

# Guidance for Flood Risk Analysis and Mapping

## Mapping Information Platform (MIP)

November 2019



**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](http://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](http://www.fema.gov/library).

## Table of Revisions

The following summary of changes details revisions to this document subsequent to its most recent version in May 2017.

Affected Section or Subsection	Date	Description
Sections 15 and 16	November 2019	Revised the document page size to allow Attachments C and D more room, creating a more readable document.

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## 1.0 MIP Overview

The Mapping Information Platform (MIP) supports the Risk Mapping Assessment and Planning (Risk MAP) program by facilitating the production, management, and sharing of flood hazard data and maps in a digital environment. The MIP is a system of tools that integrates program and project management, data storage and retrieval, standardized quality reviews, and project tracking and reporting into one web-based application.

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 revisions and amendments (i.e., Letters of Map Change (LOMC)). This document provides guidance on the various functions supported by the Studies platform within the MIP, including, user access and technical support, tools and functionality, project management and workflow activities, and data capture and dissemination. For guidance on the LOMC process MIP users should see the [MT-1 Technical Guidance](#) document.

The bulk of MIP functionality can be found under Tool & Links and the workbenches. 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), 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.

## 2.0 System Access

Access to the MIP is available at the MIP (<https://hazards.fema.gov>) website. The ability to download engineering data is only available to authenticated users. Registration, or authentication, is required for access to tools such as File Explorer and project workflows. Users with public access may only view project status information and search available engineering data.

To request access, or if you have questions about the MIP Workflows (Studies, Amendments, or Revisions), contact your Regional Support Center (RSC).

The RSC will collect general user information and for account creation and assist in determining proper MIP Workflow roles and access level. The RSC will populate a workflow access request form on your behalf and submit the form to the MIP technical support team for processing. Upon approval, you will receive access information such as username and password via email from [miphelp@riskmapcds.com](mailto:miphelp@riskmapcds.com), along with general information on how to access the workflow. FEMA employees requesting access should go through their respective MIP Champ/RPML/RSC, and will be provided a username. PIV card access is required for FEMA employees to log onto the MIP.

MIP Users, once logged in, can 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.



## 3.0 System Structure

### 3.1 Studies Platform

The MIP Studies workflow is a series of tasks and activities completed by Mapping Partner (e.g., Cooperating Technical Partners (CTPs) and Risk MAP contractors) and FEMA in order to complete a Flood Risk project.

**Table 1: MIP Studies Roles and Responsibilities**

Studies Role	User Description
Study Manager	Studies users who enter and update all cost and schedule information, at least monthly; update projected milestone dates (Preliminary, LFD, and Effective); enter leverage information; and provide project oversight.
Study Producer	Studies users, usually Cooperating Technical Partners (CTPs), Production and Technical Services (PTS) staff, and Community Engagement and Risk Communication (CERC) staff. Producers submit and upload data; meet all Quality Assurance and Quality Control (QA and QC) requirements; perform independent QA and QC as applicable; enter data analysis information; enter actual milestone dates; and enter all post-prelim information. Also, referred to as a Task Owner.
Study Administrator (Champions and RPMLs):	<p>MIP Champion – Studies users at Regional offices who serve 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 &amp; Quality Control (QA/QC), approving change requests (facilitating revised MIP Baseline schedules), MIP Help requests, validation and escalation resolution, and MIP obligation data reconciliation.</p> <p>Regional Project Management Lead – Studies users representing 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, purchases, and tasks, update baseline scope and schedule, monitor EV, monthly and quarterly reporting, and support MIP Help requests.</p>

Studies Role	User Description
RSC (Black Belts):	Production and Technical Services (PTS) staff who are responsible for tracking and monitoring projects, data validation, and performing quality reviews. MIP responsibilities include: assisting the RPMLs with EV monitoring, task assignments, monthly and quarterly reporting, requesting support from MIP Help, and troubleshooting project workflows for Mapping Partners.

### 3.2 Revisions Platform

The Revisions platform supports the collective MT-2 workflow processes within the MIP, which involve receiving, processing and issuing Letters of Map Revision (LOMRs) and Conditional Letters of Map Revision (CLOMRs). The Revisions platform is sorted by MIP role. See Table 2 for descriptions. For the Revisions workflow diagram see Attachment C.

**Table 2: MIP Revisions Roles and Responsibilities**

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.
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.

Revision Role	User Description
Document Control	User who completes the post-processing activities associated with revision cases (e.g., Distribute Determinations, Receive Appeal or Protest).

### 3.3 Amendments Platform

The Amendments platform supports the collective MT-1 workflow processes within the MIP, which involve 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 platform 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 Amendments Roles and Responsibilities**

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.

### 3.4 eLOMA Portal

Hosted within the MIP, the eLOMA platform 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](https://hazards.fema.gov/femaportal/wps/portal/usercare_training)).

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@riskmapcds.com](mailto:miphelp@riskmapcds.com)) to add eLOMA access to your existing User ID.

If you have questions regarding your registration, contact MIP Help via email at [miphelp@riskmapcds.com](mailto:miphelp@riskmapcds.com).

### 3.5 Online LOMC Portal

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](https://hazards.fema.gov/femaportal/wps/portal/usercare_training)).

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.

## 4.0 MIP Studies Production Overview

### 4.1 Key Terms Defined

- **Project** – a collection of one or more purchases which together address the needs a geographic area (e.g. HUC-8 or other defined planning area such as a levee system or coastal area). Each new MIP project is assigned a nine-digit project number (e.g., XX-XX-XXXS).
- **Purchase** – a collection of study activities or tasks, housed within a project, and aligned to a specific geography. A Purchase is generally categorized as a riverine, coastal, levee, elevation, or outreach investment and represents any given fiscal year unique work item(s) tied to a task order or grant.
- **Task** – a study activity within a purchase, assigned to and completed by different MIP studies users, including managers, producers, quality reviewers, data validators, and FEMA personnel.
- **Project Studies Workbench** – the launching point for all Project Level Access Users. This workbench will allow Project Level Access users to create, edit, assign, and track any assigned MIP Studies Projects or Tasks. From this workbench, each Project Level Access user will be shown what projects they have created or what projects they have been assigned to.
- **Task Studies Workbench** – the launching point for all MIP Users whom have been assigned to a Task. The Task Studies Workbench will allow users to create, edit, assign, and track any assigned MIP Studies Tasks. Only the Tasks that have been assigned to the user will be visible on the Task Studies Workbench.

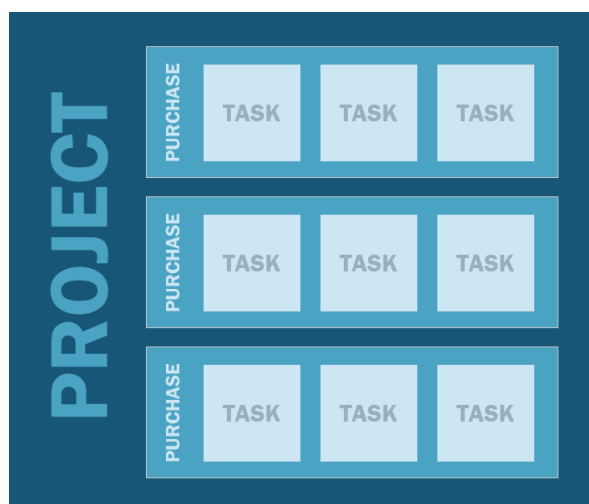


Figure 1: Project-Purchase-Task Relationship

## 4.2 Studies Access Levels / User Roles

Authenticated MIP studies users are assigned one of three different levels of access in the system. Higher access levels include all capabilities of the lower access levels.

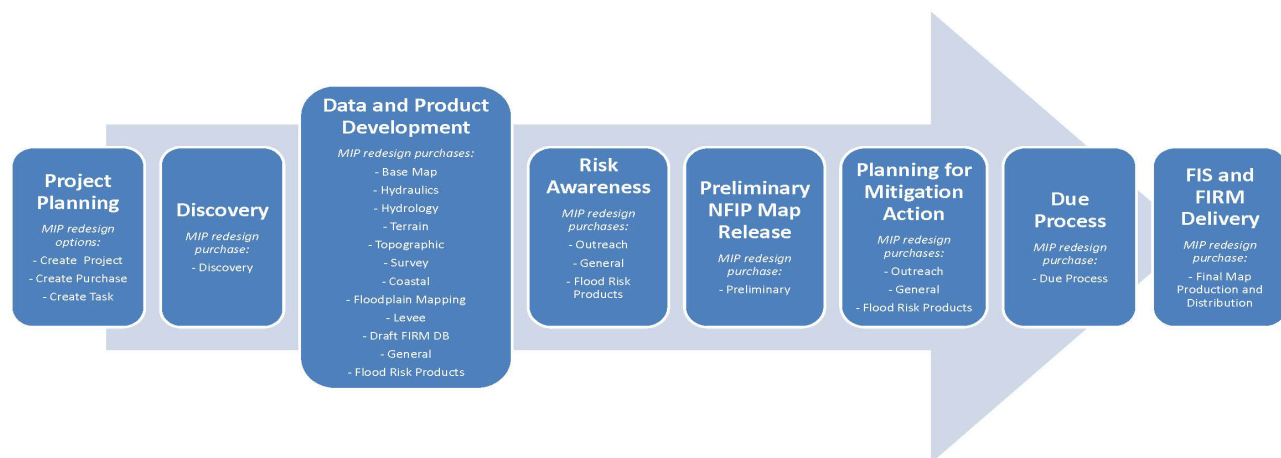
- **Task:** “Producer” role. The majority of MIP users will fall in this category. Project producers completes tasks that are assigned to them. Task access users will be able to re-assign assigned tasks to other MIP studies users. This access level also includes those users who are responsible for completing validation tasks, typically a Black Belt.
- **Task + EV:** “Manager” role. A manager will be able to view and manage financials and project status. Those currently managing financial and EV information will fall into this category.
- **Project:** “Administrator” role. Project administrators serve as project creators and owners. They create, own and manage projects and purchases, and do the initial task assignments at task creation. Regional Champions and RPMLs will fall into this category.

**Table 4: MIP Access Level and User Roles**

Available Actions	Access Level (User Role)		
	Project (Administrator)	Task + EV (Manager)	Task (Producer)
Create Project	X		
Create Purchase	X		
Create Task	X		
Update Task Progress	X	X	
Assign Task	X	X	X
Receive Assigned Task	X	X	X
Complete Task	X	X	X

## 4.3 MIP Studies Business Flow

As shown in Figure 2 below, the MIP Studies platform supports many activities that occur throughout the Risk MAP lifecycle.



**Figure 2: Risk MAP Project Lifecycle Diagram including elements from MIP Studies Workflow Redesign.**

Within the MIP, the Studies business flow is divided into three major sections, all of which include applicable data capture, quality, outreach, and project management elements:

1) Discovery and Data Development:

- The initial collection, development, and upload of applicable data.

2) Preliminary Map Production and Outreach:

- Preparation and delivery of preliminary map products to the communities.
- Community outreach and feedback.

3) 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.

Figure 3 below shows the tasks that are available in each of these three sections.

