

Guidance for Flood Risk Analysis and Mapping

Mapping Information Platform (MIP)

November 2015



FEMA

Requirements for the Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment, and Planning (Risk MAP) Program are specified separately by statute, regulation, or FEMA policy (primarily the Standards for Flood Risk Analysis and Mapping). This document provides guidance to support the requirements and recommends approaches for effective and efficient implementation. Alternate approaches that comply with all requirements are acceptable.

For more information, please visit the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage (www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping). Copies of the Standards for Flood Risk Analysis and Mapping policy, related guidance, technical references, and other information about the guidelines and standards development process are all available here. You can also search directly by document title at www.fema.gov/library.

Document History

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1.0 MIP Overview

The Mapping Information Platform (MIP) was deployed in 2004 as part of the FEMA Flood Map Modernization program to facilitate the management, production, and sharing of flood hazard data and maps in a digital environment. It integrates program and project management, data storage and retrieval, standardized quality control reviews, and map production status tracking into one web-based application. With FEMA's transition to the Risk MAP program the MIP continues to grow and evolve to meet the needs of FEMA and its contractors to manage and monitor the progress of its flood hazard mapping data. Enhanced program delivery under Risk MAP also now includes watershed based projects and flood risk data production.

The MIP is a system of record for the Risk MAP program and serves as the primary portal for the capture, validation, retrieval, and storage of flood hazard mapping data produced by flood studies and Letters of Map Change (LOMCs). This document provides guidance on the data dissemination functions supported by the MIP, including user access and technical support, tools and functionality, and project management and workflow activities.

Key Terms:

- Work Item List – displays all active projects and activities for a user to claim and complete
- Workflow History – displays a history of all activities in the project, including a description of the activity, who can claim the activity or who claimed and completed the activity, and possible next activities in the workflow
- Activity Reference Guide – a list and description of each data field for every activity in the workflow
- Task – often used interchangeably with activity; a task is an individual step in the workflow
- Activity – often used interchangeably with task; an activity is a group of tasks
- Project – MIP term for a case
- MIP Administrators – administrator level users can create projects (study, amendments, and revisions) and manipulate project workflows through Process Admin. These users include FEMA staff, MIP Champions and Black Belts, Regional Program Management Lead (RPML), and MIP Help.
 - Champion – Regional staff serves as an advocate for increased MIP use and acceptance, workflow process improvements, and overall Earned Value (EV) performance management. MIP responsibilities include overseeing overall MIP Quality Assurance & Quality Control (QA/QC), approving Change Requests (facilitating revised MIP Baseline schedules), MIP Help requests validation and escalation resolution, and MIP Obligation data reconciliation.

- RPML – Program Management (PM) staff located at the Regional office responsible for assisting FEMA in managing the scope, schedule, and budget of the Regional portfolio, including Change Requests. This assistance includes close collaboration with the Task Order leads and Regional Project Monitors to ensure that each individual project is accurately represented in the MIP. MIP responsibilities include: create and obligate projects, update baseline scope and schedule, monitor EV, monthly and quarterly reporting, support MIP Help requests, and Process Admin changes.
- Black Belt – Production and Technical Services (PTS) staff typically located at the Regional Service Center (RSC) responsible for tracking and monitoring projects, data validation, and performing quality reviews. MIP responsibilities include: assisting the RPML with EV monitoring, monthly and quarterly reporting, request support from MIP Help, transfer tasks in Process Admin, and troubleshoot project workflows for Mapping Partners.
- MIP Producers – production level user is also referred to as a Task Lead. A producer (e.g., Cooperating Technical Partner (CTP), PTS, Community Engagement and Risk Communication (CERC)) completes the majority of project tasks including data development and map production tasks.
- MIP Managers – management level users (e.g., CTP, PTS, CERC) are responsible for completing Manage activities and capturing the cost and schedule information for the performing Organization for the project area.

1.1 Access

Access to the MIP is available at the MIP (<https://hazards.fema.gov>) website. Registration is required for access to tools such as File Explorer and project workflows. Public access to the MIP is limited to Search Engineering Data and Public Reports. The ability to download engineering data is only available to registered users.

1.1.1 MIP Workflow

To request access to the MIP Workflow, contact your RSC.

The RSC will collect general information used for account creation and assist in determining proper MIP Workflow roles and subscriptions. The RSC will populate a workflow access request form on your behalf and submit the form to the MIP User Care group for processing. You will receive access information such as username and password via email from miphelp@riskmapcads.com along with general information on how to access the workflow.

MIP Users, once logged in, are able to manage their User Profile. Profile management allows users to update their email address and security challenge question. The challenge question will allow MIP Users to reset their password if needed.

1.1.2 eLOMA

To request access to the eLOMA (electronic Letter of Map Amendment) application, users should self-register by submitting the online eLOMA Registration Form (<https://hazards.fema.gov/femaportal/wps/portal/elomaaccountcreation>). If you are an existing MIP User, you need to contact MIP Help (call (877) FEMA-MAP (877-336-2627) or email miphelp@riskmapcdfs.com) to add eLOMA access to your existing User ID.

If you have questions regarding your registration, contact MIP Help via email at miphelp@riskmapcdfs.com.

1.1.3 Online LOMC

For access to the Online LOMC application, submit an online Registration Form at the following (<https://hazards.fema.gov/femaportal/onlinelomc/ext/Registration/load>) website.

The Online LOMC web application allows home owners or their designated representatives to easily request a LOMC. Use this site if your property was inadvertently included in a flood zone, or if the addition of fill elevated your property so that it is above the flood zone.

1.2 MIP Support

MIP Help hours of operation are 8:00 a.m. until 5:00 p.m. Eastern Time, Monday through Friday, with the exception of Federal holidays. Support requests may be submitted outside of these hours of operation but will be processed on the next business day. Support services may be requested by either emailing miphelp@riskmapcdfs.com or by placing a telephone call to (877) FEMA-MAP (877-336-2627).

Either method results in the creation of a support ticket, which will be used to track your request until completion. Upon ticket creation you will be sent a confirmation email from MIP Help containing a summary and description of the request, as well as an ID number for the corresponding support ticket. If you do not receive an auto-generated ticket from MIP Help, please contact MIP Help at miphelp@riskmapcdfs.com.

1.2.1 Email Support

MIP Users can submit support requests to the MIP Help team by sending an email to miphelp@riskmapcdfs.com. Emailing the MIP Help support team is the preferred method of communication.

Required information when submitting requests via email:

- 1) First name
- 2) Last name
- 3) Telephone number (use a number we can reach you during work hours)
- 4) User ID (of the person who experienced the problem)
- 5) In the subject field, provide a brief description of the problem or service requested, component & project case number

- 6) **CLEAR** example: Study - Need to add tasks to Ramsey County, ND (07-08-0177S)
- 7) **UNCLEAR** example: Ramsey County (07-08-0177S)
- 8) In the body of the e-mail request, provide a full detailed description of the problem or service including:
 - a. Current step in workflow/screen/related activity/case number/community/CID
 - b. Expected results or activities
 - c. Screenshot of the error/problem
 - d. In addition to the general information listed above, and in an effort to increase the speed with which your request can be resolved, include the following recommended information where applicable.

Recommended information when submitting requests via email:

- 1) Lists steps to re-create the issue.
- 2) Indicate if the problem occurred just once or multiple times.
- 3) Date and approximate time the problem began
- 4) FEMA case number
- 5) File names and complete paths

MIP Help Request Tip -- MIP Help requests users **NOT** to do the following:

- 1) Do not submit more than one case or case number per ticket.
- 2) Do not forward email conversations without providing all of the relevant details up front.
- 3) Do not open or modify the case until the ticket has been closed.

The MIP Help Team will attempt to resolve requests in the absence of required information but cannot guarantee prompt resolution unless complete information is provided.

1.2.2 Telephone Support

MIP users can call (877) FEMA-MAP (877-336-2627) for telephone support. If users choose to call for support, they will be prompted by an automated call distribution system. The Technical Support Specialist will gather the information needed to satisfy the request and generate a support ticket on their behalf.

1.2.3 Help Escalation Plan

If MIP users are not receiving timely or satisfactory responses through the email and/or telephone support directions provided above they should consult the MIP Help escalation plan. Before following this procedure and submitting a MIP Help ticket, contact your MIP Champion or Black Belt to see if they are aware of the issue and can help.

Escalation procedures when users encounter a problem or issue with MIP Help:

- 1) Submit a MIP Help ticket: Include your first and last name, a brief description of the issue in the subject line, your contact information (telephone number and MIP User ID), and a detailed description of the problem or service in the email body.
- 2) If you receive no response by the third business day of submitting your ticket: Contact the MIP Champion or Black Belt in your Region; contact the MIP Help Desk Manager, if the MIP Champion and/or Black Belt cannot provide an answer.
- 3) If the explanation you receive from MIP Help does not adequately answer your question: Contact MIP Help again to ask for a clearer answer; contact the Customer and Data Services (CDS) Deputy Program Manager, if you still do not understand the response or the response is inadequate.

For urgent matters that needs immediate assistance, follow these steps:

- 1) Indicate the urgency to MIP Help when sending the email support request.
- 2) Contact your MIP Champion and Black Belt, so they can confirm and indicate to MIP Help the level of urgency.
- 3) Contact the MIP Help Desk Manager, if the issue has still not been addressed within your timeline.

Please note that some issues may be escalated to the MIP development team for further investigation and may take some time to resolve. MIP Help will communicate to the user when the issue may be resolved. Before escalating to a higher level allow some time for each level of escalation to respond.

For the [MIP Help Escalation Plan](#) and specific points of contact see the Support Requests section of MIP Use Care (https://hazards.fema.gov/femaportal/wps/portal/usercare_support).

1.2.4 Other MIP User Resources

Work Instructions:

Individual modules (PDF, PPT, or TXT format) are step-by-step instruction, screenshots, and tips to complete each activity in the study, amendment, and revision workflows. For a complete list of work instructions go to MIP User Care → Training Materials: https://hazards.fema.gov/femaportal/wps/myportal/usercare_training.

MIP User Care: <https://www.hazards.fema.gov> → MIP User Care tab

A repository of frequently asked questions and support materials with five distinct sections: Frequently Asked Questions (FAQs), Access Requests, Support Requests, Training Materials, and Guides and Documentation.

2.0 MIP Functionality

The MIP offers a wide array of tools and features which function to facilitate reporting, project workflows, and data management. The bulk of MIP functionality can be found under Tool &

Links and Workbench. Applications such as Process Admin and the MIP Ad Hoc Reporting System (MARS) require access to be granted by MIP Help. Access to Process Admin and MARS is typically only granted to Administrator level users.

2.1 Tools & Links

The Tools & Links section of the MIP provides users with numerous data management and reporting tools, including: Data Upload, Search Engineering Data, File Explorer, Reports & Form Letters, Digital Flood Insurance Rate Map Database Quality Assurance (DFIRM DB QA), Address Book, Meta Data Test Submission, and Metaman. This section of the MIP also links users to various flood hazard mapping information, tools, and other geospatial resources.

2.1.1 Data Upload

The Data Upload tool allows users to load data artifacts, outside of the MIP workflow, for studies, amendments, and revisions. All uploads require the following submission details: FEMA Case Number, Product Type, Effective Date, and Abstract. Product Types for studies, amendments, and revisions are listed below.

Study Product Types available for upload:

- Technical Study Data Notebook (TSDN)
- Appeals
- Correspondence
- Scoping
- Flood Elevation Determination Docket (FEDD) File
- Supporting Artifacts
- Floodplain Boundary Standards (FBS) Reports

Amendment Product Types available for upload:

- Correspondence/Data
- Final Letter
- Cover
- Letter
- Final Determination
- Violation Letter
- Other Response
- Supporting Artifacts
- 216 Letter
- Endangered Species Act (ESA) Documentation

Revision Product Types available for upload:

- Modeling Hydraulics
- Modeling Hydrology
- Review Notes
- Annotations
- Final Determination
- Correspondence
- Cover Letter
- Special Response Letter
- Violation Letter
- 116 Letter
- Best Available Data
- 316-PMR
- FEDD File
- Supporting Artifacts
- Work Maps
- ESA Documentation

Each submission package should be no larger than 1 GB. Packages more than 1 GB in size or containing more than 8000 files can be separated into multiple uploads. If the package contains multiple files, these files should be zipped together, and uploaded as a single file.

When submitting data through Data Upload the user must select the appropriate “Access Restriction” for the material. These options will be available on the second screen of the data upload process. The user must select “Yes” or “No” for the three “Access Restriction” questions:

- Allow for Public Discovery? – Will the public see the upload dataset returned in the Flood Risk Study Engineering Library search results?
- Allow File Names Displayed? – After selecting an upload dataset in the Flood Risk Study Engineering Library, can the public view the file names within the specific upload?
- Allow for Public Download? – In the Flood Risk Study Engineering Library can the public download the files associated with the specific upload?

Selecting “No” for all three questions will result in the Flood Risk Study Engineering Library not displaying the uploaded materials to the public at any time. By default, the Access Restrictions will be set as defined in the Public Access Rules. You cannot remove restrictions that are placed by default, so some or all of answers to the three questions will not be editable. For example, Scoping materials are publically discoverable, and their file names are publically viewable; however, Scoping materials cannot be downloaded by the public. For public access guidelines for searching and downloading the materials uploaded through the Data Upload

portal are available below in Attachment A: Public Access Rules for Study data uploaded via MIP Workflow.

Files submitted through Data Upload will be stored in the MIP K: drive within the Submission Repository folder as well as become searchable and retrievable via the Flood Risk Study Engineering Library.

2.1.2 Search Engineering Data and File Explorer

These tools allow a MIP user to discover and access engineering, mapping, and/or DFIRM artifacts stored in MIP. The MIP File Explorer portal may be used to navigate and access directories and files located on the MIP J: and K: drives. The ability to modify specific folders is based on a user has claimed their assigned tasks and project workflow status within the MIP. Please direct questions regarding data access to MIPHelp@riskmapcds.com. For more information how the Search Engineering Data and File Explorer tools work see Section 6 of this guidance document.

2.1.3 Reports & Form Letters

This functionality enables registered users to create pre-defined or “canned” Amendment, Revision, and Study reports that provide status on a project within MIP. This activity also provides the ability to generate Amendment and Revision Form Letters supporting a project within the MIP workflow. Registered users can access Reports & Form Letters from Tool & Links or Workbench. The MIP user will need to choose which report they would like to retrieve from a drop down menu, selecting from “Select Report Category” and “Select Report Name”. The MIP user will need to enter information into the required fields indicated by asterisks. Once appropriate fields are entered the user will click “Get Report” to launch Crystal Reports Viewer to see the selected report. The report can be exported or printed from the Crystal Reports Viewer. Public access users will only be able to access Public Reports.

