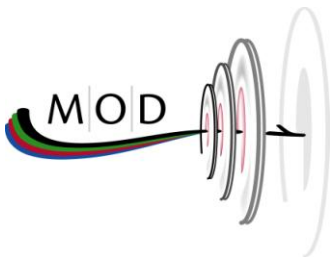


Flood Map Modernization MSC Deliverable Package Guide

Version 1.4

April 2007



Document History

Document Location

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Right-click this field and choose Update Field to show file path

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1. Introduction

Information on the final deliverables and paperwork for the Flood Insurance Study (FIS) report and the Flood Insurance Rate Map (FIRM) are presented in the *Guidelines and Specifications for Flood Hazard Mapping Partners* (G&S), volume 1, section 1.5. The purpose of this document is to provide additional guidance to mapping partners for consistency of the FIS report and FIRM final deliverables that are sent to the FEMA Map Service Center (MSC) for printing by the Government Printing Office (GPO). The deliverable materials must be reviewed by the National Service Provider (NSP) prior to submittal by the mapping partner to the MSC. The final deliverable material are to be sent to the MSC approximately 2 months after the date of the letter of final determination (LFD) or approximately 4 months prior to the effective date of the FIRM and FIS report. The MSC and the GPO coordinate the printing and distribution of the FIRM and FIS report.

2. MSC Deliverable Materials

The required documents that make up the final deliverable materials package to the MSC include the following:

- The standard Letter of Transmittal (appendix A);
- Transmittal (179-series) letter to Chief Executive Officer (CEO) of community (appendix C);
- Negatives and proof copy of FIRMs, or Flood Boundary and Floodway Maps (FBFM), when applicable;
- Print Processing worksheet (appendix D);
- Print Requisition form for the FIS report and for Flood Maps (appendix E and F);
- Community Map Action List (CMAL) and print Processing Worksheet (appendix G);
- Hard copy FIS report in final form; (cover sheet, vicinity map, photo pages, and flood profiles);
- CD or DVD containing digital map and report deliveries; and
- Updated Geo-index.

A Transmittal Check Sheet may be used by the mapping partner to aid in the compilation of the package materials. The check sheet template is located at appendix B.

3. Preparation of the FIS Report

The designated mapping partner must prepare digital and hard copies of the FIS report for submission to the MSC.

3.1. Hard Copy FIS Report

The mapping partner must supply the original hard copy of the FIS report. In preparing the FIS report, the mapping partner must adhere to the procedures provide below.

If the FIS report exceeds 150 pages it shall be subdivided into two or more volumes. No more than 100 pages shall be included in any volume of a multiple-volume FIS report. Where possible, reports shall be subdivided so that volumes begin and end at logical breakpoints; however, the number of volumes must be minimized. One Table of Contents (TOC) shall be prepared for all volumes. A copy of the TOC shall appear in each volume of the FIS report. Below are steps for preparing the FIS for submission to the MSC.

Review the text and graphics against the TOC to make sure all pages and graphics are provided. It is recommended that Subsection 1.3 and Section 10 of the FIS be carefully checked for omissions. If blanks exist, fill in the required information.

Assemble all materials (graphics and profiles) and place them in order according to the TOC. If the FIS is more than one volume, divide it up according to the TOC before beginning the page numbering for each volume. The numbering for each volume is done the same way as it is for single-volume reports. After assembling all materials, prepare one complete copy of the FIS report (including the graphics and full-size profiles).

Follow the guidelines below in numbering the pages:

1. The page number for the cover page will read “cover”.
2. The Notice to Users page following the cover page will be marked as “1/2/ blank”.
3. The first page of the TOC will be labeled “3”, the second page will be labeled “4” and so on. If the last page of the TOC is an odd number e.g. 5, then it will be labeled as 5/6/ blank (odd numbers only) and so on. This will make certain that the first section of the FIS report will begin on an odd numbered page.
4. Flood Profiles must begin on an odd numbered page. For example, if the last page number were labeled 20, the first Flood Profile would be labeled “21/22/ blank”. If, however, the last page of the text is an odd number, continue the Flood Profiles with the next odd number. For example, if the last page number were labeled 21, the first Flood Profile would be labeled “23/24/ blank”.

3.2. Digital Report

The FIS report must be submitted as a PDF, one file per volume, bookmarked at the major headings of each Table of Contents (minimum) and at the start of each flooding source’s profile (subject to cost and project officer approval). The FIS report, including the profiles must be scanned at a resolution of 400 dpi.

4. Preparation of the FIRM

The mapping partner must prepare digital and hard copies of the FIRM for submission to the MSC.

4.1. Hard Copy

The mapping partner must adhere to the procedures provide below.

All map panels are to be rolled and sealed in brown packaging paper. The FIRM Index should be rolled separately and labeled with the community name and “FIRM Index” on the brown paper. If multiple Index panels exist, write the number of the panels on the brown paper, being rolled separately.

Wrap the map panels according to map type (FIRM or FBFM), and frame size (A, B, C, D, and E).

1. Vector Base (black and white) maps - place panels in ascending numerical order with no more than 26 panels in a roll.
2. DOQ Base (two-color) maps - no more than two negatives (same map panel; one negative for black and the other for cyan) in a roll.

Write the community name, type, frame size, and number of panels on the brown paper for all maps. Next, prepare all necessary paperwork [transmittal letter (s), Print Processing Work Sheet(s), and Print Requisition form(s)], and include in the final package. After the paperwork is complete, write the correct control number shown in Block 4 of the Printing Requisition form on each rolled package.

4.2. Digital Map Deliverables

The digital map deliverables must be on a CD or DVD, and the digital files must be organized by the file structure presented in Section 6, Preparation of Digital Data.

5. Preparation of the GPO Paperwork

The mapping partner must prepare the paperwork presented below to accompany the final deliverable materials for the FIS report, FIRMs and FBFMs (if produced).

5.1. Transmittal Letter to Community

The 179 letters templates are presented on appendix C. Refer to the Document Control Procedures Manual for the current letter templates. The mapping partner must adhere to the procedures provide below:

Select the correct letter type from one of the following:

179	Used for a community that is receiving a FIRM and FIS report for the first time.
179-M	Used for a minimally flood prone community that is receiving a FIRM and for any other community for which a FIRM only is produce.
179-R	Used for a community where only the FIRM is revised.
179-RS	Used for a community where the FIRM and FIS report are revised.
179-S	Used for a community where the FIS report only is revised.
179-CWG	To ensure that the new format countywide FIRM Index is made available to all communities in the county, the first time an existing countywide format FIRM is revised, the new Index format will be provided to all communities in the county with an explanatory letter.
179-CW	Used for a community receiving a countywide FIRM and FIS report for the first time.
179-RS CW	Used for a community where the countywide FIRM and FIS report are revised.

Using the correct version of the letter, include the following information:.

- Current CEO name and address
- Six-digit community identification number (CID)
- Effective Date

Print two copies of each letter for the final package.

5.2. Print Processing Worksheet

The standard Print Processing Worksheet and a sample worksheet are presented at appendix D. The items below must be filled in on the worksheet:

- **TWO COLOR NEGATIVE**
Indicate yes or no.
- **EFFECTIVE DATE**
Enter the effective date of the FIRM.
- **COMMUNITY NUMBER**
Enter the six digit community identification number (CID).
- **COUNTY MAP NUMBER (FIPS)**
Enter the five-digit Federal Information Processing System (FIPS) code for the county in which the community is located. The FIPS can be obtained directly from the website www.itl.nist.gov/fipspubs/co-codes/states.txt.
- **COMMUNITY NAME**
Enter the correct community name, including the “City of”, “Town of”, etc., designation. If the community is the unincorporated areas of a county, enter the county name here.
- **COUNTY NAME**
Enter the name (s) of the county(ies) in which the community is located in parentheses. If the community is the unincorporated areas of a county, enter “(Unincorporated Areas).”
- **COUNTY CODE**
Enter the FIPS code for the County in which the community is located.
- **STATE/REGION**
Enter the two letter state abbreviation followed by the two-digit FEMA Region number (e.g., Texas would be shown as “TX/06”).
- **DATE TO PRINT**
Leave this space blank. MSC staff will add this information, as well as all information appearing in the blocks below the block labeled “INTERNAL MSC USE ONLY”.
- **NEW/REVISED FIRMS**
Enter information below:
 - In the “Panel & Suffix” column, list all FIRM panels, beginning with the Map Index that will be printed for the community.
 - In the “Panel & Suffix” column, show the Map Index as “IND0”.
 - In the “Panel & Suffix” column, show each FIRM panel as the four-digit number that appears on the individual panels and the Map Index and the suffix.
 - In the “M#” column, show the number that appears in Block 4, “CONTROL NO”, on the Printing Requisition Form for that panel.
 - Leave the “QTY TO TRANSFER”, and “QTY FOR VIP/REV” columns blank; MSC staff will complete these columns.
- **STUDY /FLOODWAYS**
Enter information below:
 - In the “Panel & Suffix” column, list all volumes of the FIS report and all FBFM panels, beginning with the Map Index that will be printed for the community.

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- In the “Panel & Suffix” column, show single-volume FIS reports as “V000”, and multiple-volume FIS reports as “V001”, “V002”, and “V003” as required to cover all printed volumes, followed by the suffix.
- In the “Panel & Suffix” column, after the FIS report volume(s), show the Map Index as FND0.
- In the “Panel & Suffix” column, show each FBFM panel as the four- digit number that appears on the individual panels and the Map Index. Do not show a suffix.
- In the M# column, show the number that appears in Block 4, “CONTROL NO”, on the Printing Requisition Form for the FIS report or FBFM panel. Leave the “QTY TO TRANSFER” and “QTY FOR VIP” columns blank; the MSC staff will complete these columns.
- **RECYCLES**
Identify all the map panels by number and suffix that are being superseded by the new maps. Leave the “Quantity” column blank, as this will be completed by the Map Service Center.

5.3. Printing Requisition Form for the Flood Study Report

The printing Requisition Form for a community is obtained from the MSC as a carbon-copy sheet, which has some information already completed by the MSC. The form and a sample are presented at appendix E. The mapping partner must fill in the following items.

- **TITLE AND/OR DESCRIPTION OF JOB (BLOCK 9)**
Enter the name of the community after the words “FLOOD STUDY”, which appear on all flood study requisition forms. List the volume number and suffix, e.g. V001A as well. Note: if more than one volume, each volume shall have a separate print requisition.
- **QUANTITY (BLOCK 10)**
Leave this field blank. MSC staff will complete.
- **NUMBER OF ORIGINAL PAGES (BLOCK 11)**
Enter the total number of pages included with the FIS report, Flood Profiles.
- **MATERIAL SUBMITTED (BLOCK 13)**
Enter an “X” in the box to the left of “CAMERA COPY & NEGATIVES”.
- **ADDITIONAL INFORMATION (BLOCK 15)**
Add information to indicate the pages that are negatives and pages that are 11x17 format (generally, Flood Profiles); e.g., Cover, 7-10, and 60-124.

5.4. Printing Requisition Form for the Maps

The printing Requisition Form for a community is obtained from the MSC as a carbon-copy sheet, which has some information already completed by the MSC. The form and a sample of are presented at appendix F. The mapping partner must fill in the following items.

- **TITLE AND/OR DESCRIPTION OF JOB (BLOCK 9)**
Enter the name of the community after the words “Z-FOLDED FLOOD MAP”, followed by “(FIRM)”.
- **NUMBER OF ORIGINAL PAGES (BLOCK11)**
Enter the total number of panels included in the rolled package. Note: up to 16 per rolled package for black and white, 25 rolled packages (two per roll, per panel) for two-color/DOQ.
- **MATERIAL SUBMITTED (BLOCK 13)**
Enter an “X” in the box to the left of “negatives”.
- **PAPER SIZE (BLOCK 17)**
Enter the frame size of the panels included in the rolled package.
- **ADDITIONAL INFORMATION (BLOCK 15)**
Enter “2 color” for DOQ’s.

5.5. Community Map Action List (CMAL)

The CMAL form can be obtained from the studies group in Alexandria, VA. The mapping partner must include the information below on the CMAL form, which is presented in Appendix G. The CMAL code list, which is located on the back of the CMAL form, is to be used for the appropriate entries on the CMAL form. Most of the required information can be found on the printed copies of the FIRM and FBFM Indexes and map panels. For the initial County-wide FIRM, the CMAL should list all communities within the county, even the non-flood prone communities. Every community will need a Print Processing Worksheet and the flood prone communities will need a SF179. When processing a revise County-wide FIRM, all communities, flood prone and non-flood prone, shown on the revise map panels shall be listed on the CMAL, have a SF179, and Print Processing Worksheet. The following information should be provided in the CMAL:

- **DATE**
Enter, in the upper right-hand corner of the form, the date the CMAL is sent to MSC.
- **REVIEW CONTRACTOR**
Enter “MAPPING PARTNER NAME”
- **EFFECTIVE DATE**
Enter the date the map(s) and report will become effective. This date is shown on the cover of the FIS report and the title block of the FIRM Index and map panels.

For each community, identify the following information on the same line:

- **STATE**
Enter the two-letter state abbreviation on the first line.
- **COMMUNITY NUMBER**
Enter the six-digit CID.
- **COMMUNITY NAME (COUNTY NAME)**
Enter the community name, including the “Town of”, “City of”, etc. on the first line. Enter

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the county name or, if it is the county, enter unincorporated areas, in parentheses, on the second line.

- **PRINTED PANEL(S) AND SUFFIX**

List the four-digit panel number and suffix for all FIRM panels that are being printed in ascending numerical order, beginning with the FIRM Index on the first line. For single-panel Indexes, the FIRM Index should be shown as IND0, followed by the suffix. For multiple-panel Indexes, the FIRM Index should be shown as IND1, IND2, etc., followed by the suffix.

- **INLAND/COASTAL**

Enter “I” for inland, on the first line if the 60.3 code shown in the Letter of Final Determination (LFD) is b, c, or d. Enter “C”, for coastal, if the 60.3 code in the LFD is “e”. Enter “IC”, for inland and coastal, if the 60.3 code shown in the LFD is b, c, or d and e.

- **HAZARD**

Enter “NF” if the community is non-flood prone. Enter “MF” if the community is minimally flood prone. Minimally flood prone being defined only unnumbered or lettered SFHAs. Enter “FL” for flood prone communities.

- **60.3 CODE**

Enter the one- or two-letter code (i.e., b, c, d, e) shown in the LFD on the first line.

- **PROGRAM STATUS**

Enter “1” for the emergency program. Enter “2” for regular program on the first line. Enter “3” for non-participating communities with no map, enter “4” for non-participating communities with a map.

- **MAP STATUS, FHBM**

Enter “5” on the first line if the FHBM was superseded by a FIRM. Enter “1” if an FHBM was not published.

- **MAP STATUS, FIRM**

Enter one of the following codes on the first line as appropriate:

“1” if FIRM has never been produced for the community. Leave the date field on the CMAL blank.

“2” if the FIRM is becoming effective for the first time.

“3” if an existing FIRM is being revised.

“4” if the FIRM was rescinded.

“5” if the community is participating in the Regular Phase of the NFIP as non-flood prone and no FIRM was printed.

“6” if the community is participating in the Regular Phase of the NFIP as minimally flood prone and a FIRM showing Zones A and C was published

“7” if the community is participating in the Regular Phase of the NFIP as minimally flood prone and the FHBM was converted to a FIRM by letter.

“8” if the effective FIRM was all Zone D and no published FIRM.

“9” if the community is all Zone D and a FIRM was printed.

“10” if the community is all Zone C/X and a FIRM was printed.

- **INITIAL MAP DATE, FFBM**
Enter the initial identification date shown on the FIRM panel. This date can also be obtained from FMSIS, CIS or the MIP.
- **INITIAL MAP DATE, FIRM**
Enter the Flood Insurance Rate Map effective date shown on the FIRM panel(s).
- **PRINTED FLOODWAY PANELS**
Enter “N/A” on the first line if a separate FFBM has not been prepared. If an FFBM has been prepared, list the four-digit panel number for all FFBM panels that are being printed for the community in ascending numerical order, beginning with the FFBM Index on the first line. For single-panel Indexes, the FFBM Index should be shown as “FND0.” For multiple-panel Indexes, the FFBM Indexes should be shown as, “FND1, FDN2, etc.”
- **LOCATION OF MAP REPOSITORY**
Enter the address of the Community Map Repository. This information can be obtained from the community.
- **COMMENTS**
Provide comments that may be useful to the MSC in processing this GPO submittal. The following are notes that can and should be added when appropriate:
 - Prepared in Countywide Format for the first time
 - Only Panel Printed
 - Change to Map Initiatives Format form Standard Format
 - Minimal Conversion
- **PAGE ____ of ____**
Show “Page 1 of 1” for all single-page forms. Number multiple page forms consecutively (e.g., Page 1 of 3 for the first page, Page 2 of 3 for the second page, Page 3 of 3 for the third page of a three-page form).

6. Preparation of the Digital Data

6.1. Digital Materials

The mapping partner must meet the FEMA specifications presented below for submission of the digital data to the MSC. The media disc must be a CDs (CD-R, or CD-RW) or DVDs (DVD+R only). Note: Case must be preserved in filenames. Use the case shown in the examples below, e.g. uppercase for panels, studies, and DFIRM IDs, mixed case for some directory names, lower case for “metadata”, “readme”, and file extensions. The following is provided as a basic overview of the DFIRM naming convention. Consult Appendix H of this guide for specific details and the full-text version of the DFIRM naming conventions document.

DFIRM Databases - GIS data files

Export: Directory contains all standard DFIRM database files in ESRI Export format E00.

Shapefile: Directory contains all standard DFIRM database files in ESRI Shape-file format SHP.

MapInfo: Directory contains all standard DFIRM database files in MapInfo MIF format MIF.

Documents - Text file containing metadata and read-me file, which are used to view all file that are contain on the media disc. The DFIRM database standard states that the file should be named: <ST_FIPS><PCOMM>_<EFF_DATE>_metadata.txt; where ST_FIPS is the two-digit state FIPS code; PCOMM is the either the three digit county FIPS code with a trailing C or the four digit community number; and EFF_DATE is the effective date of the study in YYYYMMDD format.

