

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



Mapping Activity Statement No. IDNR04-7
Development of Hydrologic & Hydraulic Flood Data, Kendall 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) IDNR-7 is as follows.

SECTION 1—OBJECTIVE AND SCOPE

The objective of the Flood Map Project documented in this MAS is to develop a updated hydrologic and hydraulic data to be used in the Digital Flood Insurance Rate Map (DFIRM) production effort to be completed by the partners under current and future map production MAS agreements. The majority of the work to be completed under this MAS will be for streams in Kendall County.

The data to be developed will resolve known discrepancies between existing FEMA mapping and current conditions and detailed studies of areas previously unstudied or with approximate studies that are, or soon will be, in areas with high development pressure. Since portions of the areas to be studied/restudied are not yet identified, scoping will be required. The majority of the work to be completed under this MAS will be for streams in Kendall County.

This MAS will include coordination with the digital conversion efforts being conducted by the partners under additional MAS agreements. When the conversion process identifies issues that require the consideration/interpretation of existing hydrologic/hydraulic studies, IDNR will analyze the study and provide a recommendation to resolve the issue. Areas to restudy are summarized in the table below.

Table 1-1

Flooding Source	Reach Limits & Length	Detailed Hydrologic Analyses	Detailed Hydraulic Analyses	Refinement or Creation of Zone A
Waubansee Creek	Areas impacted by urbanization		X	X
Aux Sable Creek	Areas impacted by urbanization		X	X
Rock Creek	Areas impacted by urbanization			X
Blackberry Creek	Continuation of restudy being conducted in Kane County	X	X	X
Waubansee Creek	Areas impacted by urbanization		X	X

This Flood Map Project will be completed by the following

- Illinois Department of Natural Resources
FEMA Region V
- Baker Corporation, under contract to FEMA as National Service Provider (NSP)

The activities for this Flood Map Project and the Mapping Partners that will complete them are summarized in Table 1-2 below. The sections of this MAS that follow this table describe the specific activities, responsible Mapping Partner, FEMA standards that must be met, and resultant map components.

Table 1-2

Activities	IDNR	FEMA Region V	NSP
Activity 1 – Scoping	X	X	X
Activity 2 – Outreach	X	X	X
Activity 3 – Field Surveys and Reconnaissance	X		
Activity 6 – Hydrologic Analyses	X		
Activity 8 – Hydraulic Analyses	X		
Activity 10 – Floodplain Mapping	X		

FEMA has developed tools to assist in the development of the flood hazard data studies and the Digital Flood Insurance Rate Maps (DFIRMs) that can be used at the IDNR's discretion. The tools available at this time include WISE software and the DFIRM production tools. FEMA will, through the NSP, provide access and training in these tools.

Use of WISE and other FEMA-supplied production tool sets is not required. Should the IDNR choose not to use these production tools, intermediate project data should be submitted to FEMA in accordance with data capture standards at major milestones in each Mapping Project. 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)
- Field Survey
- Hydrology Completed (draft and final)
- Hydraulics Completed (draft and final)

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

Scope: This task involves collecting data from a variety of sources including community contacts, other Federal and State Agencies, NFIP State Coordinator and FEMA archives. IDNR will evaluate the effective FIS report and FIRM maps to see where it needs to be updated. Lists of mapping needs from the MNUSS database will be included in the consideration.

In cooperation with the FEMA Region, a Project Management Team will be established consisting of IDNR, the FEMA Regional Engineer, the County Engineer and appropriate community official. The Project Management Team will be responsible for prioritizing the activities of this project. 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 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; Available Data Inventory; Scoping Map; Scoping Meeting Agenda/Minutes form; Aerial photos/topographic mapping if available; existing drainage studies or other H&H data; and Floodplain Ordinance(s).

The project management team shall review the initial mapping needs list, review the research findings, and make selections for 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 (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.

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

Deliverables: The Final Scoping Report shall be delivered with all of the components as laid out in the attached "Partner Flood Map Modernization Program Scoping Report" template in Appendix A in accordance with the schedule outlined in Section 6 for this Activity.

Activity 2 – Outreach

Responsible Mapping Partner: IDNR

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 Contractor activities shall include, but are not limited to -

- ✓ Establishing two-way communication to address the needs of, inform and obtain feedback from, the stakeholders;
- ✓ 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.

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 3 - Field Surveys and Reconnaissance

Responsible Mapping Partner: IDNR

Scope: To supplement any field reconnaissance conducted during the Project Scoping phase of this project, IDNR shall conduct a detailed field reconnaissance of the specific study area to determine conditions along the floodplain, verify types and numbers of hydraulic and/or flood-control structures, locations of cross sections to be surveyed, and other parameters needed for the hydrologic and hydraulic analyses.

In addition to the initial field reconnaissance, IDNR shall conduct field surveys, including obtaining channel and floodplain cross sections, identifying or establishing Temporary Bench Marks, and obtaining the physical dimensions of hydraulic and flood-control structures.