Table 1: List of Reports Available Through Reports & Form Letters

Form Letters	Amendment and Revision Reports	General Reports	Study Reports	Public Reports
Amendment Cover Letter (Draft)	Amendment Cases In-Progress	Community Locator	Appeal Period Summary	Completed LOMCs by Community
Amendment Cover Letter (Final)	Amendment Project Data Sheet	Location Subscription - LOMC List	Community Coordination	Open LOMCs
Amendment Determination Document (Draft)	Amendment Status	Location Subscription - Revalidation List	Community LOMC List	Project Locator

Form Letters	Amendment and Revision Reports	General Reports	Study Reports	Public Reports
Amendment Determination Document (Final)	BFE Publication and Letter Tracking	Location Subscription - SOMA List	Community Map Actions	Study Project Locator
Final Summary of Map Actions (SOMA)	LOMC Case Tracking	Project Listing Report	Flood Engineering	
Preliminary Summary of Map Actions (SOMA)	MT-1 Docket		Flood Mapping	
Letter 30 Day Suspension	Revision Cases In-Progress		Map Adoption	
Letter 90 Day Suspension	Revision Project Data Sheet		Post Preliminary	
Letter Revalidation	Revision Status		Pre-Scoping	
MT-1 Acknowledgement	Violation Tracking		Projected and Actual Study	
Refund Letter			Study Performance	
Request for Additional Data and/or Fee			Study Project Data Sheet	
Return Letter			Study Project Progress Report	
Revision Cover Letter			Study QA	
Revision Determination Document			Suspended Communities	

2.1.4 DFIRM DB QA

The DFIRM DB QA homepage provides access to Data Validation Tool (DVT) validation functions available to the MIP user, including access to submitting a test DFIRM DB QA and searching for the submission status of a submitted DFIRM artifact.

2.1.4.1 Perform DFIRM DB QA Test Submission

This function enables the user to submit a test DFIRM DB QA submission for validation by DVT. Enter the FEMA Study Case Number, Community ID, and FIRM DB Schema and click "Continue" to choose a file to be uploaded for test submission. Users can choose from 2003, 2011, 2013 FIRM Database Schemas.

2.1.4.2 Review DFIRM DB QA Submission

The review submission page allows users to find and review DFIRM QA reports for artifacts that have been submitted to DVT for validation, including Draft, Preliminary, and Final DFIRM artifact submissions. MIP users should use the search filter to view a report containing the status of FIRM DB QA Submission, please enter search criteria and click on "Search". Test submission results originate from the test submission environment. Draft, Preliminary, and Final results originate from project workflow QA activities (e.g., Develop DFIRM Database). Submission statuses are returned as Passed or Failed. Users can click on the Project Name listed in returned search results to view the FIRM DB QA submission level status and to review each submission report.

2.1.5 Address Book

The goal of the Address Book portlet is to display 1) Search results after an Address Book search has been performed, 2) Add Record forms when an add action has been launched, and 3) Modify record forms when a modify record action has been launched.

2.1.6 Meta Data Test Submission

Registered MIP users can access the web-based Metadata Test Submission portal to validate XML files, except for Discovery and Flood Risk Products. The test environment is provided so that users may validate and see results from their metadata submission prior to submitting it through the project workflow. Note that test submission should be made prior to a DVT submission through the MIP workflow. The following map production and data development metadata schemas can be tested via this portal:

- Acquire Base Map
- Develop FIRM Database
- Develop Hydraulic Data
- Develop Hydrologic Data
- Develop Topographic Data
- Orthoimagery
- Perform Alluvial Fan Analysis
- Perform Coastal Analysis
- Perform Field Survey

- Perform Floodplain Mapping
- Produce Final Map Products
- Produce Preliminary Map Products

2.1.7 Metaman

The Metaman Desktop Application is used to convert text files to XML files, correct XML files, edit XML files, and export XML files. The Metaman Desktop Application is downloadable via the MIP however users should use the web-based Metadata Test Submission portal to validate XML files since the Metaman Desktop Application does not automatically receive updates or connect with the MIP.

2.2 Workbench

The Workbench provides access to MIP project workflow functions available to users, including access to all Work Items that can be claimed to work on. For assistance in determining MIP workflow roles and access:

- Studies users: Contact your RSC or Black Belt
- Revisions and Amendments users: Contact your Subject Matter Expert (SME) or miphelp@riskmapcdfs.com.

2.2.1 Work Items List

Each Flood Risk Project is a series of MIP workflow tasks. These activities are organized into task groups according to the different project phases that occur during production. Work items are available to a user based on organization type (e.g., CTP, PTS, CERC, or FEMA) and a user's MIP roles and responsibilities, both of which are defined during account registration. For visual diagrams of workflow activities see Attachment B: Study Process Diagram, Attachment C: Revision Process Diagram, and Attachment D: Amendment Process Diagram. The Process Diagrams also identify the user role for each activity, such as Task Lead, Study Administrator, and Manager, for a complete list of task groups, activities, role names and descriptions, and performing organization, see Attachment E: MIP Task and Activities with User Roles.

The work item list will show a user all project activities which are available to them, appearing as Claimed or Unclaimed activities. The user's view of their work item list can be modified through Options and updated through Refresh.

2.2.1.1 Claiming and Unclaiming Items

Available work items can be claimed by a user by clicking on the "Claim" button. The claimed item then can be opened by clicking on the Activity Name. Within each MIP activity there are numerous data fields the user would be required to complete, some with a data upload component. For a complete list of data fields and their descriptions see the Activity Reference Guide (<https://hazards.fema.gov/femportal/ActivityReferenceGuide/>).

2.2.1.2 Options and Refresh

A user can modify (add, remove, reorder) the columns displayed on their work item list using Options. The "Action", "Activity Name", "Case Number", and "Project Name" fields are not modifiable. If you save your changes when you are finished, your preferences will be retained in your MIP user profile.

Work Item List Options:

- Action
- Activity Name
- Case Number
- Community
- Community Identification Number (CID)
- Date Posted
- Project Category
- Project Name
- Region
- State
- Task Description
- Task System ID
- Workflow History

The Refresh function will allow a user to update their work item list displaying new activities and removing activities claimed by other users.

2.2.2 Project Dashboard

The Project Dashboard displays the health of a mapping effort from a geographical or project level perspective, particularly from a Cost, Schedule, Regulatory Requirement and Management Effectiveness perspective.

“Show Me Areas” allows users to filter their search by project type (Amendments, Revisions, and Study), geographic area (Region, State, and County), and status indicators (Cost, Schedule, and Overall Health). Filter options can be selected from drop down menus. The Search button will populate the Composite View depending on what information the user entered to filter their search. From the Composite View users can then drill down to the Project List and Project Summary information.

Dashboard search results will display based on chosen geography and will include calculated EV performance indices, Cost Performance Index (CPI) and Schedule Performance Index (SPI). Cost, schedule, and health are also color coded to indicate status, green equals on target, yellow or orange equals at risk, and red indicates attention is needed, see Figure 1.

Figure 1: Project Dashboard – Project List View

Project List -- Studies in Wisconsin						
Project #	Project ID	Cost	Cumulative CPI	Schedule	Cumulative SPI	Health
13-05-6006S	RM-RMP-FY12-ASFPM Outreach Support for Great Lakes Coastal Flood Study-C	○	0.99	●	0.59	●
13-05-4204S	RM-REG-FY12-WI-Ozaukee County Lake Michigan Coastal Update-C	○	1.00	●	0.54	●
14-05-4066S	RM-FY13-WI-Tier 1 Action Engagement-O	○	1.00	⊖	0.92	⊖
14-05-2214S	RM-RMP-FY13-WI-Marquette County Non-Coastal Areas-(14-05-3367S)-C-CW	○	1.00	●	0.85	●
13-05-4199S	RM-REG-FY12-Manitowoc County Lake Michigan Coastal Update-C	○	1.00	●	0.65	●

2.2.2.1 Earned Value Management

Cost and schedule performance is calculated by Earned Value at the project level. Terminologies for EV calculations are: ACWP (AC) - Actual Cost of Work Performed, BCWP (EV) - Budgeted Cost of Work Performed and BCWS (PV) Budgeted Cost of Work Scheduled (planned). EV calculations allow FEMA Study Administrators to establish cost and schedule performance using Performance Indices.

MIP EV Tip: Study Managers should update their MIP manage tasks with “Actual Cost to Date”, “As Of Date”, and “Percent Complete” for all active tasks at the end of each calendar month.

Figure 2: Earned Value Graph

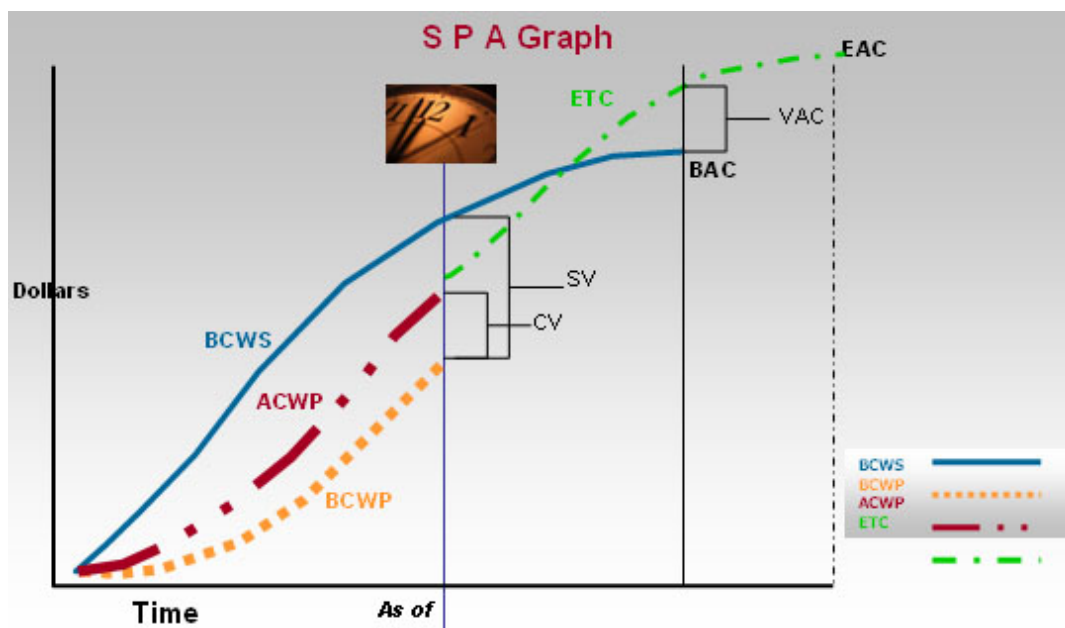


Figure 3: Earned Value Performance Indices

PERFORMANCE INDICES

- Cost Performance
 - **Cost Variance (CV) \$ = BCWP - ACWP**
 - **Cost Performance Index (CPI) = BCWP/ACWP**
- Schedule Performance
 - **Schedule Variance (SV) \$ = BCWP - BCWS**
 - **Schedule Performance Index (SPI) = BCWP/BCWS**

Green - On Target: 0.95 - 1.05
Yellow - At Risk: 0.90 - 1.10
Red - Out of Tolerance: < 0.90 or > 1.10

Figure 4: Earned Value Example (Costs in Dollars)

Task	Task Baseline Budgeted Cost	% of Work Actually Completed	Days since Baseline Task Start/ Total Duration of Task in Days	BCWP	ACWP	BCWS
Scoping	6,000	1	14/14	6,000	7,000	6,000
Develop DFIRM Database	70,000	1	90/90	70,000	72,000	70,000
Perform Floodplain Mapping	30,000	0.5	180/180	15,000	17,000	30,000
Preliminary Map Production	85,000	0.15	90/90	12,750	10,000	85,000
Post Preliminary Processing	109,000	0.1	30/90	10,900	15,700	36,333
	300,000		TOTALS:	114,650	121,700	227,333

BCWP = Task Baseline Budgeted Cost x Percent of Work Actually Completed (e.g., Prelim Map Production \$85,000 x 0.15 = 12,750).

BCWS = Task Baseline Budgeted Cost x Days since Baseline Start / Total Duration of Task in Days (e.g., Post Prelim Processing \$109,000 x 30/90 = 36,333).

$$\text{CPI} = \text{BCWP} / \text{ACWP} = 114,650 / 121,700 = 0.94$$

$$\text{SPI} = \text{BCWP} / \text{BCWS} = 114,650 / 227,333 = 0.50$$

A CPI of 0.94 means that the project is providing 94 cents of value for every dollar earned (OVERRUN). An SPI of 0.50 means that the project has completed 50 percent of the planned-to-date value (BEHIND SCHEDULE).

2.2.3 Summary of Map Actions

This tool is applicable to studies and allows users to categorize effective LOMCs within the project geography for purposes of issuing the Preliminary Summary of Map Action (SOMA), the Final SOMA, and Revalidations documents. LOMCs will be listed by the community in which the case was initially determined. All LOMCs shall be either excluded or categorized. There are four SOMA categorizations: Category 1 (LOMCs Incorporated), Category 2 (LOMCs Not Incorporated), Category 3 (LOMCs Superseded), and Category 4 (LOMCs To Be Redetermined) (see Standard #553). Within the MIP workflow the SOMA is considered “Complete” when all LOMCs are excluded or categorized. Some communities will not have any LOMCs; in those instances no action on the SOMA is needed.

A “Complete” SOMA status is required before the following MIP tasks can be completed:

- Distribute Preliminary Map Products
- Distribute Letter of Final Determination (LFD) Docket

2.3 Process Admin

The Process Admin (PA) tool supports Amendments, Revisions and Studies projects so a valid MIP case number is required when doing a Process Admin search. Functionality available in the Process Admin tool includes:

- Search for a project
- Open the Workflow History
- Change a project status
- Unclaim an activity
- Transfer an activity
- Update project data

Process Admin access is limited to select MIP users, typically FEMA staff, study administrators, and process leads; such users include MIP Champions, Black Belts, and RPMLs.

2.4 MARS

MARS is a reporting application to access MIP data and create ad-hoc reports on demand. MARS provides users increased access to data on the MIP, access which must be granted to a

user by MIP Help. Data elements available for the ad-hoc reporting universe include Studies and Revisions Workflow data as well as Amendments status information. Click on the “Access MARS” link to launch the MARS application. MARS is a Java supported application and works with Java version 8 update 11.

For users trying to resolve configuration issues in MARS see the [Resolving Issues in MARS](#) document at MIP User Care → Training Materials → MARS Training (https://hazards.fema.gov/femaportal/wps/myportal/usercare_training). All questions about the MARS reporting application should be directed to MIPHelp@riskmapcdfs.com.

Features of MARS include:

- New data elements for Studies reports
- Status information for Revisions and Amendments
- Accesses a separate data warehouse, not the MIP database
- Data is refreshed daily to include updates made the previous business day
- Create individualized reports and email them at scheduled intervals to non-MARS users (i.e., mapping partners, National Flood Determination Association, etc.)
- Access to additional Studies, Amendments and Revisions canned reports
- Create individualized reports (contact your MIP Champion or Black Belt for information)

MARS will be unavailable daily from approximately 5:00 a.m. to 7:30 a.m. Eastern Time for maintenance.