Examples of file name:

24031C_20031217_metadata.txt - a county-wide DFIRM and

241234_20031217_metadata.txt - a community DFIRM

The read-me file is named readme.txt and contain complete documentation of file names, sizes and contents as required.

FIS Study Text - PDF with each volume as a separate file book marked at the major headings of each Table of Contents (minimum) and at the start of each flooding source's profile (subject to cost and Project Officer approval). The file should be named: <ST_FIPS><PCOMM><VOLUME NUMBER>.pdf.

Example of file name:

24031CV000.pdf

Orthophotos -in the format used to make the DFIRM (if applicable). This should be the format that the orthophotos were provided to FEMA unless the appearance of the portion of the orthophotos shown on the DFIRM was modified by re-projection, re-sampling, etc.

RFIRMS - Directory contains TIFF or PNG raster images of FIRM panels, the Index and their associated world files (All Images must be Geo-referenced) following the naming conventions below.

Examples:

24031C0001A.tif	Black and white maps – 400 DPI, Group 4 TIFF
24031C0001A.png	Two-color maps – 400DPI, 24 bit PNG
24031CIND0A.tif	Map Index

World files for the image files above:

24031C0001A.tfw
24031C0001A.pgw
24031CIND0A.tfw

6.2. Digital File Structure

The mapping partner must provide the digital files organized in the file structure presented illustrated in figure 1. Table 1 provides more details regarding folder content and the file naming conventions. Pay close attention to the directory names, they are case sensitive. Both figure and table can be found in section 1 of the G&S.

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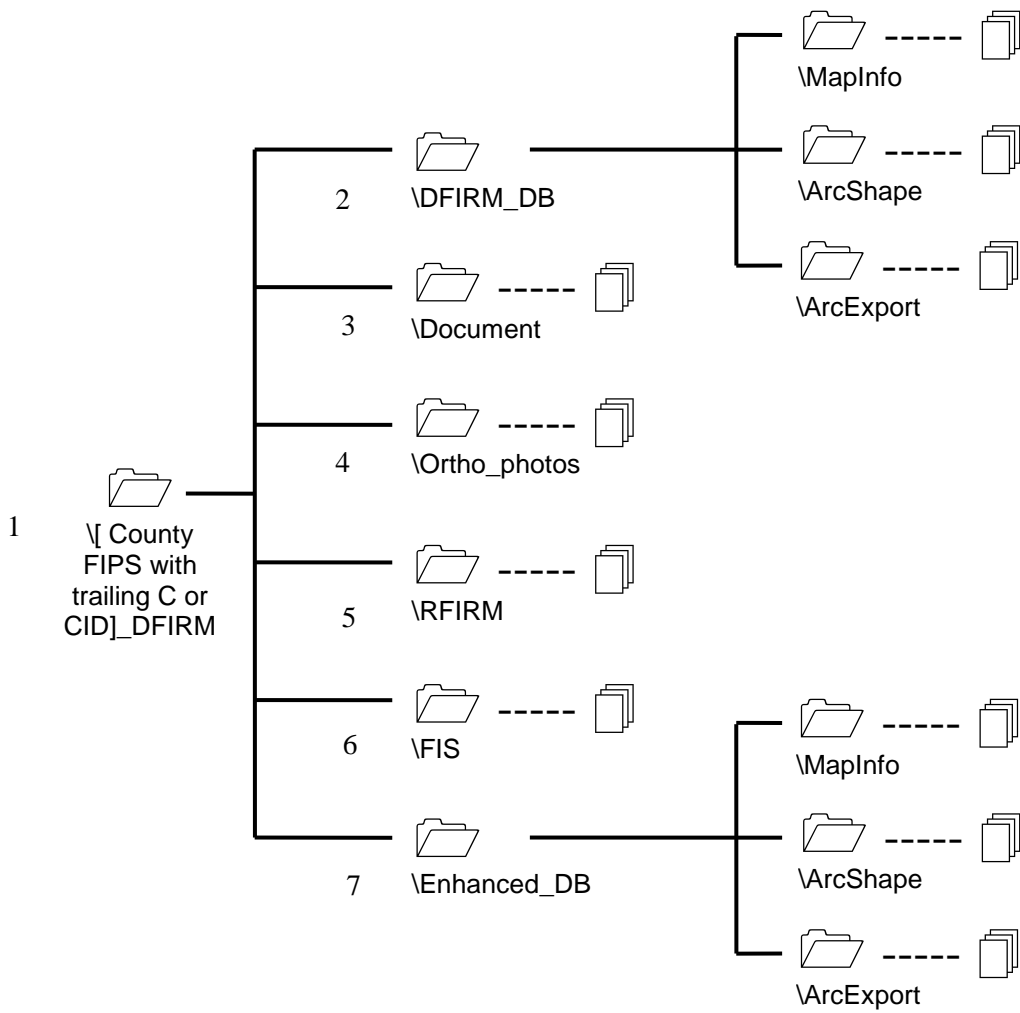


Figure 1. Final Deliverables Digital File Structure

Table 1. Digital Folder Contents and File Naming Conventions

Directory Name	Directory Contains	File Format	File/Folder Name Example	Diagram Reference
\[FIPS with trailing C]_DFIRM OR \[CID]_DFIRM	Six subdirectories, listed below		\12345C_DFIRM or \120234_DFIRM	①
\DFIRM_DB	Three subdirectories, each containing all standard DFIRM database files in differing formats: <ul style="list-style-type: none"> • \MapInfo • \ArcShape • \ArcExport 	\MapInfo: MapInfo MIF format \ArcShape: ESRI Shapefile format \ArcExport: ESRI Export format (if available)		②
\Document	Two files: <ul style="list-style-type: none"> • metadata file • readme file 	Text format	\24031C_20031217_metadata.txt ([FIPS]_[EffectiveDate(YYYYMMDD)]_metdata.txt) or \241234_12172003_metadata.txt ([CID]_[EffectiveDate(YYYYMMDD)]_metadata.txt) or \24031C_12172003_readme.txt ([FIPS]_[EffectieDate(YYYYMMDD)]_readme.txt) or \241234_12172003_readme.txt ([CID]_[EffectiveDate(YYYYMMDD)]_readme.txt)	③
\ORTHOPHOTOS	Aerial photographs and their associated world files			④

Source: Table 1-6 Digital File Structure, G&S [April 2003]

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Table 1. Digital Folder Contents and File Naming Conventions (Continued)

Directory Name	Directory Contains	File Format	File/Folder Name Example	Diagram Reference
\RFIRM	Raster image of FIRM panels and their associated world files (if available)	TIFF or PNG format	<p>\24031C0001A.tif <i>([FIPS]C[PanelNumber][PanelSuffix].tif)</i></p> <p>or</p> <p>\2412340001A.tif <i>([CID][PanelNumber][PanelSuffix].tif)</i></p>	⑤
\FIS	Digital FIS report	PDF	<p><i>Single jurisdiction, single volume:</i></p> <p>\241234V000.pd <i>([CID]C[VolumeNumber].tif)</i></p> <p>or</p> <p><i>Countywide, Volume 1:</i></p> <p>\24031CV001.pdf <i>([FIPS][VolumeNumber].tif)</i></p>	⑥
\Enhanced_DB	<p>Three subdirectories, each containing all enhanced DFIRM database files in differing formats:</p> <ul style="list-style-type: none"> • \MapInfo • \ArcShape • \ArcExport 	<ul style="list-style-type: none"> • \MapInfo: MapInfo MIF format • \ArcShape: ESRI Shapefile format • \ArcExport: ESRI Export format (if available) 		⑦

Source: Table 1-6 Digital File Structure, G&S [April 2003]

6.3. Geo-Index

The geo-index is a spatial index for the selection of products through the Map Store Search component of the MSC e-commerce web site. It displays the corporate limits of all political entities, and the individual FIRM panels in relation to these boundaries. This index allows homeowners to easily find which FIRM they need to look up their relevant flood insurance information. Appendix I contains the documentation for creating the geo-index process, which will include such things as file format, table structure, where to submit, and general practices in its creation. Below is a screenshot of a typical geo-index.

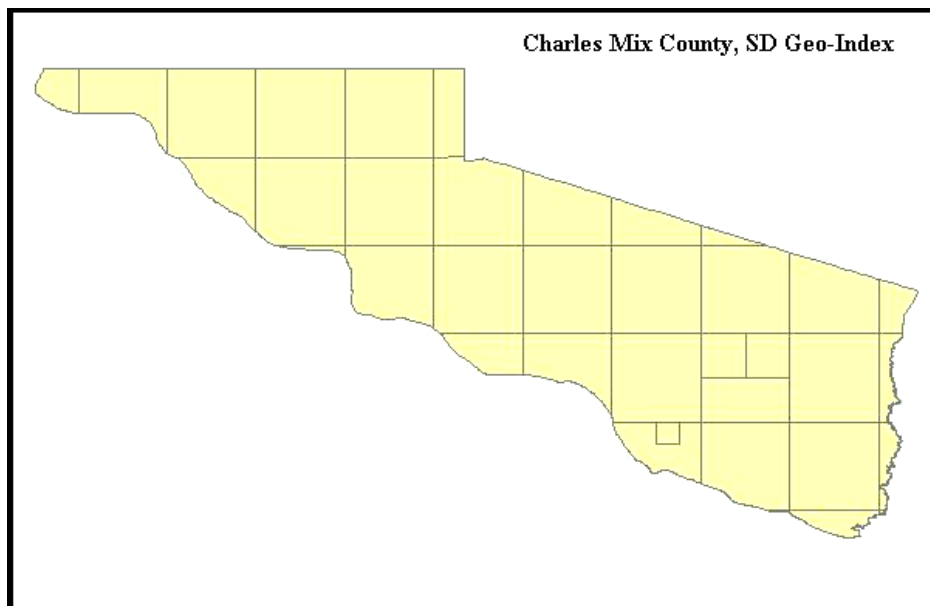


Figure 2. Countywide Geo-Index Example

The mapping partner must submit the Geo-Index data with projection using NAD83 as a zipfile of shapefile (.shp, .shx, .dbf, .sbn, .sbx, .prj) to <http://www.floodmaps.net/eftp/> and contact:

James Park
Geo-Index Coordinator
FEMA Map Service Center
6730 Santa Barbara Ct
Elkridge, MD 21075
Telephone: (410) 471-4022
Email: james.park@associates.dhs.gov

The file naming convention is GIDX_DFIRM ID + Effective Date (YYYYMMDD).

Examples:

For Countywide: GIDX_12345C_20040622

For Community: GIDX_123456_20040622

Appendix A. Standard Letter of Transmittal

Letter of Transmittal

To: _____ Subject: _____

Attn: _____ Date: _____

Sent		Description
YES	NO	Composite Negative and Proof Copy
YES	NO	Document 179
YES	NO	CMA List and Print Processing Worksheet
YES	NO	Printing Requisitions
YES	NO	Camera – Ready FIS Text
YES	NO	CD Containing GIS and Study Data

REMARKS:

Signed: _____

Appendix B. Transmittal Check Sheet

TRANSMITTAL CHECK SHEET

1. Point of Contact

Name of Mapping Partner

Name/Title

Address

Phone Number

Email

Name of Study

Processing Schedule

2. DFIRM Package

One Paper Copy of FIS Report along with Original Copy

One set of Paper Print/Copies

- | | | |
|------------------------------------------------|--------------------------------------------------|-------------------------------------|
| <input type="checkbox"/> Cover Sheet | <input type="checkbox"/> Figures | <input type="checkbox"/> FIRM Index |
| <input type="checkbox"/> Vicinity Map | <input type="checkbox"/> Profiles (Complete Set) | <input type="checkbox"/> FIRM Panel |
| <input type="checkbox"/> Photos | | |
| <input type="checkbox"/> Transmittal Letter(s) | <input type="checkbox"/> Print Requisition | <input type="checkbox"/> LFD Letter |
| <input type="checkbox"/> Print Work Sheet | <input type="checkbox"/> CMA-List | |

CD/DVD

- | | | |
|-------------------------------------|-----------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Shape File | <input type="checkbox"/> Map Info File | <input type="checkbox"/> Ortho TIF/HDR |
| <input type="checkbox"/> Geo Index | <input type="checkbox"/> Map Info Data | <input type="checkbox"/> DOQ Convert to PNG |
| <input type="checkbox"/> Metadata | <input type="checkbox"/> FIS Report-PDF | <input type="checkbox"/> Vector/TIF w/TF |

Appendix C. Standard 179 Letter Templates

MSC Deliverable Package Guide



Federal Emergency Management Agency

Washington, D.C. 20472

The Honorable (CEO Name and Address)

**IN REPLY REFER TO:
179**

Dear _____:

Enclosed are the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) materials for your community, which have been prepared by the Department of Homeland Security's Federal Emergency Management Agency. They reflect the latest hydraulic and hydrologic information available to us for the identification of flooding risks in your community. Copies of the FIRM and FIS materials are also being sent, under separate cover, to your community's map repository.

If you would like to order additional copies of the FIRM and FIS materials, please call our Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosures
Community Identification Number:
FIRM Effective Date:

bcc: NSP Case File
FEDD File



Federal Emergency Management Agency
Washington, D.C. 20472

The Honorable (CEO Name and Address)

Community No.:
Community:
179-CWG

Dear _____:

Enclosed is a copy of the revised Flood Insurance Rate Map (FIRM) Index for [countywide FIRM name] prepared by the Department of Homeland Security's Federal Emergency Management Agency (FEMA). To avoid confusion, please replace the FIRM Index that you currently have on file with the most recent copy, which is being sent under separate cover to your community's map repository. Your community is receiving this information for administrative purposes only; flood hazards for your community were not modified in this revision. As you are aware, your community shares this Index with several other jurisdictions in the county. Future revisions to the enclosed FIRM Index will be issued to you only if a FIRM panel on which your community is located is revised. This FIRM Index will therefore remain valid for your community until such time as a panel on which your community is shown is revised.

It is also important to note that if your community annexes land on adjacent FIRM panels in the future, you must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered from the FEMA Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosure

Community Identification Number:

FIRM Effective Date:

bcc: Case File
FEDD File

MSC Deliverable Package Guide



Federal Emergency Management Agency

Washington, D.C. 20472

The Honorable (CEO Name and Address)

**IN REPLY REFER TO:
179-M**

Dear _____:

Enclosed is the Flood Insurance Rate Map (FIRM) for your community, which has been prepared by the Department of Homeland Security's Federal Emergency Management Agency. The FIRM reflects the latest information available to us for the identification of flooding risks in your community. Copies of the FIRM are also being sent, under separate cover, to your community's map repository.

If you would like to order additional copies of the FIRM, please call our Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosure
Community Identification Number:
FIRM Effective Date:
bcc: Case File
 FEDD File



Federal Emergency Management Agency

Washington, D.C. 20472

The Honorable (CEO Name and Address)

**IN REPLY REFER TO:
179-R**

Dear _____:

Enclosed is the revised Flood Insurance Rate Map (FIRM) for your community, which has been prepared by the Department of Homeland Security's Federal Emergency Management Agency. The revised FIRM reflects the latest hydraulic and hydrologic information available to us for the identification of flooding risks in your community. Copies of the revised FIRM are also being sent, under separate cover, to your community's map repository.

If you would like to order additional copies of the revised FIRM, please call our Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosure
Community Identification Number:
FIRM Effective Date:
bcc: Case File

MSC Deliverable Package Guide



Federal Emergency Management Agency

Washington, D.C. 20472

The Honorable (CEO Name and Address)

**IN REPLY REFER TO:
179-RS**

Dear _____:

Enclosed are the revised Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) materials for your community, which have been prepared by the Department of Homeland Security's Federal Emergency Management Agency. The revision reflects the latest hydraulic and hydrologic information available to us for the identification of flooding risks in your community. Copies of the revised FIRM and FIS materials are also being sent, under separate cover, to your community's map repository.

If you would like to order additional copies of the revised FIRM and FIS materials, please call our Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosure
Community Identification Number:
FIRM Effective Date:
bcc: Case File



Federal Emergency Management Agency

Washington, D.C. 20472

The Honorable (CEO Name and Address)

**IN REPLY REFER TO:
179-S**

Dear _____:

Enclosed are the revised Flood Insurance Study (FIS) materials for your community, which have been prepared by the Department of Homeland Security's Federal Emergency Management Agency. They reflect the latest hydraulic and hydrologic information available to us for the identification of flooding risks in your community. Copies of the revised FIS materials are also being sent, under separate cover, to your community's map repository.

If you would like to order additional copies of the revised FIS materials, please call our Map Service Center at 1-800-358-9616.

Sincerely,

William R. Blanton, Jr., CFM
Section Chief
Engineering Management Section

Enclosure
Community Identification Number:
FIRM Effective Date:

bcc: Case File

MSC Deliverable Package Guide



Federal Emergency Management Agency

Washington, D.C. 20472

Community No.: _____
Community: _____
179RS-CW

Dear _____:

Enclosed is a copy of the revised Flood Insurance Study (FIS) materials for (community), prepared by the Department of Homeland Security, Federal Emergency Management Agency (FEMA). These materials include the Flood Insurance Rate Map (FIRM) panels, a revised FIRM index, and a revised FIS report. To avoid confusion, please replace materials that you currently have on file with the most recent copy. Additional copies are being sent under separate cover to your community's map repository.

As you are aware, your community shares the enclosed map index with several other jurisdictions in the county. Future revisions to the enclosed FIRM index will only be issued to you if a FIRM panel on which your community is located is revised. Therefore, this FIRM index will remain valid for your community until such time as a panel on which your community is shown is revised.

It is also important to note that if your community annexes land on adjacent FIRM panels in the future, you must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered from the FEMA Map Service Center at (800) 358-9616.

Sincerely

A handwritten signature in black ink that reads "William R. Blanton Jr." with a stylized flourish at the end.

