

**Illinois Department of Natural Resources
and
Federal Emergency Management Agency,
Cooperating Technical Partners**



Mapping Activity Statement No. IDNR04-5

**Digital Flood Insurance Rate Map Production and Development of Updated
Flood Data, Champaign County, Illinois**

In accordance with the Cooperating Technical Partners (CTP) Partnership Agreement dated May 3, 2004 between the State of Illinois (through its Department of Natural Resources, hereafter IDNR) and the Federal Emergency Management Agency (FEMA), Mapping Activity Statement (MAS) IDNR04- 5 is as follows.

SECTION 1—OBJECTIVE AND SCOPE

The objective of the Flood Map Project documented in this MAS is to begin the development of a Digital Flood Insurance Rate Map (DFIRM) and Flood Insurance Study (FIS) report for Champaign County. The DFIRM and FIS report will be produced in the FEMA Countywide Format. The Village of Broadlands, City of Champaign, Village of Fisher, Village of Mahomet, Village of Sidney, Village of St. Joseph, City of Urbana, and the unincorporated areas of Champaign County each have independent FIRMs.

Existing GIS data and study needs for the community will be researched, obtained, organized, and provided in accordance with Activity 1. Scoping will be significant and necessary to determine the final scope of work for this project.

This Flood Map Project will be completed by the following

- Rock Island County;
- Illinois Department of Natural Resources;
- National Service Provider (NSP) Regional Management Center 5

The CTP shall notify FEMA and the NSP by e-mail of all meetings with community officials at least two weeks prior to the meeting (with as much notice as possible). FEMA and/or the NSP may or may not attend the community meetings

The activities for this Flood Map Project, including required Quality Assurance/Quality Control (QA/QC) reviews, and the Mapping Partners that will complete them are summarized in Table 1 below. The sections of the MAS that follow this table describe the specific activities, responsible Mapping Partner(s), FEMA standards that must be met, and resultant map components.

Table 1

Activities	IDNR	NSP	FEMA
Activity 1 – Scoping	X	X	X
Activity 2 - Outreach	X	X	X
Activity 7 – Independent QA/QC Review of Hydrologic Analyses	X		
Activity 9 – Independent QA/QC Review of Hydraulic Analyses	X		
Activity 12 – Base Map Acquisition)	X		
Activity 13 – DFIRM Production (Non-Revised Areas)	X		

FEMA has developed tools to assist in the development of the flood hazard data studies and the Digital Flood Insurance Rate Maps (DFIRMs) if the CTP wishes to use them. FEMA will, through the NSP, provide all CTPs access to and training in these tools. The tools available at this time include WISE software and the DFIRM production tools. The use of these tools will improve the Map Modernization and efficiency of all mapping partners.

If the CTP chooses not to use these production tools, then the CTP will be required to submit intermediate project data at major milestones in each Mapping Project in accordance with data capture standards. Submitting data in these standards will aid in more efficient quality control reviews, data storage, archiving, and for future study updates.

The Data Capture Standard submittals will be required at the following study milestones

- Project Scoping (as specified)
- QA/QC Review of Hydraulic Analyses
- DFIRM Mapping

QA/QC review activities may be performed by CTPs or the NSP at the discretion of FEMA. Please note the NSP will also be performing periodic audits and overall study/project management to ensure study quality.

FEMA will be providing download/upload capability for intermediate data submittals through the Management Information Portal (MIP). Data submittals uploaded via the MIP will include the same data required prior to the existence of the MIP.

Activity 1 – Scoping

Responsible Mapping Partner: IDNR, NSP, FEMA

Scope: This task involves collecting data from a variety of sources including community surveys, other Federal and State Agencies, NFIP State Coordinators, Community Assistance Visits (CAV's) and FEMA archives. IDNR will evaluate the effective FIS report and FIRM maps to see if it needs to be updated. Lists of mapping needs will be obtained from the MNUSS database, community surveys and CAV's if available.