2.4.1 Pre-defined Reports

Pre-defined report or “canned” reports have already been customized for the user by the MARS administrator. These reports should not be modified however they can be scheduled for recurring delivery to a user’s email address. Four groups of canned reports are available:

- Studies Reports
- Earned Value Reports (studies only)
- Amendment Reports
- Revisions Reports

Users must be logged into the MIP to access MARS. See the MARS home page (<https://hazards.fema.gov>) for a list of canned reports.

2.4.2 Ad-hoc Reporting

Ad-hoc reporting allows users to create new reports from the MARS universe which includes Studies, Amendments, and Revisions. There are numerous data elements a user can pull into

their customized query. Queries can be saved, exported, or scheduled for delivery to the user's email address.

Users must be logged into the MIP to access MARS. See the MARS home page (<https://hazards.fema.gov>) for a list data element names and description.

3.0 Project Management

All Flood Risk Projects and LOMCs must be tracked in the MIP per FEMA Program Standard number 1 (SID# 1). The initiation of a project requires the creation of a new case number. Each Region's Program Management team is typically responsible for project creation and EV monitoring. The lifecycle of the project is then managed by the project management team (e.g., CTP, PTS, CERC). The project management team will facilitate the completion of all project activities for which they are responsible, including data development, community engagement, map production, and cost and schedule management.

3.1 Creating Projects

The Create Project tool enables selected users to establish a new Amendment, Revision, or Study project in MIP. Each new MIP project is assigned a nine digit project number. The first two digits of the project number indicate the fiscal year in which the project was created, the second two digits indicate the Region, the next four digits are a sequentially generated number, and the letter at the end indicates what type of project it is. See a list of options for project type and project status below.

Each project is created based on either single or multiple geographies, typically at the county level and then assigned to a specific organization scoped with the work. The basic steps to create a study project in the MIP include: 1) selecting the Region in which the project exists 2) adding organization name, schedule, and budget for the scoping tasks 3) add the geography being studied, typically county based for studies and community based for amendments and revisions 4) adding FEMA and RSC contact information. Note that the FEMA Regional Engineer and FEMA Regional Floodplain Manager are contact information fields which will appear in the MARS EV reports linking those project monitors with their assigned projects.

Project Type Options:

- A: Amendment or projects
- C: Amendment Conditional
- P: Revision
- R: Revision Conditional
- S: Study
- T: Pre-Scoping
- V: Amendment (V Zone)

- X: Amendment & Revision Corrected Copy Case

Project Status Options:

- Active - An in-progress project anywhere in the workflow.
- Closed/Terminated - A project that does not continue processing through the workflow. The case is terminated somewhere in the workflow.
- Completed - A project that has gone through the workflow from beginning to end (all workflow steps are completed).
- Inactive – Only applicable to Revisions and Amendments projects, when a project has yet to be assigned a project resource or the project is awaiting requested data and/or fees.
- On-hold – Only applicable to Studies projects, a temporarily removed project from the Work Item List. This status suspends EV calculations.
- Suspended – Only applicable to Revisions and Amendments projects, a project is suspended due to data and/or fees or a violation.
- Withdrawn - A project that does not continue processing through the workflow. The case is terminated somewhere in the workflow because the requester wishes to withdraw their revision request.
- Removed – A project was created in error or is no longer valid. This could be a legacy project that was replaced with a new MIP case number and all the data from the legacy project is now included with the new case number. Projects with this status will not show up in any reports or on anyone's work item list. This is the equivalent to a 'junk' status. A project can be moved to the 'removed' status through MIP Help.

For Step-by-step work instructions to Create Project see MIP User Care: https://hazards.fema.gov/femaportal/docs/RSC_MOD_HQ_01_Create_Project.pdf.

3.1.1 Project Naming Convention

A MIP project name needs to be practical and intuitive, using common language to help quickly identify projects for MIP users who daily interact with the cases. In an effort to balance the need for additional data that cannot be obtained from the MIP but allows maximum flexibility and discretion for project names at the Regional level, standardized elements should be used when creating a MIP project name using a list of recognizable codes to be included as a prefix and suffix to a Regionally-determined project name. All MIP projects must adhere to the following naming structure, also see Table 2: **(Prefix code) Regionally-determined project name (Suffix codes)**.

FEMA Regions should coordinate with their MIP Champions and RPMLs to develop appropriate names for projects in the MIP. The bulk of the project name will be determined by the Region, with the following requirements for tracking and reporting purposes:

- You must indicate if the project is tracking regulatory (REG) production processes or Risk MAP products (RMP) using the appropriate prefix.
- You must indicate the fiscal year the project was first funded and created in the MIP via the suffix.
- You must indicate the type of study, and/or funding used, in the suffix. If multiples, list them alphabetically. This item must be included in parenthesis.
- You must include the HUC8 code if it is a watershed-basin study.
- You must ensure that the total length of the name does not exceed 128 characters. If so, then you will need to adjust the regionally-determined portion of the project name. (This safeguard prevents the MIP from truncating any necessary suffix information when exporting the project name in various reports.)

MIP Champions and RPMLs also have the access rights to change the name of a project already created in the MIP. Once the new project name is determined, the Champion or RPML will login to the MIP and search for the case number in the Process Administrator Tool. Select the project and click the “Update Study Project” button. Click on the “Project Scoping Information” link and enter the revised name in the “Project Name” field. Click the “Continue” button through all the Project Scoping screens. Enter comments in the Change Notes box when prompted, click the “Continue” button and then click the “Complete” button when finished making updates. The new name of the project will appear in the top of the Process Admin screen.

Table 2: Prefix and Suffix Code Descriptions for MIP Project Names

Prefix Code	Description
REG	Indicates the project is tracking production of regulatory products and processes
RMP	Indicates the project is tracking production of Risk MAP products and services
FOA	First Order Approximation production (FOA) Example: RM-FOA-FY14-MN-07040004-Zumbro River Watershed (12-05-2135S)-W
Suggested codes for the regionally determined project name section	
CW	Indicates a countywide project
PCW	Indicates a partial-countywide project (according to the guidelines outlined in Procedure Memorandum 46)
W	Indicates a watershed-basin project (requires including at least one HUC8 code)

PMR	Indicates a Physical Map Revision
MAINT	Indicates Maintenance
DISC	Indicates Discovery
Suffix Code	Description
FY##	Indicates the first fiscal year the project was funded/created, where '##' is the last two digits of the numerical year (e.g., fiscal year 2009 is FY09)
C	Indicates the project contains coastal study areas or is financed by Coastal funds
E	Indicates an elevation acquisition project
L	Indicates the project contains areas impacted by a levee, is associated with levees (e.g., revision to add/remove a Provisionally Accredited Levee, or PAL, note), or is financed by levee funds
LMP	Levee Analysis and Mapping Approach (LAMP) Example: RM-REG-FY11-IL-Hardin County-Rosiclare Levee-L-LMP
O	Indicates a project financed by Other Engineering Needs funds (may be used alone or in conjunction with other study type codes)
HUC#####	Indicates the 8-digit numeric hydrologic unit code (HUC) for a watershed-basin study, where # represents
REG####	Indicates the last four digits of the REG case number (only needed at the end of the RMP project name)

Project naming convention examples:

Watershed Project

- REG-Baraboo River PMR-FY10 (LO) HUC59824785
- RMP-Baraboo River PMR-FY10 (LO) HUC59824785-REG0234

County Project

- REG-Madison County Maint-FY11 (EL)
- RMP-Madison County Maint-FY11 (EL)-REG0234

3.2 Obligating Funds

The Obligate Project Funds task is completed by the MIP Champion or RPML after the scoping workflow has been completed. The scoping workflow is completed either as Discovery or as dummy data. The Obligate Project Funds task opens up the data development tasks to be completed by the Mapping Partner and is based on the scope of the project and the statement of work. If the project is a Study or REG project, KDP1 may be required prior to the completion of the Obligate Project Funds tasks, reference the [Key Decision Point \(KDP\) Process Guidance Document](#) for project compliance with the KDP Process.

For every data development task that is added when completing the Obligate Project Funds task, you will need the following information: Task Name and Task Description, associated geography, schedule, budget, contractor organization type and name, contract number and task order number (for CTP's you will need Award Number, and Mapping Activity Statement (MAS) Number). Information impacting this step will also include 1) is the task currently contracted or planned? If the task is planned for a future schedule and budget, geography should be added, and the Planned box checked. In this case, an Authorize Planned Data Development Task will be added to the project for obligation at a later time. 2) Is Independent QAQC contracted as separate line item, or has this cost been rolled into the total cost for the task? If it has been contracted as a separate line item, check the box for Independent QAQC and additional lines for data will appear.

After this task is completed in the workflow, data development tasks are added / removed or modified using the Process Admin – Update Study Project – Data Development Tasks or Prelim and Post-Prelim Tasks. Under Data Development tasks, you can add tasks using the Add Task button. Note that in cases when added tasks do not appear on the users study workbench; contact MIP Help for assistance. Tasks can also be removed if the task has not already been claimed at 100%. Tasks can also be edited using the editor button in the right hand corner of the task; modifications can include; task description if additional information is required, budget and schedule, if there has been a modification or change request. Changes that cannot be made after a task is initially set up are changes to Organization Type, and Organization {name}.

When setting up projects, it is important to consider the requirements for data capture and organization with the data is uploaded. There are some situations where it makes sense to add additional tasks to organize the data upload process. For example Light Detection and Ranging (LiDAR):

- If LiDAR is purchased after Discovery has been completed, the LiDAR purchase can be included in the main project as a Develop Topographic Data task. In this case, it can be useful to include separate develop topographic data tasks for any data integration or editing that is performed in conjunction with regulatory flood modeling. This allows the full suite of deliverables for the original LiDAR collected to be submitted and the task closed when the LiDAR has been delivered and QA'd. Subsequent modifications to the Digital Elevation Model (DEM) to support regulatory analysis can be submitted under a different develop topographic data task.
- If LiDAR is purchased prior to Discovery, typically a separate project should be created with a Develop Topographic Data to capture the LiDAR deliverables.

Similarly, FOA may be performed prior to Discovery and may be performed for a geography that does not correspond to a standard Risk MAP project. In these cases, it also make sense to create a separate project to capture the FOA data with develop topo, hydrologic, hydraulic, and floodplain mapping tasks to capture the deliverables from FOA. If FOA is performed along with Discovery, the supporting data may be uploaded though the Tools and Links upload portlet along with other Discovery artifacts.

For Step-by-step work instructions to Obligate Project Funds, see MIP User Care: https://hazards.fema.gov/femaportal/docs/RSC_MOD_HQ_03_Obligate_Project_Funds.pdf.

3.2.1 Task Descriptions

Task descriptions allow the project creator (Champion or RPML) to record project details (e.g., Fiscal Year, Change Request, etc.) in the MIP workflow at the task level. The purpose of each project task is not always intuitive especially when creating Flood Risk projects (non-regulatory) and when assigning tasks such as Perform Alluvial Fan Analysis. The details provided in the task description field clearly define a task's purpose and can make it easier for the Mapping Partner to identify tasks when they are claiming work on their Workbench. Task descriptions can appear as an option on the Workbench or can be found in manager tasks, such as Manage Data Development.

Figure 5: Task Description on MIP Workbench

Claim an activity by clicking the Claim button. Clicking on the Activity Name link will display information in the Work Item Details (below). Click on column names to sort by that column. The input fields below may be used to filter your work item list.

- [Collapse](#): Add, remove, and reorder columns in your Work Items list
- [Refresh](#): Display new activities in your Work Items list and remove activities claimed by others
- [Activity Reference Guide](#): Display an overview of information needed to complete Studies activities

Action	Activity Name	Case Number	Project Name	Date Posted	CID	Task Description
Claim	Approve LFD Docket	09-05-12330	Marquette County, MI (Countywide DFRM)	10/19/2015	26439C	
Claim	Distribute 30 Day Suspension Notification	08-05-60425	Anoka County, MN (Countywide DFRM)	10/17/2015	27063C	
Claim	Distribute 30 Day Suspension Notification	12-05-22828	RH-880-FY11-01-07070005-Lower Wisconsin River Watershed (FY10 Discovery Funding in 11-05-18988) (8 County)-O-W	10/17/2015	55049C	
Claim	Distribute 30 Day Suspension Notification	14-05-39943	RH-880-FY13-29-31, Joseph County-(LORR 11-05-78048)-O-PRR	10/17/2015	18141C	
Claim	Validate Content Submission: Alluvial Fan Analysis	14-05-40748	RH-FY13-MO-Tier 2 Action Engagement-O	10/16/2015	26001C	Action Support
Claim	Validate Content Submission: Final Map	10-05-30450	RH-FY09-IN-Marion County Updater-O-PRR	10/16/2015	16097C	
Claim	Check Adoption Status	11-05-38730	RH-FY10-09-Dakota County (Hastings Levee)-L-PRR	10/11/2015	27037C	Includes Outreach, Appeal & Protest Support & CMPS population & maintenance
Claim	Check Adoption Status	13-05-67760	RH-880-FY10-26-LaSalle County (C&Y Marsh Dist)-O-PRR	10/11/2015	11058C	"Appeal and Protest Support" and "Post Preliminary Processing" combined as one task.
Claim	Check Adoption Status	14-05-20390	RH-880-FY10-04-Lucas County (City of Toledo)-O-PRR	10/11/2015	30095C	
Claim	Validate Content Submission: Final Map	11-05-47440	RH-880-FY10-04-04110000-Cuyahoga River Watershed-O-W	10/08/2015	36153C	

Showing 1 to 10 of 24 specified. Total number of items: 26

3.3 Managing Watershed Projects

The MIP Studies Workflow was designed for community based or countywide projects. However, it does allow for the entry of basin-wide projects. This section provides the steps that users should follow for entering basin-wide projects into the MIP, including a number of workarounds to circumvent current system limitations. These steps will facilitate the proper setup of projects in the MIP to allow accurate storage and retrieval of the project data. It is possible that other basin-wide scenarios exist that are not fully covered in this document.

A basin-wide project is set up similarly to a county-based study project that includes multiple communities. The key differences between a basin-wide study and a multi-community study are in the naming of the basin-wide study and the configuration of files for the data upload tasks.

The Obligate Project Funds task allows the study administrator to assign data development tasks and add funds for obligated tasks. In the Task Information section of the Obligate Project Funds screen, select the appropriate tasks to include in the project and select the same Task Area (County) for those tasks (Acquire Base Map, Develop Topographic Data, Perform Field Survey, Develop Hydrologic Data, Develop Hydraulic data, Perform Coastal Analysis, Perform Alluvial Fan analysis, Perform Floodplain Mapping). All data will be stored under this County and will reduce the total number of tasks in the Data Development section of the project. For ease of use and consistency, it is highly recommended that the first county (in alphabetical order) be selected.

The [Guidance for Creating Basin-Wide Projects in the MIP](https://hazards.fema.gov/femaportal/docs/Basin_Wide_Studies.pdf) provides guidance and screen shots on key steps for users needing to create a watershed project, see MIP User Care (https://hazards.fema.gov/femaportal/docs/Basin_Wide_Studies.pdf).