William R. Blanton Jr., CFM, Acting Chief
Engineering Management Section
Mitigation Division

Enclosures

Revision Effective Date: _____



Federal Emergency Management Agency

Washington, D.C. 20472

IN REPLY REFER TO:
(179CW)
Community No.:
Community:

Dear _____:

Enclosed is a copy of the Flood Insurance Study (FIS) materials for _____ and Incorporated Areas prepared by the Federal Emergency Management Agency (FEMA). These materials include the Flood Insurance Rate Map (FIRM) panels, a FIRM map index, and a FIS report. Additional copies are being sent under separate cover to your community's map repository.

As you are aware, your community shares the enclosed map index with several other jurisdictions in the county. Future revisions to the enclosed FIRM index will only be issued to you if a FIRM panel on which your community is located is revised. Therefore, this FIRM index will remain valid for your community until such time as a panel on which your community is shown is revised.

It is also important to note that if your community annexes land that is shown on adjacent FIRM panels in the future, you must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered from the FEMA Map Service Center at (800) 358-9616.

Sincerely,

A handwritten signature in black ink that reads "William R. Blanton Jr." with a stylized flourish at the end.

William R. Blanton Jr., CFM, Acting Chief
Engineering Management Section
Mitigation Division

Enclosure(s)

Effective Date: _____

Appendix D. Print Processing Work Sheet and Sample

MSC Deliverable Package Guide

PRINT PROCESSING WORKSHEET				TEC: PROGRAM: R					
TWO COLOR NEGATIVE? YES: NO:				INTERNAL MSC USE ONLY					
EFFECTIVE DATE: January 19, 2006				VIP ACCT #					
COMMUNITY NUMBER: 29018				VIP ORDER:					
COUNTY MAP NUMBER (FIPS): 29115				REV ORDER:					
COMMUNITY NAME: Linn County				OBSOLETE REPORT:					
COUNTY NAME:				BRNCH/PLNT TRANSFER:					
PRINT TYPE NEW: REV:				QUANTITY TRANSFER					
COUNTY CODE: 29115 STATE/REGION: MO/07				BOM TRANSFER					
DATE TO PRINT:				PUTAWAY:					
NEW/REVISED FIRMS				STUDY/FLOODWAYS				RECYCLES	
PANEL & SUFFIX	QTY TO TRANSFER	M#	QTY FOR VIP/REV	PANEL & SUFFIX	QTY TO TRANSFER	M#	QTY FOR VIP/REV	PANEL & SUFFIX	QTY
INDOA		56757		V000A		23781			
0025C		56758							
0045C		56758							
0050C		56758							
0075C		56758							
0100C		56758							
0125C		56758							
0150C		56758							
0160C		56758							
0170C		56758							
0175C		56758							
0200C		56758							
0225C		56758							
0250C		56758							
0270C		56758							
0275C		56758							
0285C		56758							
0295C		56758							
0300C		56758							
0315C		56758							
0320C		56758							
0325C		56758							
0350C		56758							
0375C		56758							
0400C		56758							

**Appendix E. Print Requisition for Flood Study Form
and Sample**

MSC Deliverable Package Guide

FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD STUDY			1. PRINT ORDER NO.	2. REQ. NO. 8-00003
3. ORIGINATING OFFICE			4. CONTROL NO.	
5. DATE OF REQUEST	6. DELIVERY DATE REQUESTED	7. PERSON TO CONTACT FOR ADDITIONAL INFORMATION:		8. TELEPHONE NO.
9. TITLE AND/OR DESCRIPTION OF JOB FLOOD STUDY -				
10. QUANTITY	12. PAPER STOCK AND INK (Weight, kind, and color) TEXT: COVER: INK:		13. MATERIAL SUBMITTED <input type="checkbox"/> CAMERA COPY <input type="checkbox"/> NEGATIVES	
11. NUMBER OF ORIGINAL PAGES			14. AFTER PRINTING RETURN ORIGINALS TO:	
15. ADDITIONAL INFORMATION		16. PRINT COPY <input type="checkbox"/> ONE SIDE 17 X11 Foldins <input type="checkbox"/> HEAD TO HEAD TEXT		17. PAPER SIZE <input type="checkbox"/> 8- 1/2 X 11 (Covers & Text) <input type="checkbox"/> 17 X11 Foldins – folded to 8-3/8 x11
		18. BINDING TWO STAPLES <input type="checkbox"/> LEFT SIDE		
		19. FUNDS AVAILABLE IN ALLOTMENT (Signature & Date Of Budget Official)		
20. TIME AND DATE RECEIVED		21. APPROPRIATION CODE		
		22. REQUESTING OFFICIAL(S). I CERTIFY THAT THIS WORK IS NECESSARY TO THE CONDUCT OF THE OFFICIAL BUSINESS OF FEMA		
		_____ Requesting Official	_____ Authorized Approving Officer	
BELOW THIS LINE FOR PRINTING BRANCH USE ONLY				
23. PRINTING BR ESTIMATED COST		24. PRINTING BR APPROVAL TO PRINT AND DATE		
\$ BY:				
25. SOURCE OF PRINTING <input type="checkbox"/> PROGRAM <input type="checkbox"/> 719 <input type="checkbox"/> 615 <input type="checkbox"/> 644 <input type="checkbox"/> IN-HOUSE				

MSC Deliverable Package Guide

FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD STUDY			1. PRINT ORDER NO.	2. REQ. NO. 8-00003	
3. ORIGINATING OFFICE Mitigation Directorate/Hazard Identification & Risk Assessment Division			4. CONTROL NO. M 23786		
5. DATE OF REQUEST	6. DELIVERY DATE REQUESTED	7. PERSON TO CONTACT FOR ADDITIONAL INFORMATION: Claire Drury		8. TELEPHONE NO.	
9. TITLE AND/OR DESCRIPTION OF JOB FLOOD STUDY - Ferry County, WA					
10. QUANTITY	12. PAPER STOCK AND INK (Weight, kind, and color) TEXT: Offset, white 40lb., 50lb., 60lb. COVER: Vellum, peach tan, 50lb. INK: PMS 296		13. MATERIAL SUBMITTED <input checked="" type="checkbox"/> CAMERA COPY <input checked="" type="checkbox"/> NEGATIVES		
11. NUMBER OF ORIGINAL PAGES 40			14. AFTER PRINTING RETURN ORIGINALS TO: Claire Drury		
15. ADDITIONAL INFORMATION		16. PRINT COPY <input checked="" type="checkbox"/> ONE SIDE 17 X11 Foldins <input checked="" type="checkbox"/> HEAD TO HEAD TEXT		17. PAPER SIZE <input checked="" type="checkbox"/> 8- 1/2 X 11 (Covers & Text) <input checked="" type="checkbox"/> 17 X11 Foldins – folded to 8-3/8 x11	
		18. BINDING TWO STAPLES <input checked="" type="checkbox"/> LEFT SIDE			
		19. FUNDS AVAILABLE IN ALLOTMENT (Signature & Date Of Budget Official)			
20. TIME AND DATE RECEIVED		21. APPROPRIATION CODE 96-5-2511-2410-2-2200			
		22. REQUESTING OFFICIAL(S). I CERTIFY THAT THIS WORK IS NECESSARY TO THE CONDUCT OF THE OFFICIAL BUSINESS OF FEMA			
		_____ Claire Drury Requesting Official		_____ Claire Drury Authorized Approving Officer	
		BELOW THIS LINE FOR PRINTING BRANCH USE ONLY			
		23. PRINTING BR ESTIMATED COST \$ BY:		24. PRINTING BR APPROVAL TO PRINT AND DATE	
25. SOURCE OF PRINTING <input checked="" type="checkbox"/> PROGRAM <input type="checkbox"/> 719 <input checked="" type="checkbox"/> 615 <input type="checkbox"/> 644 <input type="checkbox"/> IN-HOUSE					

Appendix F. Print Requisition for Z-Folded Flood Maps Form and Sample

MSC Deliverable Package Guide

FEDERAL EMERGENCY MANAGEMENT AGENCY "Z-FOLDED" FLOOD MAPS			1. PRINT ORDER NO.	2. REQ. NO.
3. ORIGINATING OFFICE			4. CONTROL NO.	
5. DATE OF REQUEST	6. DELIVERY DATE REQUESTED	7. PERSON TO CONTACT FOR ADDITIONAL INFORMATION:		8. TELEPHONE NO.
9. TITLE AND/OR DESCRIPTION OF JOB "Z-FOLDED" FLOOD MAP -				
10. QUANTITY	12. PAPER STOCK AND INK (Weight, kind, and color) TEXT:		13. MATERIAL SUBMITTED <input type="checkbox"/> CAMERA COPY <input type="checkbox"/> NEGATIVES	
11. NUMBER OF ORIGINAL PAGES	INK: <input type="checkbox"/> BLACK <input type="checkbox"/> PMS - 296		14. AFTER PRINTING RETURN ORIGINALS TO:	
15. ADDITIONAL INFORMATION		16. PRINT COPY <input type="checkbox"/> ONE SIDE <input type="checkbox"/> HEAD TO HEAD	17. PAPER SIZE A- <input type="checkbox"/> 18-3/4 X 25-7/8 B- <input type="checkbox"/> 22-1/2 X 25-7/8 C- <input type="checkbox"/> 26-1/4 X 25-7/8 D- <input type="checkbox"/> 30 X 25-7/8 E- <input type="checkbox"/> 37-1/2 X 25-7/8 I- <input type="checkbox"/> 27-1/2 X 34-1/2 28-1/2 X 34-1/2 8-1/2 X 11	
		18. BINDING <input type="checkbox"/> FOLD TO – 3-3/4 X 8-1/2		
		19. FUNDS AVAILABLE IN ALLOTMENT (<i>Signature & Date Of Budget Official</i>)		
20. TIME AND DATE RECEIVED		21. APPROPRIATION CODE		
		22. REQUESTING OFFICIAL(S). I CERTIFY THAT THIS WORK IS NECESSARY TO THE CONDUCT OF THE OFFICIAL BUSINESS OF FEMA		
		_____ Requesting Official	_____ Authorized Approving Officer	
BELOW THIS LINE FOR PRINTING BRANCH USE ONLY				
23. PRINTING BR ESTIMATED COST		24. PRINTING BR APPROVAL TO PRINT AND DATE		
\$ BY:				
25. SOURCE OF PRINTING <input type="checkbox"/> PROGRAM <input type="checkbox"/> 644 <input type="checkbox"/> IN-HOUSE				

MSC Deliverable Package Guide

FEDERAL EMERGENCY MANAGEMENT AGENCY "Z-FOLDED" FLOOD MAPS			1. PRINT ORDER NO.	2. REQ. NO. 8-00003		
3. ORIGINATING OFFICE MITIGATION DIRECTORATE/HAZARD IDENTIFICATION & RISK ASSESSMENT DIVISION			4. CONTROL NO. M 56812			
5. DATE OF REQUEST	6. DELIVERY DATE REQUESTED	7. PERSON TO CONTACT FOR ADDITIONAL INFORMATION: Claire Drury	8. TELEPHONE NO.			
9. TITLE AND/OR DESCRIPTION OF JOB "Z-FOLDED" FLOOD MAP - LINN COUNTY, MO						
10. QUANTITY	12. PAPER STOCK AND INK (Weight, kind, and color) TEXT:		13. MATERIAL SUBMITTED <input type="checkbox"/> CAMERA COPY <input checked="" type="checkbox"/> NEGATIVES			
11. NUMBER OF ORIGINAL PAGES 25	INK: <input type="checkbox"/> BLACK <input checked="" type="checkbox"/> PMS 296		14. AFTER PRINTING RETURN ORIGINALS TO: Claire Drury			
15. ADDITIONAL INFORMATION 2 COLOR		16. PRINT COPY <input type="checkbox"/> ONE SIDE <input type="checkbox"/> HEAD TO HEAD	17. PAPER SIZE A- <input type="checkbox"/> 18-3/4 X 25-7/8 B- <input type="checkbox"/> 22-1/2 X 25-7/8 C- <input type="checkbox"/> 26-1/4 X 25-7/8 D- <input type="checkbox"/> 30 X 25-7/8 E- <input checked="" type="checkbox"/> 37-1/2 X 25-7/8 I- <input type="checkbox"/> 27-1/2 X 34-1/2 <input type="checkbox"/> 28-1/2 X 34-1/2 <input type="checkbox"/> 8-1/2 X 11			
		18. BINDING <input checked="" type="checkbox"/> FOLD TO 3-3/4 X 8-1/2	19. FUNDS AVAILABLE IN ALLOTMENT (<i>Signature & Date Of Budget Official</i>)			
20. TIME AND DATE RECEIVED		21. APPROPRIATION CODE -5-2511-2100-2410-2				
		22. REQUESTING OFFICIAL(S). I CERTIFY THAT THIS WORK IS NECESSARY TO THE CONDUCT OF THE OFFICIAL BUSINESS OF FEMA <table border="0" style="width:100%"> <tr> <td style="width:50%; text-align:center"> <u>Claire Drury</u> Requesting Official </td> <td style="width:50%; text-align:center"> <u>Claire Drury</u> Authorized Approving Officer </td> </tr> </table>			<u>Claire Drury</u> Requesting Official	<u>Claire Drury</u> Authorized Approving Officer
<u>Claire Drury</u> Requesting Official	<u>Claire Drury</u> Authorized Approving Officer					
BELOW THIS LINE FOR PRINTING BRANCH USE ONLY						
23. PRINTING BR ESTIMATED COST \$ BY:		24. PRINTING BR APPROVAL TO PRINT AND DATE				
25. SOURCE OF PRINTING <input checked="" type="checkbox"/> PROGRAM <input checked="" type="checkbox"/> 644 <input type="checkbox"/> IN-HOUSE						

Appendix G. Community Map Action Form and Sample

COMMUNITY MAP ACTION LIST

(WHERE NO ENTRY IS NECESSARY, USE N/A)

FINAL LIST _____

DATE _____

COLUMN CODE:

1. Two letter state designator

2. FEMA community six-digit I.D. number

3. Community name
County(s) name

4. Four digit number and suffix for each FIRM or FHBM panel printed

5. INLICOAST
I-Inland
C-Coastal
W-Wave Height

6. HAZARD
FL-Flood
MS-Mudslide
ER-Erosion
NF- Non-floodprone
MF-Minimally floodprone
DF-Undetermined but possible flood hazard

7.60.3 CODE
*Dual entry available
A -Special Hazard not defined, no elevation data (NO FIRM OR FHBM PRINTED)
B -Special Hazard Designated, no elevation data (FHBM OR MINIMAL FIRM)
C -FIRM, no floodway or Coastal High Hazard
D -FIRM, Regulatory floodway designated
E -FIRM, Coastal High Hazard

8. PROGRAM STATUS
1 -Emergency
2 -Regular
3 -Not participating-no map
4 -Not participating-with map
5 -Withdrew
6 -Suspended

9. FHBM STATUS
1 -Never mapped
2 -Original
3 -Revised
4 -Rescinded
5 -Superseded by FIRM

10. FIRM STATUS
1 -Never mapped
2 -Original
3 -Revised
4 -Rescinded
5 -All Zone C/X - no published FIRM
6 -All Zones A & C/X - no elevation determined
7 -All Zones A & C/X - original FIRM by letter
8 -All Zone D - no published FIRM
9 -All Zone D - with published FIRM
10 -All Zone C/X - with published FIRM

11. DATES OF ALL PREVIOUSLY PRINTED MAPS

12. REVISION CODES
1 -Part 65 - BFE Decrease
2 -Part 65 - BFE Increase
3 -Part 65 - SFHA Change
4 -Part 65- Zone Designation Change: revised FIRM
5 -Part 65 - Curvilinear
6 -Parts 64 & 65 - Incorporation
7 -Parts 64 & 65 – Disincorporation
8 -Parts 64 & 65 – Annexation
9 -Part 65 - SFHA Reduction
10 -Part 68 - SFHA Increase w/o Numbered Zones
11 -Part 65 - SFHA Increase with Numbered Zones
12 -Part 65 - Drafting Correction: Printing Errors
13 -Part 65 - Suffix Change ONLY
14 -Part 65 - Change to Uniform Zone Designation (7/7/74)
15 -Revisions Withdrawn
16 -Refunds Possible
17 -Letter of Map Revision (elevation change)
18 -Letter of Map Revision (no elevation change)
19 -Federal Register Omission
20 -ATTENTION a previous map(s) rescinded or withdrawn for this community, affecting the sequence of suffixes
21 -Miscellaneous

13. RESCISSION CODES

1 -FEMA determined the community would not be inundated by the 100-year flood (COMMUNITY APPEAL)
2 -FEMA determined the community would not be Inundated by the 100-year flood (no community appeal)
3 -Map contained printing errors or was Improperly distributed. A new map will be printed & distributed
4 -Community tacked land use authority over the SFHA
5 -Map does not accurately show the SFHAs. A new map will be printed and distributed
6 -The map had Inaccurate flood elevations
7 -Map rescinded to evaluate mudslide hazards
8 -T & E or T & E map rescinded
9 -WITHDRAWN. A revision within a reasonable period was not possible. A new map will be
10 -Miscellaneous

14. LIST OF NUMBERED FLOODWAY PANELS PRINTED

15. ADDRESS OF COMMUNITY'S MAP REPOSITORY

COMMUNITY MAP ACTION FORM

REVIEW CONTRACTOR: Michael Baker Corp

Effective Date: January 19, 2006

List Number:

State	FIA Community Number	Community Name (County Name)	Printed Panel(s) & Suffix	Inland/Coastal	Hazard	60.3 Code	Program Status	Map Status		FHB	FIRM	Printed Floodway Panels	Location of Map Repository	Comments
								FHB	FIRM					
MO	290813	Linn County (Unincorporated Areas)	INDOA 0025C	I	FL	D	2	1	3			12/15/83	Linn County Courthouse 108 North High Street Linneus, MO 64653	
			0045C, 0050C, 0075C, 0100C, 0125C, 0150C, 0160C, 0170C, 0175C, 0200C, 0225C, 0250C, 0270C, 0275C, 0285C, 0295C, 0300C, 0315C, 0320C, 0325C, 0350C, 0375C, 0400C, 0425C, 0450C, 0455C, 0460C, 0500C											
MO	290214	City of Brookfield (Linn County)	INDOA 0316C 0320C	I	FL	D	2	5	3	02/01/74	07/16/90		City Hall 116 West Brooks Street Brookfield, MO 64628	
MO	290619	City of Browning (Linn County)	INDOA 0045C	I	FL	B	2	5	3	02/21/75	09/18/85		City Hall 313 West Main Street Browning, MO 64630	
MO	290913	City of Bucklin (Linn County)	INDOA 0350C	I	NF	A	2	1	2				City of Bucklin 22 North Livingston Street Bucklin, MO	
MO	290557	City of Laclede (Linn County)	INDOA 0295C	I	FL	B	2	4	2	06/25/76			City Hall 607 Pershing Drive Laclede, MO 64651	
MO	290563	City of Linneus (Linn County)	INDOA 0170C 0175C, 0285C, 0300C	I	FL	B	2	4	3	07/11/75			City of Linneus 207 North High Street Linneus, MO 64653	

