

# Guidance for Flood Risk Analysis and Mapping

## **Preliminary Distribution and Revised Preliminary**

May 2017



**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 November 2015.

<b>Affected Section or Subsection</b>	<b>Date</b>	<b>Description</b>
Section 1, 3.4, 4.3, 4.4, 4.5 and 5	May 2017	Update to reflect the MIP Studies Redesign effort. The reference to the MIP tasks have been updated to reflect the new terminology. Additionally, sections have been removed that specifically focused on the workaround developed that is no longer needed.

## Table of Contents

1.0	Introduction .....	1
2.0	Post-Preliminary Timeline .....	1
3.0	Preliminary Distribution .....	3
3.1	Preliminary Distribution Requirements .....	3
3.2	Preliminary Regulatory Products .....	4
3.3	MIP Submittal of Preliminary Regulatory Products.....	4
3.4	Preliminary Data on the MSC .....	4
3.5	Mailing of Preliminary Regulatory Products.....	5
4.0	Revised Preliminary .....	5
4.1	Key Decisions Points (KDPs) and Congressional Notification .....	5
4.2	Revised Preliminary Distribution.....	6
4.3	Issuance of Revised Preliminaries .....	8
4.4	Completing Data Development Tasks for the Revised Preliminary Purchase.....	8
4.5	Issuing the Revised Preliminary Regulatory Products in the MIP and the MSC.....	10
5.0	Preliminary and Revised Preliminary SOMA.....	11

## List of Figures

Figure 1: PPP Timeline .....	2
Figure 2: Purchase Folder Example .....	9

## List of Tables

Table 1: Preliminary Distribution .....	3
Table 2: KDPs and Revised Preliminaries .....	6
Table 3: Revised Preliminary Distribution .....	6

## **1.0 Introduction**

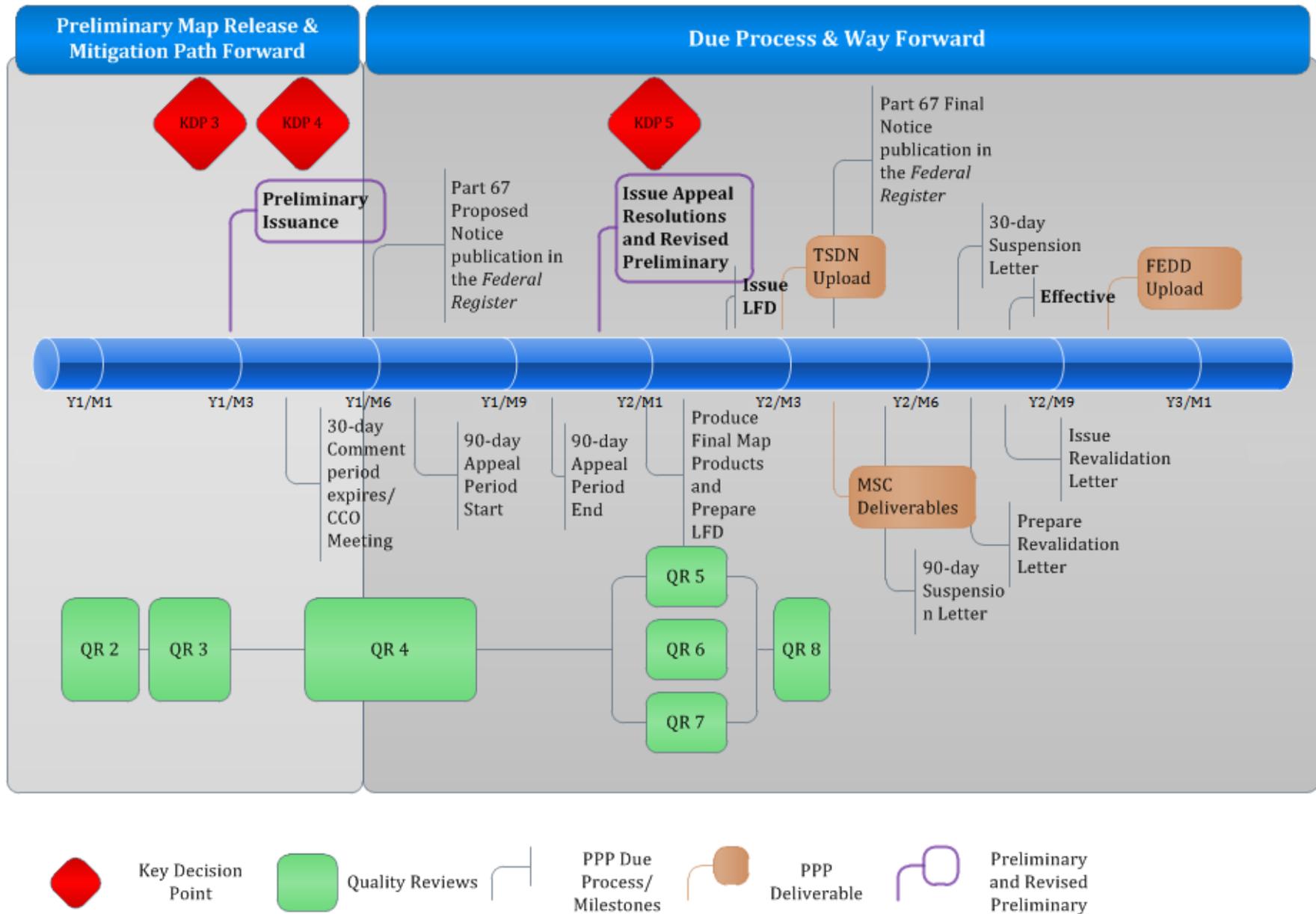
Upon completion of the various data development tasks associated to the Flood Risk Project, the Department of Homeland Security's Federal Emergency Management Agency (FEMA), FEMA contractors, and other organizations that partner with FEMA issues the new or updated Flood Insurance Study (FIS) Reports, a Flood Insurance Rate Map (FIRM), and FIRM Database to the affected communities in "Preliminary" form for review.