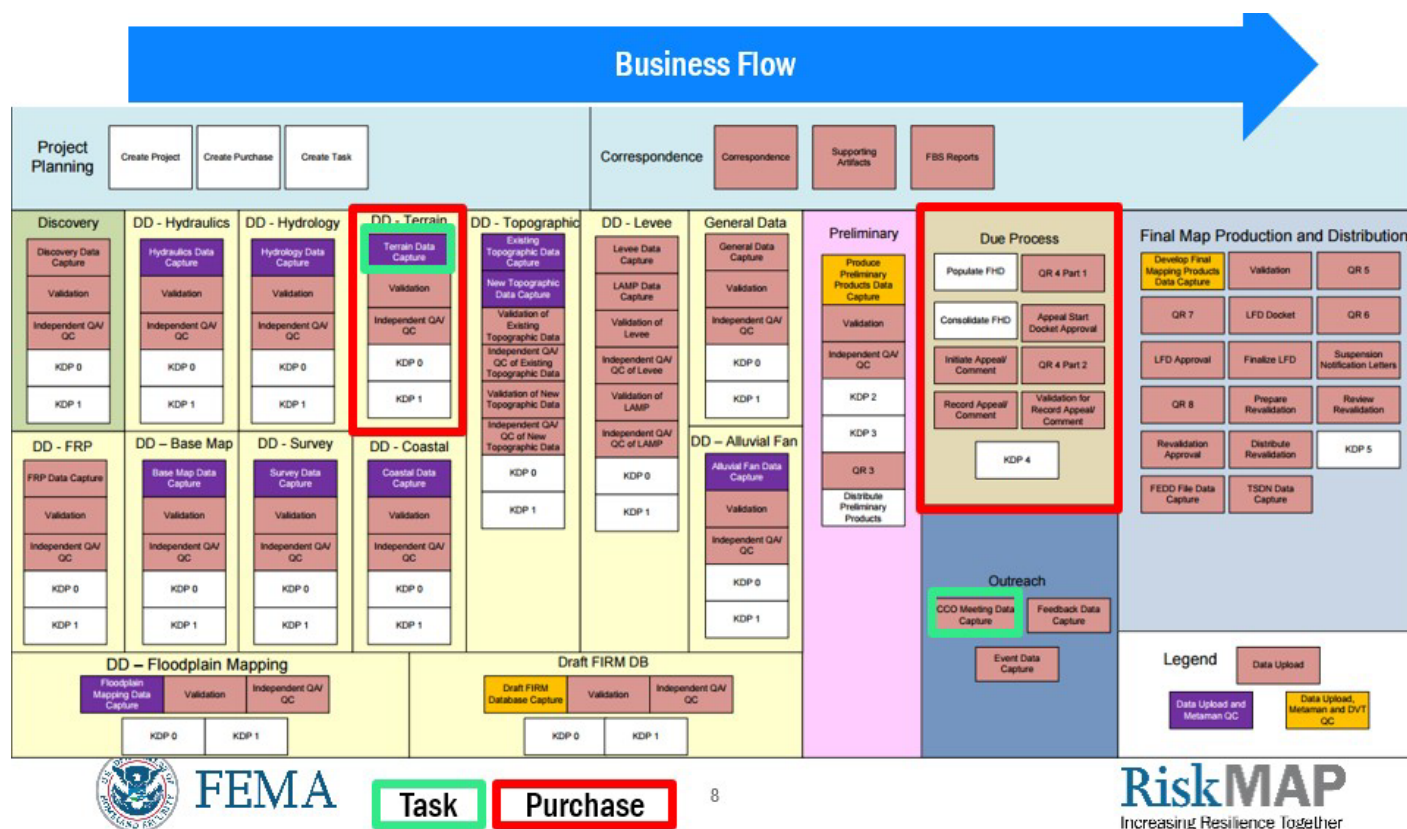


Figure 3: MIP Studies Business Flow



## 5.0 Studies Project Management

Per FEMA Program Standard SID #1, all Flood Risk Projects Must be tracked in the MIP. Projection Creation, overall portfolio health and earned value monitoring is the responsibility of the Region and RPML. The lifecycle of a project, including progress tracking, task completion and data upload are managed by the Project Management Team, (e.g., CTP, PTS, CERC).

### 5.1 Earned Value

Project cost and schedule performance is derived from Earned Value (EV) information that is entered at the task level and then consolidated for project level calculations. Earned Value reporting in the MIP provides FEMA with an overview of a project's health and whether a project is adhering to the schedule and cost expectations that have been set.

Study Managers are required to update the "Actual Start Date", "Dollars Spent", "As Of Date", and "Percent Complete" fields in the MIP for all of their assigned tasks by the end of each calendar month. These updates are captured through the Track Task Progress tool within the Study Task workbench, and should continue until 100 percent completion is attained for each task. Please note that once a task is completed in terms of data capture, it will continue show up in the Track Task Progress tool for up to 90 days in order for the study manager to log any final EV information.

#### Terminologies for EV calculations:

- ACWP (AC) – Actual Cost of Work Performed
- BCWP (EV) – Budgeted Cost of Work Performed
- BCWS (PV) – Budgeted Cost of Work Scheduled (planned)

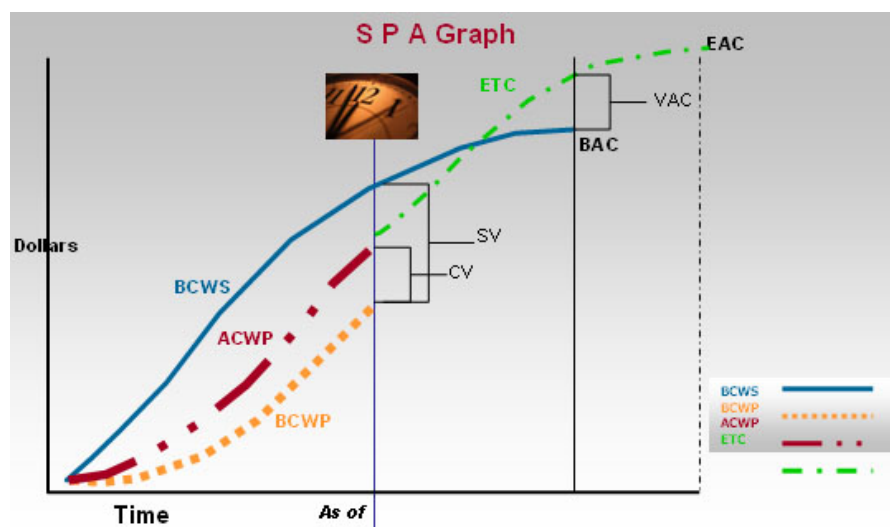


Figure 4: Earned Value Graph



## 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 5: Earned Value Performance Indices**

**Table 5: Earned Value Example (Costs in Dollars)**

Task	Task Baseline Budgeted Cost	Percent of Work Actually Completed	Days since Baseline Task Start/ Total Duration of Task in Days	BCWP	ACWP	BCWS
Discovery	6,000	100%	14/14	6,000	7,000	6,000
Draft FIRM Database	70,000	100%	90/90	70,000	72,000	70,000
Floodplain Mapping Data Capture	30,000	50%	180/180	15,000	17,000	30,000
Preliminary Map Production	85,000	15%	90/90	12,750	10,000	85,000
Post Preliminary Processing	109,000	10%	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).

CPI = BCWP / ACWP = 114,650 / 121,700 = 0.94

SPI = BCWP / 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).

**Table 6: MIP Tasks with Earned Value tracking**

Task Name	Purchase Type	Purchase Group
Alluvial Fan Data Capture	Alluvial Fan	Data Development
Base Map Data Capture	Base Map	Data Development
CCO Meeting Data Capture ( <i>EV tracking optional</i> )	Outreach	Outreach
Coastal Data Capture	Coastal	Data Development
Discovery Data Capture	Discovery	Discovery
Draft FIRM Database Data Capture	Draft FIRM DB	Data Development
Due Process Management	Due Process	Post Preliminary Processing
Event Data Capture ( <i>EV tracking optional</i> )	Outreach	Outreach
Existing Topographic Data Capture ( <i>EV tracking optional</i> )	Topographic	Data Development
Final Mapping Products Management	Final Map Production and Distribution	Post Preliminary Processing
Flood Risk Products Data Capture	Flood Risk Products	Data Development
Floodplain Mapping Data Capture	Floodplain Mapping	Data Development
General Data Capture ( <i>EV tracking optional</i> )	General	Data Development
Hydraulics Data Capture	Hydraulics	Data Development
Hydrologic Data Capture	Hydrology	Data Development
Independent QA/QC	multiple	multiple
LAMP Data Capture	Levee	Data Development
Levee Data Capture	Levee	Data Development

Task Name	Purchase Type	Purchase Group
New Topographic Data Capture	Topographic	Data Development
Produce Preliminary Products Data Capture	Preliminary	Preliminary
Survey Data Capture	Survey	Data Development
Terrain Data Capture	Terrain	Data Development

## 5.2 Creating Studies Projects

A project is defined as a collection of one or more purchases which together address the needs a geographic area (e.g. HUC-8 or other defined planning area such as a levee system or coastal area). Each new MIP project is automatically assigned a nine-digit project number (e.g., xx-xx-xxxS).

### Studies Projects:

- Aligning with P4, project creator will need to enter P4 Project ID during project creation.
- Including contract information and modifications, project can span multiple fiscal years.
- Containing a single purchase or group of purchases, including multiple provider organizations:
  - Single purchase project – for some project types such as LiDAR or Levee a single purchase with multiple tasks is sufficient to execute the project scope.
  - Multiple purchase project – watershed project is typical example of a project with multiple purchases (i.e., Discovery to Final Mapping).
- Having no geography associated.

The study project workbench enables project access users to create new study projects in the 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 project type (e.g., XX-XX-XXXS for study)

### Project Creation Guidelines:

- **Roles:** All projects will be created and owned by the Region or designee, such as an RPML. Purchases and tasks that exist within a project should be created and assigned as task orders or grants are approved and funded.
- **Project title:** Project names should continue to follow standard project naming conventions. Please see Section X.X.
- **Region identification:** Region should be identified during project creation. If there are multiple Regions to consider then a “Lead Region” should be selected from the drop down.

- **Contracts:** Contract information will need to be enter by the project creator when setting up a project, including fiscal year, task order number, organization, and baseline dates.
- **Contacts:** At a minimum, each project should include contact information for a Regional Project Engineer/Monitor.
  - The project creator should also consider including provider contact information such as TO Manager, CTP Manager, and / or study manager.
  - There can be multiple providers working within a project at any given time so contacts can include individuals from different providers, particularly for Discovery, Outreach, and Post-Preliminary purchases.
  - Project level contact information is for reporting purposes and will not impact task assignments.
- **New or Existing project considerations:** Project Creators must consider whether to create a new project or add new purchase to an existing project. There are many of potential project creation considerations but below are a couple common scenarios.
  - **LiDAR**
    - *Use existing project* – if the elevation acquisition is made in conjunction with a flood risk project.
    - *Create new project* – if the elevation purchases do not fit as part of a regular flood risk project either because the collection footprint extends beyond the flood risk project scope and/or because elevation data is purchased prospectively to support future work.
  - **Levee or Coastal Physical Map Revision (PMR)**
    - *Use existing project* – if the project area falls completely within an existing active watershed project. Project administrator can add as a new coastal or levee purchase distinguishing it from the other data development tasks by using the PMR purchase type indicator.
    - *Create new project* – if no active watershed project exists or the geography of the PMR footprint is not completely within the watershed boundary. In this case, a new PMR project and associated purchases would need to be created in the MIP.

For step-by-step instructions on project creation see MIP User Care.

### 5.2.1 Studies Project Naming Convention

A MIP project name should be practical and intuitive, using common language to help quickly identify projects for MIP users who daily interact with the study case numbers. 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 3: **(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 Region will determine the bulk of the project names, with the following requirements for tracking and reporting purposes:

- You must indicate the fiscal year the project was first funded and created in the MIP via the prefix.
- 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 HUC 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.

**Table 7: Prefix and Suffix Code Descriptions for MIP Project Names**

Prefix Code	Description
RM	Indicates a Risk MAP project.
FYXX	Indicates the first fiscal year the project was funded/created, where '##' is the last two digits of the numerical year (e.g., fiscal year 2017 is FY17).
ST	Indicates the state(s) in which the project is located.
	<b>Suggested codes for the regionally determined project name section</b>
CW	Indicates a countywide project.
PCW	Indicates a partial-countywide project (per the guidelines outlined in <u>Procedure Memorandum 46</u> ).
Watershed number and name	Indicates the numeric hydrologic unit code (HUC) and name for a watershed-basin study, typically for a HUC8.
PMR	Indicates a Physical Map Revision.
DISC	Indicates Discovery.
BLE or LSAE	Base Level Engineering or Large Scale Automated Engineering.
LiDAR	Light Detection and Ranging acquisition.
Suffix Code	Description
C	Indicates the project contains coastal study areas or is financed by Coastal funds.

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).
O	Indicates a project financed by Other Engineering Needs funds (may be used alone or in conjunction with other study type codes).
W	Indicates a watershed-basin project (requires including at least one HUC8 code).