Data collection will include obtaining the best available base map materials (corporate limits, roads, orthophotos, etc) along with stream centerline files. The acquired data will be imported into the scoping tool and used during the Scoping Task. In the Scoping Tool all streams should have unique names, the limits of the effective FEMA studies should be identified, LOMC areas should be identified, and community requests should be identified. This task also includes populating the streamlines with existing pipeline and scoped studies currently underway.

In cooperation with the FEMA Region, a Project Management Team will be established consisting of the IDNR, FEMA's regional engineer, Champaign County, and other appropriate officials. The Project Management Team will be responsible for coordinating the activities of this project and completing all tasks identified in this Statement of Work.

Preliminary Research Activities can be separated into two categories—researching effective information and researching available data for the Flood Map Project. The following tasks shall be completed to research effective information: inventory the FEMA archives for effective FIRM panels, FBFM panels, FIS reports, and other flood hazard data or existing study data; summarize the information in the MNUSS database; summarize contiguous community agreement checks; review CAV and CAC files; and develop a scoping map and an overview of the results of the research. FEMA and/or the NSP will provide the CTP with the current FIRM data, copies of LOMCs adopted since the map effective date and information from the MNUSS database. IDNR will collect information from CAV and CAC files.

IDNR will co-ordinate, set-up, and hold the Scoping Meeting. This includes identifying a time, place, and all participants. The purpose of this meeting is to present the current information to the local officials (state, county and municipal) and coordinate on prioritization and identification of study areas. IDNR shall be responsible for compiling the necessary information for the meeting. These items may include: FIS and FIRM for affected communities; USGS quads for the study area; best available community base map(s); effective FIRM summary; Available Data Inventory; Scoping Map; Scoping Meeting Agenda/Minutes form; Aerial photos/topographic mapping if available; existing drainage studies or other H&H data; Community master plan(s)/Drainage Master Plan(s); Zoning Maps; Street Maps; As-built plans; and Floodplain Ordinance(s).

The project management team shall review the initial mapping needs list, review the research findings, and make selections of proposed methods for obtaining/producing flood data. Any additions or changes to the needs list shall be discussed with all members. All needs shall also be prioritized. In general, highest priority shall be given to the following areas: areas of dense existing or anticipated development, including areas where new road crossings have been constructed over stream(s); areas affected by flood-control structures and/or channelization; areas where natural physical changes in the floodplain have been significant (due to subsidence or extreme erosion, for example); areas that were studied by approximate methods and unmapped areas, especially those with development pressure; areas where the community has experienced flooding outside mapped floodplains, with severe damage to buildings and/or

infrastructure; areas where mapped flood hazards do not match those shown on contiguous FIRMs (unless those FIRMs are not considered to be accurate); and areas where flood data (BFEs, floodplains, and regulatory floodways) are likely to be changed the most by a restudy.

Based on the discussion of mapping needs, IDNR and FEMA Project Officer will finalize the areas to be included in the project or future projects (based on recommendations provided by the Project Team). Areas to be studied by detailed and approximate methods shall be identified. The following issues will be discussed and refined: Review and Refinement of Flood Hazard Identification Methodologies, Review of existing studies not yet submitted as LOMR, Review of Proposed Paneling Scheme, Review and Refinement of Base and Topographic Map Source, and Finalization of Map Production and Database Options.

Standards: All work under Activity 1 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: The Final Scoping Report shall be delivered in accordance with the schedule outlined in Section 6 for this Activity.

Activity 2 – Outreach

Responsible Mapping Partner: IDNR, NSP

Scope: The outreach activities for a Flood Map Project can best be understood as a process that begins during the Project Scoping phase and continues through the Map Production and Post-preliminary phases. A regulatory overview of required activities is followed by a description of tools that can be used in working with stakeholders to keep them informed and to solicit their input.