COMMUNITY MAP ACTION LIST

(WHERE NO ENTRY IS NECESSARY, USE N/A)

FINAL LIST _____

DATE _____

COLUMN CODE:

1. Two letter state designator

2. FEMA community six-digit I.D. number

3. Community name
County(s) name

4. Four digit number and suffix for each FIRM or FHBM panel printed

5. INLICOAST
I-Inland
C-Coastal
W-Wave Height

6. HAZARD
FL-Flood
MS-Mudslide
ER-Erosion
NF- Non-floodprone
MF-Minimally floodprone
DF-Undetermined but possible flood hazard

7.60.3 CODE
*Dual entry available
A -Special Hazard not defined, no elevation data (NO FIRM OR FHBM PRINTED)
B -Special Hazard Designated, no elevation data (FHBM OR MINIMAL FIRM)
C -FIRM, no floodway or Coastal High Hazard
D -FIRM, Regulatory floodway designated
E -FIRM, Coastal High Hazard

8. PROGRAM STATUS
1 -Emergency
2 -Regular
3 -Not participating-no map
4 -Not participating-with map
5 -Withdrew
6 -Suspended

9. FHBM STATUS
1 -Never mapped
2 -Original
3 -Revised
4 -Rescinded
5 -Superseded by FIRM

10. FIRM STATUS
1 -Never mapped
2 -Original
3 -Revised
4 -Rescinded
5 -All Zone C/X - no published FIRM
6 -All Zones A & C/X - no elevation determined
7 -All Zones A & C/X - original FIRM by letter
8 -All Zone D - no published FIRM
9 -All Zone D - with published FIRM
10 -All Zone C/X - with published FIRM

11. DATES OF ALL PREVIOUSLY PRINTED MAPS

12. REVISION CODES
1 -Part 65 - BFE Decrease
2 -Part 65 - BFE Increase
3 -Part 65 - SFHA Change
4 -Part 65- Zone Designation Change: revised FIRM
5 -Part 65 - Curvilinear
6 -Parts 64 & 65 - Incorporation
7 -Parts 64 & 65 – Disincorporation
8 -Parts 64 & 65 – Annexation
9 -Part 65 - SFHA Reduction
10 -Part 68 - SFHA Increase w/o Numbered Zones
11 -Part 65 - SFHA Increase with Numbered Zones
12 -Part 65 - Drafting Correction: Printing Errors
13 -Part 65 - Suffix Change ONLY
14 -Part 65 - Change to Uniform Zone Designation (7/7/74)
15 -Revisions Withdrawn
16 -Refunds Possible
17 -Letter of Map Revision (elevation change)
18 -Letter of Map Revision (no elevation change)
19 -Federal Register Omission
20 -ATTENTION a previous map(s) rescinded or withdrawn for this community, affecting the sequence of suffixes
21 -Miscellaneous

13. RESCISSION CODES

1 -FEMA determined the community would not be inundated by the 100-year flood (COMMUNITY APPEAL)
2 -FEMA determined the community would not be Inundated by the 100-year flood (no community appeal)
3 -Map contained printing errors or was Improperly distributed. A new map will be printed & distributed
4 -Community tacked land use authority over the SFHA
5 -Map does not accurately show the SFHAs. A new map will be printed and distributed
6 -The map had Inaccurate flood elevations
7 -Map rescinded to evaluate mudslide hazards
8 -T & E or T & E map rescinded
9 -WITHDRAWN. A revision within a reasonable period was not possible. A new map will be
10 -Miscellaneous

14. LIST OF NUMBERED FLOODWAY PANELS PRINTED

15. ADDRESS OF COMMUNITY'S MAP REPOSITORY

Appendix H. DFIRM Deliverables

DFIRM Deliverables (Revised September, 2006)

The purpose of this document is to ensure consistency of the DFIRM deliverables. These deliverables include the products delivered by the National Service Provider (NSP) to the Map Service Center (MSC) and the products that will be distributed by the MSC.

I. DFIRM Products to be delivered to the MSC

- A. Raster Images Geo-referenced
 - a. FIRMs and Floodways
 - i. Black and white maps – TIFF, Group 4
 - ii. Two color maps – PNG 400, dpi–24 bit–D size
 - b. FIS Study Text - PDF as a single file – bookmarked at the major headings of each Table of Contents (minimum) and at the start of each flooding source’s profile (subject to cost and Project Officer’s approval).
- B. DFIRM Vector Databases - GIS data files
 - a. MapInfo files
 - b. ESRI Shapefiles
 - c. ESRI Export files
 - d. Metadata
- C. Digital Orthophotos – in the format used to make the DFIRM (if applicable). This will be the format that the orthophotos were provided to FEMA unless the appearance of the portion of the orthophoto shown on the DFIRM was modified by reprojection, resampling, etc.
- D. Geo-index Update – refer to Geo-index documentation
- E. Negatives
- F. Print Requisition Form
- G. Print Processing Worksheet
- H. Community Map Action List (CMAL) (to be sent with each GPO package and compiled and sent electronically at the completion of an entire effective date, template attached)
- I. Community Research Log (to be sent two months prior to the effective date, template attached)

II. DFIRM Products to be distributed by the MSC

- A. DFIRM Products
 - a. DFIRM data – (GIS data including the vector base map and metadata) - distributed on CD and as a single zip file for download from the MSC website
 - b. Digital orthophotos and their associated world files (if geo-referenced) - distributed on CD
- B. Public Map Kit (FIRM raster images)
 - a. Available on CD and for download from the MSC website
 - b. \$3.00 per map image on CD and \$2.50 per image downloaded
- C. Study Kit (FIS document)
 - a. Available on CD and for download from the MSC website
 - b. \$6.00 per volume on CD and \$5.00 per volume downloaded
 - c. \$3.00 per floodway image on CD and \$2.50 per image downloaded

III. DFIRM naming convention of products delivered to the MSC

A naming convention for the DFIRM product has been established to facilitate the automation of data storage, retrieval and CD-ROM production that is based on established FEMA IDs.

Note: Case must be preserved in filenames. Use the case shown in the examples below, e.g. uppercase for panels, studies, and DFIRM IDs, mixed case for some directory names, lower case for “metadata”, “readme”, and file extensions.

DFIRM ID Naming

INITIAL DFIRM Submission

CD or CDs of initial DFIRM information identified as:

<CID or County FIPs>_DFIRM

Examples:

120234_DFIRM – a community DFIRM kit

12345C_DFIRM – a county DFIRM kit

REVISED DFIRM Submission

When a DFIRM is revised an alpha is to be added to the DFIRM name as:

<CID or County FIPs>_<Alpha>_DFIRM

The first revision will contain the letter “A”. The alpha will be advanced one letter for each subsequent revision. If a DFIRM is revised more than 26 times, passing the 26 alpha characters, subsequent revisions will contain double alphas (e.g., AA, AB, and so forth).

Examples:

120234_A_DFIRM – a community DFIRM kit

120234_AB_DFIRM – a community DFIRM kit

12345C_A_DFIRM – a county DFIRM kit
12345C_AB_DFIRM – a county DFIRM kit

A new county-wide study for Montgomery County, Maryland, would be stored as:
24031C_DFIRM

The revised county-wide study for Montgomery County, Maryland, would be stored as:
24031C_A_DFIRM

IV. Name and directory structure of CDs & DVDs delivered to the MSC

- Disc Volume Name

Including a volume name of the disc is optional. The volume name of the disc, if present, will be the DFIRM_ID as described above/

- *Directory Structure*

The directory structure of the disc is defined to group specific item types into separate directories for processing. Each item type will have a specifically named and located directory on the disc. The overall directory structure is as follows:

```
Volume_Name (optional)
\
|      \<DFIRM_ID>
|      \DFIRM_DB
|          \ArcExport
|          \ArcShape
|          \MapInfo
|      \Document
|      \Enhanced_DB
|          \ArcExport
|          \ArcShape
|          \MapInfo
|      \FIS
|      \Ortho_photos
|      \RFIRM
```

- \ - The root directory name that appears when the CD is loaded will be the name of the DFIRM ID. This DFIRM_ID will also appear on the outside of the case.
- \DFIRM_DB\ - Directory contains subdirectories for GIS file sets.
 - \MapInfo\ - Directory contains all standard DFIRM database files in MapInfo MIF format.
 - \ArcShape\ - Directory contains all standard DFIRM database files in ESRI Shapefile format.
 - \ArcExport\ - Directory contains all standard DFIRM database files in ESRI Export format (if available).

- \Document\ - Directory contains metadata and a readme file.
The DFIRM database standard states that the file will be named as:

<ST_FIPS><PCOMM>_<EFF_DATE>_metadata.txt

-or-

<ST_FIPS><PCOMM>_<REV>_<EFF_DATE>_metadata.txt

Where:

- A. ST_FIPS is the two-digit state FIPS code
- B. PCOMM is the either the three digit county FIPS code with a trailing C or the four digit community number
- C. REV is the revision of the DFRIM if it a revised copy
- D. EFF_DATE is the effective date of the study in *YYYYMMDD* format

Examples:

24031C_20031217 _metadata.txt – an initial countywide DFIRM

241234_20031217 _metadata.txt – an initial community DFIRM

24031C_A_20031217 _metadata.txt – a revised countywide DFIRM

241234__AB_20031217 _metadata.txt – a revised community DFIRM

- \Ortho_photos\ - Directory contains aerial photography and associated world files (if available).
- \RFIRM\ - Directory contains TIFF or PNG raster images of FIRM panels and their associated world files (if available), following the naming conventions:

Examples:

24031C0001A.tif 24031C0001A.tfw

24031C0001A.png 24031C0001A.pgw

- \FIS\ - Directory contains PDF of the FIS report, following the naming conventions for an FIS study text:

Example:

24031CV000.pdf

- \Enhanced_DB\ - Directory contains subdirectories for GIS filesets.
 - \MapInfo\ - Directory contains all enhanced DFIRM database files in MapInfo MIF format.
 - \ArcShape\ - Directory contains all enhanced DFIRM database files in ESRI Shapefile format.
 - \ArcExport\ - Directory contains all enhanced DFIRM database files in ESRI Export format (if available).

V. DFIRM naming convention of products to be distributed by the MSC

Products distributed by the MSC will utilize the following naming convention to be easily understood by customers:

A. DFIRM database

State abbreviation\Community or County Name\DFIRM_DB

Examples:

\MD\Montgomery_Co\DFIRM_DB

- \DFIRM_DB\
 - \MapInfo\ - Directory contains all standard DFIRM database files in MapInfo MIF format.
 - \ArcShape\ - Directory contains all standard DFIRM database files in ESRI Shapefile format.
 - \ArcExport\ - Directory contains all standard DFIRM database files in ESRI Export format (if available).
- \Enhanced_DB\
 - \MapInfo\ - Directory contains all enhanced DFIRM database files in MapInfo MIF format.
 - \ArcShape\ - Directory contains all enhanced DFIRM database files in ESRI Shapefile format.
 - \ArcExport\ - Directory contains all enhanced DFIRM database files in ESRI Export format (if available).
- \Document\ - Directory contains metadata and a readme file.
The DFIRM database standard states that the file will be named as:

<ST_FIPS><PCOMM>_<EFF_DATE>_metadata.txt

Where:

- ST_FIPS is the two-digit state FIPS code
- PCOMM is either the three digit county FIPS code with a trailing C or the four digit community number
- EFF_DATE is the effective date of the study in YYYYMMDD format

Examples:

24031C_20031217_metadata.txt – a countywide DFIRM

241234_20031217_metadata.txt – a community DFIRM

- \Ortho_photos\ - Directory contains aerial photography and associated world files (if available).

B. Raster Maps

TIFF or PNG raster images of FIRM panels

Examples:

24031C0001A.tif 24031C0001A.tfw
24031C0001A.png 24031C0001A.pgw

World files (when available, will automatically be delivered with the FIRM panels)

C. FIS

PDF of the FIS report

Example:

24031CV000.pdf

Appendix I. MSC Geo-Index Documentation

Map Service Center (MSC) GIS Systems Support Documentation Last Updated: March 28, 2007 Table of Contents

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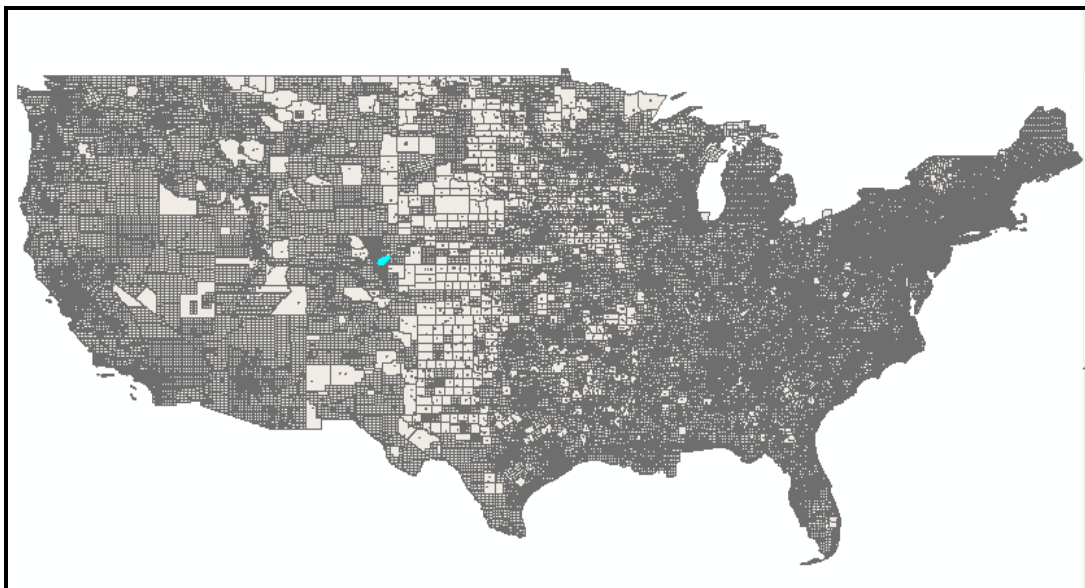
1.0 Introduction

The Geo-index is a spatial index of the map products for selection through the Map and Product Search component of the MSC e-commerce website (<http://msc.fema.gov>). It displays the corporate limits of all political entities and the individual Flood Insurance Rate Map (FIRM) panels in relation to these boundaries. This index allows homeowners to easily find which FIRM they need in order to look up their relevant flood insurance information.

Mapping contractors should submit a Geo-index with the MSC Deliverables (*nee* GPO) Package for the specific Digital Flood Insurance Rate Map (DFIRM). This entire package should be submitted to the MSC four months prior to the effective date. The Geo-index is a layer that reflects a combination of the FIRM panels and political boundaries. This should be submitted in the form of an ESRI shapefile, comprised of all FIRM panels (both printed and non-printed) clipped to the DFIRM's political boundary. Ideally the panel index (S_FIRM_PAN) supplied with the DFIRM database would be used on the Map and Product Search to eliminate duplication of FIRM panels. The major obstacle is that the DFIRM panel indexes are not clipped at the community boundaries. This clipping is essential as it represents the true coverage area of the map and it prevents the customer from ordering unwanted products in spatial searches. Once the index is created for a particular DFIRM, it is intended to be used to update the National Geo-index Layer of all DFIRM data.

Note that this spatial file does not get included on the CD/DVD, which contains the GIS data sent to the MSC for final delivery. The file should be submitted to the MSC separately via File Transfer Protocol (FTP) at the same time as the MSC Deliverable Package. The MSC then inserts the Geo-index into the national layer.

Exhibit A: National Geo-index Layer



2.0 Overview

The National Geo-index Layer depicts the spatial reference for FIRMs and Flood Hazard Boundary Maps (FHBMs). These products are in the Product Catalog – FEMA Issued Flood Map category on the MSC website. The Geo-index of the public map layer is composed of a tessellation of continuous polygons that cover the entire land surface of the United States and its territories. It includes all the communities participating in the National Flood Insurance Program (NFIP) program and having public maps. The Geo-index also contains data about non-printed panels (which are not distributed by the MSC) and unmapped areas.

3.0 Definitions

The following are definitions of terms used in the production of a Geo-index.

3.1 Panel Polygons

The map panel polygons encompass the actual land surface that is mapped on a panel within the map frame boundary. The panel neat lines, panel title block, and note areas are not represented within the polygons. Maps containing map frames that are completely filled in with land surface are represented by a “rectangular” polygon. There are many maps where the map frame contains only a small area of mapped land surface. These maps are typically represented by an irregular polygon.

3.2 Holes

Some of the polygons may contain a “hole.” A hole represents a gap in the mapped surface and is often depicted on the map panel as an “Area Not Included” (ANI). The ANIs may designate other communities that are not part of the map or areas that are unmapped. Unmapped areas can be represented as polygons, but other ANIs should be left blank with no polygons.