Project name examples:

- RM-FY15-MI-LIDAR Purchase (14 Counties)-E
- RM-FY11-IL-Hardin County-Rosiclare Levee-L-LMP
- RM-FY13-OH-05090202-Little Miami River Watershed-O-W
- RM-FY14-OH-Richland County City of Shelby-O-PMR

### 5.3 Managing Studies Projects

#### Project Management Guidelines:

- **Roles:** All project level updates will be the responsibility of the project owner, who is typically the Region or its designee, such as an RPML.
- **Contracts:** New contracts or contract modifications (e.g., change request, grant extension, or scope clarification) can be added to the project as necessary.
  - The project owner should update contract change information at the Purchase and / or Task once both the Region and HQ has signed the modification. This should happen on a rolling basis as the modifications are approved.
  - The project owner should notify the Mapping Partner and Region that the changes to the project information has been entered and work can proceed.
- **Status management:** Project status is no longer system driven and will now be managed manually for all project phases. For example, because the studies workflow is no longer system driven the project status will not automatically change to “Completed” once all Post-Preliminary tasks are complete. Also, in the past “Completed” indicated that a project had progressed through final mapping and reached an effective date, this concept is no longer applicable under the MIP studies redesign. Status changes should be coordinated with the Region and RPML.
  - 1) Project status (Active/On-hold/Closed/Completed, etc.) should be managed manually for all project phases.
  - 2) Requests to close or complete a project in the MIP should be sent by the mapping partners to the project owner, namely the Region or RPML. This should occur once the mapping partner has completed assigned tasks, processed their final invoice, and marked associated tasks as 100 complete in Studies Workbench.

- 3) Updated status definitions:
  - Active - in-progress project anywhere in the workflow.
  - Closed - a project that does not continue processing through the workflow. The case is terminated somewhere in the workflow. This status indicates when scoped activities within a project were not completed, project activities were de-scoped, or a contract expired before scope could be completed.
  - Completed – indicates a project was completed as scoped (e.g., completed LiDAR or Discovery), or if a project, with a final mapping purchase has reached an effective date. Please note a project could have multiple counties in final mapping and each would have to reach an effective date before changing project status to 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. Placing a project on-hold should be coordinated with the Region on an as needed basis. This status should only be used as temporary action since it suspends project work and associated EV calculations for all tasks within the project. Long term (i.e., more than 3 months) on-hold projects should be re-baselined or taken to a final status such as Closed or Completed.
  - Suspended – only applicable to Revisions and Amendments projects, a project is suspended due to insufficient data, lack of payment, or a potential violation.
  - Withdrawn - only applicable to Revisions and Amendments projects. 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 – indicates 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.

## 5.4 Creating Studies Purchases

### Studies Purchases:

- Collections of Studies activities or tasks, housed within a project
- Represent an investment for a particular geography (e.g. hydraulics, hydrology, coastal, levee, outreach, etc.)
  - Geography clarifications:
    - Discovery and Data Development - watershed level geography, typically.

- Draft, preliminary, and final map production - county level geography.
- Due Process – only communities which need an appeal period; these communities should be identified during preliminary distribution.
- Unlike projects and tasks, do not contain contract information.
- Group tasks which are performed together for a defined geography.
- Have the option to have multiples of the same purchase within a project, representing multiple contracts, providers, or activities.

For a diagram of available purchases see [Attachment B: Study Strawman](#).

### **Purchase Creation Guidelines:**

- **Roles:** All purchases will be created and owned by the Region or designee, such as an RPML. Purchases and associated tasks should be created and assigned as task orders or grants are approved and funded.
- **Purchase Information:**
  - Purchase Group (required): There are five purchase groups based on type of project activity and include Discovery, Data Development, Preliminary, Outreach, and Post-Preliminary. The project creator will select the appropriate purchase group based on contract information.
  - Purchase (required): Allows project creator to select a purchase from the purchase group. For example, from Data Development group the project creator can select from purchase options, such as hydrology, hydraulics, survey, etc.
  - Purchase Type Indicator: This is a new feature of the MIP studies redesign and allows the project creator to clarify the purpose of a purchase. The following indicators are available:
    - Revised Preliminary
    - Large Scale Automated Engineering (LSAE)
    - Base Level Engineering (BLE)
    - Physical Map Revision (PMR)
- **Geography:** Geography is defined based on contract scope and is entered during purchase creation by the Region or designee, such as an RPML.
- **Contacts:** At minimum, each purchase should include contact information for a Regional Project Engineer/Monitor.
  - The project creator should also consider including provider contact information such as TO Manager, CTP Manager, and / or study manager.
  - There can be multiple providers working on a purchase so contacts can include individuals from different providers, particularly for Discovery, Outreach, and Post-Preliminary purchases.



- Purchase level contact information is for reporting purposes and will not impact task assignments.

For step-by-step instructions on purchase creation see MIP User Care.

#### 5.4.1 Assigning the Geography of a Purchase

The studies redesign allows all purchases to be tagged with a HUC number, typically a HUC8. Project creators should identify when possible a HUC for most purchases then edit or refine the associated geography (remove or add counties, communities, etc.) depending on purchase type, scope of work, and / or project area. If selecting a HUC is not feasible for a given purchase the project creator should define the geography directly related to the purchase type and scope of work, typically the county and communities impacted by a project footprint. The three main types of purchases, in terms of geography, as listed below.

- **Watershed** (Discovery, Data Development):
  - HUC (typically HUC8) and watershed name should be identified for all watershed based purchases. This option will pull in all counties and communities from the community layer which intersect the selected HUC. Projected creators can add and remove communities as needed depending on the project area.
- **County** (Countywide mapping, LiDAR collection):
  - Select state and county or counties which represent the project area.
- **PMR** (coastal, levee, 316-PMR or community initiated projects):
  - Select state, county, and only those communities within PMR footprint.
- **Additional purchase geography clarifications:**
  - Discovery and all Data Development (except Draft FIRM) - watershed level geography (e.g., HUC8), typically.
  - Draft, Preliminary, and Final Database tasks - countywide level geography OR county plus communities within the PMR footprint.
  - Due Process – only communities which need an appeal period should be included in the due process purchase geography. The communities impacted by FHD changes should be identified by the mapping partner during Prelim distribution.

#### 5.4.2 Discovery Purchase Considerations

If a Discovery purchase is added to a project it is recommended that the project creators also add a base map task and an existing topographic data task to the project. This will allow users to capture any leverage data collected during discovery and have it accurately reported.

- Base Map from Discovery – captured in the Base Map Data Capture task
- Existing Topo from Discovery – captured in the Existing Topographic Data Capture task

If no base map or existing topo data is collected during the discovery the project creators can remove or repurpose these tasks after completion of the discovery purchase.

### 5.4.3 Levee Purchase Considerations

The levee purchase will capture levee accreditation (Levee Data Capture) or LAMP plan information (LAMP Data Capture). This purchase and associated tasks are intended to collect non-engineering data, such as correspondence, letters, and the LAMP Plan. Any hydraulic and hydrology analysis (e.g., interior drainage) should be uploaded in those purchase types separately from the levee purchase.

Project creators and study managers should consider geography, number of levee systems, and type of analysis, when setting up a levee purchase. These considerations will determine whether single or multiple purchases and tasks are needed.

#### Purchase set up recommendations:

- Single levee system with one approach/analysis:
  - One levee purchase with geography specific to levee system
  - One levee or LAMP task for data capture
- Multiple levee systems with one approach/analysis:
  - One levee purchase to capture all levee systems
  - Comprehensive geography, so not specific to any one system
  - One levee or LAMP task for data capture
    - Multiple levee system IDs should be entered
- Multiple levee systems with multiple approach/analysis:
  - One levee purchase to capture all levee systems
  - Comprehensive geography, so not specific to any one system
  - Multiple levee or LAMP tasks for data capture
    - Each distinct analysis (e.g. natural valley, accreditation, LAMP, etc.) should be captured in a separate levee and /or LAMP data capture task.

### 5.4.4 Base Map and Elevation Purchase Considerations

Base map and elevation data collection and processing can occur at various points in the project lifecycle. To support the searchability and use of MIP project information it is important that users collect base map and elevation datasets through the appropriate purchase types. For example, base map and elevation data collected during or for the purposes of carrying out Discovery, Large Scale Automated Engineering, or Base Level Engineering should be submitted through the appropriate Base Map Data Capture, Existing Topographic Data Capture and/or Terrain Data Capture tasks associated with those project activities.

- **Additional elevation considerations:** The finished terrain model/surfaces used for modeling and floodplain mapping must be submitted. If existing or gathered elevation data are used as-is, it is only necessary to submit the data once under an Existing Topographic Data Capture task. A readme file and a metadata file indicating this should also be submitted under the project's Terrain Data Capture task. If the elevation data are

processed by a Mapping Partner for use in a Flood Risk Project (e.g., Hydrologic and Hydraulic modeling), the source data should be submitted under the applicable New Topographic Data Capture or Existing Topographic Data Capture task and the processed data should be submitted as final data under a Terrain Data Capture task.

- **Additional LSAE and BLE considerations:** This type of data should be submitted to the MIP under the applicable Hydrology, Hydraulics, and Floodplain Mapping purchases and tagged with the appropriate Large Scale Automated Engineering or Base Level Engineering purchase type indicator. If LSAE or BLE data is subsequently refined as part of another MIP purchase, the refined data should be submitted under the appropriate MIP Data Capture task(s) (e.g. hydrology, hydraulics, or floodplain mapping) of the subsequent MIP purchase. Only the portions of the LSAE or BLE data that are updated and/or used for the regulatory maps need to be submitted.

For additional information on base map and elevation data capture requirements see the [Data Capture Technical Reference](#) and [Data Capture Guidance](#).

#### **5.4.5 Revised Preliminary Purchase Considerations**

Revised preliminary purchases (e.g. Hydraulics, Preliminary, Draft DFIRM, etc.) can be tagged with a purchase type indicator of 'Revised Preliminary' and added within an existing Flood Risk Project. All Preliminary purchases identified with the purchase type indicator of 'Revised Preliminary' are subject to Quality Reviews (QR) 1, 2, and 3 and at minimum would require a Draft FIRM Database purchase for QR1 and a Preliminary purchase for QR2 and QR3. Other data development tasks can be created and tagged 'Revised Preliminary' depending on the scope of the revision and the type of data being revised. Should a second statutory 90-day Appeal Period be required, a Due Process purchase will also be required.

See the [Preliminary Distribution and Revised Preliminary Guidance](#) document for a detailed description of setting up Revised Preliminary purchases in the MIP.

#### **5.4.6 General Purchase Considerations**

General purchases can be used to capture a broad range of Risk MAP related activities, typically which are non-technical in nature and not related to a specific mapping project. Activities could include regional standard operations, program management hours, awareness metric tracking, and CERC related activities.

This purchase does track earned value information however in some cases a zero-dollar purchase may be needed. Providers should work with the appropriate FEMA staff to determine how this purchase should be used.

See MIP User Care for more information about General Data purchases.

#### **5.4.7 Outreach Purchase Considerations**

The outreach purchase includes three task types: Consultation Coordination Officer (CCO) Meeting, Feedback, and Event. See the following considerations on when and how to use these outreach activities.

- **CCO Meeting task** – should only be set up if funded within a mapping project.
  - If a CCO is not funded the decision to forgo the meeting must be documented with the Region and the community must be notified by letter per Program Standard 384 (SID# 384).
- **Feedback task** – this task is unique in that it can capture feedback throughout the lifecycle of a project and can be shared with multiple providers. Therefore, it should be created for all projects with regulatory mapping activities. Project teams should use this task to collect any feedback or community comments received from the various 30-day comment periods (e.g., 620 letter, 621 letter, Preliminary Distribution, etc.) or outreach events (e.g., CCO Meeting, FRR Meeting, Resilience, etc.) Please note the feedback task is not intended to capture appeals or comments received during the statutory 90-day appeal period, instead defer to the due process purchase.
- **Event task** – should only be set up if funded within a mapping project. This will capture a variety of Risk MAP outreach activities and their associated deliverables, not related to the CCO meeting, Discovery, or LAMP. Outreach data capture under the event task may include Flood Risk Review, Resilience, and associated deliverables such as reports, meeting materials, and 620, 621, and 622 letters. Any feedback or comments received during an outreach event should be logged in a feedback task. This task may also be used to document events outside of a Flood Risk Project, such as a High Water Mark Event. Such an event should be given its own project number.

It should be noted that Discovery engagement and LAMP meetings are also tracked separately under their own MIP data capture purchases and tasks.