The overarching goal for conducting outreach is to create a climate of understanding and ownership of the mapping process at the State and local levels. Well-planned outreach activities can reduce political stress, confrontation in the media, and public controversy, which can arise from lack of information, misunderstanding, or misinformation. These outreach activities also can assist FEMA and other members of the Project Team in responding to congressional inquiries.

By proactively reaching out to all key stakeholders as early in the Flood Map Project as possible, the maps can be used to their full potential. The likelihood of appeals may also be reduced or eliminated. Specific activities shall include, but are not limited to -

- ✓ Establishing two-way communication to address the needs of, inform and obtain feedback from, the stakeholders;
- ✓ Ensuring compliance with due process requirements;
- ✓ Interacting with technical representatives to ensure production of accurate and up-to-date maps;
- ✓ Enhancing ownership by communities
- ✓ Tracking, monitoring, and evaluating outreach activities and adjusting efforts according to ongoing feedback and evolving project needs.

All communication with local governments will be done in accordance with Title 44 Code of Federal Regulations Part 66.

Standards: All work under Activity 2 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: Upon Completion of Outreach and Coordination the Contractor shall deliver the following to the FEMA Regional Project Officer in accordance with the schedule outlined in Section 6 for this Activity:

- A report detailing outreach and coordination activities
- Backup or supplemental information used in writing this report

Activity 7 - Independent QA/QC Review of Hydrologic Analyses

Responsible Mapping Partner: IDNR

Scope: IDNR shall review the technical, scientific, and other information for completed studies submitted by or on behalf of Champaign County or communities in Champaign County that have not been previously submitted through a Letter of Map Amendment or Revision application to ensure that the data and modeling are consistent with FEMA standards and standard engineering practice and are sufficient to revise the FIRM. This work shall include, at a minimum, the activities listed below.

Review the submittal for technical and regulatory adequacy, completeness of required information, and supporting data and documentation. The technical review is to focus on the following:

- Use of acceptable models;
 - Use of appropriate methodology (ies);
 - Correctly applied methodology (ies)/model(s), including QC of input parameters;
 - Comparison with gage data and/or regression equations, if appropriate; and
 - Comparison with discharges for contiguous reaches or flooding sources.
- Maintain records of all contacts, reviews, recommendations, and actions and make them readily available to FEMA.
 - Maintain an archive of all data submitted for hydrologic modeling review. (All supporting data must be retained for 3 years from the date funding recipient submits its final expenditure report to FEMA.)

Standards: All work under Activity 7 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, IDNR shall if requested make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Activity:

- A Summary Report that describes the findings of the independent QA/QC review and
- Recommendations to resolve any problems that are identified during the independent QA/QC review.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/frm_gsam.pdf.

Activity 9 - Independent QA/QC Review of Hydraulic Analyses

Responsible Mapping Partner: IDNR

Scope: IDNR shall review the technical, scientific, and other information for completed studies submitted by or on behalf of Champaign County or communities in Champaign County that have not been previously submitted through a Letter of Map Amendment or Revision application to ensure that the data and modeling are consistent with FEMA standards and standard engineering practice and are sufficient to revise the FIRM. This work shall include, at a minimum, the activities listed below.

- Review the submittal for technical and regulatory adequacy, completeness of required information, and supporting data and documentation. The technical review is to focus on the following:
 - Use of acceptable model(s);
 - Starting water-surface elevations;
 - Cross-section geometry;
 - Manning's "n" values and expansion/contraction coefficients;
 - Bridge and culvert modeling;
 - Flood discharges;
 - Regulatory floodway computation methods; and Tie-in to upstream and downstream non-revised Flood Profiles.
- Use the CHECK-2 or CHECK-RAS program as appropriate to flag potential problems and focus review efforts.
 - Maintain records of all contacts, reviews, recommendations, and actions and make them readily available to FEMA.
- Maintain an archive of all data submitted for hydraulic modeling review. (All supporting data must be retained for 3 years from the date funding recipient submits its final expenditure report to FEMA.)