When appropriate, survey data from the agency responsible for the construction of the flood control structure will be used in the analysis.

Standards: All work under Activity 3 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the Technical Support Data Notebook (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:

- A report summarizing the findings of reconnaissance
- Maps and drawings that provide the detailed survey results and
- NSP format survey database or intermediate data delivery consistent with the NSP data capture standards – appendix N of the Guidelines and Specifications for Flood Mapping Partners.

Activity 6 – Hydrologic Analyses

Responsible Mapping Partner: IDNR

Scope: IDNR shall perform hydrologic analyses for the areas listed earlier in this MAS and areas identified through the scoping process. IDNR shall calculate peak flood discharges for the 10-, 2-, 1-, and 0.2-percent-annual-chance storm events using the HEC-RMS computer program. If the existing hydrology was completed using TR-20 and the revised conditions can be accurately reflected, the modified TR-20 run may be used. These flood discharges will be the basis for subsequent hydraulic analyses under Activity 8.

If Geographic Information System (GIS)-based modeling is used, IDNR shall document automated data processing and modeling algorithms and provide them to FEMA to ensure they are consistent with the standards outlined above. Digital datasets (such as elevation, basin, or land use data) are to be documented and provided to FEMA for approval before performing the hydrologic analyses to ensure the datasets meet minimum requirements.

Standards: All work under Activity 6 shall be performed in accordance with the standards specified in Section 5 of this MAS.

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

- Digital copies of all hydrologic modeling (input and output) files for the 10-, 2-, 1-, and 0.2-percent-annual-chance storm events;
- Digital and hardcopy versions of the Summary of Discharges Table presenting discharge data for the flooding sources for which hydrologic analyses were performed;
- Digital and hardcopy versions of draft text for Section 3.1, Hydrologic Analyses, of the FIS report;

- Digital and hardcopy versions of all backup data used in the analysis, including work maps.
- NSP Format Hydrology Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards – Appendix N of the Guidelines and Specifications for Flood Mapping Partners

For GIS-based modeling, deliverables shall include all input and output data, intermediate data processing products, and GIS data layers.

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

Activity 8 – Hydraulic Analyses

Responsible Mapping Partner: IDNR

Scope: IDNR shall perform hydraulic analyses for streams listed in Table 1-1 above. The modeling will include the 10-, 2-, 1-, and 0.2-percent-annual-chance events based on peak discharges computed under Activity 6. The hydraulic methods used for this analysis will include HEC-RAS.

IDNR shall use the cross-section and field data collected under Activity 3 to perform the hydraulic analyses. The hydraulic analyses will be used to establish flood elevations and regulatory floodways for the subject flooding sources.

IDNR shall use the FEMA CHECK-2 or CHECK-RAS checking program to check the reasonableness of the hydraulic analyses.

IDNR shall document automated data processing and modeling algorithms for GIS-based modeling and provide them to FEMA for review to ensure they are consistent with the standards outlined above. Digital datasets are to be documented and provided to FEMA for approval before performing the hydraulic analyses to ensure the datasets meet minimum requirements.

Standards: All work under Activity 8 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 make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Activity:

Digital profiles of the 10-, 2-, 1- and 0.2-percent-annual-chance water-surface elevations representing existing conditions using the FEMA RASPLOT program or similar software;

Digital version of the Floodway Data Table for each flooding source that is compatible with the DFIRM database;

Digital version of all hydraulic modeling (input and output) files;

Digital version of table with range of Manning's "n" values;

Explanations for unresolved messages from the CHECK-2 or CHECK-RAS program, as appropriate;

- Digital version of draft text for inclusion in the FIS report.
- For GIS-based modeling, deliverables include all input and output data, intermediate data processing products, GIS data layers, and final products in the format of the DFIRM database structure.

- NSP Format Hydraulic Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards – Appendix N of the Guidelines and Specifications for Flood Mapping Partners
- A Summary Report that describes the findings of the QA/QC review; and
- Recommendations to resolve any problems that are identified during the QA/QC review.

Activity 10 - Floodplain Mapping

Responsible Mapping Partner: IDNR

Scope: IDNR shall delineate/redelineate the 1- and 0.2-percent-annual-chance floodplain boundaries and the regulatory floodway boundaries for the flooding sources for which detailed hydrologic, and/or hydraulic were performed. IDNR shall incorporate all new or revised hydrologic, hydraulic and shall use the best topographic data available to delineate the floodplain and regulatory floodway boundaries on a digital work map. In addition, IDNR shall incorporate the results of all effective Letters of Map Change (LOMCs) within the revised areas as appropriate.

Standards: All work under Activity 10 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:

- Digital work maps showing the 1- and 0.2-percent-annual-chance floodplain boundary delineations, regulatory floodway boundary delineations, cross sections, BFEs;
 - DFIRM mapping files, prepared in accordance with the requirements in Guidelines and Specifications for Flood Hazard Mapping Partners;
 - Metadata files describing the DFIRM data;
 - An explanation for the use of existing topography for the studied reaches, if appropriate.
- NSP Format Mapping Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards – Appendix N of the Guidelines and Specifications for Flood Mapping Partners

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/frm_gsam.pdf.