#### 5.4.8 Due Process and Final Map Purchase Considerations

Due process and final mapping purchases will only be created if funded by the Region. The project creator should consider the following purchase requirements when setting up a due process or final map purchase.

- **Consolidated FHD:** The project creator should create two Consolidated FHD tasks for each due process purchase within a mapping project, one for the Proposed Notice and one for the Final Notice. The tasks should be named accordingly so assigned users can differentiate between them.
- **FEDD File Data Capture:** If a due process purchase is created the project creator should also add a FEDD file task from the final mapping purchase type. This will support the collection of appeal start letters and certified mail receipts.
- **Validation (Final Map purchase):** This task should be completed prior to the completion of KDP5. It should be used as a pre-KDP5 check of the FEDD file.

For additional information on the Post Preliminary deliverable requirements see the [PPP Deliverables Guidance](#) document.

#### 5.5 Updating the Geography and Status of a Purchase

All purchase level updates will be the responsibility of the project owner typically the Region or designee, such as an RPML.

Purchases are grouped into the following categories: Discovery, Data Development, Outreach, Preliminary, and Post Preliminary. Please see the following purchase management considerations:

- **Updating the Purchase Geography:** Geography should be clearly defined when planning a project and developing a scope of work to ensure that the correct geography is identified during purchase creation. Purchase geography should not be edited once purchase creation is complete. However, an error at purchase creation or a contract modification may require an update to purchase geography. The mapping partner should work with their RPML or Black Belt to make the necessary geography updates. Changes to purchase geography will be reflected in any associated tasks within the purchase.
- **Updating the Status of a Purchase:** Each purchase status can be managed independently of the overall project status. However, management of purchase status still lies with project creator or MIP help.
  - 1) Purchase status must be managed manually for all project phases. To do this the mapping partner will need to coordinate with the Region.
  - 2) Purchase status can differ from the overall project status. For example, the project can be active while the Hydrology purchase can be placed “on-hold”. Placing an individual purchase on-hold will suspend EV calculations for that purchase.
  - 3) Updated status definitions:
    - Active – scoped purchase activities are ongoing and contract mechanism is not expired, includes active EV calculations.
    - Completed – indicates a purchase is complete; including all associated tasks within the purchase.
    - On-hold – purchase activities have stopped temporarily, including work on associated tasks. This status at the purchase level does not suspend EV calculations.

For additional programmatic information pertaining to individual purchases and purchase set up considerations see MIP User Care.

## 5.6 Creating Tasks

Tasks are study activities within a purchase, assigned to and completed by MIP studies users, including managers, producers, quality reviewers, data validators, and FEMA.

### **Most granular level of MIP study organization characterized as:**

- Requiring contract and modifications (i.e., change requests) to be captured to support EV tracking:
  - Seen only by Task + EV access level users.
  - Task set-up includes: baseline start and end dates, negotiated cost, and task order number information.
- Assignment of tasks to MIP user(s) occurs during task creation.

- Allowing for multiples of the same task to exist within a purchase.
- Having a “business driven” process, instead of system driven. Meaning that users will be responsible for understating workflow sequence and in which order tasks should be completed.
- System will not trigger users as to what task to complete next since all tasks within a purchase are assigned at the same time.

### 5.6.1 Create Tasks

#### Task Creation Guidelines:

- **Roles:**
  - **Administrator** (project access) – all tasks will be created by the Region or designee, such as an RPML. Purchases and associated tasks should be created and assigned as task orders or grants are approved and funded.
    - *Order of task creation:* Create data capture tasks first, then create the validation task. This is because the task creator will need to identify which task should be validated.
  - **Manager** (task + EV access) – entering EV related information such as cost and progress will be based on the user having task + EV access. Task + EV users will update progress per task using the Study Task workbench.
  - **Producer** (task access) – tasks are assigned to and completed by the mapping partner funded to perform the study related activity. Producers will access and complete tasks also through the Study Task workbench. However, they will not see EV related items such as cost and percent complete.
- **Task Information:**
  - **Task type** (required): Allows project creator to select a task from a drop-down list of available tasks based on associated purchase type.
  - **Task name** (required): Project creator is required to enter a task name (free text field) to supplement and clarify task purpose and provider roles. In most cases the task name will simply be a duplication of the task type, such as QR3, Validation, Base Map, etc. However, the project creator when creating a MIP task should consider the following task naming convention. For more information on task names see MIP User Care.
  - **Task Name + Geography** (statewide, watershed, county, body of water) + **Other clarifications** (Disco: lead/support, Levee: Accreditation and Levee Name, LAMP: Levee Name, Coastal: IDS, FRP Validation: Draft/Final).
    - Task name examples: Disco\_WatershedName\_Lead, QR3\_FloodCounty, ConsolidateFHD\_County\_Proposed
  - **Baseline start / end dates** (required): This contract information, which supports EV calculations, is required to be entered by the project creator during task creation.

- **Description:** In addition to the task name, the task description allows the project creator to further describe and clarify the purpose of a task. Project creators should consider including details such as, whether the task is associated with new, restudied, or leveraged analysis, including a list of stakeholders, the study extent, a description of the associated geography, and Mapping Partner (PTS/CTP) information. This information should come from contract and grant information, such as the scope of work.
- **Geography:** The associated purchase geography defines the task geography. For geography clarifications please see the purchase creation section above.
- **Contracts and EV:** Contract information such as task order number and organization are stored and maintained at both the project and task level of a MIP project by the project owner. However, cost (in dollars) is only stored at the task level.
  - Task contract information includes: task order number, organization, and current negotiated cost.
  - Because task order information is already stored at the project level when creating a task, the project owner must select from a predetermined task order drop down list within the task creation screen.
  - Negotiated costs are stored within each funded task.
  - Baseline date and cost date together will be used for EV calculations at the task level.
- **Assigning tasks:** The MIP will no longer rely on a process in which tasks must be claimed on a workbench. With the MIP redesign all tasks associated with a funded purchase will be assigned up front to responsible users.
  - **Typical tasks assignments:**
    - Producer tasks (data capture, QA/QC) – Mapping Partner or provider.
    - Validation tasks – Region or Black Belt.
    - KDP tasks – Region or Program Management (PM) team designee.
    - Quality Review tasks – QR Lead, typically within a PTS provide.r
  - **Initial task assignment process:**
    - 1) Project creators (i.e., Region or RPML) will create and initially assign all new tasks (except KDPs) to the Regional Black Belt, or if know directly to the project/purchase manager.
      - KDPs – Region or PM team designee will be responsible for completing all KDP tasks.
    - 2) If assigned to the Black Belt they will then re-assign the producer tasks (expect validation tasks and QR tasks) to the responsible study manager. Depending on regional preference the Region or Black Belt will be responsible for completing all data validation tasks.
    - 3) The study manager can then re-assign their data capture and QA/QC task to the appropriate project team members. Please note that managers, if they assign the task



to someone else to perform the work, should keep a copy of the task for themselves in order to track EV.

For step-by-step instructions on task creation see MIP User Care.

### 5.6.2 Updating / Managing Tasks

#### Task management guidelines:

- Assignment of tasks to MIP user(s) occurs during task creation.
- Once a task is assigned, a task owner can re-assign a task to any other MIP user.
- Multiples of the same task can exist within a purchase.
- The same task can be assigned to multiple users (e.g., Manager and Producer)
- Task progression is “business driven”, instead of system driven. Meaning users will be responsible for understating workflow sequence and the order in which tasks should be completed.
- System will not trigger users as to what task to complete next since all tasks within a purchase are assigned at the same time.
- Tasks will be managed (including EV updates) from the Study Task workbench.
- Only task + EV users will see EV related items such as cost and percent complete.
- Users can save entries and data uploads as often as needed using the “Save” button within the task. Saving data does not impact reporting. Having saved data will be stored on the J drive.
- Once work and deliverables are complete the task owner can click “Submit” to complete the task. Completed task will disappear from the task owner’s workbench. Completed data will be copied to the K drive.
- All “validation” tasks should be completed by the Region or a Black Belt.
- **Roles:**
  - Task Creator – synonymous with the project and purchase creator. The Region or RPMLs will be responsible for creating all components of a MIP project including all tasks.
  - Task Owner, “Producer”– Tasks are assigned when created by the task creator. Once assigned to a user, that MIP user is the task owner. Task owners can then re-assign tasks to any other authenticated MIP user.
  - Task + EV Owner, “Manager” – Typically a study manger will be responsible for updating cost and progress for each task. Therefore, a manage should always keep a copy of each task on their Study Task workbench even if they intend someone else on the project team to perform the work or upload data.



- **Geography changes:** Task geography is tied to the purchases geography. Once a purchase and its associated tasks have been created only MIP help can make changes to geography.
- **Re-assigning tasks:** Once a task has been assigned, the user to which the task is assigned is considered the task owner. All task owners have the ability in the new system to re-assign tasks to other MIP users. A study manager can re-assign tasks to the appropriate project team member as needed
  - Important to EV management: A manager should always keep a copy of each task on their Study Task workbench even if they intend someone else on the project team to perform the work or upload data.
  - **Task statuses:**
    - New - assigned but not started.
    - In Progress – Information entered and user clicks “Save”.
    - Completed - once user clicks Submit.
- **Saving tasks:** Task owners can save entries and data uploads as often as needed using the Save button within the task. Saving data does not impact reporting. Saved data will temporarily be stored on the J drive.
- **Completing tasks:** Once work and deliverables are complete the task owner can click “Submit” to complete the task. Completed task will disappear from the task owner’s workbench. Completed data will be copied to the K drive. All completed work should be delivered in accordance with data capture guidance and technical reference.
  - **Order of task completion:**
    - KDP (Region or PM team) → Data Capture (Mapping Partner) → Validation (Region or Black Belt) → Independent QA/QC (Mapping Partner, if scoped).
    - If any, validation or QA/ QC task is rejected by a reviewer, the MIP will re-open the associated data capture task so the mapping partner can address comments and re-upload data if applicable.
  - **Task Coordination:**
    - The study team is responsible for the correct sequence of task completion. When a data capture task is completed, the study team should coordinate with the subsequent task owner, such as a Black Belt for data validations or a QR reviewer for QR tasks.
    - If any, validation or QA/ QC task is rejected by a reviewer, the MIP will re-open the associated data capture task so the mapping partner can address comments and re-upload data if applicable.
  - **Actual dates:** These critical project dates will be reported as actual dates once certain tasks are completed. This is important for reporting purposes, such as project Prelim, LFD, and Effective dates.

- **Finalizing Tasks:** Tasks with associated EV should not be marked as 100% completed until associated validation and independent QA/QC tasks are also completed.

## 5.7 Critical Studies Milestone Dates and Reporting Considerations

Project teams should consider the implications on studies reporting when they manage and complete their assigned project MIP tasks. Keeping critical dates (i.e., Preliminary, LFD, Effective, appeal start / end dates, etc.) populated and up to date is crucial for project monitoring and accurate reporting (e.g., monthly Notice to Congress). These critical dates are identified below, including what tasks impact their reporting and when they should be updated.

- **Projected Preliminary Date:** Updated through the *Produce Preliminary Products Data Capture* task. This projected date should initially be entered by the Mapping Partner once the Preliminary tasks have been created and assigned. The projected preliminary date can be updated through the Track task screen by a Task + EV or Project level access user while the *Produce Preliminary Products Data Capture* task is active.
- **Actual Preliminary Date:** Updated through the *Distribute Preliminary Products* task. The actual preliminary date should only be entered by the Mapping Partner once QR3 and KDP3 have been approved. The actual preliminary date is the date that is stamped on the preliminary products. Once an actual preliminary date is entered and “Send to MSC” is selected the actual preliminary date will be reported to the MIP and MSC. Clicking “Submit” will ultimately complete the task, removing it from a user’s workbench.
- **Appeal Start / End Dates:** Updated through the *Initiate Appeal / Comment* task, using the following date entry fields: “Second Newspaper Publication Date” for the appeal start date and “Appeal End Date” for the appeal end date. These dates are reported to the MIP once they are entered and saved within the *Initiate Appeal / Comment* task; because of this reporting impact it is important that the appeal start and end dates not be entered until the Mapping Partner is ready to start the 90-day appeal period. The appeal start and end dates should be entered by the Mapping Partner once these dates have been scheduled, typically after the Proposed Notice has published in the Federal Register and QR4 part 2 has been initiated.
- **Projected LFD / Effective Date:** Updated through the *CCO Meeting Data Capture* task or the *LFD Docket* task. The projected LFD date should be populated at the time the CCO meeting task or the *LFD Docket* task are created and assigned. If the date needs to be re-projected at any time it can be updated in the Track task screen through the *CCO Meeting Data Capture* task or the *LFD Docket* task by a Task + EV or Project level access user. The projected effective date will be system calculated based on the projected LFD date that is entered by the Mapping Partner.
- **Actual LFD / Effective Date:** Updated through the *LFD Approval* task and will be the responsibility of FEMA HQ staff or their designee. LFD approval should not be requested until the successful completion of QRs 5, 6, and 7. Population of an actual LFD date and subsequent completion of the *LFD Approval* task will represent FEMA approval of the LFD docket. The actual effective date will be system calculated based on the actual LFD date

entered. Clicking “Save” or “Submit” within this task will trigger reporting of the actual LFD and actual effective date to the MIP and CIS.