Standards: All work under Activity 9 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, IDNR shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Activity:

- A Summary Report that describes the findings of the independent QA/QC review; and
 - Recommendations to resolve any problems that are identified during the independent QA/QC review.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/frm_gsam.pdf.

Activity 12 - Base Map Acquisition

Responsible Mapping Partner: IDNR

Scope: Activity 12 consists of obtaining the digital base map. IDNR shall provide US Geological Survey digital orthoquadrangles (DOQ, scale 1:12,000) for the base map unless an alternate local base map is provided by the communities. The required activities are as follows:

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 meets the minimum standards and specifications that FEMA requires for DFIRM production.

Populate the DFIRM database with the information required by FEMA.

Standards: All work under Activity 12 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, IDNR shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Activity:

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

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/firm_gsam.pdf.

Activity 13 – DFIRM Production (Non-Revised Areas)

Responsible Mapping Partner: IDNR

Scope: For all flooding sources except those segments for which updated flood data has been identified or will be developed as determined under Activities 1, IDNR shall convert the information shown on the effective FIRM and Flood Boundary Floodway Map (FBFM) panels for all incorporated and unincorporated areas of Champaign County to digital format in conformance with FEMA DFIRM specifications. IDNR shall use the base map acquired under Activity 12 for the conversion. IDNR shall digitize 38 FIRM panels and 13 FBFM panels. IDNR also shall incorporate the results of LOMCs issued by FEMA since the date of the current effective FIRM for each affected community through December 31, 2004. IDNR shall address all comments and questions regarding Activity 13 that are raised during the QA/QC review. IDNR shall not digitize the flood theme for those segments of flooding sources for which updated flood data will be developed. Rather, IDNR shall leave these as "holes" in the digital flood theme that will be filled in.

Standards: All work under Activity 13 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: Upon completion of three DFIRM panels, IDNR shall submit the panels for an independent QA/QC review. In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, IDNR shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Activity:

- DFIRM mapping files, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- Metadata files describing the DFIRM data, including all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- One complete set of plots of DFIRM panels showing all detailed flood hazard information at a suitable scale; and
- A Summary Report that describes and provides the results of all automated or manual QA/QC review steps taken during the preparation of the DFIRM, including a check that the road and floodplain relationship is maintained for all non-revised areas.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/firm_gsam.pdf.

SECTION 2—TECHNICAL AND ADMINISTRATIVE SUPPORT DATA SUBMITTAL

The Project Team members for this Flood Map Project that have responsibilities for activities included in this MAS shall comply with the data submittal requirements summarized below.

All supporting documentation for the activities in this Mapping Activity Statement shall be submitted in the TSDN format in accordance with Appendix M of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners*, dated April 2003. Appendix M is available for viewing or download on the FEMA Web site at http://www.fema.gov/pdf/fhm/firm_gsam.pdf. Table 2-1 indicates the sections of the TSDN that apply to each mapping activity.

If any issues arise that could affect the completion of an activity within the proposed scope or budget, the responsible Mapping Partner shall complete a Special Problem Report (SPR) as soon as possible after the issue is identified and submitted to FEMA. The SPR is to describe the issue and propose possible resolutions. (For additional information on SPRs, refer to Appendix M, Subsection M.2.1.1 of *Guidelines and Specifications for Flood Hazard Mapping Partners*.)

Table 2-1. Mapping Activities and Applicable TSDN Sections

TSDN Section	Mapping Activities					
	1	2	7	9	12	13
General Documentation						
Special Problem Reports	X	X	X	X	X	X
Telephone Conversation Reports	X	X	X	X	X	X
Meeting Minutes/Reports	X	X	X	X	X	X
General Correspondence	X	X	X	X	X	X
Engineering Analyses						
Hydrologic Analyses			X	X		
Hydraulic Analyses			X	X		
Key to Cross-Section Labeling			X	X		
Key to Transect Labeling			X	X		
Draft FIS Report			X	X		
Mapping Information	X	X			X	X
Miscellaneous Reference Information	X	X	X	X	X	X

SECTION 3—PERIOD OF PERFORMANCE

The mapping activities outlined in this MAS will begin on September 1, 2004, and will be completed no later than December 31, 2005.