3.4 Managing PMR Projects

The purpose of this section is to provide guidance to MIP users when they are setting up new mapping projects that are Physical Map Revisions (PMRs) wholly contained within one county. A PMR revises flood hazard data on a portion of an effective FIRM because of changed physical conditions. For users that are setting up PMRs that cross county boundaries or new mapping projects on a basin-wide (watershed) basis rather than as a county/community-based project, see the [Guidance for Creating Basin-Wide Projects](#) in MIP User Care.

An important step in creating any project is the Obligate Project Funds task which assigns MIP task to a project. At this step, data development tasks are chosen and funds are obligated for those tasks. The process for a PMR project is the same as that used for a county-wide study. In the Task Information section of the Obligate Project Funds screen, select the appropriate tasks to include in the project and select the same Task Area (county-wide) for those tasks (Acquire Base Map, Develop Topographic Data, Perform Field Survey, Develop Hydrologic Data, Develop Hydraulic data, Perform Coastal Analysis, Perform Alluvial Fan analysis, Perform Floodplain Mapping, and/or Develop DFIRM Database). Every project needs to have at least a Develop DFIRM Database Task associated with it. All data will be stored under the county under the project's case number. Even though a PMR revises the flood hazard information on only a portion of a county, a PMR project will include an updated county-wide GIS database.

The [Guidance for Creating Physical Map Revision \(PMR\) Projects in the MIP](https://hazards.fema.gov/femaportal/docs/PMR.pdf) provides guidance and screen shots on key steps for users needing to create a PMR project, see MIP User Care (<https://hazards.fema.gov/femaportal/docs/PMR.pdf>).

3.5 Managing Revised Preliminary Projects

A Revised Preliminary MIP case number should be created for each Revised Preliminary Project needed. It is assumed that the original MIP case number was built as single or multi countywide project as opposed to projects that are community-based. All Revised Preliminaries should be built as a single countywide project for the area impacted.

The MIP Champion, RPML or other FEMA designee will assign the appropriate tasks for the Revised Preliminary Project. These include any data development tasks that need to be revised, the preliminary map production and post-preliminary map production tasks (if a second Appeal Period is required) as outlined by the contract and/or schedule information. At a minimum, one Develop FIRM Database task must be obligated to fulfill the QR1 requirement and one preliminary map production task obligated to fulfill the QR2/QR3 requirements.

See the [Preliminary Distribution and Revised Preliminary Guidance](#) document for details on creating the MIP case number, working through the scoping task, obligating the project funds, managing the original case number, identifying revised data within the original case number and closing the new Revised Preliminary MIP case number created.

3.6 Managing Engineering Projects

3.6.1.1 First Order Approximation

First Order Approximation (FOA) projects are created and obligated similar to a countywide project, using a single county jurisdiction. The MIP Champion, RPML or other FEMA designee creates the project in the MIP and obligates the scoped tasks. FOA projects are often coupled with the Discovery process, so the Study Manager will see a separate Discovery case number accompany the FOA case number. FOA projects also include Zone A model production because of this data development tasks will need to be added to each FOA project. The project creator typically will assign the Perform Alluvial Fan task to capture the FOA deliverables. For other technical activities that accompany FOA the project creator should assign data development as appropriate (e.g., Perform Floodplain Mapping, Develop Hydrologic Data, etc.) and be sure to utilize task descriptions to define the scope details for each task.

For details on FOA data production and methodology and its use see the [First Order Approximation Guidance](#) document.

3.6.1.2 Levee Analysis and Mapping Approach

LAMP projects have multiple funding year objectives therefore can be complicated to properly set up in the MIP. FEMA and MIP leadership are still in the process of finalizing a [LAMP in the MIP Reference Document](#). Contact your Region's Champion or RPML for details on setting up LAMP projects in the MIP.

3.7 Study Workflows

The MIP Studies Workflow is a series of tasks and activities completed by the Mapping Partner organization (e.g., CTP, PTS, CERC), the RSC, and FEMA in order to complete a Flood Risk project. The study workflow is divided into three major sections:

- 1) Manage Data Development:
 - The initial development and upload of applicable data
- 2) Manage Preliminary Map Production:
 - Preparation and delivery of preliminary map products to the communities
- 3) Manage Post Preliminary Processing:
 - Present maps to the community
 - Conduct, record and review appeals and comments
 - Submit final map products to the Map Service Center (MSC)
 - Manage revalidation
 - Manage map adoption

All three sections include applicable Quality Assurance reviews. Additional, smaller sections include: Manage Pre-Scoping and Manage Scoping. For specific tasks see Attachment B: Study Process Diagram and Attachment E: MIP Task and Activities with User Roles.

3.7.1 Study Roles and Responsibilities

Study Manager:

- Enter and update all cost and schedule information, at least monthly
- Impacts Earned Value metrics reviewed by FEMA
- Update projected milestone dates (Preliminary, LFD, and Effective)
- Enter leverage information
- Provide project oversight

Study Producer:

- Submit / upload data
- Meet all QA requirements
- Perform independent QA, as applicable
- Enter data analysis information
- Enter actual milestone dates
- Enter all post-prelim information

Study Administrator (Champions, Black Belts, RPMLs and FEMA Regional staff):

- Create Projects
- Establish baselines (obligate funds)
- Set and enforce policy
- Provide project oversight
- Review and approve applicable workflow tasks
- Review Earned Value (EV) data from the MIP

RSC (Black Belts):

- Perform national QA
- Validate deliverables

- Complete appropriate approvals

3.8 Amendment Workflows

Amendments is the term used in MIP for the MT-1 workflow process, which involves receiving, processing and issuing Letters of Map Amendment (LOMA), Conditional Letters of Map Amendment (CLOMA), Letters of Map Revision Based on Fill (LOMR-F), and Conditional Letters of Map Revision Based on Fill (CLOMR-F). The Amendments workflow is series of MIP activities sorted by MIP role see Table 3 for descriptions. For the Amendments workflow diagram see Attachment D.

Table 3: MIP Roles for the Amendments Workflow

Amendment Role	User Description
Process Administrator	Super-user for amendments who can perform all activities in the process (i.e., claim an activity regardless of role) and can change the owner of an activity
Project Administrator	User who is responsible for initiating new cases (i.e., entering all required case information)
Resource Manager	User who can assign a specific engineer to a case
Fee Administrator	User who can handle the receipt and logging of fees for amendment cases
Project Lead	User who can suspend cases; also a user who can also be designated to process an amendment
Task Lead	User who can process amendment (i.e., are assigned by the Resource Manager)
Audit Lead	User who reviews amendment cases before sending to FEMA
FEMA Amendment Lead	User from FEMA who can review and approve cases

3.8.1 eLOMA

Hosted within the MIP, eLOMA is a web-based tool specifically for licensed land surveyors and professional engineers (referred to as Licensed Professionals or LPs) and FEMA approved National Flood Determination Association Certified Professionals (CPs) to submit selected Letter of Map Amendment (LOMA) requests, known as an eLOMA. A LOMA is an official amendment to an effective Flood Insurance Rate Map (FIRM), typically issued to remove a Special Flood Hazard Area (SFHA) designation from a property and/or structure. User of the eLOMA application must be registered and will access the tool through the MIP.

The eLOMA tool is designed specifically for LPs and CPs to generate a quick determination from FEMA within minutes of submitting required information and data for the subject of the eLOMA request. The eLOMA tool is designed to replace the traditional standard LOMA process by allowing users to expedite LOMA requests that meet eLOMA Criteria.

The eLOMA tool does not accept the following LOMC requests: Letters of Map Revision (LOMR), Letters of Map Revision Based on Fill (LOMR-F), Conditional Letters of Map Amendment (CLOMA), or Conditional Letters of Map Revision Based on Fill (CLOMR-F).

For tutorials, trainings, and other resources on how to navigate through an eLOMA request see the eLOMA section of MIP User Care Training (https://hazards.fema.gov/femaportal/wps/portal/usercare_training).

3.8.2 Online LOMC

The Online LOMC web application (<https://hazards.fema.gov/femaportal/onlinelomc/signin>) allows home owners or their designated representatives to easily request a LOMC request, including LOMA, CLOMA, LOMA-F, CLOMA-F, LOMR and CLOMR. Use this site if your property was inadvertently included in a flood zone, or if the addition of fill elevated your property so that it is above the flood zone.

For tutorials, trainings, and other guides on how to navigate through an Online LOMC request see the Online LOMC section of MIP User Care Training (https://hazards.fema.gov/femaportal/wps/portal/usercare_training).

3.9 Revision Workflows

Revisions is the term used in MIP for the MT-2 workflow process, which involves receiving, processing and issuing LOMRs and CLOMRs. The Revisions workflow is sorted by MIP role. See Table 4 for descriptions. For the Revisions workflow diagram see Attachment C.

Table 4: MIP Roles for the Revision Workflow

Revision Role	User Description
Process Administrator	Super-user for revisions who can perform all activities in the process (i.e., claim an activity regardless of role) and can change the owner of an activity
Project Administrator	User who is responsible for initiating new cases (i.e., entering all required case information)
Resource Manager	User who can assign a specific engineer to a case
Fee Administrator	User who can handle the receipt and logging of fees for revision cases

Revision Role	User Description
Project Lead	User who can suspend cases; also a user who can also be designated to process a revision
Task Lead	User who can process revisions (i.e., are assigned by the Resource Manager)
Audit Lead	User who reviews revision cases before sending to FEMA
FEMA Revision Lead	User from FEMA who can review and approve cases
Document Control	User who completes the post-processing activities associated with revision cases (e.g., Distribute Determinations, Receive Appeal or Protest)

4.0 Data Capture

Project data is captured through the MIP via Data Upload, File Explorer, and most commonly through the MIP workflow. Data shall be captured per the current version of the [Data Capture Technical Reference](#), including MIP folder directory structure and file formats.

The MIP data upload limitation is currently 1 GB for files uploaded through the MIP Workflow or Data Upload and 2 GB for File Explorer. LiDAR should be mailed to the FEMA Engineering Library instead of being uploaded to the MIP. See the [Data Capture Guidance](#) document for additional information on data capture requirements.

Table 5: Project Activities with Data Upload Requirements and Related MIP Task

Project activity	Related MIP task	Folder Creation (Manual or Automatic)
Discovery	Scoping	Manual – see Data Capture Technical Reference
Base Map	Acquire Base Map	Manual – see Data Capture Technical Reference
Terrain	Develop Topographic Data	Manual – see Data Capture Technical Reference
Survey	Perform Field Survey	Manual – see Data Capture Technical Reference

Project activity	Related MIP task	Folder Creation (Manual or Automatic)
Hydrology	Develop Hydrology Data	Manual – see Data Capture Technical Reference
Hydraulics	Develop Hydraulics Data	Manual – see Data Capture Technical Reference
Alluvial Fan	Perform Alluvial Fan Analysis	Manual – see Data Capture Technical Reference
Coastal	Perform Coastal Analysis	Manual – see Data Capture Technical Reference
Floodplain Mapping / Redelineation	Develop Floodplain Mapping	Manual – see Data Capture Technical Reference
Draft Mapping Data	Develop DFIRM Database	Automatic
Preliminary Mapping Data	Produce Preliminary Map Products	Automatic
Final Mapping Data	Produce Final Map Products and Submit MSC Deliverable	Both automatic and manual folders: Automatic - RFIRM folder Manual - all other folders (FIS, MXD, etc.), see Data Capture Technical Reference
Post Preliminary (TSDN and FEDD)	No MIP task - Use Data Upload interface (Tools & Links)	Manual – see Data Capture Technical Reference
Flood Risk Products Data	Various MIP tasks, see Section 7.2	Manual – see Data Capture Technical Reference

4.1 Uploading Data

The data deliverables associated with tasks in the MIP must be successfully uploaded and validated before a task can be considered complete. Due to restrictions within the MIP, the process for uploading data depends upon the data type and size. For the purposes of uploading to the MIP, data is divided into the following types and sizes: Non-LiDAR data smaller than 1 GB, Non-LiDAR data larger than 1 GB, and LiDAR data.

Non-LiDAR data smaller than 1 GB

Non-LiDAR Data sets that are smaller than 1 GB can be uploaded directly to the MIP using the MIP process workflow or placed directly to the submission folder on File Explorer.

Non-LiDAR data larger than 1 GB

The MIP currently has a 1 GB data upload capacity. As non-LiDAR Data larger than 1 GB cannot be uploaded directly to the MIP, this data must be physically sent to CDS for uploading by the GIS Data Depot. This process described below.

Mapping Partners must select “Submission Method” to “Mail the Data” to the Data Depot at the Submit Data Files step in the MIP Workflow. This automatically creates a MIP Help ticket for the Data Depot. The Mapping Partner should physically send the data, a CD, DVD, or a hard drive with USB. Data sent in other formats will not be able to be uploaded and will not be returned to the center. Data should be sent to the GIS Data Depot using the address: FEMA Map Service Center, 10400 Eaton Place, Suite 150, Fairfax, VA 22030, Attention: GIS Data Depot.

Data submissions should include the following information:

- MIP Help Ticket Number
- Activity Name (e.g., Terrain, DFIRM, Hydrology, etc.)
- Contact Name
- Contact Address
- Contact Phone
- Contact Email Address
- Exact folder path to which the data needs to be uploaded
- Return Shipping Label*

*You must provide a return shipping label if you would like a hard drive returned to you. DVDs will not be returned.

Once the data is received by the GIS Data Depot, it generally takes about two business days for the Data Depot to upload the data and then a three to four business days for hard drives to be returned. Once data is received, the GIS Data Depot takes the following steps:

- Inform MIP Help of receipt of the data.
- Upload the data to the J drive of the MIP.

- Close the MIP Help ticket with a notification for the submitter to proceed with validation of the data and the continuance of the project workflow.
- Return the hard drive to the sender if a return shipping label was included in the submission.

LiDAR Data

Due to its size and complexity, LiDAR data cannot be uploaded to the MIP or processed by the GIS Data Depot. Currently, LiDAR data should be submitted to the FEMA Engineering Library using the process described below.

When submitting LiDAR data, Mapping Partners should submit LiDAR data sets on a portable hard drive or other media, in the TSDN format, to the FEMA Engineering Library at the following address: FEMA Engineering Library, 847 South Pickett Street, Alexandria, VA 22304, Attn: Bill Davis.

LiDAR data submissions should include the following information:

- Contact Name
- Contact Address
- Contact Phone
- Contact E-mail Address
- RSC E-mail Address
- MIP Case Number / Project Name

In addition to sending data to the FEMA Engineering Library, Mapping Partners will also need to upload to the MIP all the documentation deliverables required for LiDAR in the current version of the Data Capture Technical Reference (QA Report, FEMA elevation data profile, compliant metadata for the whole package, Federal Geographic Data Committee (FGDC) compliant metadata for sub-deliverables, flight plans and logs, etc.). Mapping Partners should include in the upload the required TSDN certification of the data specified in the Post-Preliminary Deliverables Guidance and Data Capture Guidance. Any validation of the LiDAR data necessary for project advancement must take place before delivery to the Engineering Library. A .txt "Read-me" file must accompany these uploaded documents notifying MIP users of the final location of the LiDAR data at the Engineering Library.