## **6.0 Studies Data Capture, QC, and Upload**

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 varies depending on which tool the files are uploaded through: 100 GB for the MIP workflow and 2 GB for Data Upload and File Explorer. Datasets larger than 100 GB should be sent to the FEMA Engineering Library instead of being uploaded to the MIP. See the Data Capture General and Data Capture Workflow Details guidance documents for additional information on data capture requirements.

### **6.1 Capturing Studies Data**

The Workbench Tab provides authenticated MIP users access to the functions in the MIP. For Studies, users will use the Study Project and Study Task Tabs under the Workbench tab to access project information. Amendments and Revisions users will continue to use the existing Work Items Tab to claim and work on LOMC tasks as required. For assistance in determining MIP workflow roles and access:

- Studies users: Contact your RSC.
- Revisions and Amendments users: Contact your Subject Matter Expert (SME) or [miphelp@riskmapcds.com](mailto:miphelp@riskmapcds.com).

#### **6.1.1 Study Project Workbench**

The study project workbench is the launching point for all project level access users and allows these users to create, edit, assign, and track Studies projects or tasks. All projects created by, or assigned to the project owner will be visible on this workbench. Typically, this tool will be used by Project Administrators, such as Regional personnel and RPMLs.

#### **6.1.2 Study Task Workbench**

The study task workbench is the launching point for all MIP Users who have been assigned tasks to complete. The study task workbench will allow task owners, managers, and producers to assign and re-assign tasks. Task + EV users will use this workbench to complete monthly progress updates to manage EV.

Users will only see the tasks that they have been assigned on their study task workbenches. 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 identify user roles 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.

### 6.1.3 Summary of Map Actions Workbench

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 five SOMA categorizations: Category 1 (LOMCs Incorporated), Category 2A (Revised panel – LOMCs Not incorporated), Category 2B (Unrevised panel – 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. See the [SOMA Guidance](#) document for additional information on SOMA categorization process.

SOMA reports and revalidation letter templates are only accessible through the SOMA workbench.

### 6.1.4 Leverage Capture

Leverage entries represent the value of all non-National Flood Insurance Program (NFIP) resources contributed by any university, federal, state, regional, multijurisdictional, tribal, or local entity which supports the development, revision, or maintenance of Risk MAP-related products. Leverage can include in-kind services (e.g. topographic data, field surveys, engineering analyses, and GIS efforts). Users can make a leverage entry through the project lifecycle within most purchases, including Discovery, all data development types, preliminary, due process, outreach, and final mapping.

Leverage entries should follow [Estimating the Value of Partner Contributions to Flood Mapping Projects “Blue Book”](#) available in the FEMA document library. Leverage contributions are reported as the quantities of data and services contributed to the project, not reported as actual costs enumerated in dollars. The [Blue Book](#) includes tables listing the units and types for most forms of leverage contributions. To create a leverage entry, find the appropriate row(s) in the blue book tables, enter the quantity of data or services provided consistent with the blue book entry, specify the appropriate units, then complete the “Type” field by combining the value under “Project Element” with the appropriate sub-heading under “Less Effort More Effort” indicating which blue book value is most appropriate to the situation. Note that the quantity must be adjusted for federal funding that partially funded the leverage data or activity. See the [Blue Book](#) for details.

The one exception to this approach is for reporting contributions from federal partners to new topographic data production. When purchasing new elevation data in partnership with other federal agencies and where a CTP is not involved, report the other agency contributions in dollars based on each partners’ contribution. See the MIP User Care for New Topographic Data Capture for details.

▼ Leverage ⓘ

<input type="checkbox"/>	Quantity	Type	Unit	Contributed By	Federal Fiscal Year	Comment
No Leverage added						

+ Add   Edit   Delete

**Figure 6: Leverage Entry Screen**

## 6.2 Metaman and 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: Base Map, Draft FIRM Database, Hydraulic Data, Hydrologic Data, Topographic Data, Orthoimagery, Alluvial Fan Analysis, Coastal Analysis, Field Survey, Floodplain Mapping, Preliminary, and Produce Final Maps.

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.

## 6.3 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.

- **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.
- **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.

## **6.4 MIP Data Upload Guidance**

There are several methods available for uploading data to the MIP: the studies workflow, Tools and Links - Data Upload, File Explorer, and on digital storage media to MIP Help or the Engineering Library. The primary method for data upload should be through the studies workflow, however, this may depend on the type of data being submitted and the size of the dataset(s). These data upload methods are described in the following sections.

### **6.4.1 Uploading Studies Data through the Workflow**

Task owners should upload data to the MIP during execution of any project task with the built-in upload functionality. The folders that you can view in File Explorer, associated with each MIP task, are automatically generated when data is uploaded through a workflow task. Folders below the task level folder will need to be created by Mapping Partners as specified in the [Data Capture Technical Reference](#) and as applicable to the data being submitted. These folders should be created and populated with the data applicable to the task, zipped, and uploaded to the MIP. The uploaded data will subsequently be unzipped in the submitted folder structure on the MIP and viewable on the MIP File Explorer J: Drive.

With regards to geography, in general, the spatial extents of a task will be defined by the purchase. If subfolders that represent subdivisions of the purchase geography would facilitate the Mapping Partner's workflow and/or future use of the data (e.g., HUC8 basins broken out within a larger HUC4 watershed-based project), the Mapping Partner should include logically named sub-folders within the uploaded folder structure.

Though the primary method of submitting data should occur through the MIP studies workflow, data can also be uploaded through MIP File Explorer J: Drive, as long as the associated MIP task is active. Data uploads through File Explorer are limited to 2 GB and should only be used as alternative upload method, such as when a MIP user wants to replace a single file or subfolder within a larger data package before completing the data capture task.

Data deliverables associated with tasks in the MIP studies workflow must be successfully uploaded and validated before a task can be considered complete. The guidance for uploading through the studies workflow, for all data types, is outlined below including file size limitations.



## Datasets smaller than 100 GB

All data of this file size should be loaded to the MIP directly, including Flood Risk Products and LiDAR when file size permits. This can be accomplished in one of two ways:

- 1) **Managed Upload option** – use this option for large datasets and for selecting multiple zip files. Users can upload zip files as large as manageable, but because some users may not have a system capable of creating very large zip files the dataset should be pared down into multiple zip files no larger than 20 GB each. While this is not a system limitation, FEMA is currently testing system limitations at this size and it will be expanded in the future. **Note: Users must download the Aspera client to use this option.**
- 2) **Direct Upload option** – Users who cannot or will not install the Aspera client to use the Managed Upload option can still use the Direct Upload option. This option requires the selection of one zip file which cannot be larger than 2 GB. Users who cannot install the Aspera client and have a dataset larger than 2 GB must submit the data to MIP Help on a hard drive as described in the section below.

Datasets smaller than 100 GB can be mailed to MIP Help if the user is unable to successfully upload them through the MIP task using the above Manage or Direct Upload instructions. This method is not intended for small submittals of only a few GBs therefore should be reserved for datasets that could not be broken up into multiple zip files or those reaching the upper limit of the 100 GB limitation. When mailing in datasets smaller than 100 GB, mapping partners must select “MIP Help” in the Data Location drop-down to signify that the data will be mailed to MIP Help on a hard drive. Supporting documentation for large datasets must still be uploaded directly to the MIP (i.e., general, correspondence, and spatial files). Once the “MIP Help” in the Data Location drop-down option has been selected and supporting documentation has been uploaded the mapping partner should click “Save” but not complete the task. The data capture should remain open until the mapping partner receives confirmation from MIP Help that the data was uploaded. 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 sender. Data should be sent to MIP Help using the address: MIP Help, 10400 Eaton Place, Suite 500, Fairfax, VA 22030.

Data submissions should include the following information:

- MIP Case Number
- Purchase Name (e.g., Terrain, DFIRM, Hydrology, etc.)
- Task Type (e.g., Terrain Data Capture, Hydraulics Data Capture, etc.)
- Task Name (e.g., Terrain for Fairfax County - 01)
- Contact Name
- Contact Address
- Contact Phone
- Contact Email Address

- Exact folder path to which the data should 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 MIP Help receives the data, it generally takes three business days for data to be uploaded and then three to four business days for hard drives to be returned. Once data is received, MIP Help takes the following steps:

- 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 flow.
- Return the hard drive to the sender if a return shipping label was included in the submission.

Once MIP Help has confirmed that the requested data has been uploaded to the MIP J: Drive the mapping partner can then proceed with completing the appropriate data capture task. Completing the data capture task will copy the data to the MIP K: Drive. The mapping partner should then coordinate with the Region or Black Belt to facilitate validation of the submitted data.

### **Datasets 100 GB and Larger**

FEMA's has existing repository limitations and cannot store all large datasets such as some very large coastal modeling or LiDAR datasets. Until a long-term large data storage solution can be implemented datasets that are 100 GB and larger must be sent to MIP Help on a hard drive for long term storage and access. The drive will not be returned to the submitting party.

Mapping Partners must select "MIP Help" in the Data Location drop-down if the data will be mailed to MIP Help on a hard drive. Supporting documentation for large datasets should still be uploaded directly to the MIP (e.g., general, correspondence, and spatial files). 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 sender. Data should be sent to MIP Help using the address: MIP Help, 10400 Eaton Place, Suite 500, Fairfax, VA 22030.

Data submissions should include the following information:

- MIP Case Number
- Purchase Name (e.g., Terrain, DFIRM, Hydrology, etc.)
- Task Type (e.g., Terrain Data Capture, Hydraulics Data Capture, etc.)
- Task Name (e.g., Terrain for Fairfax County - 01)
- Contact Name
- Contact Address
- Contact Phone



- Contact Email Address

In addition to sending data to the MIP Help, 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](#) (For example, for elevation data users would upload 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 large datasets necessary for project advancement must take place before delivery to MIP Help. A .txt “Read-me” file must accompany these uploaded documents notifying MIP users of the final location of the large datasets at the Engineering Library.

Once the data is received, MIP Help will send a receipt confirmation email to the sender.

#### 6.4.2 Data Upload Requirements through Tools and Links

The Data Upload tool allows users to load data artifacts, outside of the MIP workflow, for studies, amendments, and revisions. Typically, this option is used to upload project related data for which there is not an associated MIP data capture task with upload functionality enabled. With the MIP redesign, the need for this upload method should be very limited. 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. There are three Study Product Types available for upload outside of the project workflow.

- **Floodplain Boundary Standard (FBS) Report** supporting documentation or artifacts.
- **Correspondence** for studies and appeals not previously uploaded during a MIP Data Capture task.
- **Study Artifacts** not uploaded during a MIP Data Capture task.

When using this portlet, an abstract that describes the data being delivered is required. The abstract should clearly describe the deliverable as well as the geographic area it covers. This should include the county or communities covered by the data being delivered as well as the corresponding Federal Information Processing Standard (FIPS) code or community identification number (CID).

Each submission package should be no larger than 1 GB. If the package contains multiple files, these files should be zipped together, and uploaded as a single file. Submission packages over 1 GB should be mailed to MIP Help on an external hard drive or other media as described above.

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 upload?

- Allow for Public Download? – In the Flood Risk Study Engineering Library can the public download the files associated with the 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, Discovery materials are publicly discoverable, and their file names are publicly viewable; however, Discovery materials cannot be downloaded by the public. 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.