Image 1: A Hole (Marquette County, WI)

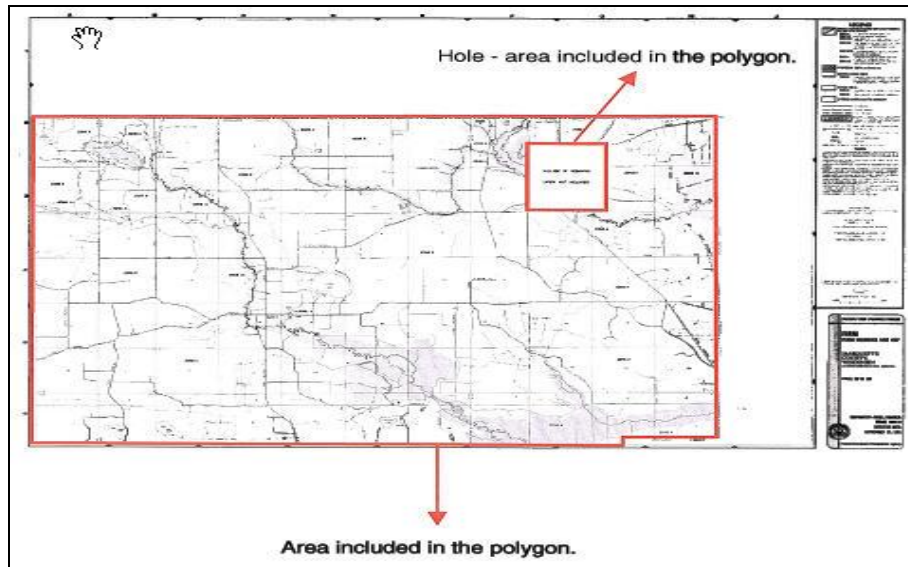
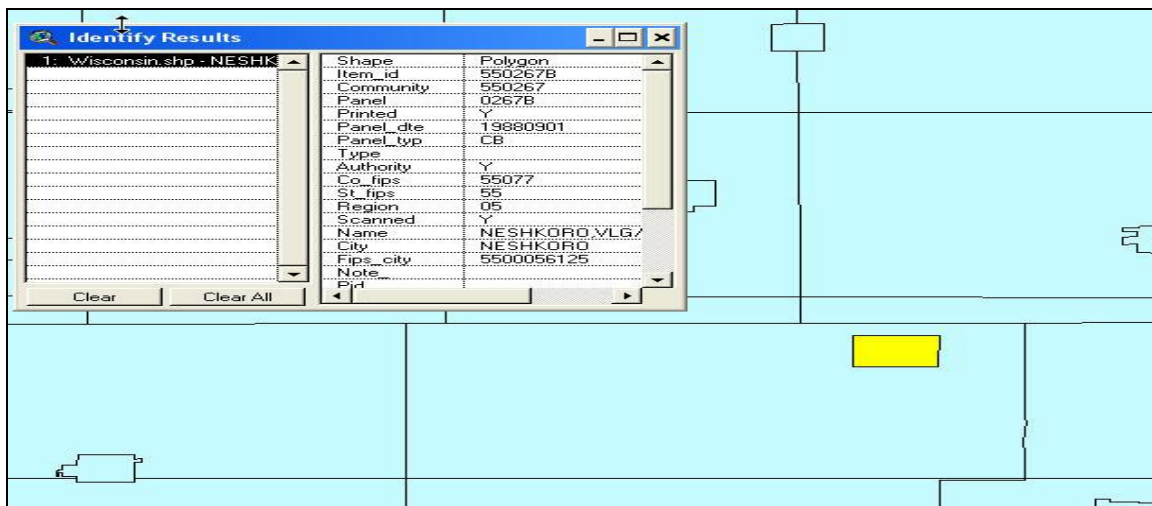


Image 2: Marquette County, WI in Geo-index Database

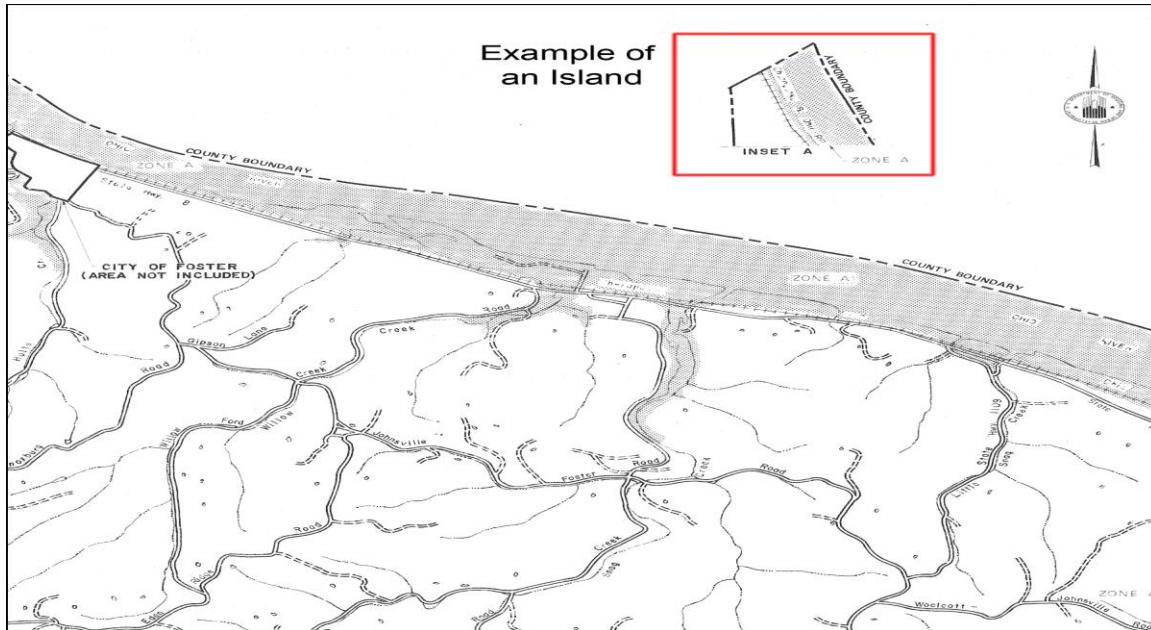


3.3 Islands

A panel may also have “islands” or discontinuous areas that are mapped on a single panel. Situations like these often occur on the edges of a community and are usually created in an effort to reduce the number of printed maps. In such cases, the mapped areas are designated with the same panel/map number as the main map polygon, but are tied to ONE and ONLY ONE record in the database. Both shapefile and geo-database formats permit this type of data structure. The reason for a single database record (even though the map may represent multiple polygons) is to provide only one map product result if a customer performs an area search in the map search

utility. Otherwise, the customer would be ordering the same map panel several times. See Image 3 for an example of an island.

Image 3: An Island (highlighted in red)



3.4 Non-Printed Panels

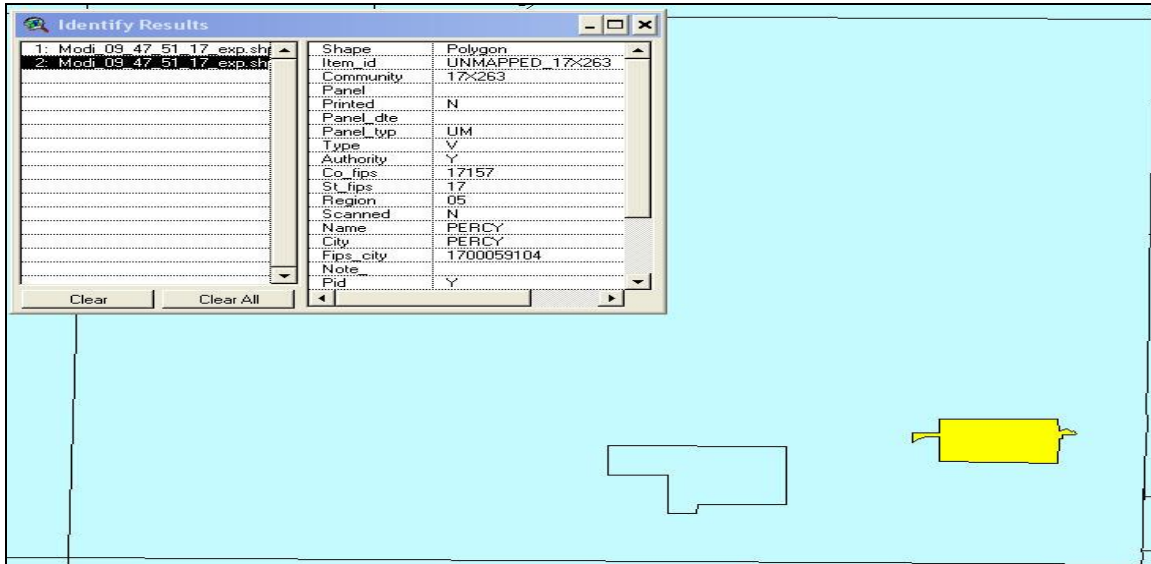
The Geo-index contains polygons that represent non-printed panels. A non-printed panel results when a community's land area has been "panelized", but a map is not printed for the area for one reason or another. There are a number of reasons for a panel to be "non-printed", but typically the reason is that the land surface contained within the panel is all one flood hazard zone area or the panel represents land area outside a study area. Thus, there was no need to print the panel. These circumstances are normally specified on the map index for the community. Each non-printed panel is depicted in the Geo-index and contains the map panel's number along with other descriptive attributes. A non-printed panel is not a product that is distributed by the MSC. However, it is represented in the Geo-index so that feedback can be provided to the customer should they select the area in a spatial search.

3.5 Unmapped Areas

It is the goal of MSC to provide feedback to customers whenever a spatial query is made against the public map layer; this includes areas that are not mapped. Typically, unmapped areas can include cities, towns, townships, villages, and unincorporated county areas. An unmapped area may also be a National park, military base, water body, or other unmapped area having no authority to participate in the NFIP program. If an area is unmapped, a polygon exists that contains the attribute of "UM" for "unmapped" in the *Panel_typ* field. The UM attribute

prevents the item from being added to the shopping cart while still providing feedback to customers. When appropriate, unmapped polygons are identified with the FEMA Community Identifier (CID) and community name. At one time, the Community Information System (CIS) supplied preliminary CIDs for the unmapped areas in the Geo-index appearing to have land use authority. These CIDs are not currently in the NFIP program and FEMA is in the process of eliminating these. See Image 4 for an example of an unmapped area.

Image 4: An Unmapped Non-Printed Panel



4.0 Data Description

Most of the fields used for the Geo-index follow the Q3 database standard which is available on the MSC website. However, modifications were made so that the data would be consistent with the databases used by the MSC and with the technology used to select the polygons. The Geo-index preceded the DFIRM data standards that include a data description for map panel boundaries. The MSC will continue to evaluate and modify the required Geo-index fields. These updates will be available in future releases of this document.

Ideally the panel index (S_FIRM_PAN) supplied with the DFIRM database would be used on the Map Search to eliminate duplication of datasets. The reason this is not used is that the DFIRM panel indexes are not clipped at the community boundaries. This clipping is essential as it represents the true coverage area of the map and it prevents the customer from ordering unwanted products in spatial searches.

It should be noted that the Geo-index is not static. From time to time, there may be the need to add additional fields as new requirements are realized. Table 1 depicts the database structure for the shapefiles which are provided to the MSC.

Table 1: Geo-index Field Names

Geo-index Field Names and Descriptions			
Field Name	Format	Length	Description
ITEM_ID	Character	15	<p>Product name per MSC Product Naming Conventions (Ex. 10003C0035G)</p> <ul style="list-style-type: none"> For non-printed panels the Item_ID will be the panel number designated in the map panel index for the community. For unmapped areas the Item_ID will be the concatenation of “UNMAPPED_<CID#>”. Ex. UNMAPPED_230706. <p>For unmapped areas with no authority the Item_ID will be the concatenation of “UNMAPPED+<State Fips>+<Type>+<Increasing number by type>” (Ex. UNAMPPEd_24W01). This is a polygon representing water for the State of Maryland.</p>
COMMUNITY	Character	6	<p>FEMA Community ID (Ex. 10003C)</p> <p>For Community-based mapping the community based CID is used.</p> <p>For county-wide mapping the county-wide CID, a county FIPS + “C” character is used.</p>
PANEL	Character	5	<p>4 digit panel + suffix (Ex. 0035G)</p> <p><u>Note:</u> For unmapped areas, this field will be blank.</p>
PANEL_DTE	Character YYYYMMDD	8	<p>Effective date of the map. (Ex. 20000610)</p> <p><u>Note:</u> For unmapped areas, this field will be blank</p>
PANEL_TYP	Character	2	<p>Classification of panel polygon being unmapped, community-based or county-wide. For clarity of definition, county-wide is determined to be only those maps that have a county-wide CID as part of the panel number. These panels utilize the FIPS code followed by a “C”.</p>
PRINTED	Character (Logical - Y or N)	1	<p>Whether the panel is printed or not. (Ex. Y)</p> <p><u>Note:</u> Non-printed panels and unmapped areas will always have this field designated as “N”.</p>
REGION	Character	2	<p>Two digit FEMA Region number (Ex. 03)</p>
CO_FIPS	Character	5	<p>Full county FIPS code (Ex. 10003)</p> <p><u>Note:</u> This field represents the county in which the panel falls. In some situations, there are cross-county communities that fall within more than one county. In such cases, the Co_FIPS contains the county ID occupied by the majority of the community.</p>
ST_FIPS	Character	2	<p>State FIPS code. (Ex. 10)</p>
SCANNED	Character (Logical - Y or N)	1	<p>A field indicating if a scanned or digital image of the map is available. (Ex. “Y”)</p>

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NAME	Character	100	The MSC Name of the community as pulled from the MSC Community table. (Ex. BETHANY,TWN/BROOKE CO)
AUTHORITY	Character (Logical – Y or N)	1	A field added as part of the unmapped community effort to designate whether an unmapped area has land use authority or not.

Geo-index Field Names and Descriptions

Field Name	Format	Length	Description
TYPE	Character	2	A field added as part of the unmapped community effort to designate the type of unmapped community. The designations are: The codes are as follows: “Y” Types: C – City T – Town V – Village TS – Township BO – Borough PL – Plantation R – Indian Reservation IS - Islands CO – County (Unincorporated County Area) CY – County (Unincorporated areas of a mapped County area – status unclear) DI – Improvement District A – Authority “N” Types: P – Park W – Water I – Institutions M – Military R – Reservation (without land use authority)
CITY	Character	100	The Census designated name as pulled from Census data. (Ex. BETHANY)
FIPS_CITY	Character	10	The Census designated FIPS codes for places. (Ex. 4160705350) . The field will be left blank for entities having multiple FIPs codes such as counties, parishes, etc.
NOTE	Character	100	A field added as part of the unmapped community effort to aid in anomaly resolution.
PID	Character (Logical - Y or N)	1	A field added as part of the unmapped community effort. A “Y” value for this field identifies an unmapped community that previously did not have a CID. A preliminary CID was generated by CIS so that standardized and unique Ids could be assigned to these areas.

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EFF_DAT	Double YYYYMMDD	Precision: 16 Scale: 0	Effective date of the map. (Ex. 20000610)
MCC	Character	6	Primary Mapping Partner who performed the Study. (Ex. BAKER, D&D, PBS&J, etc)

5.0 Creating the Geo-index from DFIRM Data

There are a number of processes that can be used to create the Geo-index. Such processes are available with ESRI's Toolbox, ArcMap (Geoprocessing Wizard), or even via customized scripts. However, what must be utilized is the combination of the final S_FIRM_PAN and S_POL_AR features.

The following is a step-by-step process for creating a Geo-index:

5.1 Countywide

When creating the Geo-index for a countywide DFIRM, typically the communities within that county are incorporated. When this is the case, the general process is to “clip” (geo-processing tool) the layers of the S_FIRM_PAN layer to the S_POL_AR layer, then add the required Geo-index field names and populate accordingly. Please note that it may be helpful to initially retain several of the input layer's attributes (i.e., S_FIRM_PAN). These fields can be “calculated” (another geo-processing tool) or concatenated into some of the new Geo-index fields, which may save time. Images 5 through 7 are example layers and features from a countywide Geo-index.

Image 5: Input Layer - S_FIRM_PAN

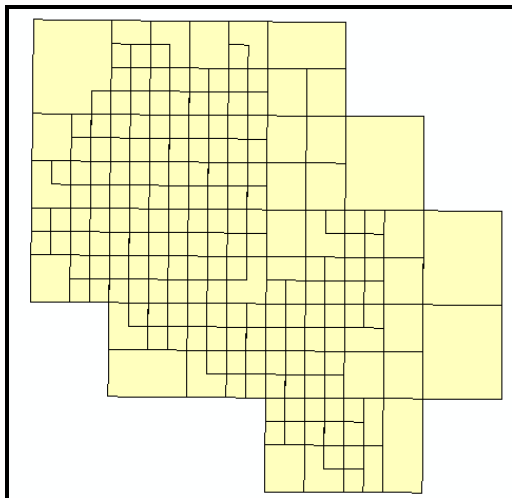


Image 6: Clipped Layer - S_POL_AR

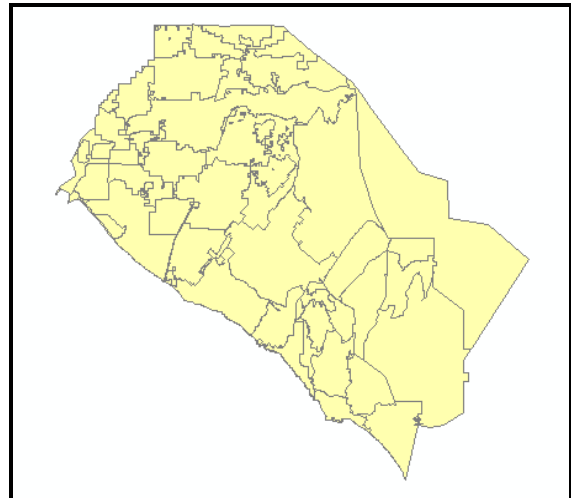
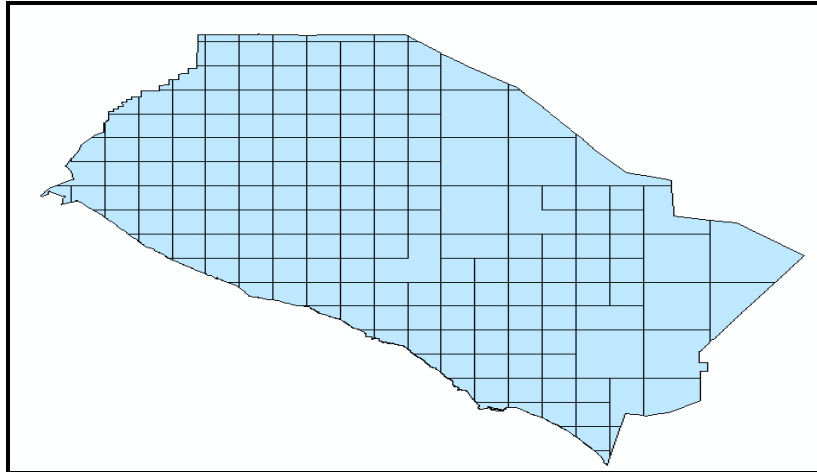


Image 7: Output Feature - Countywide Geo-index



5.2 Community Based

The same general process applies when a DFIRM is Community-Based. If the S_POL_AR layer is only one polygon, the clip method is most appropriate. *However, when a DFIRM is Community-Based it is important to retain both sets of attributes within the datasets.* This will make it easier when populating the Geo-index fields. When multiple political polygons exist (often a result of having some unincorporated county ANI areas mixed within the community) the “intersect” method is typically the best process, for this splits all political polygons within the FIRM panel neat line. Images 8 through 10 are example layers and features from a countywide Geo-index.