Once the data is received, the FEMA Engineering Library will send a receipt confirmation email to the sender and cc the RSC email included in the data submission. Depending upon the size of the data, data will either be returned to the sender on the original drive (after the Engineering Library loads the data to an internal drive), or the drive submitted will be maintained at the Engineering Library. In conjunction with an agreement between FEMA and the U.S. Geological

Survey (USGS), specific LiDAR data will be delivered from the Engineering Library to the USGS for upload to one of their sites.

5.0 Data Validation

All project data uploaded to the MIP through a project workflow needs to be reviewed and validated for completeness against the current Data Capture standards by a MIP super-user, typically a MIP Black Belt or someone with the RSC.

MIP activities with a “Validation Content Submission” requirement:

- Perform Field Survey
- Develop Topographic Data (Terrain)
- Acquire Base Map
- Perform Coastal Analysis
- Develop Hydrologic Data
- Develop Hydraulic Data
- Perform Alluvial Fan Analysis
- Perform Floodplain Mapping
- Develop DFIRM Database (QR1)
- Produce Preliminary Map Products (QR2)
- Produce Final Map Products (QR5)

For more information on data capture requirements, please refer to the [Data Capture Technical Reference](#).

5.1 Quality Reviews and DVT

Three Quality Reviews (QRs) include DVT checks which are processed on the submitted FIRM Database and its corresponding metadata file. DVT performs several checks on the submitted metadata file as well as several checks for consistency between the metadata file and the FIRM Database submittal.

QRs and MIP task with DVT checks:

- QR1 (Draft submission) – Develop DFIRM Database
- QR2 (Prelim submission) – Produce Preliminary Map Products
- QR5 (Final submission) – Produce Final Map Products

For more information on DVT requirements, please refer to the [Database Verification Tool \(DVT\) Guidance](#). There are additional QRs that occur during the study process but do not require validation through the MIP. For more information on all QR requirements, refer to the Quality Review Guidance document.

5.2 Preliminary Data

Once QR3 and KPD3 are approved the Mapping Partner should complete the Distribute Preliminary Map Products activity. This will distribute preliminary data (FIS, FIRMs, and database files) to the public facing sites: (www.fema.gov/preliminaryfloodhazarddata) and (www.msc.fema.gov). Preliminary data will be removed from the public-facing site when 'Submit MSC Deliverable' activity is complete (in close proximity to the LFD date).

In rare cases and after FEMA approval, data can be removed from the public view. This requires FEMA approval and coordination from MIP Help on the part of the Mapping Partner. If data is removed, the public will not be able to select that state or county when searching and language will indicate "No record found".

For additional guidance see the [Preliminary Distribution and Revised Preliminary Guidance](#) and the Authoritative Source for Preliminary Data section under MIP User Care → Training Materials.

6.0 Data Storage and Retrieval

6.1 File Explorer

The MIP File Explorer is a JavaScript-based web application that is accessible to authenticated MIP account holders upon login. The File Explorer allows users to navigate through the contents of the MIP working (J:) and archival (K:) Drives.

The J: drive is the drive onto which geographic data (e.g., data with FGDC-compliant metadata) is initially uploaded through the Manage Data Development activities on the MIP. This data is automatically copied to the K: drive after the completion of each Data Development activity. Data is registered when the Manage Quality Assurance activity is completed. Data uploaded to the MIP through the Tools & Links Data Upload feature is automatically placed on the K: drive.

The K: drive is read-only for all users – no files or folders on it can be modified through the File Explorer. All authenticated MIP users can read and download all files on the entirety of the J: and K: Drives. The ability to modify contents of J: Drive folder is dependent on whether a MIP user has claimed the activity.

All MIP authenticated users are able to view the entirety of the J: and K: Drives, which includes the ability to view file attributes and download individual files or sets of files. Questions about account permissions should be directed to MIPHelp@riskmapcads.com. For more information about MIP workflow status and its impact on J: drive access, users should consult the Data Migration and Transition Briefing on MIP User Care.

6.1.1 File Explorer Access and Navigation

The File Explorer application is available by login to registered MIP users using their MIP username and password. The application is available through Tools & Links. Depending on what web browser you are using, you may need to enable Compatibility Mode or otherwise adjust your browser settings in order to make the application display correctly. The top of the File Explorer page contains a legend for understanding the folder access notation used in the File Explorer. A user's level of access to a particular folder is identified by the notation displayed next to the folder. The notation explanations are as follows: (r--) - read only (rw-) - read and write (rwd) - read, write, and delete At the top right corner of the page is a link to this User Guide, as well as a link to download Adobe Reader in order to access PDFs such as this one. Below that pair of links is a "Keyboard Access Assistance" link. Selecting this link will pop up a list of keyboard shortcuts that allow users to input commands more quickly and complete them without using a mouse. These commands are as follows:

- Arrow keys will navigate through the folder/file structure.
- Left arrow closes the currently selected folder or returns to the currently selected folder/file's parent folder.
- Right arrow will open the currently selected folder or move to the first sub-folder of the currently selected folder.
- Enter Key will open the currently selected folder.
- Spacebar will make whatever file or folder is currently under tab focus the Current Selection
- Shift-L will download the currently selected file.
- Shift-N will create a new folder as a sub-folder of the currently selected folder.
- Shift-C will copy the currently selected folder/files.
- Shift-V will paste the copied content into the currently selected folder.
- Shift-D will delete the currently selected folder/files.

On the topmost frame of the File Explorer, the middle panel contains a File Path area that lists the full File Path of the currently selected folder or file. The right side contains a Case Number input field where a specific Case Number, if known, can be entered for quick access. The left-hand frame of the File Explorer contains two views for navigating through the folder structure on the J: and K: Drives – Explorer View and Case Number View. The largest frame, which has "Filename," "Size," and "Last Modified" column headers, is where file information about the contents of folders appears. The bottommost frame contains a series of buttons that can be used to accomplish some of the same commands as the Keyboard Shortcuts.

If you already know the Case Number for the project whose files you are attempting to access, you may type it into the Case Number input field at the top of the File Explorer screen and select

Search. You must enter the case number in exact accordance with standard naming conventions, including hyphens. Only an exact match will return the case. If a match is found, it will display the case folders in the Case Number View section.

If the Case Number is not known Explorer View enables you to navigate through the overall folder structure of the J: or K: Drives in order to find your desired project. It is useful if you do not have the project's Case Number available. The top level folder in Explorer View are organized by FEMA Region and users can be search by expanding the selected using your mouse (click on either the plus sign inside of the box to the left of the folder name or on the folder name itself) or using the arrow keys your keyboard – this will expand out the top level of folders on the drive. To collapse a level of folders back into their parent folder, click the minus sign inside of the box to the left of the parent folder or use the left arrow key on your keyboard. Expanding the Explorer View folder structure will reveal state, county, community, project, task, and then data level folders. Each project will have its own folder structure, which can be quite complex. You may continue using the Explorer View to navigate that structure to find the particular folder and data you want. For MIP projects, the folder structure under “SubmissionUpload” will mirror the Data Development tasks in the MIP.

6.1.2 J: Drive Maintenance

The MIP J: Drive, as the working drive, is only intended to be a temporary repository for files uploaded through the MIP project workflows. The final repository for MIP data is the K: Drive. In an effort to reduce the large amounts of duplicative, redundant, and extraneous data that have accumulated on the file server CDS has implemented a process to cleanup files on the MIP J: drive. Files that are on the J: drive, but not the K: drive will be transferred over to the K: drive. The redundant files will then be removed from the J: drive. For some projects there are files on both J: and K: drives, but with known differences or discrepancies. These projects will go through a reconciliation process, requiring coordination between the Mapping Partner and MIP Regional contacts (Champions, Black Belts, and RPMLs). MIP users will be notified by email that reconciliation is needed. Through the reconciliation process it will be determined whether J: drive files should be deleted or copied over to the K: drive. File maintenance requests should be coordinated between MIP Regional contacts (Champions, Black Belts, and RPMLs) and MIP Help.

6.1.3 Discovery Data Repository

The MIP serves as a repository for data resources suitable for Discovery from national data maintained by FEMA and Other Federal Agencies (OFAs). The FEMA Discovery Data Repository, which is to be used only for official FEMA purposes, such as Discovery, can be found on the MIP File Explorer at J:/DISCOVERY_DATA_REPOSITORY. The Discovery Data Repository is maintained by FEMA. Geospatial data available from FEMA and OFAs are often preferred sources for performing Discovery activities and are referenced in the National Discovery Data Coordination Procedure. Note that data used for Discovery may not be at a suitable scale for Flood Insurance Rate Map (FIRM) production.

6.1.4 Using File Explorer

6.1.4.1 Downloading Files

If your access to a folder is read-only, which will be denoted by (r--) appearing next to the folder name, you will not be able to modify the contents of the folder. You can download a file, however, by double clicking on it in the File Details frame or by making it the Current Selection and clicking on the download button at the bottom of the window. This will bring up your browser's download prompt.

To download the contents of an entire folder, select the folder and either select the Download button or enter Shift + L in order to download the currently selected folder. Note: doing so will bring up an error message warning you that downloading a folder may entail downloading a great deal of information. If you choose to proceed, then a new browser tab or window will open. Once the process of zipping up the contents of your chosen folder is complete, download links will appear in this new window.

6.1.4.2 Creating New Folder

To create a new folder, select an existing folder to which you have write access. Then select the New Folder button or enter Shift + N in order to create a new folder as a sub-folder of the currently selected folder. You will be prompted to enter a name for the new folder. Once you select OK, the new folder will appear in the Folder Navigation frame.

6.1.4.3 Uploading Files

To upload a new file, select a folder to which you have write access. Then select the Upload button. This will bring up an upload prompt that will allow you to select a file on your computer and upload it to the selected folder. You may also drag and drop a file from your computer into the File Explorer. To do so, click the file on your Desktop or in a folder, then hold down the mouse click as you drag the file from your computer window to the destination folder in the folder structure navigation. When the file is hovering over the destination folder, a Move icon will appear. Release the mouse click to upload the file from your computer to the folder. If you upload a ZIP file, the contents of the file will be unzipped upon upload. This includes any folder(s) buried within the ZIP, which will be added to the existing folder structure, under the folder to which you uploaded the ZIP file.

6.1.4.4 Copying Files and Folders

To copy a file from one folder to another, select the file in the File Details frame and select the Copy button or enter Shift + C. Then make the desired destination folder in the Folder Navigation frame the Current Selection and select the Paste button or enter Shift + V. The file will be copied over into the destination folder. In order to paste a file into this folder, you will need to make sure the destination folder is the Current Selection and highlighted in blue. You can do this by using the mouse or arrow keys to move the Current Selection highlighting from the file to the parent folder. You can also copy a file or folder by simply clicking on it, then holding down the mouse click as you drag the file from the File Details frame to the destination folder in the Folder Navigation frame. You can also copy a file or folder by simply clicking on it, then holding down the mouse click as you drag the file from the File Details frame to the destination folder in the Folder Navigation frame. Once the file is over the destination folder,

release your mouse click and the file will be copied into the target folder. A confirmation message will display in red below the Search by Case Number pane.

6.1.4.5 Deleting Files

To delete a file or folder, highlight it as the Current Selection in the respective File Details or Folder Navigation frame and either select the Delete button or enter Shift + D. A warning prompt will appear. Click OK to complete the deletion.

6.2 Flood Risk Study Engineering Library

The Flood Risk Study Engineering Library (FRiSEL) is an online search portal that can be used to access data associated with FEMA flood risk mapping projects that has been uploaded to FEMA systems. It replaces the pre-existing "Search & Retrieve Data" functionality within the Mapping Information Platform (MIP). The FRiSEL provides users with a fast, intuitive search and navigation interface for locating, examining, and downloading engineering support data.

This system is only accessible by credentialed FEMA staff, contractors, and affiliated mapping partners with active logins and access to the MIP. Questions about account permissions should be directed to MIPHelp@riskmapcds.com.

The data accessed through the FRiSEL resides on the MIP K: drive, which is the designated archival drive for storage of MIP flood risk mapping project data. MIP data found on the working J: drive or other servers (e.g., the eLOMA and Online LOMC submittal drives or the CFAS-CH drive used by the LOMC Clearinghouse) is not accessible through the FRiSEL.

6.2.1 Keyword Search

When first accessing this application, the initial screen contains only the Keyword Search input field. This field may be used to conduct keyword-based searches on the data. Data uploads contain a number of searchable fields, including associated metadata, and the Keyword Search compares the entered search terms against these fields. There are several specific types of searches that can be performed using logical operators. These are explained in the help text accessible by clicking the "?" next to "Keyword(s) Search" and are also listed below.

- **EXACT Search:** One or more alphanumeric keyword search terms are entered, enclosed in quotation marks. Returned results will match the exact the search string in quotation marks from the records' searchable fields. (Example: a search for "Potomac Hydraulic" will return only results containing "Potomac Hydraulic.")
- **OR Search:** More than one alphanumeric keyword search term is entered, separated by one or more spaces. Returned results will list records containing any of the search terms within the records' searchable fields. (Example: a search for Potomac Hydraulic will return all results containing Potomac as well as all results containing Hydraulic.)
- **AND Search:** More than one alphanumeric keyword search term is entered, separated by the 'AND' operator. Returned results will contain both the first and any subsequent search term(s). (Example: a search for Potomac AND Hydraulic will return results containing both Potomac and Hydraulic, but they do not need to appear adjacent to one other in the records' searchable fields.)

- **MINUS Search:** More than one alphanumeric keyword search term is entered, separated by the dash character ('-'). Returned results will list records containing the first search term but excluding any subsequent terms. (Example: a search for Potomac -Hydraulic will return all results that do contain Potomac but do not contain Hydraulic within the records' searchable fields.)
- **WILDCARD Search:** An alphanumeric keyword search term is followed by an asterisk. Returned results will list records containing the search term and any strings that begin with the search term. (Example: a search for Poto* will return results containing Poto as well as results containing any string that begins with Poto, such as Potomac, Potowmack, etc.)

6.2.2 Advanced Search

Selecting the “+ Advanced Search” link located directly below “Keyword(s) Search” drops down an additional set of search input fields. Values may be entered for one or more of these fields to narrow the range of search results returned. The values entered into the fields here are checked against the corresponding attributes in the data as submitted. Some data, particularly older cases, may have limited or missing attributes. For that reason, it should not be assumed that searches will always return a comprehensive listing of all data available in the FRiSEL that matches the search parameters. To clear all entries in the Search parameters and begin constructing a new search, select the Reset button at the bottom right of the page, immediately next to the Search button.

Selecting the “+ More Options” link located directly to the left of the “Search” button will drop down a final extra set of search input fields. As with the initial Advanced Search set of fields, these search fields are all optional. They are checked against the corresponding attributes in the data, as it was submitted to FEMA by mapping providers. Using a greater number of search fields can help narrow down the list of returned results, with the tradeoff that the results will potentially be less comprehensive.

6.2.3 Narrowing Search Results

The Search Results screen will display the data uploads whose attributes matched the search criteria, with 10 results displayed per page. Results are sorted by date uploaded, with the most recently uploaded data being displayed first.