SECTION 4—FUNDING/LEVERAGE

FEMA is providing funding, in the amount of \$1,000,000, for the completion of this Flood Map Project. During the scoping process, additional needs may be identified. Activities associated with any additional needs would be performed based on availability of additional funds. The CTP Leverage listed in Table 4-1 includes in-kind services and blue book values for acquired information (i.e. base map data, hydrologic and hydraulic analyses, etc.). More detailed leverage information will be determined during the detailed scoping process and reported back to FEMA at that time.

Table 4-1

Table 4-2 FEMA funds identified above are available to be used for the following activities:

Activities	FUNDABLE?
Activity 1 - Scoping	Yes, up to 10% of total cost
Activity 2 - Outreach	Yes, up to 10% of total cost
Activity 3 - Field Surveys and Reconnaissance	Yes
Activity 4 - Topographic Data Development	No, unless approval given during scoping phase by Regional PO
Activity 5 - Independent QA/QC Review of Topographic Data	No
Activity 6 - Hydrologic Analyses	Yes
Activity 6A - Coastal Flood Hazard Analyses	Yes
Activity 7 - Independent QA/QC Review of Hydrologic Analyses	Yes
Activity 7A - Independent QA/QC Review of Coastal Hazard Analyses	Yes
Activity 8 - Hydraulic Analyses	Yes
Activity 9 - Independent QA/QC Review of Hydraulic Analyses	Yes
Activity 10 - Floodplain Mapping (Detailed Riverine or Coastal Analysis)	Yes
Activity 10A - Floodplain Mapping (Redelineation Using Effective Flood Profiles and Updated Topographic Data)	Yes
Activity 10B - Floodplain Mapping (Refinement or Creation of Zone A)	Yes
Activity 11 - Independent QA/QC Review of Floodplain Mapping (Revised Areas)	Yes
Activity 12 - Base Map Acquisition	No
Activity 13 - DFIRM Production (Non-Revised Areas)	Yes
Activity 13A - Independent QA/QC Review of DFIRM Production (Non-Revised Areas)	Yes
Activity 14 - DFIRM Production (Merge Revised and Non-Revised Information)	Yes
Activity 14A - Application of DFIRM Graphic and Database Specifications	Yes
Activity 14A - Independent QA/QC Review of DFIRM Product Meeting FEMA Graphic and Database Specifications	Yes
Activity 15 - Preliminary DFIRM and FIS Report Distribution	Yes
Activity 16 - Post-Preliminary Processing	Yes

SECTION 5—STANDARDS

The standards relevant to this Mapping Activity Statement are provided in Tables 5-1 and 5-2. Information on the correct volume, appendix, section, or subsection of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners* to be referenced for each mapping activity are summarized in Table 5-2. These Guidelines are available for viewing or download from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/fhm/dl_cgs.shtml

Table 5-1. Applicable Standards for Project Activities

Applicable Standards	Activities					
	1	2	7	9	12	13
<i>Guidelines and Specifications for Flood Hazard Mapping Partners, April 2003</i>	X	X	X	X	X	X
American Congress on Surveying and Mapping Procedures	X					
Global Positioning System (GPS) Surveys: National Geodetic Survey (NGS-510), "Guidelines for Establishing GPS-Derived Ellipsoid Heights," November 1997	X					
Engineer Manual 1110-1-1000, <i>Photogrammetric Mapping</i> (USACE), July 1, 2002	X					
Engineer Manual 1110-2-1003, <i>Hydrographic Surveys</i> (USACE), January 1, 2002	X					
"Numerical Models Accepted by FEMA for NFIP Usage," Updated April 2003	X		X	X		
<i>Content Standard for Digital Geospatial Metadata</i> (Federal Geographic Data Committee), 1998	X	X			X	X
<i>Document Control Procedures Manual</i> , December 2000	X	X				
<i>44 Code of Federal Regulations Part 66 and 67</i>		X				

