FEMA.

- *Special Correspondence:* Comments received within the 90-day appeal period (referred to as "special correspondence") will be reviewed, and responses will be drafted by MCC for FEMA's review. MCC will also mail the final correspondence upon authorization by FEMA.
- *Revise DFIRMs and FIS Report:* If necessary, MCC will work with those parties responsible for preparing the DFIRM under Activities 8, 8A, 8B, 11, and 12 to prepare revised preliminary copies of the DFIRMs and FIS report, including all data tables and flood profiles. MCC will mail all revised preliminary copies of DFIRMs and associated correspondence upon authorization by FEMA.
- *Letter of Final Determination:* MCC will work with FEMA to establish an effective date for the DFIRM and FIS report, prepare a Letter of Final Determination (LFD) for FEMA review and signature, prepare a final notice for publication in the *Federal Register*, mail the LFD with appropriate enclosures, and coordinate publication of the final notice in the *Federal Register*.
- *GPO Processing:* MCC will prepare final copies of the DFIRM and FIS report, and provide them to FEMA. This will include preparing camera-ready film negatives of the DFIRM and paper copies of the FIS report, including flood profiles; preparing appropriate paperwork to be included with DFIRM and FIS report materials, including the transmittal letter to the community CEO, the print processing worksheet, the Printing Requisition Form, and the Community Map Action Form; and delivering the final materials and paperwork to FEMA in the format prescribed by FEMA.
- *Archiving Data:* MCC will package the backup data and correspondence for this Flood Map Project and transmit it to the Engineering Study Data Package Facility.

Standards: All work conducted under this Activity shall conform to the standards specified for this Activity in Section 3 of this Mapping Activity Statement.

Products: In accordance with the TSDN format described in Section 2, MCC shall make the following products available to FEMA as required:

- Draft LFD and associated backup data and information for FEMA review;
- Draft Special Correspondence and backup data and information for FEMA review;
- Appeal and Protest resolution letters, and all backup data and information for FEMA review;
- Five sets of DFIRM negatives and paper FIS reports, including all updated data tables and flood profiles;
- Paperwork required for printing of DFIRM panels and FIS report;
- Complete DFIRM spatial database; and
- Completed and organized Engineering Study Data Packages.

## **Section 2: Technical and Administrative Support Data Submittal**

The Project Team members for this project that have responsibilities for activities included in this Mapping Activity Statement shall comply with the following data submittal requirements:

- All supporting documentation for the activities in this Mapping Activity Statement shall be submitted in accordance with Appendix M, Section M.2.1 of the *Guidelines and Specifications for Flood Hazard Mapping Partners*, prepared by FEMA, dated February 2002. The following table indicates the sections of the TSDN that apply to each activity.

**Section 4: Schedule**

MICS will be used to establish the project schedule and to report of progress quarterly. The FEMA lead will review MICS 30 days after the end of the quarter and provide comments if needed.

**Table 3-2 Mapping Activities and Applicable Sections of Guidelines and Specifications for Flood Hazard Mapping Partners**

Activity Number	Task Description	Applicable Volume, Section/Subsection, and Appendix of Guidelines and Specifications
1	Field Surveys and Reconnaissance	Volume 1, Sections 1.2, 1.3, 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.5, A.6, A.7, and A.8 Appendices B, C, and M
2	Topographic Data Development	Volume 1, Section 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.2 and A.3 Appendix M
3	Independent QA/QC of Topographic Data	Volume 1, Section 1.4 (specifically Subsections 1.4.1 and 1.4.2.1) Appendix A, Sections A.2, A.3, A.7 (specifically Subsection A.7.5), and A.8 (specifically Subsection A.8.6) Appendix M
4	Hydrology	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix C, Sections C.1 and C.7 Appendices E, F, G, H, and M
4A	Coastal Hazard Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.2.2) Appendix A, Section A.4 Appendices B, D, and M
5	Independent QA/QC Review of Hydrology	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix C, Section C.2 Appendices E, F, G, H, and M
5A	Independent QA/QC Review of Coastal Hazard Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 Appendices B, D, H, and M
6	Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix A, Section A.4 (specifically Subsection A.4.7) Appendix C, Sections C.3 and C.7 Appendices B, E, F, G, H, and M

**Table 3-2 Mapping Activities and Applicable Sections of Guidelines and Specifications for Flood Hazard Mapping Partners (Cont.)**

<b>Task Number</b>	<b>Task Description</b>	<b>Applicable Volume, Section/Subsection, and Appendix of Guidelines and Specifications</b>
11	DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.2) Appendices K, L, and M
11A	Independent QA/QC Review of DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
12	Merging of Revised and Non-Revised Information	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.3) Appendices K and L
12A	Application of DFIRM Graphic Specifications	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K and L
12B	Independent QA/QC Review of DFIRM Graphics	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
13	Preparation and Issuance of Preliminary FIS and DFIRM	Volume 1, Sections 1.4 (specifically Subsections 1.4.2 and 1.4.3) and 1.5 (specifically Subsection 1.5.1) Appendices J, K, L, and M
14	Post-Preliminary Processing	Volume 1, Section 1.5 Appendices J, K, L, and M

Kansas Department of Agriculture-Division of Water Resources may also consult with the FEMA Regional Project Officer to request support in the areas of selection of data sources, digital data accuracy standards, assessment of vertical data accuracy, data collection methods or sub-contractors, and GIS-based engineering and modeling training.

**Section 8: Contractors**

Kansas Department of Agriculture-Division of Water Resources will ensure that procurement of subcontractors as part of this Mapping Activity Statement complies with the requirements of 44 CFR 13.36.

**Section 9: Financial Reporting**

Financial reporting requirements will be in accordance with Cooperative Agreement Articles V & VI.

**Section 10: Points of Contact**

The FEMA Regional Project Officer is Robert Franke, and the CTP Project Manager is Julie Grauer or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities. When necessary, the assistance of FEMA's MCC should be requested through the FEMA MCC Project Officer, William Blanton.

Each party has caused this Mapping Activity Statement to be executed by its duly authorized representative.



Julie Grauer, Manager  
Floodplain Mapping Division  
Kansas Department of Agriculture-Division of Water Resources

7/2/03

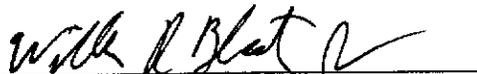
Date



Robert Bissell, Director  
Flood Insurance and Mitigation Division  
Federal Emergency Management Agency

7/14/03

Date



William R. Blanton, Jr., Project Officer  
Flood Insurance and Mitigation Administration  
Federal Emergency Management Agency

7/28/03

Date