Image 8: Input Layer - S_FIRM_PAN Image 9: Intersect Layer - S_POL_AR

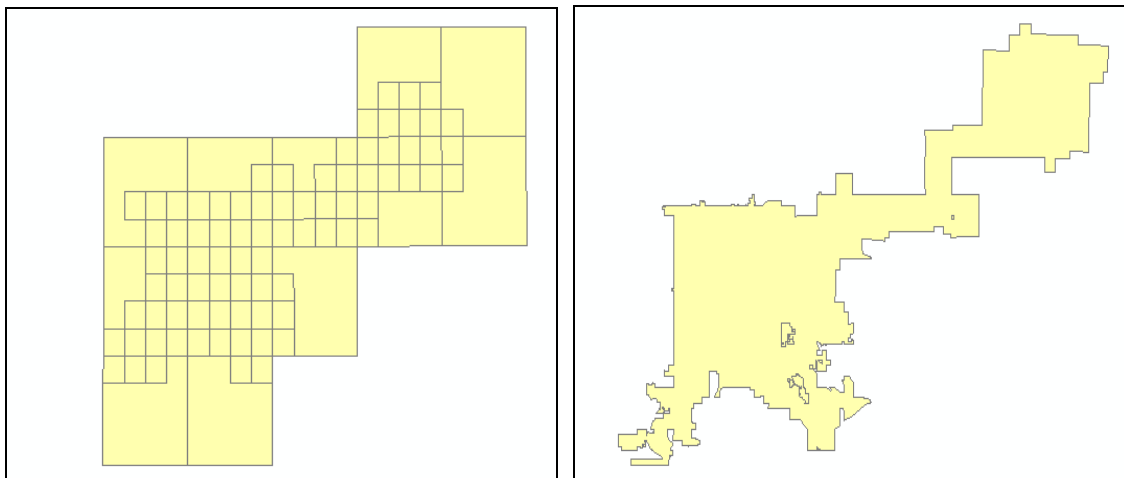
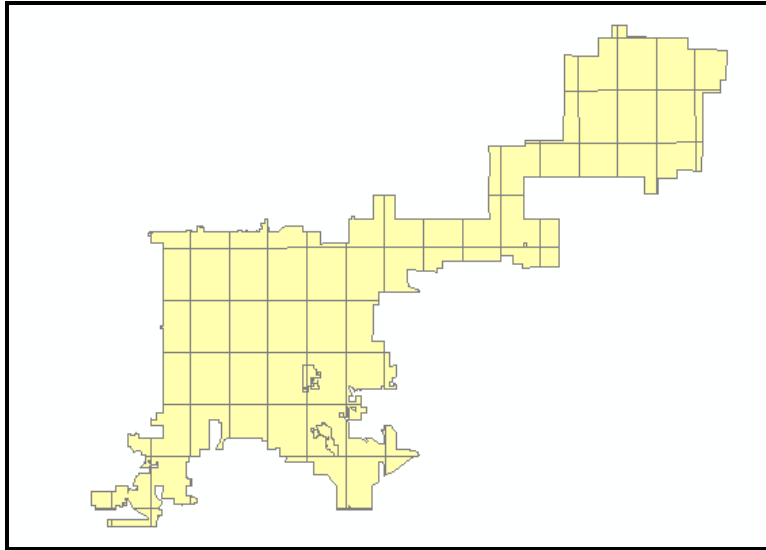


Image 10: Output Feature - Community Geo-index



After the initial creation of the Geo-index dataset, all ANI = T (true) polygons should be analyzed and determine whether they should be categorized as a “hole” or “Unmapped Area”. If categorized as a hole, those features are to be deleted. All “Unmapped Areas” are to be attributed. See Images 11 and 12 for examples of ANI = T communities.

Note: the ANI field and its attributes are retained if the intersection of S_FIRM_PAN and S_POL_AR was performed. However, be sure to verify that these selected features are in fact not part of the community’s DFIRM. “Unmapped Areas” and “holes” only apply towards communities that do not appear within the DFIRM’s L_COMM_INFO table.

Image 11: Select all Communities where ANI = T

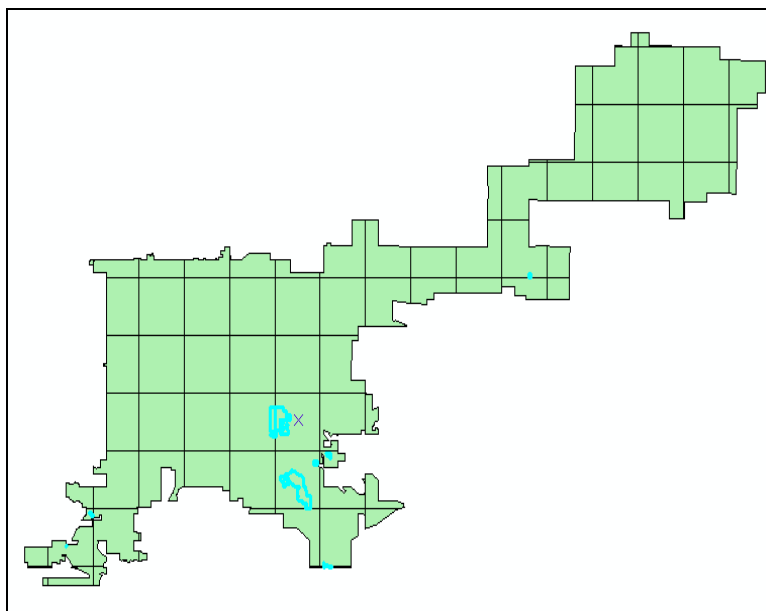
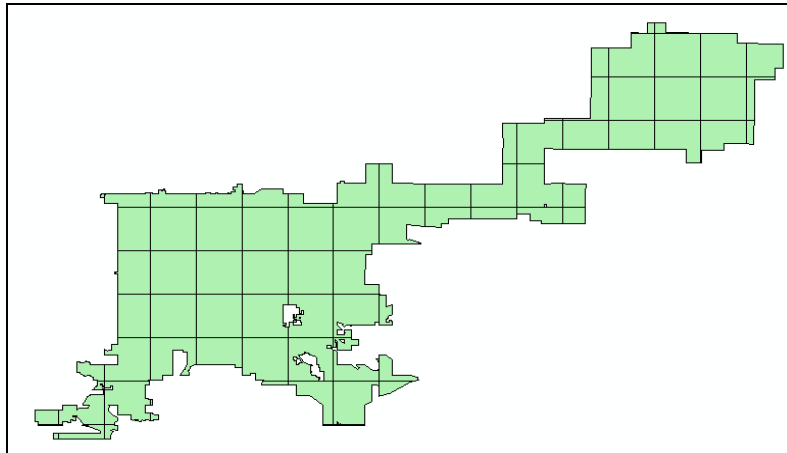


Image 12: Delete all Selected ANI = T Features



The MSC will determine whether a community is a “hole” or an “unmapped area” for users who do not have access to the National Geo-index layer and who would not have the ability to correctly attribute the information pertaining to that deleted area (or Unmapped Area - which is not a part of their DFIRM). This is to ensure that no data are overwritten since many times adjacent DFIRMs are being created at the same time, but by different mapping partners. If one mapping partner marks its ANI = T polygon as an “Unmapped Area” or even if they include archaic information in order to fill in that polygon and they submit their Geo-index, it could overwrite the most up-to-date DFIRM for that community, which could have been submitted just a few days prior.

After attributing all records within the Geo-index, the user has to verify if multiple polygons exist having the same FIRM panel attribution. If multiple polygons do exist containing the same panel/map number, the user has to merge the features together, ending up with only one record. Please note that this merge process is to only occur when polygons are of the same political jurisdiction.

For example, in Table 1, after the intersection process, it is noted that there were five polygons having a panel number of 0189 for the Community-Based DFIRM, City and County of Denver, CO.

Table 2: Table of Intersection Results with Same Panel Number

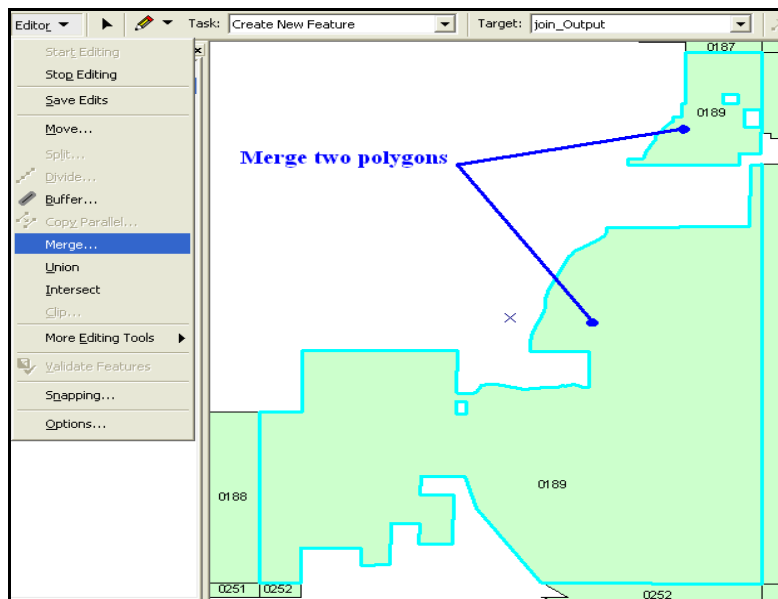
PANEL	POL_NAME1	CO_FIPS	COMM_NO	CID	ANI_TF	COM_NFO_ID
0189	CITY AND COUNTY OF DENVER	031	0046	080046	F	080046
0189	CITY AND COUNTY OF DENVER	031	0046	080046	F	080046
0189	JEFFERSON COUNTY	059	0087	080087	T	
0189	JEFFERSON COUNTY	059	0087	080087	T	
0189	JEFFERSON COUNTY	059	0087	080087	T	

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Three features were removed because they were ANI = T polygons (Jefferson County). Yet two polygons remained for the current Denver DFIRM (as noted via a populated COM_NFO_ID). Since only one polygon per panel is required, the user needs to:

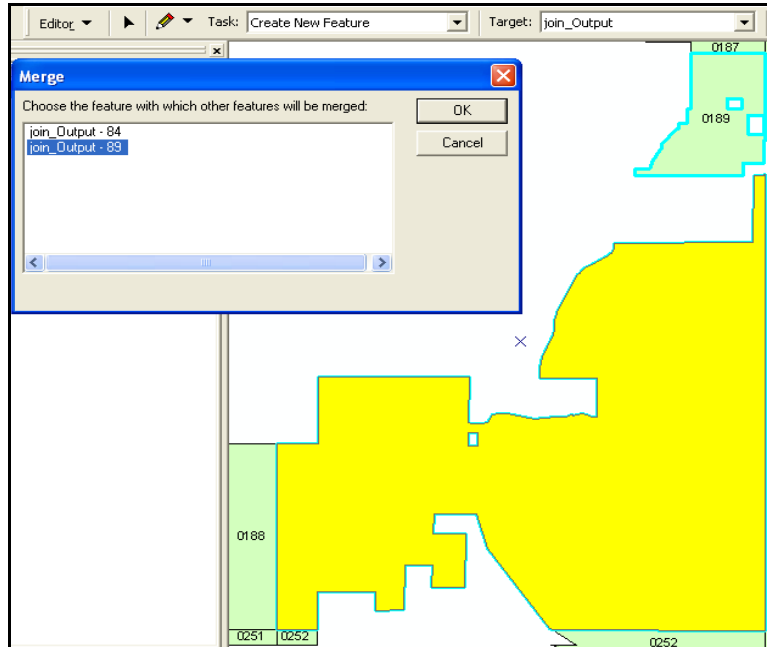
- Start an editing session
- Select the two polygons having the same panel number (see Image 13)
- Click on “Merge” via the Editor dropdown menu

Image 13: Two Panel with Same ID



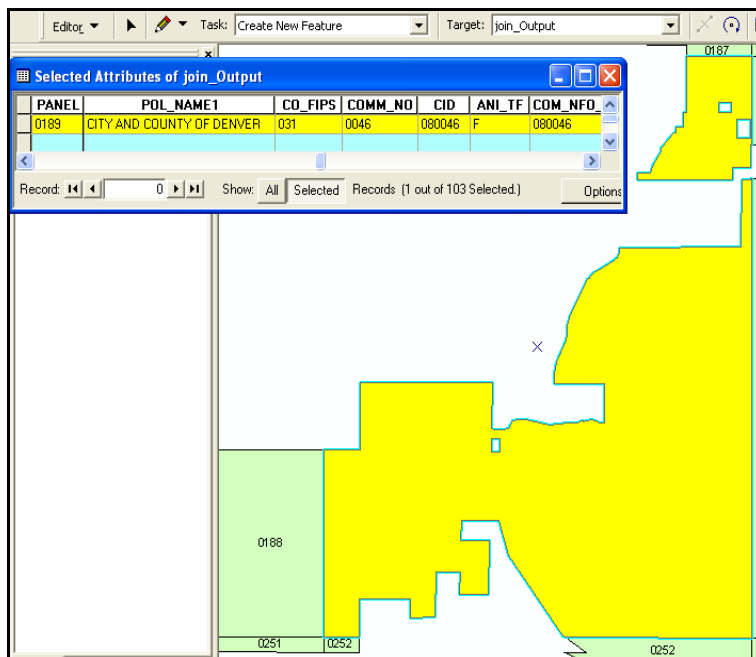
When given the option to choose which feature to base the merge on, typically the best approach is to choose the largest polygon (See Image 14).

Image 14: Merging of the Two Panels



After the merge, only one record remains (see Image 15). This process should be performed on all polygons having the same panel number.

Image 15: Result of the Merge



Additionally, in order to eliminate a duplication of efforts, a user may want to take care of all of the “Islands” before attributing the records.

MSC Deliverable Package Guide

In a case where the mapping partner cannot decide if an area polygon is a “hole” or an “unmapped” area, a separate “theme” (collection of polygons) should be created with the updated fields. This new theme should be named “(Community ID) _mm_dd_yy_undecided” (e.g., 485493_06_21_06_undecided.shp) and submitted along with the Geo-index submission for the community.

6.0 Submission to the MSC Procedures

All Geo-index submissions must be delivered with the MSC Deliverable Package four months prior to the DFIRM’s effective date. The following lists the format and projection required by the MSC tools:

- Projection: Geographic
- Datum: NAD83
- Units: Decimal Degrees

- Naming Convention:
DFIRM ID + Effective Date (YYYY_MM_DD)

Countywide Format:

12345_2005_06_22.zip

or

Community Format:

123456_2005_06_22.zip

- File Format:
ESRI Shapefile (.shp, .shx, .dbf, .sbn, .sbx, .prj)

Submit zipped up Shapefile to: <http://www.floodmaps.net/eftp/>

Within the FTP website, please include in the “Recipients” box at the bottom of the form, the email addresses for James Park (Geo-index Coordinator), Mary Ellen Bambrey (MSC Project Manager), and Joseph Schule (NSP Coordinator). These individuals’ email addresses are listed below. Additionally, please provide a brief description of the DFIRM for which you are submitting the Geo-index (e.g., community name, DFIRM ID, effective date, etc).

Geo-index Coordinator:

James Park

FEMA Map Service Center
6730 Santa Barbara Court
Elkridge, MD 21075
(410) 471-4022

James.Park@associates.dhs.gov

MSC Project Manager:

Mary Ellen Bambrey

FEMA Map Service Center
6730 Santa Barbara Court
Elkridge, MD, 21075
(410) 471-4021

Maryellen.Bambrey@associates.dhs.gov

NSP Coordinator:

Joseph Schule

Michael Baker Corp.
3601 Eisenhower Avenue
Alexandria, VA, 22304
(703) 960-8800 x 3209

Joseph.Schule@mapmodteam.com

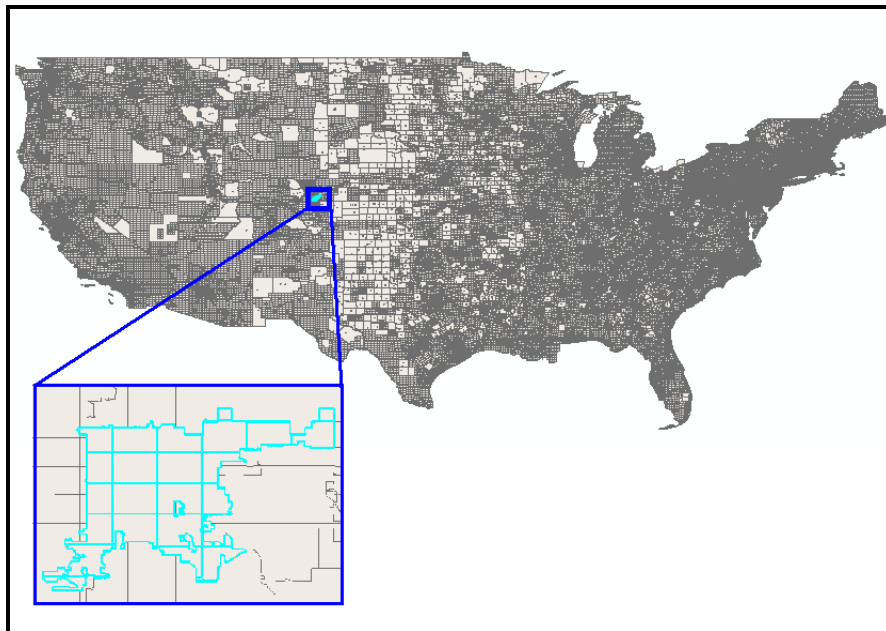
7.0 Adherence to Product Naming Convention

It is vitally important that all product databases call a specific product by the same name. For this reason, the Item Identifiers for the Flood Map Panels and Flood Map Panel Indexes will follow the MSC Product Naming Conventions, dated December, 2000 and amended April 2002. Any index updates that do not follow these conventions will be rejected.