Table 5-2. Activities & Applicable Portions of FEMA Guidelines & Specifications

Activity Number	Activity Description	Applicable Volume, Section/Subsection, and Appendix
1	Scoping	Appendix I and N, Scoping Report document attached in Appendix A to this Mapping Activity Statement
2	Outreach	44 Code of Federal Regulations Part 66 and 67
7	Independent QA/QC Review of Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 Appendix C, Section C.2 Appendices E, F, G, H, and M
9	Independent QA/QC Review of Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 (specifically Subsection A.4.7) Appendix C, Section C.5 Appendices B, E, F, G, H, and M
12	Base Map Acquisition and Preparation	Volume 1, Section 1.3 (specifically Subsection 1.3.1.8) and 1.4 (specifically Subsections 1.4.3.1 and 1.4.3.2) Appendix A, Section A.1 (specifically Subsection A.1.1)
13	DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2, 1.4.2.3, and 1.4.3.2) Appendices K, L, M and N

SECTION 6—SCHEDULE

The activities documented in this MAS shall be completed in accordance with the project schedule in Table 6-1. If changes to this schedule are required, the responsible Mapping Partner shall coordinate with FEMA and the other Mapping Partners in a timely manner.

Table 6-1

ACTIVITIES	RESPONSIBLE PARTNER(S)	START DATE	DATE DUE
Activity 1 – Scoping	IDNR, NSP, FEMA	9/01/2004	3/31/2005
Activity 2 - Outreach	IDNR, NSP, FEMA	9/01/2004	12/31/2005
Activity 7—Independent QA/QC Review of Hydrologic Analyses	IDNR	4/01/2005	8/31/2005
Activity 9 – Independent QA/QC Review of Hydraulic Analyses	IDNR	4/01/2005	8/31/2005
Activity 12 – Base Map Acquisition	IDNR	4/01/2005	5/31/2005
Activity 13 – DFIRM Production (Non-Revised Areas)	IDNR	6/01/2005	12/31/2005

SECTION 7—CERTIFICATIONS

Certifications must be made at the time the intermediate data is submitted. Relevant certifications are indexed to the following activities:

Base Map Acquisition and Preparation (Activity 12)

- A community official or responsible party shall provide written certification that the digital data meet FEMA minimum standards and specifications.
- The responsible Mapping Partner shall provide documentation that the digital base map can be used by FEMA. Please note that uploading base map data to the MIP does not constitute agreement that the digital base map can be used by FEMA. Documentation that the digital base map can be used by FEMA will still be required.

Floodplain Mapping and DFIRM Production (Activity 13)

The DFIRM metadata files shall include a description of the horizontal and vertical accuracy of the DFIRM base map and floodplain information.

Certifications must be made at the time the intermediate data is submitted. For example, if hydrologic data is submitted, certification will be required at the time it is submitted.

SECTION 8—TECHNICAL ASSISTANCE AND RESOURCES

Project Team members may obtain copies of FEMA-issued LOMCs, archived engineering backup data, and data collected as part of the Mapping Needs Assessment Process from Joshua Smith at the NSP, who may be contacted by telephone at 312 575 3931 or by facsimile at 312 707 8804.

General technical and programmatic information, such as FEMA 265 and the Quick-2 computer program, can be downloaded from the FEMA Web site (<http://www.fema.gov/fhm/>). Specific technical and programmatic support may be provided through the NSP; such assistance should be requested through the FEMA Project Officer specified in Section 12 of this MAS.

Project Team members also may 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 subcontractors, and GIS-based engineering and modeling training.

SECTION 9 - CONTRACTORS

IDNR shall ensure that the procurement for all contractors, if any are used for this Flood Map Project complies with the requirements of 44 CFR 13.36.