Each result represents a single data upload, which may contain one or more individual files. The attributes displayed for each data upload on the Search Results page include the associated FEMA Case Number of the project under which that upload was submitted; the Type of Data Product; the Project ID/Name; the project Effective Date; the date the data was uploaded to FEMA’s systems; the FEMA CID number(s) associated with the project under which the data upload was submitted; and the FEMA CID associated with that specific data upload. Some of these values may be blank.

The “Narrow Your Search” sidebar on the left side of the Search Results screen allows you to further refine the Search Results by filtering them based on selected criteria. The number in parenthesis next to each selectable attribute represents the number of results that match that attribute. Once you have selected your chosen criteria for filtering the results, select the “Refine

Search” button at the bottom of the “Narrow Your Search” sidebar. Filterable search criteria include project type, state, case number, and type of data product.

Once you have identified a specific data upload that you would like to examine further, select it in the search results to bring up the data upload details page. The details page contains a set of attributes associated with the selected data upload. It also contains several options for accessing the data, including: “Download All”, “Download Selected File(s)”, or “View Metadata”. The “Download All” button allows you to download all of the files contained in the data upload, unless the total size of the files collectively exceeds 3 GB. If that is the case, the user will be directed to download the files in smaller groupings. If the total size of the files collectively falls between 1 GB and 3 GB, then the download will be split up into 1-3 separate ZIP files of 1 GB max. Selected files will be bundled, zipped, and made available to the user for download.

6.2.4 Online LOMC and FRiSEL

For Online LOMC Cases when the following product types are uploaded through Data Upload, they will be searchable and retrievable through the Flood Risk Study Engineering Library and available to the Requestor through the Online LOMC application.

- Amendments
 - Cover Letter
 - Final Determination
 - Violation Letter
 - Other Response
 - 216 Letter
- Revisions
 - Cover Letter
 - Final Determination
 - Special Response Letter
 - 116 Letter
 - 316-PMR

7.0 Flood Risk Products

Risk MAP studies include new products which shall provide state and local officials better tools for communicating flood risk and its potential impact on communities and individuals. These new products are referred to as non-regulatory or flood risk products and include: Flood Risk Database, Flood Risk Map, and Flood Risk Report. Collectively, these products make up the suite of Flood Risk Products. Additionally, Risk MAP will bring about a more intense focus on outreach and communication.

As required by FEMA, earned value for all projects must be tracked in the MIP. Since the current MIP environment was designed prior to Risk MAP, this document provides guidance on

how to track earned value of Risk MAP projects in the MIP. Please note this guidance is temporary until future modifications are made to the MIP.

7.1 Risk MAP Projects in the MIP

For each new Risk MAP project, two MIP projects (or cases) will be created. One case will track the cost and schedule of the “standard” regulatory products (e.g., DFIRM database, floodplain development, etc.) and the other case shall track the cost and schedule of the new Risk MAP products.

To help MIP users keep track of these two related cases, a naming convention guideline has been established. The MIP projects will have the same name except that the name shall begin with either “REG” for the Regulatory Products case or “RMP” for the Risk MAP Products case.

7.2 Risk MAP “Data Development” Tasks

To track the RMP within the current MIP environment, the RMP projects will be assigned data development tasks, which have traditionally been associated with regulatory products. For example, to report progress on the development of the Flood Risk Report, a MIP user would input data to the “perform floodplain mapping” task under the RMP project. Each new RMP has been assigned a MIP data development task as outlined in Table 6.

Table 6: Associated Data Development Tasks for RMP Projects

Risk MAP Product Task	MIP Data Development Task (in RMP Project)
Develop Flood Risk Datasets (CSLF, depth grids, AoMI, etc.)	Develop Hydrologic Analysis
Develop Flood Risk Database	Develop Hydraulic Analysis
Develop Flood Risk Map	Perform Floodplain Mapping
Develop Flood Risk Report	Perform Field Survey
Risk Communication & Outreach	Perform Alluvial Fan Analysis

7.3 REG / RMP projects in the MIP

For all new Risk MAP projects containing both regulatory and non-regulatory products, the MIP Champion or RPML will create both the REG and RMP projects and then notify the user when both projects have been initiated in the MIP.

For Discovery Projects, MIP users will use the scoping task assigned under the REG project in the MIP. The Discovery deliverables (such as Discovery Map, Discovery Report and Project Charter) that result from the Discovery process should be uploaded to the MIP. Users will be able to upload any file type (including shapefiles) in a zip folder during any of the scoping tasks

(i.e., Prepare for, Conduct, or Finalize) via the workflow or they can upload to the scoping folder via the MIP data upload portlet.

In addition to the Discovery (scoping) task, the REG MIP projects will also contain all the funded data development tasks for the regulatory products associated with the Risk MAP project (e.g., base map, hydrology, DFIRM Database, etc.). Preliminary and Post Preliminary Production tasks for the Risk MAP project will also be obligated and tracked in the REG MIP project.

For RMP projects, the scoping task will still need to be completed even though it is not used for tracking the Discovery task. All fields in the RMP scoping task will need to be completed with “dummy” data, except for the comments field which should contain, at a minimum, the name and case number of the REG project that contains the discovery data. Additional work instructions are available upon request.

When establishing Risk MAP data development tasks for the RMP projects, the MIP Champion or RPML will enter the Risk MAP task name (i.e., Develop Flood Risk Datasets, Develop Flood Risk Map, etc.) in the task description field. Only the five data development tasks identified in Table 6 will be entered into the project. No other tasks, including preliminary map production or post-preliminary production, shall be obligated or planned for any RMP project.

7.4 Monthly MIP Updates

Monthly reporting will be required for both the REG and RMP MIP projects. During the latter half of each month, the MIP user should update the percent complete and “as of” date for all open tasks in the Manage Data Development screens for both the REG and RMP projects.

7.5 Finishing a RMP Data Development Task

Once an RMP task has been completed, the user shall update the associated data development task to 100% complete. However, for a data development task to be completed in the MIP, an XML metadata file is required to be uploaded and pass the Metaman validation check.

To facilitate this requirement, generic XML metadata files have been created for data development tasks in the RMP project. These files are available from MIP Champions and Black Belts. The user will only have to update the generic metadata files with the following two pieces of information:

- Enter the case number for the RMP project into the <title> element.
- Enter the CID for the upload folder into the last <placekey> element (example: FEMA-CID 123456 or FEMA-CID 12345C). There is no need to enter the actual community name in a <placekey> element, nor the CID of all affected communities; only the CID of the community associated with the upload folder needs to be included.

Once complete, click “Save As” and rename the metadata file according to standard metadata naming conventions using the CID of the upload folder and the data development task name (example: 12345C_Hydrology_metadata).

The revised metadata file will allow the MIP user to pass the required metadata validation check and complete the RMP data development task. If any difficulties are encountered while trying to complete the metadata validation, contact your MIP Champion or Black Belt, or contact MIP Help at miphelp@riskmapcnds.com, for assistance.

It should be noted that no data products (i.e., flood risk datasets) will be uploaded for any RMP projects at this time. The data for these new Risk MAP products will be stored and maintained by the mapping partner outside of the MIP.

When each RMP data development task is completed, the MIP will generate the associated validate content task. This task will not require a review in order to be approved and completed since no data have been uploaded.

When a RMP data development task and its validate content task have been completed, the MIP user can enter 100% complete and input the final completion date and cost into the Manage Data Development screen for the task. Once all RMP tasks are 100% complete, the RMP project should be closed. To close an RMP project, email a closeout request to miphelp@riskmapcnds.com and include the project name and case number.

7.6 File Organization and Submission to the MSC

A Flood Risk Products package includes the following items: Flood Risk Database (FRD), Flood Risk Report (FRR), and the Flood Risk Map (FRM). The deliverables (FRD, FRR, and FRM) should be submitted to the MSC on media (i.e., CD/DVD) or by file transfer protocol (FTP). A Flood Risk Products Index is also required when submitting flood risk items to the MSC. All files, including the Index, must be in the digital format and use the proper naming conventions found in [Data Capture Technical Reference](#).

Supporting files such as metadata should be uploaded to the MIP. There is not yet an automatically created pre-defined MIP directory structure for the Flood Risk Products data. Mapping Partners submitting Flood Risk Products data will need to create all of the folders per the [Data Capture Technical Reference](#).

Finalized flood risk products, FRD metadata files, and the associated index should be transmitted directly to the MSC via FTP or DVD, one project per disc or FTP notification no later than 30 days following the LFD for the regulatory map update. FTP notifications should be sent to FRPSubmissions@riskmapcnds.com. These products will be made available to the general public for download (<https://msc.fema.gov>).

DVDs with Flood Risk Products should be sent to:

MSC Operations
ATTN: FLOOD RISK PRODUCTS SUBMISSIONS
10400 Eaton Place, Suite 150
Fairfax, VA 22030

Mapping partners should submit non-regulatory flood risk products to the MSC as they are finalized. In the case of a Risk MAP project that does not result in a regulatory map update, the Regional Office will determine when non-regulatory flood risk products are considered final. For

Risk MAP projects that produce multiple regulatory updates, the non-regulatory flood risk products for project should be submitted to the MSC no later than 30 days following each LFD. For any given submittal, Changes Since Last Firm (CSLF) will only include portions of the project where the LFD has been issued.

Questions about the data transfer process should be directed to FRPSubmissions@riskmapcds.com.

8.0 Attachment A: Public Access Rules for Study data uploaded via MIP Workflow

Table 7: Public Access Rules for Study Data Uploaded via MIP Workflow

(ACCCONST values: **None**: No access restriction, **Restricted**: No download or discovery, **View Only**: Discover files - Can't view file names)

Type Data Product	Discoverable?	File Names Displayed?	Public Download?	Notes for Download Column
Topographic	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Base Map	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Hydrologic	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Hydraulic	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Coastal Analysis	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata

Type Data Product	Discoverable?	File Names Displayed?	Public Download?	Notes for Download Column
Alluvial Fan Analysis	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Field Survey	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Floodplain Mapping	YES	YES	NO	
DFIRM DB 'Draft'	YES	YES	NO	
Preliminary DFIRM	NO	NO	NO	
Final DFIRM	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download after the 'Distribute LFD' activity is complete with no restrictions except when appropriate flag (ACCCONST value of Restricted or View Only) is set in metadata
Perform IQA - Acquire Base Map	YES	YES	NO	
Perform IQA - Develop Topographic Data	YES	YES	NO	
Perform IQA - Perform Field Survey	YES	YES	NO	
Perform IQA - Develop Hydrologic Data	YES	YES	NO	
Perform IQA - Develop Hydraulic Data	YES	YES	NO	
Perform IQA - Perform Coastal Analysis	YES	YES	NO	

Type Data Product	Discoverable?	File Names Displayed?	Public Download?	Notes for Download Column
Perform IQA - Perform Alluvial Fan Analysis	YES	YES	NO	
Perform IQA - Perform Floodplain Mapping	YES	YES	NO	
Perform IQA - Develop DFIRM Database	YES	YES	NO	
QR3 National DFIRM - Final	YES	YES	NO	
QR3 National DFIRM - Prelim	YES	YES	NO	
Letter of Final Determination - Prepare LFD Docket	YES	YES	YES - SEE NOTE	MIP will allow discovery anytime and only allow download 2 business days after the 'Distribute LFD' activity is complete
HoldPreScopedProject	YES	YES	NO	
PreScopeProject	YES	YES	NO	
ConductScopingMeeting	YES	YES	NO	
FinalizeProjectScope	YES	YES	NO	
CreateBFENotice	YES	YES	NO	
InitiateStudyProject	YES	YES	NO	
PrepareForScoping	YES	YES	NO	
SubmitMSCDeliverable	YES	YES	NO	
SetupMapProduction	YES	YES	NO	
ProducePreliminaryMapProducts	YES	YES	NO	
SetupDataDevelopment	YES	YES	NO	
ProduceMapProducts	YES	YES	NO	
PerformMapProductQA	YES	YES	NO	

Table 8: Public Access Rules for Studies via Data Upload (Tools & Links)

Type Data Product	Discoverable?	File Names Displayed?	Public Download?
FEDD File	YES	YES	NO
Scoping Data	YES	YES	NO
TSDN	YES	YES	NO
Appeals (Study)	YES	YES	NO
FBS Reports	NO	NO	NO
Correspondence (Study)	NO	NO	NO

Table 9: Public Access Rules for Revisions via Data Upload (Tools & Links)

Type Data Product	Discoverable?	File Names Displayed?	Public Download?
FEDD File	YES	YES	NO
Cover Letter (Revisions)	YES	YES	NO
Final Determination (Revisions)	YES	YES	NO
Supporting Artifacts (Revisions)	YES	YES	NO
Modeling Hydraulics (Revisions)	YES	YES	YES
Modeling Hydrology (Revisions)	YES	YES	YES
Review Notes (Revisions)	YES	YES	NO
Special Response Letter (Revisions)	YES	YES	NO
Violation Letter (Revisions)	YES	YES	NO
116 Letter (Revisions)	YES	YES	NO
Correspondence (Revisions)	NO	NO	NO
Annotations (Revisions)	YES	YES	NO
Best Available Data Letters (Revisions)	YES	YES	NO

Type Data Product	Discoverable?	File Names Displayed?	Public Download?
316-PMR (Revisions)	YES	YES	NO
Work Maps	YES	YES	NO
Invoice Letter (Revisions)	YES	YES	NO
316 Letter (Revisions)	YES	YES	NO
ESA Documentation	YES	YES	NO