## **6.5 Delivering Flood Risk Products to the Map Service Center**

A Flood Risk Products (FRP) packages include the Flood Risk Database (FRD), Flood Risk Report (FRR), and/or the Flood Risk Map (FRM). The deliverables (FRD, FRR, and/or FRM) should be uploaded to the MIP through a Flood Risk Product purchase. A Flood Risk Products Index is also required when submitting flood risk items. Supporting files such as metadata should also be uploaded to the MIP. All files, including the Index, must be in the digital format and use the proper folder structure naming conventions found in [Data Capture Technical Reference](#).

Finalized flood risk products, FRD metadata files, and the associated index should be uploaded directly to the MIP no later than 30 days following the LFD for the regulatory map update. The Mapping Partner should then send email notification to [FRPSubmissions@riskmapcds.com](mailto:FRPSubmissions@riskmapcds.com) that the products have been uploaded so that they can be transferred to the MSC. These products will be made available to the public for download (<https://msc.fema.gov>).

Due to data upload restrictions within the MIP, the process for uploading data depends upon the data size. Please refer to the data upload limitations, instructions, and delivery locations listed above in the previous section.

Mapping partners should submit 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, project team should coordinate with the FEMA Regional Office to determine if the draft FRP projects should be uploaded or when flood risk products are considered final. For Risk MAP projects that produce multiple regulatory updates, the flood risk products for a 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](mailto:FRPSubmissions@riskmapcds.com).

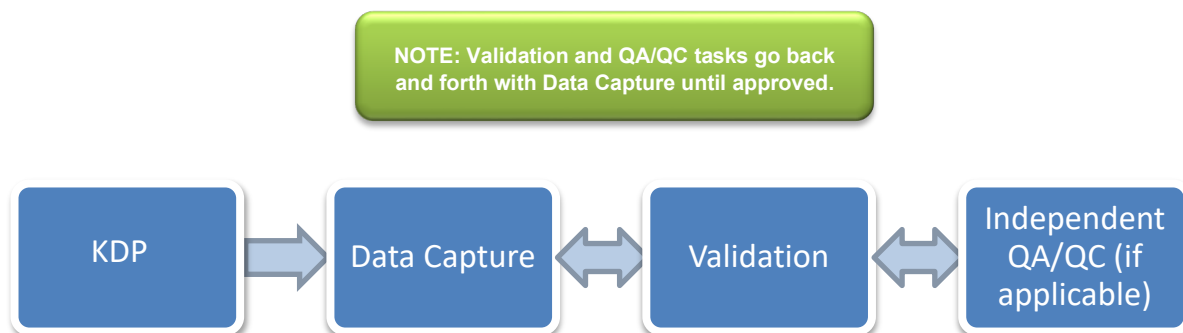
## 6.6 Data Registration

Data is registered once all tasks (Validation, Independent QA/QC and / or QR) within a purchase, with an approve / reject option, have been approved and completed. If a purchase only includes a validation task only then approval of the validation task will alone trigger data registration to FRiSEL.

## 7.0 Data Validation

All project data uploaded to the MIP through a project workflow must be reviewed and validated for completeness against the current Data Capture standards by the Region or designee, typically a MIP Black Belt.

All discovery and data development purchases which include a funded data capture component must also include a validation task. These tasks will be set up by a project administrator when the purchase is obligated. The system will not trigger the validation requirements so users must be aware of the order in which they are completing workflow tasks. Once a user has uploaded data and completed the associated data capture task they are responsible for coordinating directly with person in their Region responsible for data validation such as Regional staff or a Black Belt. See the basic representation of the validation process below. If a validation is rejected the workflow will move back to data capture to allow the Mapping Partner to address reviewer comments and re-upload data if needed.



**Figure 7: Basic Validation Process**

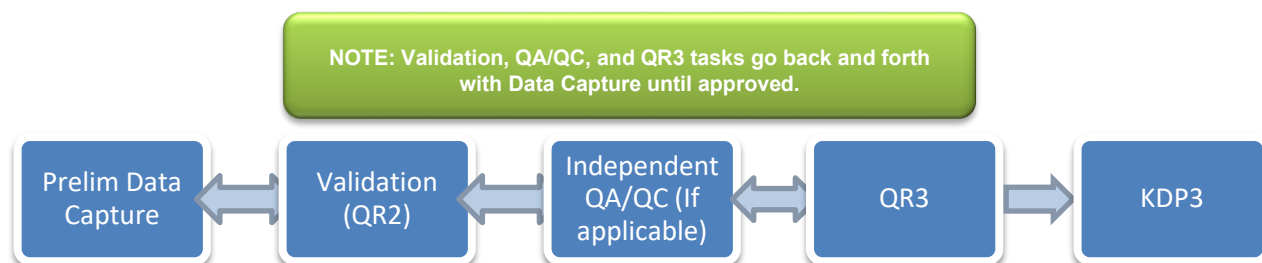
For more information on data capture requirements, please refer to the [Data Capture Technical Reference](#).

## 7.1 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) – Draft FIRM Database Capture.
- QR2 (Prelim submission) – Produce Preliminary Products Data Capture.
- QR5 (Final submission) – Develop Final Mapping Products Data Capture.



**Figure 8: Basic Preliminary Process**

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 Management Guidance](#) document.

## 7.2 Preliminary Data

Once QR3 and KPD3 are approved the Mapping Partner should complete the Distribute Preliminary Products task. This will distribute preliminary data (FIS, FIRMs, and database files) to the public facing sites: ([www.fema.gov/preliminaryfloodhazarddata](http://www.fema.gov/preliminaryfloodhazarddata)) and ([www.msc.fema.gov](http://www.msc.fema.gov)). Preliminary data will be removed automatically from the public-facing site when the 'QR8' task is completed (at or near the LFD date).

Any changes to Preliminary data once posted for public review should be coordinated with your Post Preliminary Lead, Black Belt, and Regional Project Monitor.

For additional preliminary guidance see the [Preliminary Distribution and Revised Preliminary Guidance](#).

## 8.0 Locating Studies Data

Various tools allow a MIP user to discover and access engineering, mapping, and FIRM database artifacts stored in MIP. The MIP File Explorer application may be used to navigate and access directories and files located on the MIP J: and K: drives. Users may only modify a folder if they have been assigned tasks related that folder, and folders can only be modified for active projects and purchases.

Please direct questions regarding data access to [MIPHelp@riskmapcds.com](mailto:MIPHelp@riskmapcds.com). For more information on how the Search Engineering Data and File Explorer tools work see Section 6 of this guidance document.

## 8.1 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 individual data capture tasks on the MIP. This data is automatically copied to the K: drive after the completion of each data capture task. Data is registered when the validation and / or QA/QC task 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 assigned the task.

All MIP authenticated users can 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 folder permissions should be directed to [MIPHelp@riskmapcds.com](mailto:MIPHelp@riskmapcds.com).

### 8.1.1 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. 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.

### 8.1.2 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. FEMA maintains the Discovery Data Repository. 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.

## 8.2 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 have been uploaded through the MIP. The FRiSEL provides users with a fast, intuitive search and navigation interface for locating, examining, and downloading engineering and support data.

This MIP tool is accessible to all MIP users, including the public. The public however will be limited in what they can view and download. Please see the [Attachment A](#) below for a complete list of public access rules. Credentialed users such as FEMA staff, contractors, and affiliated mapping partners with active logins will have complete access to FRiSEL. Questions about account permissions should be directed to [MIPHelp@riskmapcds.com](mailto: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.

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 several searchable fields, including associated metadata, and the Keyword Search compares the entered search terms against these fields. There are several types of searches that can be performed using logical operators, see on-screen help text for explanations.

## 9.0 Reports and Dashboards

### 9.1 Studies Reporting

The MIP Ad-Hoc Reporting System (MARS) reporting application is available to all MIP users. It allows all MIP users to access studies data and create ad-hoc reports on demand. Data elements available for the ad-hoc reporting studies universe will also include amendments and revisions data elements and project status information. Please note that studies information will no longer be available through Crystal Reports under the Report and Form Letters section of the MIP.

- **Pre-defined report or “canned” reports** have already been customized for the user by the reporting tool administrator. These reports should not be modified however they can be scheduled for recurring delivery to a user’s email address.
- **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. Please note that in order to successfully generate a customized report that is both functional and useful, users should limit reports to only a few columns, or data elements, and always apply a filter or query.

#### The Studies reporting tool features:

- The ability to create individualized ad-hoc reports.
- Over 140 data elements for Studies Redesign reports.
- A daily data refresh that includes updates made the previous business day.

- The ability to create individualized reports and email them at scheduled intervals to non-MIP users (e.g., mapping partners, National Flood Determination Association, etc.).
- Status information for Revisions and Amendments.
- Access to additional Studies, Amendments, and Revisions canned reports.

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

## 9.2 Studies Dashboards

These applications are separate from the Studies workbench tools. Unlike the workbenches, which allow users to manage projects and assigned tasks, the Dashboard tools provide users with the ability to retrieve basic project, purchase, and task status information for all Regions and mapping partners.

## 9.3 Reports & Form Letters (Revisions and Amendments Only)

This functionality enables registered users to create pre-defined or “canned” Amendment, and Revision 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 Studies Reporting Tool from Tool & Links or Workbench. The MIP user will need to choose which report they would like to retrieve from a drop-down menu. 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. Non-registered users can only access Public Reports.

## 10.0 MIP User Care Guidance

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

MIP User Care is repository of frequently asked questions and support materials with four distinct sections: Studies, Amendments, Revisions, and Engineering Data Search. The studies section will provide technical, step-by-step information on how to use the redesigned studies system, including some programmatic details dealing with project creation and purchase clarifications.

## 11.0 MIP Technical Support

### 11.1 MIP Support

MIP Help hours of operation are 8:00 a.m. until 5:00 p.m. Eastern Time, Monday through Friday, except for 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@riskmapcds.com](mailto:miphelp@riskmapcds.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@riskmapcds.com](mailto:miphelp@riskmapcds.com).

### 11.1.1 Email Support

MIP Users can submit support requests to the MIP Help team by sending an email to [miphelp@riskmapcds.com](mailto:miphelp@riskmapcds.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 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 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.

### **11.1.2 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.

### **11.1.3 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.

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

**Table 8: 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)

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
All Independent QA/QC	Independent QA/QC	Yes	Yes	No	
All QR	QR (Studies)	Yes	Yes	No	
All Validation	Validation (Studies)	Yes	Yes	No	
Alluvial Fan	Alluvial Fan Analysis (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Base Map	Base Map (Studies)	Yes	Yes	Yes - See Note	<b>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</b>

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
					Restricted or View Only) is set in metadata.
Coastal	Coastal Analysis (Studies)	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.
Correspondence (from Tools and Links Upload)	Correspondence (Studies)	No	No	No	
Correspondence (from Tools and Links Upload)	Supporting Artifacts (Studies)	No	No	No	
Correspondence (from Tools and Links Upload)	FBS Reports (Studies)	No	No	No	
Discovery	Discovery (Studies)	Yes	Yes	No	
Distribute Revalidation	Revalidation Letters	Yes	Yes	No	

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
Draft FIRM DB	DFIRM DB 'Draft' (Studies)	Yes	Yes	No	
Due Process	Dues Process (Studies)	Yes	Yes	No	
Existing Topographic	Existing Topographic Data (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Final Map Production and Distribution	Final Mapping Products (Studies)	Yes	Yes	No	<b>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.</b>
Floodplain Mapping	Floodplain Mapping (Studies)	Yes	Yes	No	
FRP	FRP (Studies)	Yes	Yes	No	

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
General	General (Studies)	Yes	Yes	No	
Hydraulics	Hydraulic (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Hydrology	Hydrologic (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Legacy Data Type	FEDD File (Studies)	Yes	Yes	No	
Legacy Data Type	Prepare for Scoping (Studies)	Yes	Yes	No	
Legacy Data Type	Conduct Scoping Meeting (Studies)	Yes	Yes	No	

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
Legacy Data Type	Finalize Project Scope (Studies)	Yes	Yes	No	
Legacy Data Type	Letter of Final Determination – Prepare LFD Docket (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Legacy Data Type	Perform IQA – Develop Topographic Data (Studies)	Yes	Yes	No	
Legacy Data Type	QR3 National DFIRM – Final (Studies)	Yes	Yes	No	
Legacy Data Type	Scoping (Studies)	Yes	Yes	No	
Legacy Data Type	TSDN (Studies)	Yes	Yes	No	
Legacy Data Type	Appeals (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Base Map (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Develop DFIRM Database (Studies)	Yes	Yes	No	