When errors are discovered, the MSC should be notified immediately so that they can be promptly corrected. Any errors in the Geo-index could potentially allow a customer to order an undesired product or receive false feedback from the MSC website.

The MSC will compare what is submitted by the mapping partners with the existing Geo-index National layer. Comparisons of the new Geo-index are made to ensure that it falls in the correct Datum and that the attribution and spatial location of features makes sense in relation to adjacent communities.

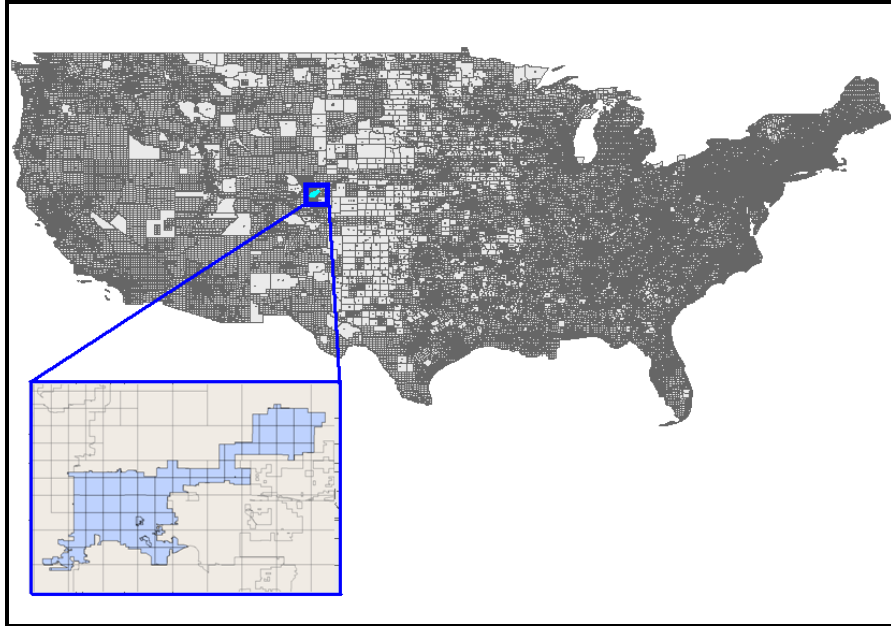
Image 16: Before - Identifying Pre-Existing Geo-index



MSC Deliverable Package Guide

Once everything looks correct, the Geo-index for the submitted DFIRM will be sewn into the National Layer. See Images 16 and 17 for examples of the Geo-index National Layer before and after the insertion of a new community.

Image 17: *After* - Insertion of New Community Geo-index into National Layer



Appendix J. MSC Product Naming Convention



Federal Emergency Management Agency

Washington, D.C. 20472

April 18, 2002

(Originally issued on December 27, 2000)

MEMORANDUM FOR: Doug Bellomo, P.E., Project Officer
Eastern Studies Team

Bill Blanton, Project Officer
Central Studies Team

Mike Grimm, Project Officer
Western Studies Team

[Original Signed]

FROM: Matthew B. Miller, P.E., Chief
Hazards Study Branch

SUBJECT: Procedure Memorandum 19 - MSC Product Naming Conventions

Background: The mapping products prepared by FEMA are tracked and inventoried in a computer system at the Map Service Center. The computer system is titled "Financial, Accounting, Management and Inventory System (FAMIS)."

Issue: Currently, there is inconsistency in the naming conventions used for FEMA mapping products. It is important that a commonly defined set of terms and naming conventions be established to facilitate the inventory and tracking of FEMA products. The original issuance of this Procedure Memorandum on December 27, 2000, established new rules for product naming conventions. This issuance outlines a new protocol for using suffixes for product identification and revisions tracking of maps, map indices, and FIS reports.

New Procedure: The product naming conventions detailed in the attached April 2002 memorandum titled MSC Product Naming Conventions, shall continue to be used by the Flood Map Production Coordination Contractors (FMPCCs) for all newly created products defined therein. Although the FMPCCs are not required to enact these naming conventions retroactively, these changes shall be reflected on all products sent to the FEMA Map Service Center on or after May 1, 2002, and are expected to be used as detailed in the attached memorandum. The significant changes outlined in this version of the memo are:

Suffixes beginning with the letter A will be used for revision tracking of:

- FHBM and FIRM indexes (including county wide indexes)
- FIS volumes (including community based and countywide volumes)

cc: see distribution list

Distribution List (electronic distribution only)

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- Bob Shea
- Paul Loyd
- Joe Coughlin

Hazard Mapping Division

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- Matt Miller
- Fred Sharrocks
- Paul Loyd
- Doug Bellomo
- Bill Blanton
- Mike Grimm
- Mark Crowell
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- Sally Magee
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MSC Deliverable Package Guide

Margaret Lawless

Outreach and Partnership Branch

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Program Marketing and Partnership Division

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Bill Lesser

Congressional and Intergovernmental Affairs Division

Fran McCarthy

Vince Fabrizio

Loretta Schaffer

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Office of General Council

Rick Neal

Flood Map Production Coordination Contractors

Zekrollah Momeni, D&D

R. Fernando Pasquel, MBJ

Vince DiCamillo, PBS&J

Map Service Center

Brenda Walguarnery

Harvard Design and Mapping

Mark Mesterhazy

Map Service Center (MSC) Product Naming Conventions

Updated, April 2002

To ensure consistency within product types, FEMA's Map Service Center (MSC) established product-naming conventions. The following outline includes a detailed description of the new Product IDs as designated by the Map Service Center (MSC) as well as former Product IDs. These IDs should be considered the standard and should be used when preparing and releasing any new products on or after the date of this memorandum.

PUBLIC FLOOD MAPS

FHBM – Flood Hazard Boundary Map

Subtypes:

Flat Maps:

Description: These flat FHBMs are 11" x 17" and are map size code F. If there is more than one page to a community, they are stapled together and considered a multi-page flat map. The index map is the first page of a multi-page flat map. The index map references all other pages by panel number.

ID: 2-digit state FIPS + 4-digit FEMA CID + Suffix (if established)

Example Former ID: 280263 A

➤ **Example New Product ID: 280263A**

The flat maps may or may not contain suffixes. Ideally, if a flat map is revised without a suffix, a suffix would be added to the CID so that historical information can be stored about map revisions. No spaces are permitted between the CID and the suffix.

Z-folds:

Description: The Z-fold FHBMs can be a variety of map size codes from A to E and G. Not all Z-folds have an index, but most do. Those that do not have an index may have a map locator on the panel or may be the only panel printed for a community.

ID: 2-digit state FIPS + 4-digit FEMA CID + 4-digit panel number + Suffix

MSC Deliverable Package Guide

Example Former ID: 010017 0003 A

- **Example New Product ID: 0100170003A**

Indexes:

Description: The Z-fold FHBM Indexes come in map size codes A to E, G and L. The Indexes are similar to Z-fold FHBMs, but can also be size code IL which is a folded 8½" x 11".

ID: 2-digit state FIPS + 4-digit FEMA CID + INDx (IND0., IND1..) + Suffix

- Example Former ID: 010017 0001-0011
- **Example New Product ID: 010017IND0A**

Single page indexes are identified as IND0; in the case of multiple page indexes, the counting begins at 1, where x is the number of the index for a particular community.

For new or revised indexes, a suffix will be added after the IND0, beginning with suffix A.

Conversion Letters:

Description: This letter essentially converts a FHBM to FIRM status. Rather than recreate a set of FIRMs for communities currently covered by FHBMs, a conversion letter simply applies FIRM legal status to these maps.

ID: 2-digit state FIPS + 4-digit FEMA CID + 9999 + Suffix (if established)

- Example Former ID: 010050
- **Example New Product ID: 0100509999**

The Map Service Center added the suffix 9999 so that the letter would not be mistaken as a flat map. 9999 was used as a safe identifier since it is likely to never be used as a panel number. The product in this case is the letter itself; the maps will still carry the Former ID that includes the community, panel number, and the appropriate suffix.

FIRM - Flood Insurance Rate Map

Subtypes:

Flat Maps:

Description: These flat FIRMs are 11" x 17" and are map size code F. If there is more than one page to a community, they are stapled together and considered a multi-page flat map. The index map is the first page of a multi-page flat map. The index map references all other pages by panel number.

ID: 2-digit state FIPS + 4-digit FEMA CID + Suffix (if available)

- Example Former ID: 010107 B
- **Example New Product ID: 010107B**

The flat maps may or may not contain suffixes. Ideally, if a flat map is revised, a suffix would be added to the CID so that historical information can be stored about map revisions. No spaces are permitted between the CID and the suffix.

Z-folds:

Description: The Z-fold FIRMs come in map size codes A to E and G.

ID: 2-digit state FIPS + 4-digit FEMA CID + 4-digit panel number + Suffix

Example Former ID: 225203 0115 E

➤ ***Example New Product ID: 2252030115E***

See Attachments A and B.

Indexes:

Description: The Z-fold FIRM Indexes come in map size codes A to E, G, and L, similar to Z-folds FIRMs. Not all Z-folds have an index, but most do. Those that do not have an index may have a map locator on the panel or may be the only panel printed for a community. Z-fold indexes can also be size code I L which is a folded 8½" x 11".

ID: 2-digit state FIPS + 4-digit FEMA CID + IND_x (IND0, IND1...) + Suffix

- Example Former ID: 040019 0001-4525
- ***Example New Product ID: 040019IND0A***

Single page indexes are identified as IND0 with the suffix. In the case of multiple index pages, the counting begins at 1, where *x* is the number of the index sheet for a particular community. The FIRM panel Product ID will also appear in the panel layout grid of z-fold indexes; however, the Product ID will not appear in the grid of the 8½" x 11" index.

For new and revised indexes, a suffix will be added after the IND_x, beginning with suffix A. See Attachments C and D.

Street Indexes:

Description: These are legacy products. Separate street indexes are no longer produced in the digital FIRM process, but there is a small collection of street indexes that are still current. These indexes accompany some of the FIRM Z-fold maps, as the street indexes were not printed on the maps themselves.

ID: 2-digit state FIPS + 4-digit FEMA CID + STD_x (STD0, STD1...)

- Example Former ID: 120077 8888
- ***Example New Product ID: 120077STD0***

In the past, 8881 and 8882 were used for multiple street index sheets. To standardize the indexes, the STD suffix replaced the numeric string and a number designating the index sheet number was added.

Countywide Z-fold FIRMs:

Description: This format follows a regular grid based on the USGS quarter quads and covers the geographical area within the quad regardless of political boundaries. However, there may be communities that have kept their own community maps or are non-participating communities, or portions thereof, that fall within the countywide mapped area.

ID: 2-digit state FIPS + 3-digit county FIPS Code + C + 4-digit panel number + Suffix.

- Example Former ID: 01097C 0757 J
- **Example New Product ID: 01097C0757J**

The traditional community-based naming convention was modified with this product class. Since a map may represent more than one community, a single community ID could not be used. In its place, the county FIPS code is used along with the letter “C” to indicate the map is a countywide. See Attachments E and F.

Countywide Indexes:

Description: These are the indexes to the countywide FIRMs. The indexes come in sizes similar to Z-folds and delineate the panel ID and coverage area.

ID: 2-digit state FIPS + 3-digit county FIPS Code + C + IND_x (IND0, IND1...) + Suffix

- Example Former ID: 41039C 0000
- **Example New Product ID: 41039CIND0A**

Countywide indexes follow the same conventions as indexes for the conventional community-based index maps. The traditional community-based naming convention was also modified with this product class. Since the index represents more than one community, a single community ID could not be used. In its place, the county FIPS code was used along with the letter “C” to indicate the index is a countywide. The Product ID will also appear in the panel layout grid of the index.

For new or revised indexes, a suffix will be added after the IND_x, beginning with suffix A. See Attachments G, H, and I.

FIS - FLOOD INSURANCE STUDIES

Description: A FIS is a narrative report that gives supporting information about a community’s flood hazards and identifies flooding sources. An FIS consists of text, graphics, flood profiles, and sometimes floodway maps. An FIS is in booklet form and varies in length. Some FISs may consist of multiple volumes. The page sizes also vary. Most pages are the standard 8 ½” x 11”. Flood profiles and some vicinity maps are 11” x 17” in size and fold out from the booklet. Flood Boundary and Floodway Maps (FBFMs) are sometimes included as an exhibit to the FIS. A FIS is always sold as a kit. Unlike public map kit components, FIS components are never sold individually.

Subtypes:

Community-based study volume:

Description: These are flood studies performed on a community-wide basis.

ID: 2-digit state FIPS + 4-digit FEMA CID + V + 00x (V000, V001...) + Suffix

- Example Former ID: 060057
- **Example New Product ID: 060057V000A**

To distinguish these products from maps, a “V” for volume was inserted followed by a three-digit volume number starting with 0. A single volume would be V000; multiple volumes would be V001, V002, etc.

For new or revised studies, a suffix should be added after the V00x beginning with suffix A. See Attachment J.

Countywide-based study volume:

Description: These are flood studies prepared on a county-wide basis.

ID: 2-digit state FIPS + 3-digit FIPs + C + V + 00x (V000, V001...) + Suffix

- Example Former ID: The front of the study will list all of the floodprone communities and their 6-digit community numbers. The naming convention is a hybrid of the county-wide naming convention plus the “V” and three-digit volume number.
- **Example New Product ID: 54005CV000A**

For new or revised studies, a suffix should be added after the V00x beginning with suffix A. See Attachments K and L.

Supplement: (Supplement Wave Height Analysis printed on the cover)

Description: These are supplements to the original FIS reports.

ID: 2-digit state FIPS + 4-digit FEMA CID + S + 00x (S000)

- Example Former ID: 345302
- **Example New Product ID: 345302S000**

To distinguish these products from the FIS V000, an “S” for supplement replaces the “V,” and is then followed by a three-digit supplement number starting with 0.

FBFM - Flood Boundary Floodway Map (Floodway Map)

Description: These are the companion maps that go with the study. They contain delineation of the regulatory floodway and cross sections used in the studies. They are not sold or distributed separately from the study.

Subtypes:

Flat Maps:

ID: 2-digit state FIPS + 4-digit FEMA CID + FLAT

- Example Former ID: 530198

MSC Deliverable Package Guide

➤ **Example New Product ID: 530198FLAT**

As in many other products, the suffix “FLAT” was added to distinguish this type of map from others types such as FHBMs or FIRMs.

Z-folds:

ID: 2-digit state FIPS + 4-digit FEMA CID + 4-digit panel number

- Example Former ID: 445395 0001
- **Example New Product ID: 4453950001FA**

Suffixes were not stored as part of the Product IDs in the past. No spaces are permitted between the CID and the suffix. The legacy products will not be changed. For revised floodway panels, a suffix shall be added after the letter F, beginning with suffix A. See Attachment M.

Indexes:

ID: 2-digit state FIPS + 4-digit FEMA CID + FND x (FND0.., FND1..,)

- Example Former ID: 445395 0001-0004
- **Example New Product ID: 44395FND0A**

To distinguish floodway indexes from other types of indexes, the FND x suffix was added to the state and community ID where x is the number of the index for a particular community. Single page indexes, are identified as FND0; in the case of multiple page indexes the counting begins at 1 where x is the number of the index for a particular community. These indexes will only be produced for Partial Map Initiatives revisions.

For revised floodway indexes, a suffix will be added after the FND0, beginning with suffix A. See Attachment N.