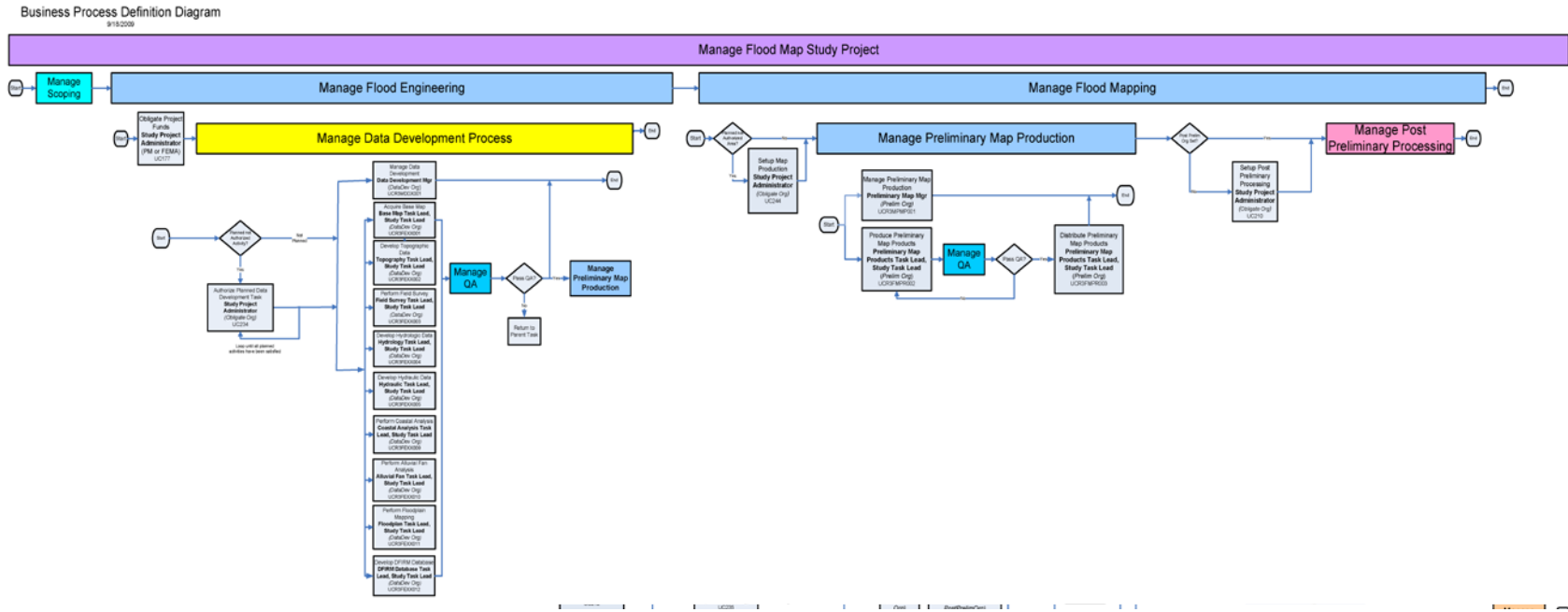
Table 10: Public Access Rules for Amendments via Data Upload (Tools & Links)

Type Data Product	Discoverable?	File Names Displayed?	Public Download?
216 Letter (Amendments)	YES	YES	NO
Violation Letter (Amendments)	YES	YES	NO
Other Response Letter (Amendments)	YES	YES	NO
Cover Letter (Amendments)	YES	YES	NO
Final Determination (Amendments)	YES	YES	NO
Supporting Artifacts (Amendments)	YES	YES	NO
Final Letter (Amendments)	YES	YES	NO
Correspondence/Data (Amendments)	NO	NO	NO
ESA Documentation	YES	YES	NO

9.0 Attachment B: Study Process Diagram

9.1 Study Process Overview

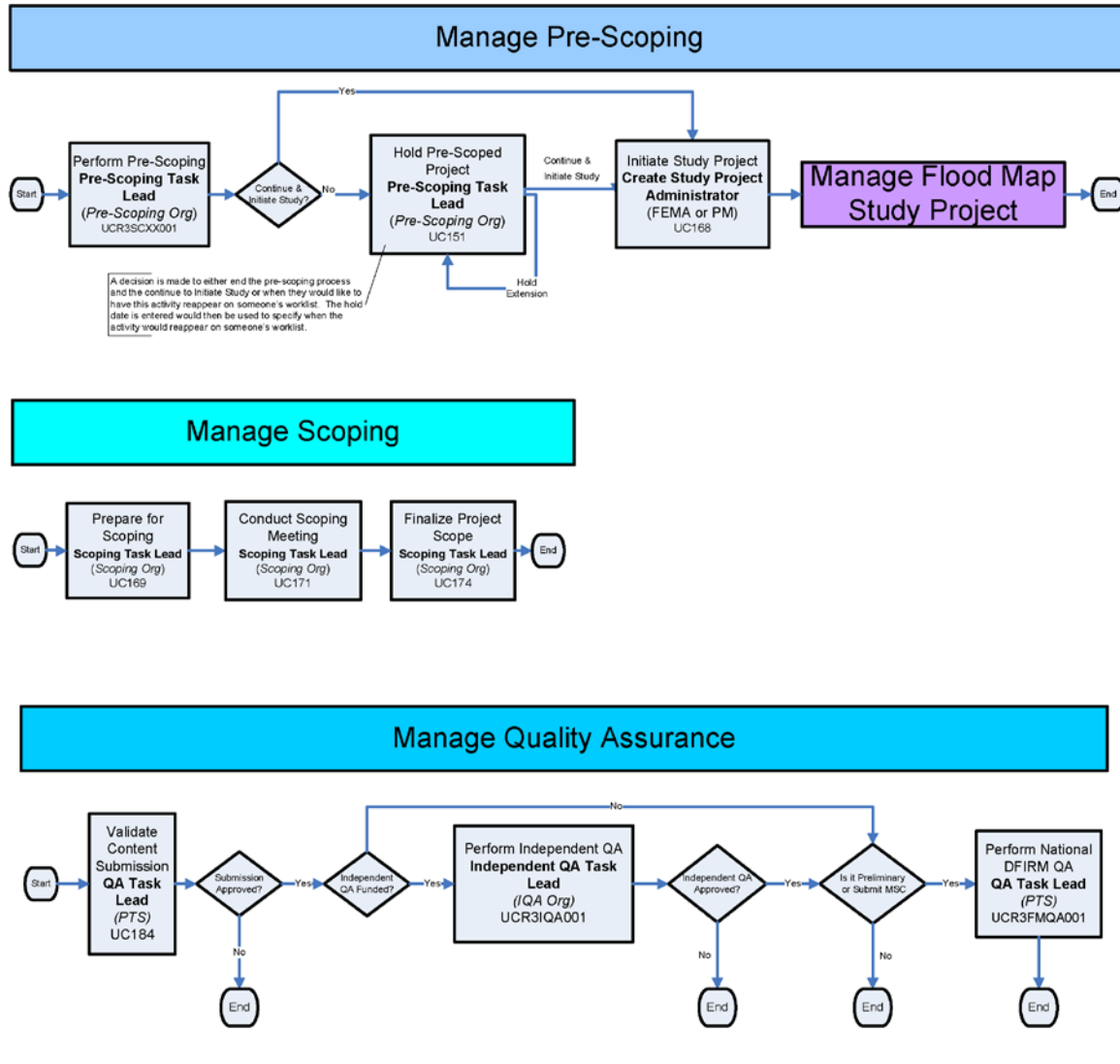
Figure 6: Study Process Diagram



Pre-Scoping Org = organization assigned to the Pre-Scoping task
 Scoping Org = organization assigned to the Scoping task
 Obtain Org = organization that completed Obtain Project Funds activity
 DataDev Org = organization assigned to the Data Development task
 QA Org = organization assigned to the Independent QA task
 Prelim Org = organization assigned to the Preliminary Map Production task
 PostPrelim Org = organization assigned to the Post Preliminary Map Production task

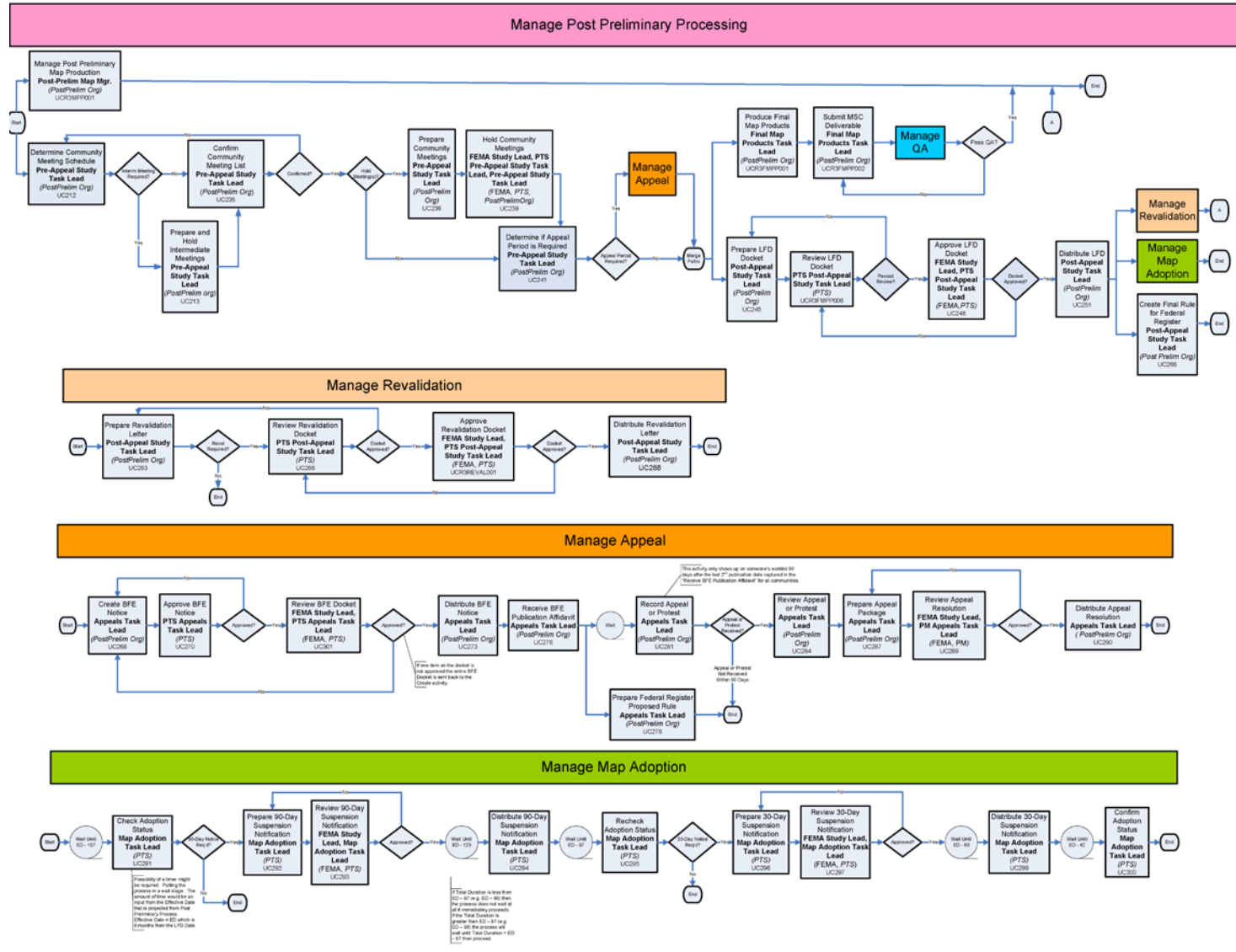
9.2 Study Scoping and Quality Process

Figure 7: Study Scoping and Quality Process



9.3 Study Post Preliminary Process

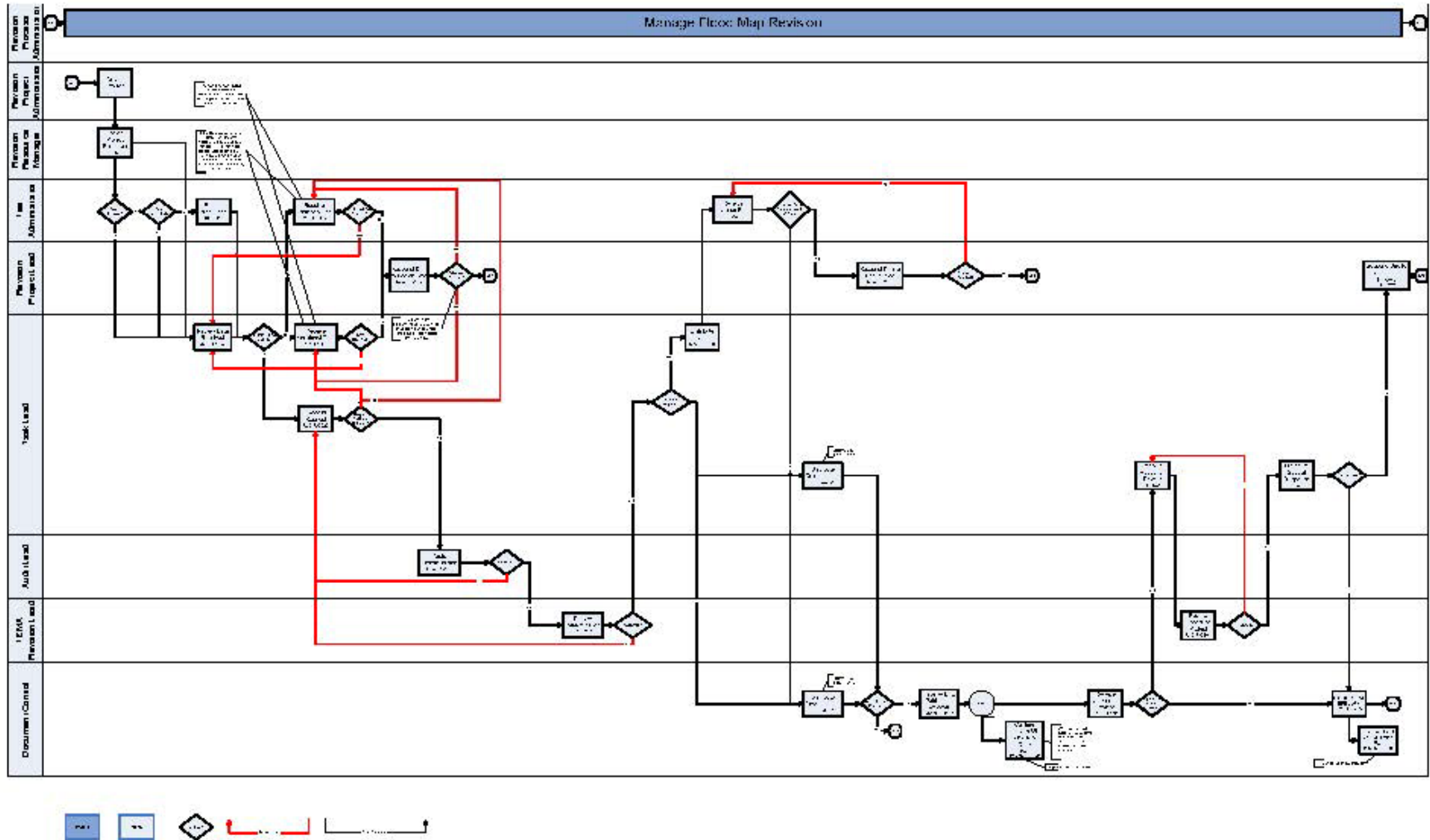
Figure 8: Study Post Preliminary Process