Table 2-1 indicates the sections of the TSDN that apply to each mapping activity.

Table 2-1 Mapping Activities and Applicable TSDN Sections

TSDN Section	Mapping Activities															
	1	2	3	4	5	6, 6A	7, 7A	8	9	10, 10A, 10B	11	12	13, 13A	14, 14A	15	16
General Documentation																
Special Problem Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Telephone Conversation Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Meeting Minutes/Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
General Correspondence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Engineering Analyses																
Hydrologic Analyses			X			X	X	X	X	X	X					
Hydraulic Analyses			X			X	X	X	X	X	X					
Key to Cross-Section Labeling			X			X	X	X	X	X	X					
Key to Transect Labeling			X			X	X	X	X	X	X					
Draft FIS Report						X	X	X	X							
Mapping Information	X	X		X	X					X	X	X	X	X	X	X
Miscellaneous Reference Information	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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.)

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 September 30, 2005. The mapping activities may be terminated at the option of FEMA or IDNR in accordance with the provisions of the Partnership Agreement dated May 3, 2004. If these Mapping Activities are terminated; the remaining funds from uncompleted activities, provided by FEMA for this Mapping Activity Statement, will be returned to FEMA.

SECTION 4—FUNDING/LEVERAGE

FEMA is providing funding, in the amount of _____ for the completion of this Flood Map Project. IDNR shall provide any additional resources required to complete the assigned activities for 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 below 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.

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.

Table 5-1. Applicable Standards for Project Activities

Applicable Standards	Activities					
	1	2	3	6	8	10
<i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> , April 2003	X	X	X	X	X	X
American Congress on Surveying and Mapping Procedures	X		X			
Global Positioning System (GPS) Surveys: National Geodetic Survey (NGS-510), "Guidelines for Establishing GPS-Derived Ellipsoid Heights," November 1997	X		X			
Engineer Manual 1110-1-1000, <i>Photogrammetric Mapping</i> (USACE), July 1, 2002	X		X			
Engineer Manual 1110-2-1003, <i>Hydrographic Surveys</i> (USACE), January 1, 2002	X		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
<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. Project Activities and Applicable Portions of FEMA Guidelines and 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
3	Field Surveys and Reconnaissance	Volume 1, Section 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.4, A.5, A.6, A.7, and A.8 Appendix F, Section F.3 Appendices B, C, M and N
6	Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix A, Section A.4 Appendix C, Sections C.1 and C.7 Appendices E, F, G, H, M and N
8	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, M and N
10	Floodplain Mapping (Detailed Riverine or Coastal Analysis)	Volume 1, Section 1.4 (specifically Subsection 1.4.2.3) Appendix C, Sections C. 4 and C.6 Appendix D, Sections D.2 (specifically Subsection D.2.7) and D.3 (specifically Subsection D.3.7) Appendices E, F, G, H, K, L, M and N

SECTION 6—SCHEDULE

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

ACTIVITIES	RESPONSIBLE PARTNER(S)	DATE DUE
Activity 1 – Scoping	IDNR, FEMA	1/31/05
Activity 2 – Outreach	IDNR	9/31/05
Activity 3 – Field Surveys and Reconnaissance	IDNR	8/31/05
Activity 6 – Hydrologic Analyses	IDNR	7/31/05
Activity 8 – Hydraulic Analyses	IDNR	8/31/05
Activity 10 – Floodplain Mapping	IDNR	9/31/05

SECTION 7—CERTIFICATIONS

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

Field Surveys and Topographic Data Development (Activities 3 and 4)

A Registered Professional Engineer or Licensed Land Surveyor shall certify topographic data, in accordance with 44 CFR 65.5(c). Certification of topographic data by the American Society for Photogrammetry and Remote Sensing is also acceptable.

Hydrologic and Hydraulic Analyses and Floodplain Mapping (Activities 6, 8, 10, 10A and 10B)

- A Registered Professional Engineer shall certify hydrologic and hydraulic analyses and data in accordance with 44 CFR 65.6(f).
- A Registered Professional Engineer or Licensed Land Surveyor shall certify topographic information in accordance with 44 CFR 65.5(c).
- Any levee systems to be accredited will be certified in accordance with 44 CFR 65.10(e).

Floodplain Mapping, DFIRM Production and Application of FEMA Graphics and Database Specifications (Activities 10, 10A 10B, 11, 13, 14, and 14A)

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

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 (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.

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 on or about October 1 (General organization/scoping Cook County), November 1 (Review Cook scoping/Cook work plan), December 1, 2004 (Status of work), February 1 (Status of work), and May 2 (Status of work);

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

Updates to the ICS, 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 Ferris Fell
Terry Fell, Chief
Hazard Identification and Risk Assessment Branch
Federal Emergency Management Agency, Region V

Sept. 2, 2004
Date

Joel Brunsvold
~~Executive Director~~ 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