Part 13 may be downloaded in PDF or text format from the U.S. Government Printing Office Web site at http://www.access.gpo.gov/nara/cfr/waisidx_04/44cfr13_04.html.

SECTION 10 - REPORTING

FINANCIAL REPORTING

Because funding has been provided to the Illinois Department of Natural Resources (IDNR) by FEMA, financial reporting requirements for the IDNR will be in accordance with Articles V and VI of the Articles of Agreement.

STATUS REPORTING

IDNR shall use Earned Value Management System (EVMS) concepts in reporting on status of the project defined by the activities of this Mapping Activity Statement. The EVMS data shall be entered into the web-based Monitoring of Contracted Studies (MICS) or a similar project database module expected to replace MICS at FEMA's new Management Information Portal (MIP) by March 2005. The FEMA Project Officer shall be responsible for providing an EVMS Project Summary Report back to IDNR every 30 days based on a routine export and summary analysis of MICS entries. A report shall also be provided to the FEMA Assistance Officer. The Assistance officer will waive the written quarterly status reports (reference 44 CFR Part 13.40, *Monitoring and Reporting Program Performance*) after evaluation of the timely submittal of the required information by IDNR. However, this shall not affect the financial reporting requirements (reference 44 CFR Part 13.41, *Financial Reporting*).

EVMS baseline data, consisting of start date, end date and all budgeted federal and non-federal resources, shall establish the basis for tracking percent complete and funds expended to date on the project. IDNR shall work with the FEMA Project Officer at the beginning of the project to establish acceptable sub-project tasking for which percent complete and actual cost shall be tracked against baseline data. In

general, these tasks shall be derived from major activities enumerated in the table provided at Section 6 of this statement. The tasking will be entered with sufficient resolution to allow project managers the ability to determine which tasks carry the potential for significant cost or schedule variances. Percent complete and actual cost shall be updated with a minimum frequency of 30 days if the project is active. The comment section provided at each MICS task entry should be used as necessary to assist in reporting project status.

Subject to Project Management Team decisions, the IDNR Project Manager may also be responsible for coordinating the production of project status report or "Report to Stakeholders" document. Ideally, this document would be published quarterly and distributed through a web-based posting. Otherwise, FEMA and its NSP contractor may request to meet with IDNR on a routine basis (up to bi-weekly if needed) to review the progress of the project. These meetings will alternate between FEMA's Regional Office, the IDNR office and conference calls as necessary.

SECTION 11 - PROJECT COORDINATION

Throughout the project, all members of the Project Team will coordinate, as necessary, to ensure the products meet the technical and format specifications required and contain accurate, up-to-date information. Coordination activities shall include:

Meetings, teleconferences, and videoconferences with FEMA and other Project Team members as needed;

- Telephone conversations with FEMA and other Project Team members on an ad hoc basis, as required;

Updates to the MICS, Mapping Needs Update Support System database, and other FEMA status information systems in accordance with requirements in Volumes 1 and 3 of *Guidelines and Specifications for Flood Hazard Mapping Partners*; and

E-mail, facsimile transmissions, and letters, as required

SECTION 12—POINTS OF Contact

The CTP Project Manager is Paul Mauer, P.E., or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities. Paul Mauer will also serve as IDNR Project Engineer for execution of this MAS. The FEMA contacts are: Ken Hinterlong, Project Officer, and Lee Traeger, Technical Monitor. The NSP representative for this MAS is Mark Hoskins, PE, Technical Manager for the NSP Regional Management Center located in Chicago.

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

Terry Fells
Terry Fells, Chief
Hazard Identification and Risk Assessment Branch
Federal Emergency Management Agency, Region V

Sept. 2, 2004
Date

Joel Brunsvold
~~Chief, Office of Water Resources~~ Joel Brunsvold, Director
~~Office of Water Resources~~
Illinois Department of Natural Resources

9/9/2004
Date

Sujata Banerjee
Sujata Banerjee
Business Manager, NSP/RMC5 (Baker Corporation)

October 15, 2004
Date