<b>Purchase Types/Data Type</b>	<b>FRiSEL - Type of Data Product</b>	<b>Discoverable to Public?</b>	<b>File Names Displayed to Public?</b>	<b>Public Download?</b>	<b>Notes for Download Column</b>
Legacy Data Type	Perform IQA – Develop Hydraulic Data (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Develop Hydrologic Data (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Develop Alluvial Fan Data (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Develop Coastal Analysis Data (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Perform Field Survey (Studies)	Yes	Yes	No	
Legacy Data Type	Perform IQA – Perform Floodplain Mapping (Studies)	Yes	Yes	No	
Legacy Data Type	Preliminary FIS (Studies)	No	No	No	
Legacy Data Type	Preliminary DFIRM (Studies)	No	No	No	
Legacy Data Type	Redelineation (Studies)	Yes	Yes	No	

Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
Legacy Data Type	Final DFIRM (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Levee	Levee (Studies)	Yes	Yes	Yes - See Note	<b>Yes, after Validation and Independent QA/QC has been approved and completed.</b>
New Topographic	New FEMA Purchased Topographic Data (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Outreach	Outreach (Studies)	Yes	Yes	No	
Preliminary	Preliminary (Studies)	No	No	No	



Purchase Types/Data Type	FRiSEL - Type of Data Product	Discoverable to Public?	File Names Displayed to Public?	Public Download?	Notes for Download Column
Preliminary (Revised)	Revised Preliminary (Studies)	No	No	No	
Survey	Field Survey (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>
Terrain	Terrain (Studies)	Yes	Yes	Yes - See Note	<b>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.</b>