Naming Conventions of Other MSC Products

Q3 Digital Flood Data

ID: Q3DISK + CD#

Example Former ID: Q3 Flood Data - Disc 1

Example New Product ID: Q3DISK1

CBRA Q3 – Coastal Barrier Resources System Digital Flood Data

ID: Q3CBRADISK + CD#

Example Former ID: CBRA Q3 Flood Data Disc 1

Example New Product ID: Q3CBRADISK1

LOMC Subscription

ID: LOMC- + SUB (for subscription) or V### (for back issue CD volumes) or PAPER (for back issue paper copy)

Yearly Subscription LOMC-SUB

Back Issue – CD-ROM LOMC-V03I7

Back Issue Paper LOMC-PAPER

FMSIS – Flood Map Status Information System

ID: State FIPS + -FMSIS- + SI (for Single Issue) or SUB (For subscription)

Single Issues/Single State: 01-FMSIS-SI

Single Issue/All States: US-FMSIS-SI

Yearly Issue/ Single State: 01-FMSIS-SUB

Yearly Issue/All States: US-FMSIS-SUB

CSB – Community Status Book

ID: State FIPS + -CSB- + SI (for Single Issue) or SUB (For subscription)

Single Issues/Single State: 01-CSB-SI

Single Issue/All States: US-CSB-SI

Yearly Issue/ Single State: 01-CSB-SUB

Yearly Issue/All States: US-CSB-SUB

NFIP Manual – National Flood Insurance Program Manual

ID: NFIP- + component number (Full Manual)

NFIP- + PE- + component number (Producer's Edition)

NFIP-KIT

NFIP-PE-KIT

NFIP-220

NFIP-251

NFIP-253

NFIP-254

NFIP-PE-255

NFIP-PE-257

NFIP-PE-259

Community Map Action List

ID: CMAL

Community Map Action List

ID: CMAL

NFIP

PANEL 0001 C

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

VILLAGE OF
COLD BROOK,
NEW YORK
HERKIMER COUNTY

ONLY PANEL PRINTED

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
COLD BROOK, VILLAGE OF	360298	0001	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER
3602980001C**

**MAP REVISED
DECEMBER 20, 2000**

Federal Emergency Management Agency

Attachment A

N
F
I
P

PANEL 0004 C

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWNSHIP OF
MANOR,
PENNSYLVANIA
LANCASTER COUNTY

PANEL 4 OF 13

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
MANOR, TOWNSHIP OF	420557	0004	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
4205570004C

MAP REVISED
SEPTEMBER 22, 1999

Federal Emergency Management Agency

Attachment B

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

**FIRM
FLOOD INSURANCE RATE MAP**

CITY OF
ALLAGASH,
MAINE
AROOSTOOK COUNTY

MAP INDEX

PANELS PRINTED: 10, 20, 40, 65, 80
85, 101, 102, 105, 106, 107, 108, 109, 115
130



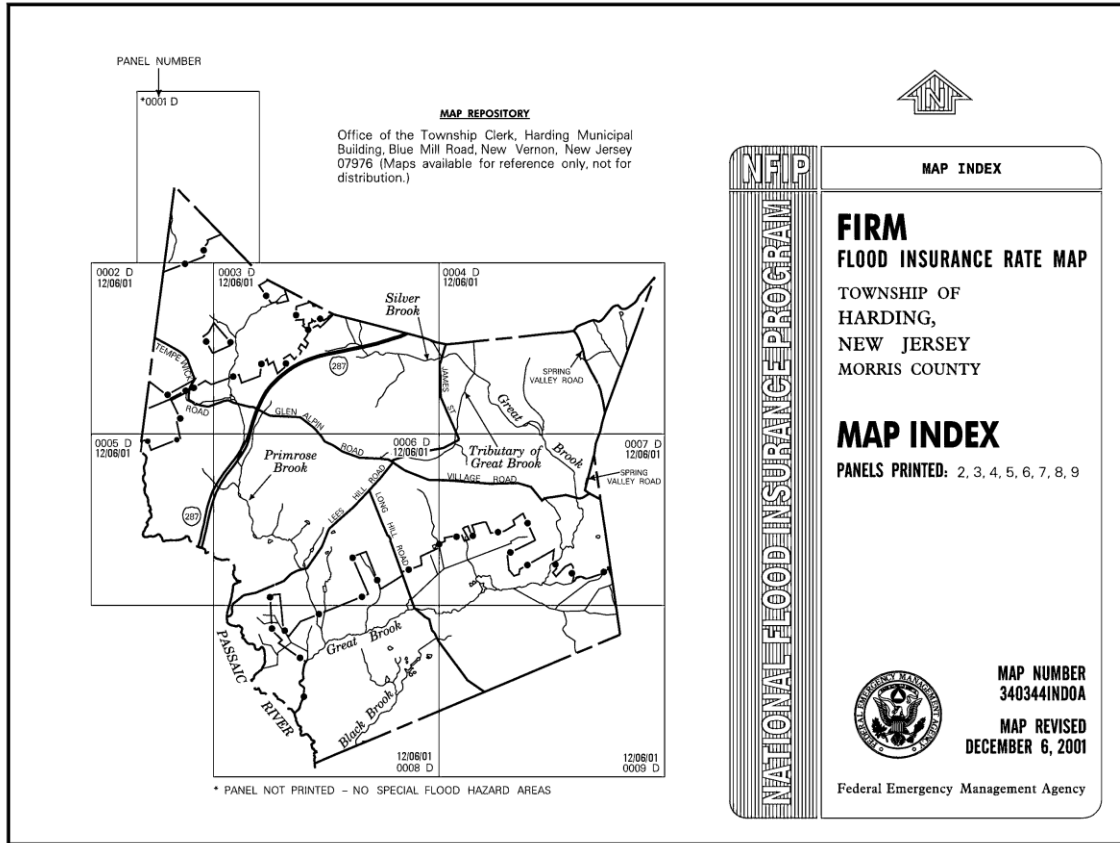
**MAP NUMBER
230440IND0A**

**MAP REVISED
SEPTEMBER 22, 1999**

Federal Emergency Management Agency

Attachment C

MSC Deliverable Package Guide



Attachment D

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0038 D

FIRM
FLOOD INSURANCE RATE MAP
FLOOD COUNTY,
USA
AND INCORPORATED AREAS

PANEL 38 OF 40

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
FLOOD COUNTY	990099	0038	D
FLOODVILLE, TOWN OF	990098	0038	D

-NOTE-

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL 101-591).

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
99009C0038D

EFFECTIVE DATE
AUGUST 19, 1998

Federal Emergency Management Agency

Attachment E

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0333 C

FIRM
FLOOD INSURANCE RATE MAP
PIKE COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)

PANEL 333 OF 530

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
DINGMAN, TOWNSHIP OF	421964	0333	C
MILFORD, BOROUGH OF	420759	0333	C
MILFORD, TOWNSHIP OF	422642	0333	C
WESTFALL, TOWNSHIP OF	421970	0333	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
42103C0333C

EFFECTIVE DATE
OCTOBER 6, 2000

Federal Emergency Management Agency

Attachment F

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

**FIRM
FLOOD INSURANCE RATE MAP
PIKE COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)**

(SEE LISTING OF COMMUNITIES TABLE)

MAP INDEX

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**MAP NUMBER
42103CINDOA**

**EFFECTIVE DATE
OCTOBER 6, 2000**

Federal Emergency Management Agency

Attachment G

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM
FLOOD INSURANCE RATE MAP
LAKE COUNTY,
ILLINOIS
AND INCORPORATED AREAS

MAP INDEX
SHEET 1 OF 2

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**(SEE SHEET 2 FOR ADDITIONAL PANELS
PRINTED)**



MAP NUMBER
17097CIND1B

MAP REVISED
OCTOBER 6, 2000

Federal Emergency Management Agency

Attachment H

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM
FLOOD INSURANCE RATE MAP
LAKE COUNTY,
ILLINOIS
AND INCORPORATED AREAS

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236, 237, 238, 241, 242, 251, 252, 253,
254, 256, 257, 258, 259

**(SEE SHEET 1 FOR ADDITIONAL PANELS
PRINTED)**



MAP NUMBER
17097CIND2B

MAP REVISED
OCTOBER 6, 2000

Federal Emergency Management Agency

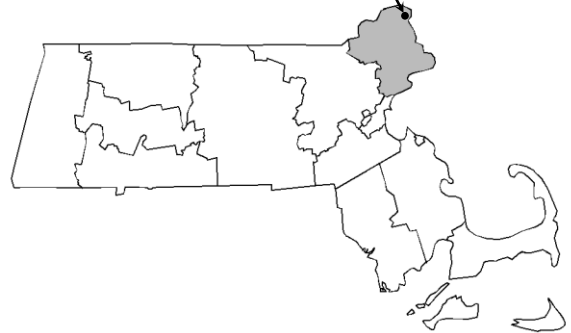
Attachment I

FLOOD INSURANCE STUDY



TOWN OF FLOODPORT, MASSACHUSETTS FLOOD COUNTY

Town of Floodport



REVISED:
SEPTEMBER 4, 2002

Federal Emergency Management Agency



FLOOD INSURANCE STUDY NUMBER
259999V000A

Attachment J

FLOOD INSURANCE STUDY

VOLUME 1 OF 2



BALDWIN COUNTY, ALABAMA AND INCORPORATED AREAS



↑
Baldwin County

COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER
BALDWIN COUNTY (UNINCORPORATED AREAS)	015000	ROBERTSDALE, CITY OF	010222
BAY MINETTE, CITY OF	010004	SILVERHILL, TOWN OF	010010
DAPHNE, CITY OF	010005	SPANISH FORT, CITY OF	010429
FAIRHOPE, CITY OF	010006	SUMMERDALE, TOWN OF	010328
FOLEY, CITY OF	010007		
GULF SHORES, CITY OF	015005		
LOXLEY, TOWN OF	010009		
ORANGE BEACH, CITY OF	015011		

JUNE 17, 2002

Attachment K

FLOOD INSURANCE STUDY

VOLUME 2 OF 2



BALDWIN COUNTY, ALABAMA AND INCORPORATED AREAS



↑
Baldwin County

COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER
BALDWIN COUNTY (UNINCORPORATED AREAS)	015000	ROBERTSDALE, CITY OF	010222
BAY MINETTE, CITY OF	010004	SILVERHILL, TOWN OF	010010
DAPHNE, CITY OF	010005	SPANISH FORT, CITY OF	010429
FAIRHOPE, CITY OF	010006	SUMMERDALE, TOWN OF	010328
FOLEY, CITY OF	010007		
GULF SHORES, CITY OF	015005		
LOXLEY, TOWN OF	010009		
ORANGE BEACH, CITY OF	015011		

JUNE 17, 2002

Attachment L

NATIONAL FLOOD INSURANCE PROGRAM

**FLOODWAY
FLOOD BOUNDARY AND
FLOODWAY MAP**

**TOWN OF
LOCKPORT,
NEW YORK
NIAGARA COUNTY**

PANEL 37 OF 39
(SEE MAP INDEX FOR PANELS NOT PRINTED)

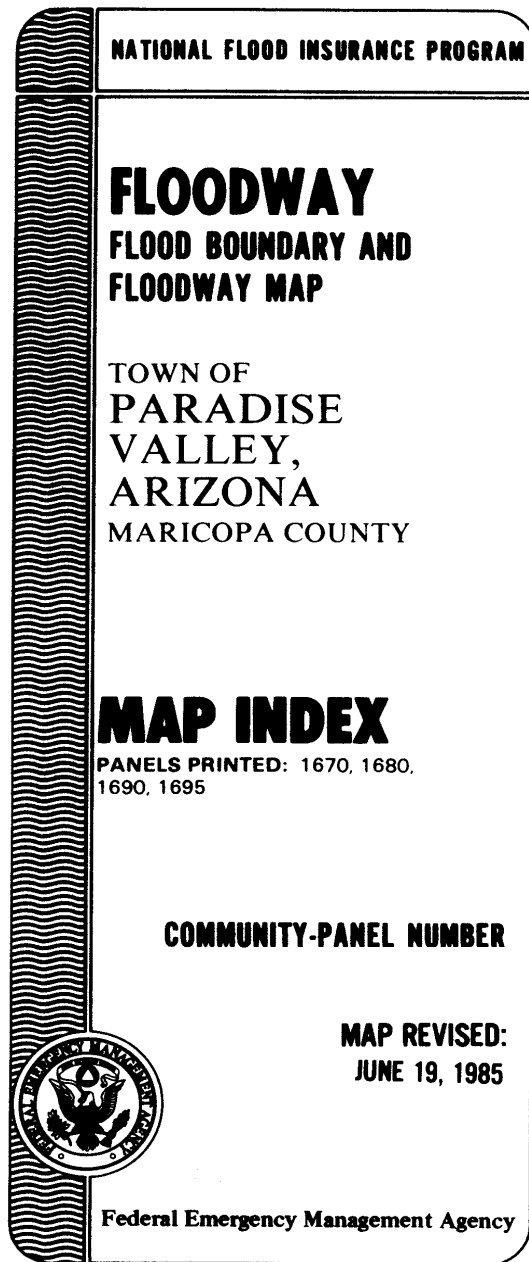
**COMMUNITY-PANEL NUMBER
3610130037FA**

**MAP REVISED:
FEBRUARY 19, 1992**



Federal Emergency Management Agency

Attachment M



Attachment N

Appendix K. DFIRM Deliverable Quality Control Review

MSC Deliverable Package Guide

DFIRM Deliverable Quality Control Review Form

General Information

Community Name _____ Community Number (CID) _____

DFIRM/Project Name _____ DFIRM Number _____

Effective Date _____ Mapping Partner Name _____

Mapping Partner Contact Name _____

Mapping Partner Contact Information _____

Quality Control Review

The subject DFIRM deliverable failed the quality control process due to the following reason(s): (check all that apply)

- Does not follow Appendix L of the Guidelines and Specifications for Flood Hazard Mapping Partners
- Does not follow the file structure for the standard DFIRM database
- Data missing (see comments below)
- CD/DVD unreadable / will not open (see comments below)
- Raster images missing
- Raster images are not 400 dpi
- Raster images are not two-color and have a DOQ base map
- Raster images missing information / all black / will not open (see comments below)

Specific Comments:

Returned By: _____

Contact #: _____

Affiliate:

- Map Service Center (MSC)
- National Service Provider (NSP)

Appendix L. Community Map Action List

MSC Deliverable Package Guide

Community Map Action List Select Category Codes and their Usage

August 2, 2006

The FEMA Map Service Center (MSC) has created this document with the assistance of FEMA's Community Assistance Section to help identify the proper usage of select category codes found on the Community Map Action List (CMAL). The intent of this document is to reduce the data entry errors found on CMALs that are submitted to the MSC as part of the MSC Deliverables (*nee*-GPO) Package. The tables provided below correspond to select categories of the CMAL. Each table includes the various codes found in that category and a detailed description of the codes' usage.

Column: INLAND/COASTAL – (only one code can be selected for a community):

CMAL Code	Explanation and Usage of Code
I – Inland	Used for inland flooding. Should be used if the 60.3 code shown in the LFD is “b”, “c”, or “d”.
C – Coastal	Used for coastal flooding. Should be used if the 60.3 code shown in the LFD is “e”.
IC –Inland and Coastal	Used if a community is affected by both inland and coastal flooding. Should be used if the 60.3 code shown in the LFD is either “b”, “c”, or “d” and “e”.

Column: HAZARD – (only one code can be selected for a community):

CMAL Code	Explanation and Usage of Code
“FL” – Flood	Used if the community has SFHAs identified. SFHAs consist of Zones AE, AO, AH, AR, A99, A1-A30, VE, VO, and V1-V30 included on FHBM/FIRM). Do not use this code for communities with only Zones A or V; use “MF” for minimally floodprone instead.
“MS” – Mudslide	Used if the community is subject to mudslides (Zones M, N, and/or P shown on FHBM/FIRM. Maps may be printed or unprinted).
“ER” – Erosion	Used if the community is subject to erosion hazards (Zone E shown on FHBM/FIRM).
“NF” – Non-floodprone	Used if the community has no SFHAs identified (Only Zones B, C, or X shown on FHBM/FIRM).
“MF” – Minimally floodprone	Used if the community has only unnumbered/unlettered Zones A or V identified.
“DF” – Undetermined but possible flood hazard	Used if the community has undetermined but possible flood hazards (Zone D shown on FHBM/FIRM. Maps may be printed or unprinted).

Column: PROGRAM STATUS – (only one code can be selected for a community)

CMAL Code	Explanation and Usage of Code
1 – Emergency	Community participates in the Emergency Program.
2 – Regular	Community participates in the Regular Program.
3 – Not participating, no map	Community is non-participating in the NFIP and is not shown on a FHBM/FIRM.
4 – Not participating, with map	Community is non-participating in the NFIP and is shown on a FHBM/FIRM.

MSC Deliverable Package Guide

5 – Withdrew	Community has withdrawn from the NFIP.
6 – Suspended	Community is currently suspended from the NFIP.
7, 8, and 9	Internal codes. Contact MSC before use.

Column: MAP STATUS (FHBM) – (only one code can be selected for a community)

CMAL Code	Explanation and Usage of Code
1 – Never mapped	A FHBM was never produced for the community. Leave the date field on the CMAL blank.
2 – Original	The FHBM is the original for the community. The effective date of the map should be recorded on the CMAL.
3 – Revised	The original FHBM was revised by another FHBM. The revision date of the map should be recorded in the notes section of the CMAL.
4 – Rescinded	The FHBM was rescinded. The date of and reason for the rescission should be recorded in the notes section of the CMAL.
5 – Superseded by FIRM	The FHBM was superseded by a FIRM. The effective date of the FIRM represents the date on which the FHBM was superseded.

Column: MAP STATUS (FIRM) – (only one code can be selected for a community):

CMAL Code	Explanation and Usage of Code
1 – Never mapped	A FIRM has never been produced for the community. Leave the date field on the CMAL blank.
2 – Original	The FIRM represents the first FIRM for the community that contains SFHAs with BFEs. For FIRMs produced in the non-countywide format, the date of the FIRM is identified as “Effective Date” on the title block. This FIRMs effective date would be listed in CIS under the initial FIRM field.
3 – Revised	The current FIRM for the community is being superseded by a new FIRM (the FIRM is being revised). For FIRMs produced in the non-countywide format, the date of the FIRM is identified as “Map Revised” on the title block. The FIRM must contain SFHAs with BFEs.
4 – Rescinded	The FIRM was rescinded. The date of and reason for the rescission should be recorded in the notes section of the CMAL.
5 – All Zone C/X – No published FIRM	The community is participating in the Regular Program as non-flood prone and no FIRM has been printed (identified NSHFA community). This code can be used for non-participating communities; however, they will not be sanctioned after one year for failure to adopt.
6 – All Zones A & C/X – no elevation determined	The community is either non-participating or participating in the Regular Program as minimally floodprone and the published FIRMs include only Zones A and C.
7 – All Zones A & C/X – original FIRM by letter	The community is participating in the Regular Program as minimally floodprone and the FHBM was converted to a FIRM by letter. In the rarest of occasions, this code may apply to non-participating communities.
8 – All Zone D – no published FIRM	The community is all Zone D and there is no published FIRM. This code can apply to non-participating or participating communities.
9 – All Zone D – with published FIRM	The community is all Zone D and a FIRM was printed. This code can apply to non-participating or participating communities.

MSC Deliverable Package Guide

10 – All Zone C/X – with published FIRM

The community is all Zone C/X and a FIRM was printed. If used for non-participating communities, they will not be sanctioned after one year for failure to adopt.