10.0 Attachment C: Revision Process Diagram

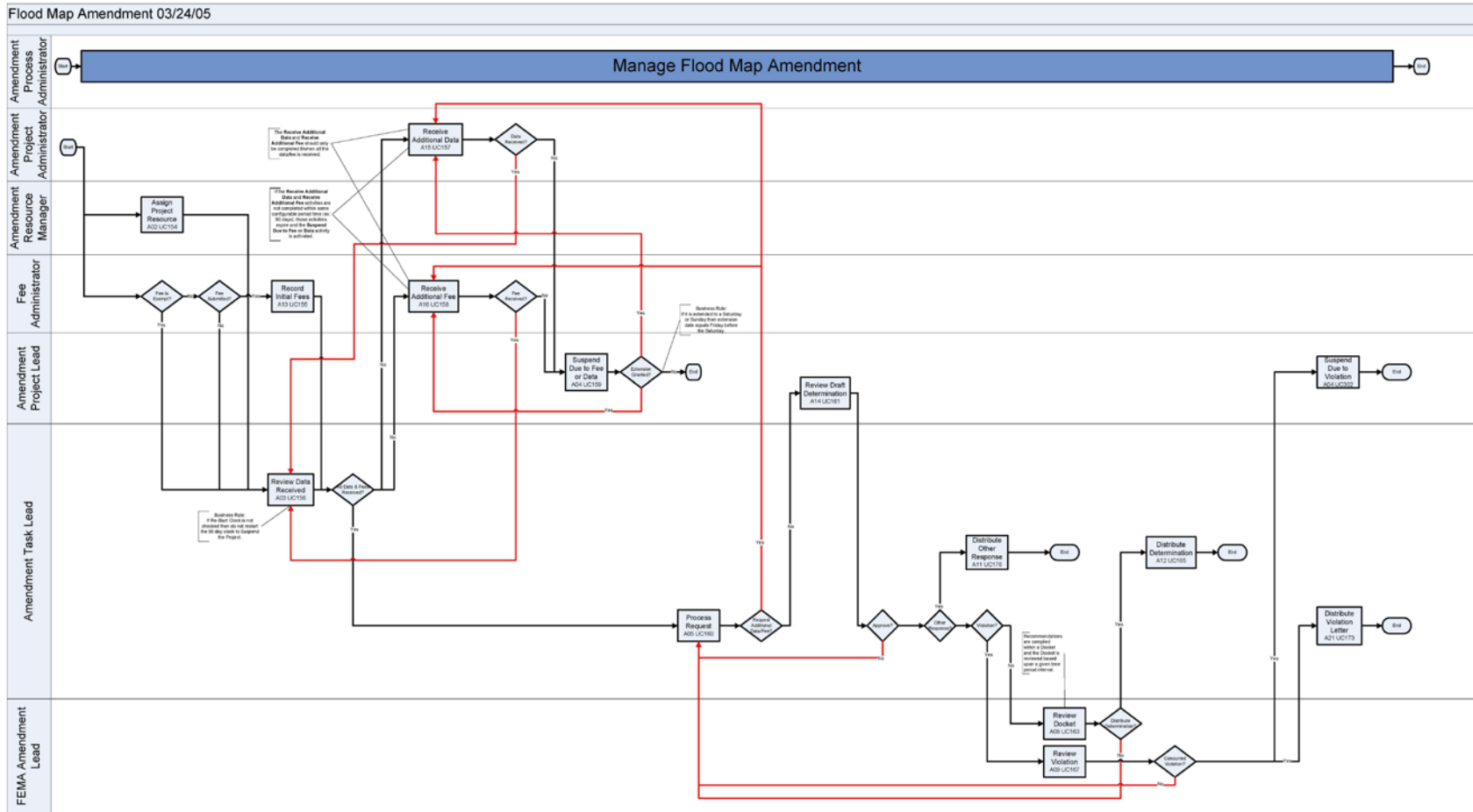
Figure 9: Revision Process Diagram

Revision Workflow



11.0 Attachment D: Amendment Process Diagram

Figure 10: Amendment Process Diagram



12.0 Attachment E: MIP Task and Activities with User Roles

Table 11: MIP Task and Activities with User Roles

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Scoping	Prepare for Scoping	Scoping Task Lead	Role is responsible for processing scoping activities	CERC and PTS
Manage Scoping	Conduct Scoping Meeting	Scoping Task Lead	Role is responsible for processing scoping activities	CERC and PTS
Manage Scoping	Finalize Project Scope of the project	Scoping Task Lead	Role is responsible for processing scoping activities	CERC and PTS
Manage Data Development Process	Obligate Project Funds	Study Project Administrator	Role is responsible for initiating new study workflow activities (entering all required information about project geography, responsible organization, cost, and schedule) and for study projects, and for updating the cost and schedule information throughout the project life cycle	FEMA HQ FEMA Region PM
Manage Data Development Process	Authorize Planned Data Development Task	Study Project Administrator	Role is responsible for initiating new study workflow activities (entering all required information about project geography, responsible organization, cost, and schedule) and for study projects, and for updating the cost and schedule information throughout the project life cycle	FEMA HQ FEMA Region PM

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Data Development Process	Manage Data Development	Data Development Manager	Role is responsible for capturing cost, leverage and schedule information as well as signify completeness of tasks for the Data Development activity.	Assigned Task Organization
Manage Data Development Process	Perform Alluvial Fan Analysis	Alluvial Fan Task Lead Study Task Lead	Role is responsible for alluvial fan engineering data deliverables	Assigned Task Organization
Manage Data Development Process	Acquire Base Map	Base Map Task Lead Study Task Lead	Role is responsible for base map data deliverables	Assigned Task Organization
Manage Data Development Process	Perform Coastal Analysis	Coastal Analysis Task Lead Study Task Lead	Role is responsible for coastal engineering data deliverables	Assigned Task Organization
Manage Data Development Process	Perform Field Survey	Field Survey Task Lead Study Task Lead	Role is responsible for field survey data deliverables	Assigned Task Organization
Manage Data Development Process	Perform Floodplain Mapping	Floodplain Map Task Lead Study Task Lead	Role is responsible for floodplain mapping data deliverables	Assigned Task Organization
Manage Data Development Process	Develop Hydraulic Data	Hydraulic Task Lead Study Task Lead	Role is responsible for hydraulics data deliverables	Assigned Task Organization

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Data Development Process	Develop Hydrologic Data	Hydrology Task Lead Study Task Lead	Role is responsible for hydrologic data deliverables	Assigned Task Organization
Manage Data Development Process	Develop Topographic Data	Topography Task Lead Study Task Lead	Role is responsible for topographic data deliverables	Assigned Task Organization
Manage Data Development Process	Develop DFIRM Database	DFIRM Database Task Lead Study Task Lead	Role is responsible for DFIRM data deliverables	Assigned Task Organization
Manage Preliminary Map Production	Setup Map Production	Study Project Administrator	Role is responsible for initiating new projects (entering all required information about project geography, responsible organization, cost, and schedule) and for study projects, and for updating the cost and schedule information throughout the project life cycle.	FEMA HQ FEMA Region PM
Manage Preliminary Map Production	Manage Preliminary Map Production	Preliminary Map Manager	Role is responsible for capturing cost and schedule information & signaling the completion of the Distribute Preliminary Map task.	Assigned Preliminary Org
Manage Preliminary Map Production	Produce Preliminary Map Products	Study Task Lead Preliminary Map Products Task Lead	Role is responsible for producing the preliminary map products. Role has access to the DFIRM Production Tools and Produce Preliminary Map Products and Distribute Preliminary map Products	Assigned Preliminary Org FEMA HQ FEMA Region CTP IDIQ OFA

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Preliminary Map Production	Distribute Preliminary map Products	Study Task Lead Preliminary Map Products Task Lead	Role is responsible for producing the preliminary map products. Role has access to the DFIRM Production Tools and Produce Preliminary Map Products and Distribute Preliminary map Products	Assigned Task Organization CTP IDIQ OFA
Manage Preliminary Map Production	Setup Post Preliminary Processing	Study Project Administrator	Role is responsible for initiating new projects (entering all required information about project geography, responsible organization, cost, and schedule) and for study projects, and for updating the cost and schedule information throughout the project life cycle. Same Organization that completed Obligate Project Funds activity	FEMA HQ FEMA Region PM
Manage Post Preliminary Processing	Manage Post Preliminary Map Production	Post-Preliminary Map Manager	Role is responsible for capturing the cost and schedule information for the performing Organization for the project area	Assigned Post Prelim Org
Manage Post Preliminary Processing	Determine Community Meeting Schedule	Pre-Appeal Study Task Lead	Role is responsible for pre-appeal post preliminary processing	Assigned Post Prelim Org CERC
Manage Post Preliminary Processing	Prepare & Hold Intermediate Meetings	Pre-Appeal Study Task Lead	Role is responsible for pre-appeal post preliminary processing	Assigned Post Prelim Org CERC
Manage Post Preliminary Processing	Confirm Community Meeting List	Pre-Appeal Study Task Lead	Role is responsible for pre-appeal post preliminary processing	Assigned Post Prelim Org CERC

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Post Preliminary Processing	Prepare Community Meetings	Pre-Appeal Study Task Lead	Role is responsible for pre-appeal post preliminary processing	Assigned Post Prelim Org CERC
Manage Post Preliminary Processing	Hold Community Meetings	Pre-Appeal Study Task Lead PTS Pre-Appeal Study Task Lead FEMA Study Lead	Role is responsible for pre-appeal post preliminary processing	Assigned Post Prelim Org FEMA HQ, FEMA Region, PTS CERC
Manage Post Preliminary Processing	Determine If An Appeal Period is required	Pre-Appeal Study Task Lead	Role is responsible for pre-appeal post preliminary processing	Assigned to Post Prelim Org.
Manage Post Preliminary Processing	Produce Final Map Products Submit MSC Deliverable	Final Map Products Task Lead	Role is responsible for the delivery of the final map products.	Assigned to Post Prelim Org.
Manage Post Preliminary Processing	Prepare LFD Docket	Post-Appeal Study Task Lead		Assigned to Post Prelim Org.
Manage Post Preliminary Processing	Review LFD Docket	PTS Post-Appeal Study Task Lead		PTS

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Post Preliminary Processing	Approve LFD Docket	FEMA Study Lead PTS Post-Appeal Study Task Lead		FEMA HQ FEMA Region PTS
Manage Post Preliminary Processing	Distribute LFD Docket Create Final Rule for the Federal Register	Post-Appeal Study Task Lead	Role is responsible for post-appeal post preliminary processing,	Assigned Post-Prelim Task Organization
Manage Revalidation	Prepare Revalidation Letter	Post-Appeal Study Task Lead	Role is responsible for post-appeal post preliminary process Review Revalidation	Assigned Post Prelim Org
Manage Revalidation	Review Revalidation Docket	PTS Post-Appeal Study Task Lead		PTS
Manage Revalidation	Approve Revalidation Docket	FEMA Study Lead PTS Post-Appeal Study Task Lead	FEMA Study Lead: Role is for FEMA staff that reviews & approves work products (such as letters relating to LOMC determinations, appeals, and final map products). This includes the FEMA staff that Holds Final Meetings, and Approves LFD Docket, approves Base Flood Elevations (BFE), and letter of Final Determination (LFD) dockets	FEMA HQ FEMA Region PTS
Manage Revalidation	Distribute Revalidation Letter	Post-Appeal Study Task Lead		Assigned Post Prelim Org

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Appeal	Create BFE Notice	Appeals Task Lead	Role is responsible for the protest and appeal period process	Assigned Post Prelim Org.
Manage Appeal	Approve BFE Notice	PTS Appeals Task Lead		PTS
Manage Appeal	Review BFE Docket	FEMA Study Lead PTS Appeals Task Lead		FEMA HQ FEMA Region PTS
Manage Appeal	Distribute BFE Notice	Appeals Task Lead		Assigned Post Prelim Org
Manage Appeal	Receive BFE Publication Affidavit	Appeals Task Lead		Assigned Post Prelim Org
Manage Appeal	Prepare Federal Register Proposed Rule	Appeals Task Lead		Assigned Post Prelim Org
Manage Appeal	Record Appeals Or Protests	Appeals Task Lead		Assigned Post Prelim Org
Manage Appeal	Review Appeals or Protests	Appeals Task Lead		Assigned Post Prelim Org
Manage Appeal	Prepare Appeal Package	Appeals Task Lead		Assigned Post Prelim Org

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Appeal	Review Appeal Resolution	FEMA Study Lead PM Appeals Task Lead	<p>FEMA Study Lead: Role is for FEMA staff that reviews & approves work products (such as letters relating to LOMC determinations, appeals, and final map products).</p> <p>This includes the FEMA staff that Holds Final Meetings, and Approves LFD Docket, approves Base Flood Elevations (BFE), and letter of Final Determination (LFD) dockets</p>	FEMA HQ FEMA Region PM
Manage Appeal	Distribute Appeal Resolution	Appeals Task Lead		Assigned Post Prelim Org
Manage Map Adoption	Check Ordinance Adoption Status	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Prepare 90 Day Suspension Notification	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Review 90 Day Suspension Notification	FEMA Study Lead Map Adoption Task Lead	<p>FEMA Study Lead: Role is for FEMA staff that reviews & approves work products (such as letters relating to LOMC determinations, appeals, and final map products)</p> <p>This includes the FEMA staff that Holds Final Meetings, and Approves LFD Docket, approves Base Flood Elevations (BFE), and letter of Final Determination (LFD) dockets</p>	FEMA HQ FEMA Region PTS

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Manage Map Adoption	Distribute 90 Day Suspension Notification	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Recheck Ordinance Adoption Status	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Prepare 30 Day Suspension Notification	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Review 30 Day Suspension Letters	FEMA Study Lead Map Adoption Task Lead	FEMA Study Lead: Role is for FEMA staff that reviews & approves work products (such as letters relating to LOMC determinations, appeals, and final map products). This includes the FEMA staff that Holds Final Meetings, and Approves LFD Docket, approves Base Flood Elevations (BFE), and letter of Final Determination (LFD) dockets	FEMA HQ FEMA Region PTS
Manage Map Adoption	Distribute 30 Day Suspension Letters	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS
Manage Map Adoption	Confirm Ordinance Adoption Status	Map Adoption Task Lead	Role is responsible for the verification and confirmation of community ordinance adoption	PTS

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Process Administration (outside study workflow)	Create Pre-Scoping Project Create Study Project Initiate a Study Project	Create Study Project Administrator	<p>Role is responsible for initiating new projects (entering all required information about project geography, responsible organization, cost, and schedule) and for study projects, and for updating the cost and schedule information throughout the project life cycle.</p> <p>Role holders may be from Program Management (PM), Regional Service Center (RSC), FEMA Headquarters, or FEMA regional offices.</p>	FEMA HQ, FEMA Regional PM, RSC
Process Administration (outside study workflow)	Update Study Project	Update Study Project Administrator	Role allows project data to be updated	FEMA, PM
Process Administration (outside study workflow)	Transfer Activity	Transfer Study Project Administrator	Role allows user to transfer study project to another user	FEMA, PM, PTS, CERC
Process Administration (outside study workflow)	Unclaim Activity	Unclaim Study Project Administrator	Role allows user to unclaim a study project activity	FEMA, PM, PTS, CERC
Process Administration (outside study workflow)	Close Terminate Hold Project	CTH Study Project Administrator	Role allows project status to be changed to "Closed", "Terminated" or "On Hold"	FEMA, PM

Task Name	Activity Name	Role Name	Role Descriptions	Performing Organization
Process Administration (outside study workflow)	Query for Process Administration	Study PA User	Study Process Administrator is a super user for a specific instance of a process (such as study for a specific case). This user can perform all activities in the process instance (claiming an activity regardless of role) and can become the owner of an activity.	FEMA, PM, PTS, CERC
Process Administration (outside study workflow)	SOMA Tool	SOMA Administrator	Tool inside MIP used to categorize LOMCs	PTS, CERC