**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
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

## 13.0 Attachment B: Study Strawman Demonstrating Business Flow

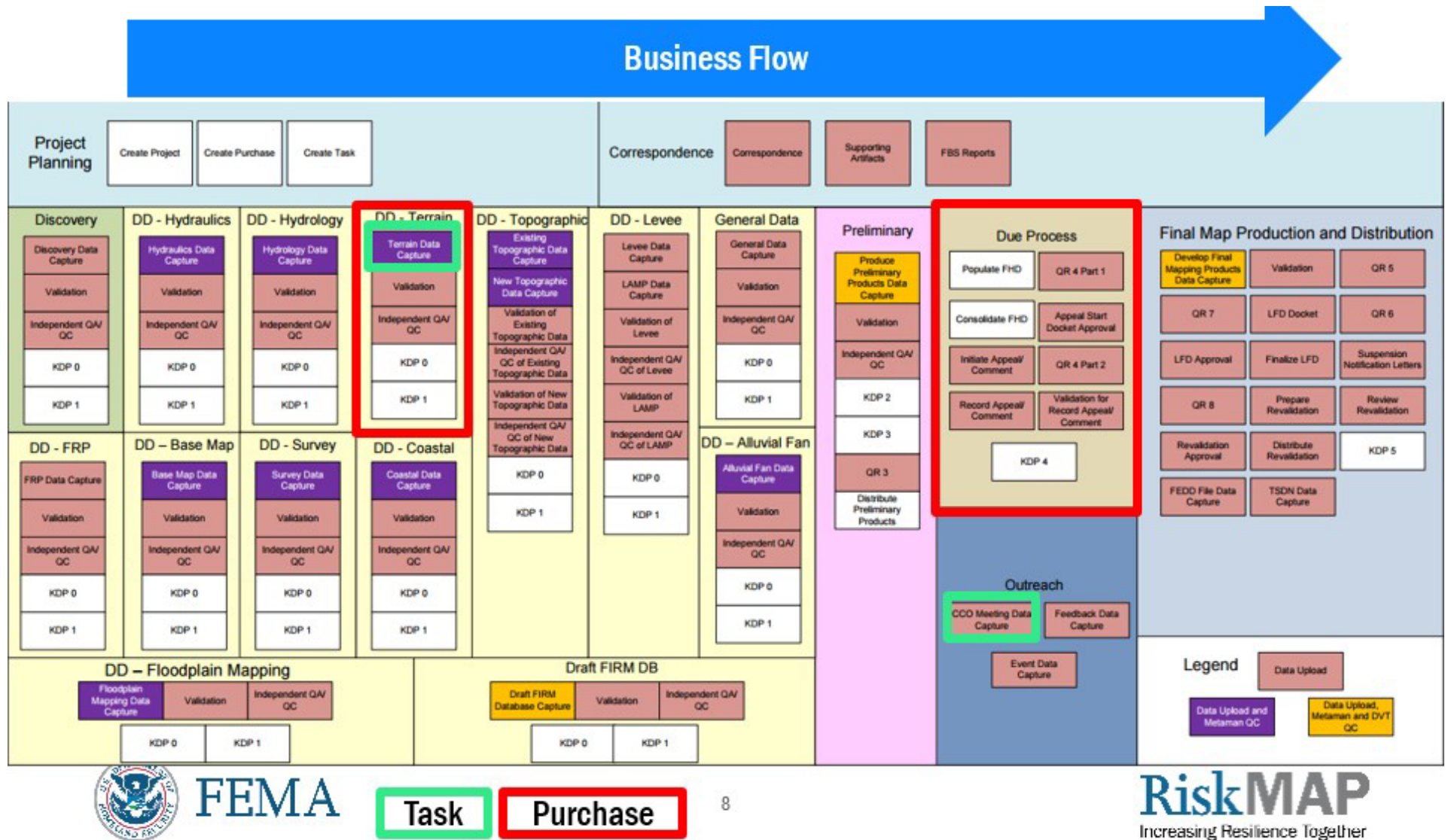


Figure 9: Study Strawman Demonstrating Business Flow

## 14.0 Attachment B: Study Process Diagrams

### 14.1 Discovery and Data Development Purchases for Study Projects

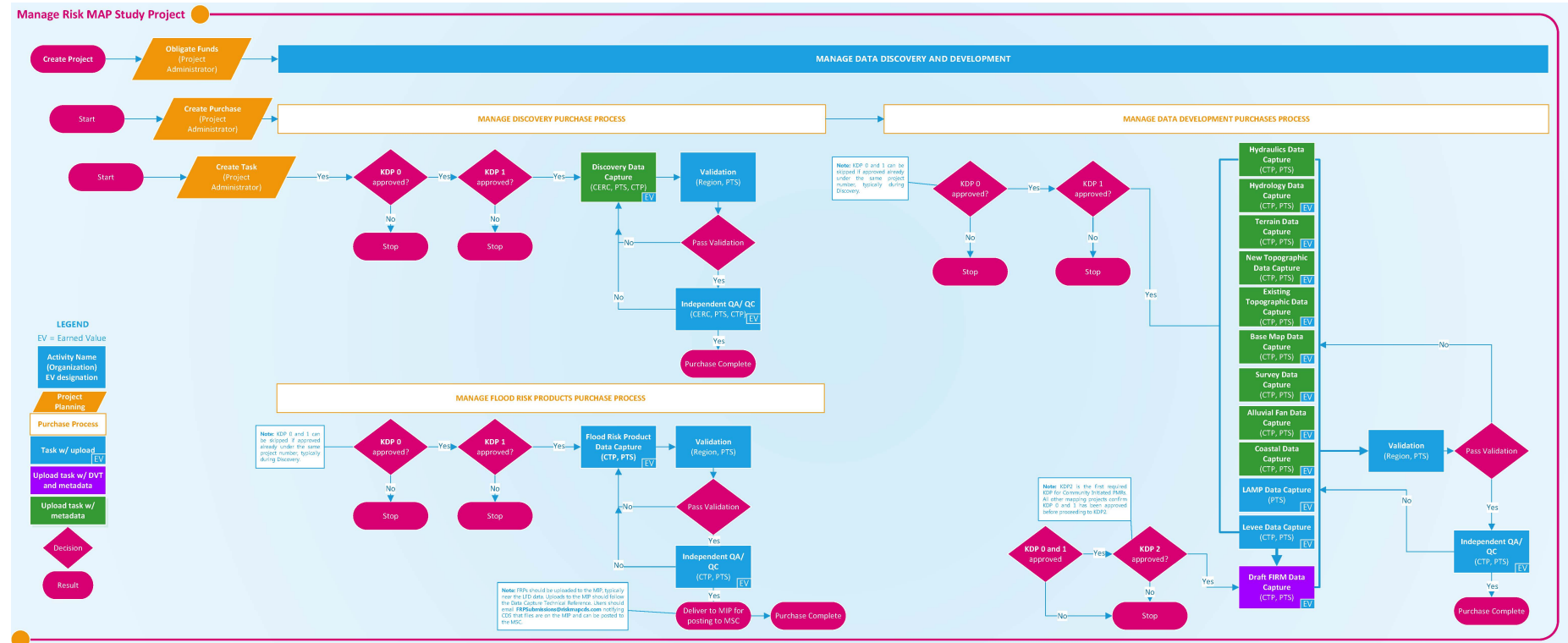


Figure 10: Discovery and Data Development Process Diagram

## 14.2 Preliminary and Outreach Purchases for Study Projects

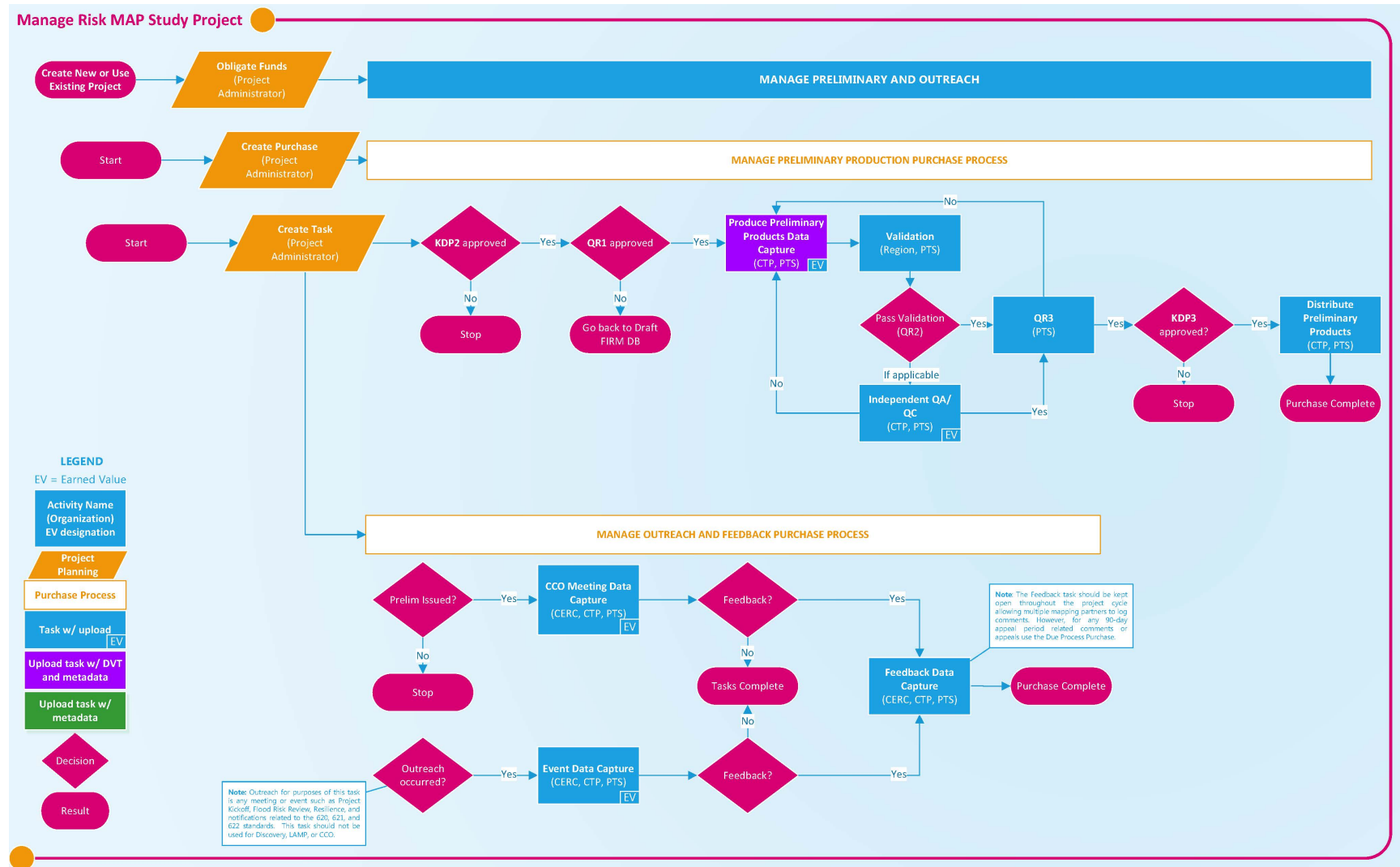


Figure 11: Preliminary and Outreach Process Diagram

## 14.3 Due Process and Final Mapping Purchases for Study Projects

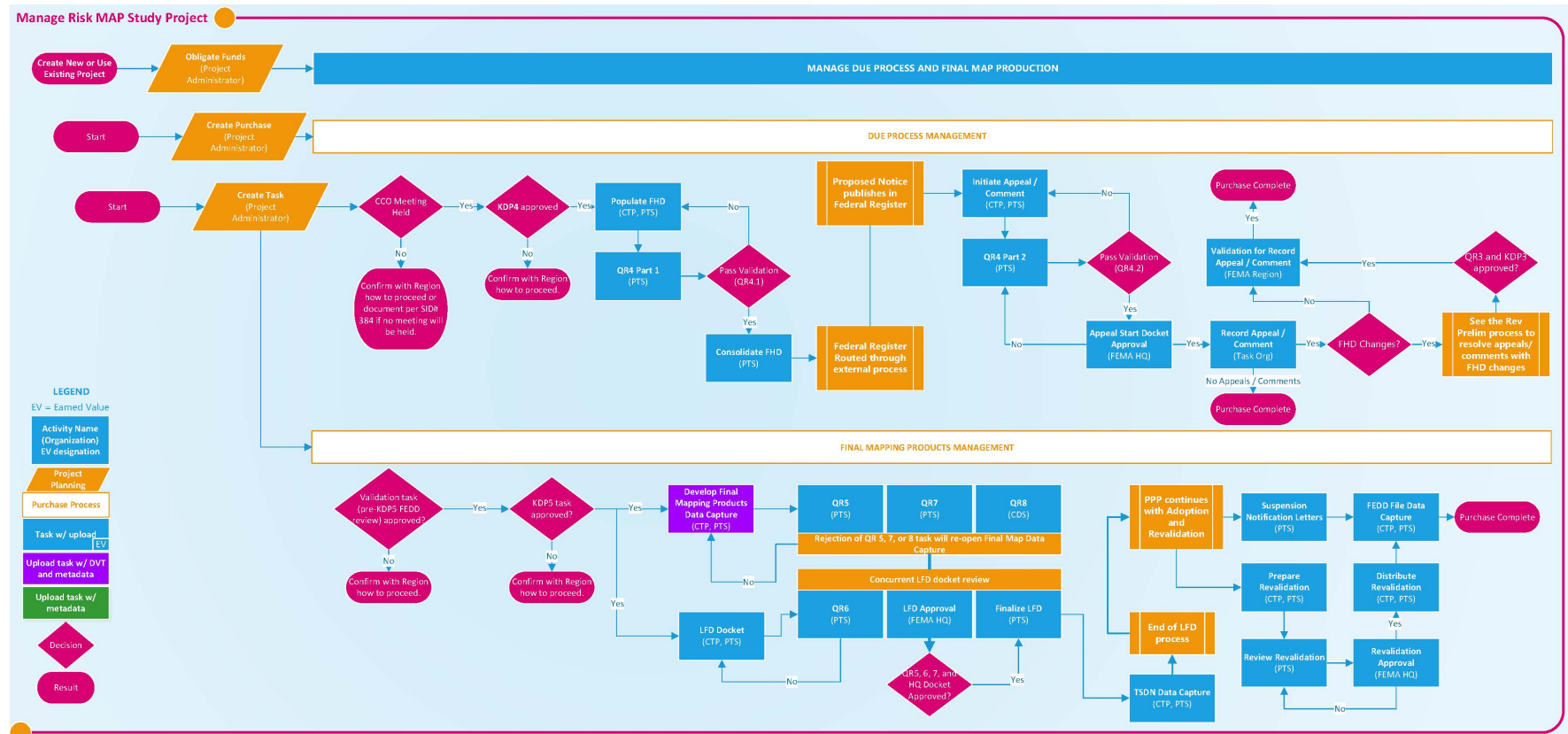


Figure 12: Due Process and Final Map Production Process Diagram

15.0 Attachment C: Revision Process Diagram

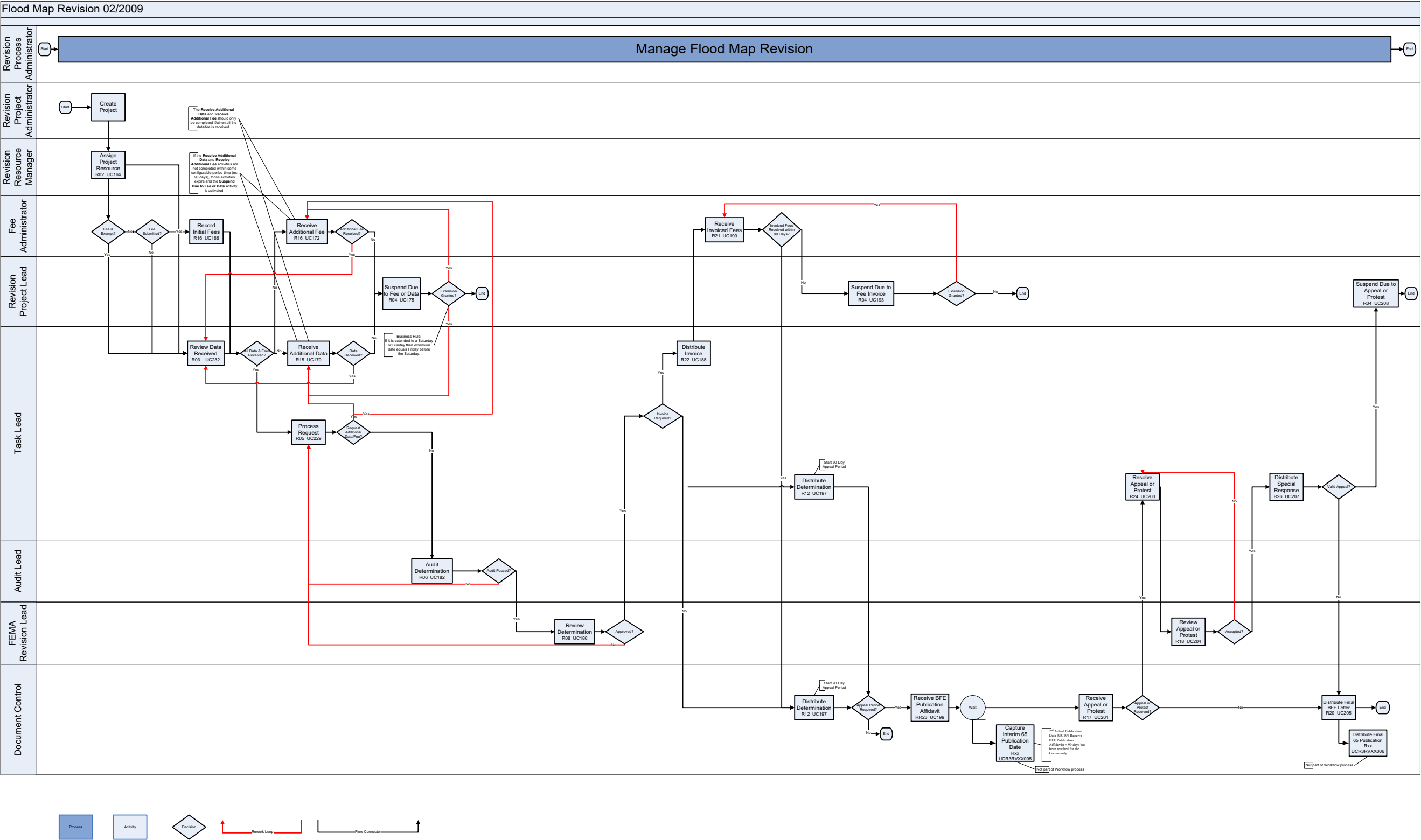


Figure 13: Revision Process Diagram



16.0 Attachment D: Amendment Process Diagram

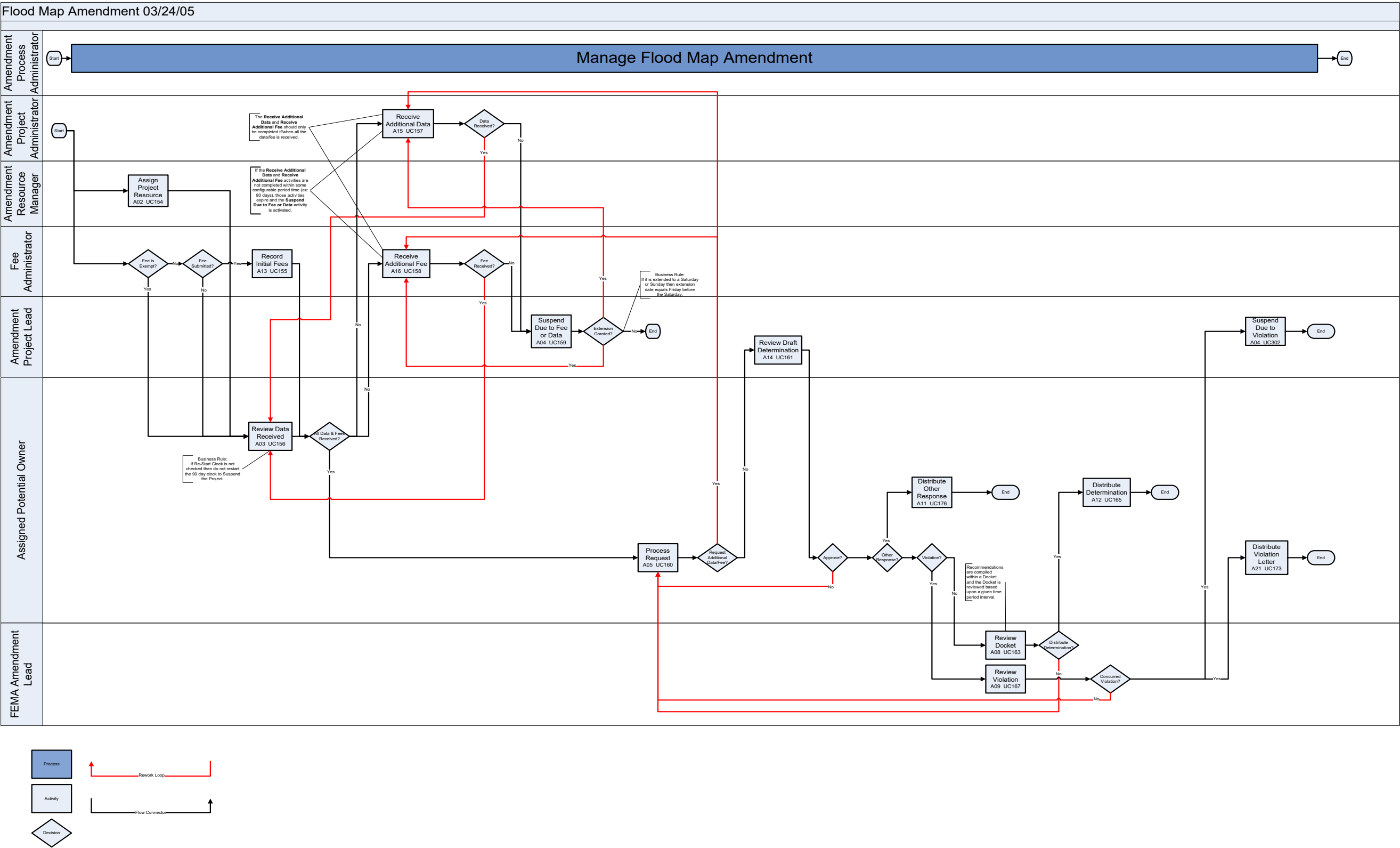


Figure 14: Amendment Process Diagram