This document provides guidance on the storage and distribution of Preliminary and Revised Preliminary regulatory products on the Mapping Information Platform (MIP) and the Map Service Center (MSC).

## **2.0 Post-Preliminary Timeline**

Figure 1 depicts the overall Post-Preliminary Processing (PPP) timeline of Flood Risk Projects to demonstrate where Preliminary and Revised Preliminary actions occur as denoted by the purple boxes.

Figure 1: PPP Timeline



### 3.0 Preliminary Distribution

Upon completion of the Discovery and Mapping phase, FEMA issues the new or updated FIS Report, FIRM panels, and FIRM Database to officials of the affected communities in “Preliminary” form for review and for distribution to other interested parties in the communities. Through an informal comment period following the issuance of the Preliminary copies and through formal public meetings, FEMA provides the affected communities, their citizens, and other interested parties the opportunity to comment on the FIS Report, FIRM panels, and FIRM Database.

When required, FEMA initiates a statutory 90-day Appeal Period to provide community officials and citizens a formal opportunity to “appeal” or “comment” through the Expanded Appeals Process (EAP). FEMA considers and evaluates all comments and data submitted during the 90-day Appeal Period and resolves all appeals and comments in consultation with the community. Guidance on initiating an Appeal Period is contained in the Post-Preliminary Due Process Guidance document.

#### 3.1 Preliminary Distribution Requirements

Because the mapped communities share one FIRM and FIS Report when they are prepared in the FEMA Countywide Format, the Preliminary distribution to jurisdictions mapped on the FIRM must be as per Table 1, Preliminary Distribution.

**Table 1: Preliminary Distribution**

Type	FIS Report	FIRM	FIRM Database	FIRM Index	SOMA	Transmittal Letters
First Time Countywide Format	All Jurisdictions	FIRM Panels applicable to each Jurisdiction	All Jurisdictions	All Jurisdictions	All Jurisdictions that have a SOMA	All Jurisdictions that are sent any of the Preliminary regulatory products.
Physical Map Revision (PMR):	All Jurisdictions that have revised FIRMs	FIRM Panels applicable to each Jurisdiction	All Jurisdictions that have revised FIRMs	All Jurisdictions that have revised FIRMs	All Jurisdictions that have a SOMA affected by revised FIRMs	All Jurisdictions that are sent any of the Preliminary regulatory products.

Please note for Preliminary copies of revised FIS Reports and FIRM panels, the Mapping Partner may, under certain circumstances, distribute only the revised components of the FIS Report. For cost containment purposes, the FEMA Lead, FEMA Project Monitor, and/or their designee may direct the Mapping Partner to distribute only certain volumes of a multiple-volume FIS Report, only the Flood Profiles revised as a result of the Flood Risk Project, or only the pages of the Floodway Data Table that were revised as a result of the Flood Risk Project. When this processing option is chosen, the FIS Report cover for the volumes not updated must be stamped with a note informing the community that the preliminary FIS Report does not contain unrevised components.

## 3.2 Preliminary Regulatory Products

### Preparation of the Preliminary FIS Report, FIRM Panels, and FIRM Database

The Mapping Partner responsible for preparing the Preliminary distribution must incorporate any corrections resulting from the technical review within the FIS Report, FIRM panels, and FIRM Database, coordinating such revisions with the Mapping Partner performing the flood hazard analyses, the FEMA Lead, and other Project Team members.

The Mapping Partner, when required, must prepare the FIS Report in final form and stamp the Preliminary date on the FIS Report cover and add the appropriate notes to the report in accordance with the requirements provided in the [FIS Report Technical Reference](#). Preliminary version of the FIRM panels and FIRM Database must also be prepared in accordance with the specifications provided in the [FIRM Panel Technical Reference](#) and [FIRM Database Technical Reference](#). The FIRM Database must be accompanied by the metadata that comply with the Federal Geographic Data Committee metadata standards. See [Metadata Profiles Technical Reference](#) for details.

### Preparation of the Preliminary Summary of Mapping Actions (SOMA) and Transmittal Letters

The Mapping Partner must distribute the Preliminary SOMA, if Letter of Map Changes (LOMCs) are categorized in the MIP, with the transmittal letter that accompanies the other Preliminary regulatory products.

The Preliminary Transmittal letter template can be located at [www.fema.gov/media-library/assets/documents/32786?id=7577](http://www.fema.gov/media-library/assets/documents/32786?id=7577). Please reach out to the respective FEMA Regional office to determine if there are regional preferences or modifications that are needed prior to mailing.

### Floodplain Boundary Standards (FBS) Submittal

It should be confirmed that the Floodplain Boundary Standards have been met before the Preliminary distribution occurs; however, documentation that it has been met must be submitted within 30 days after preliminary or revised preliminaries are distributed. Please refer to the [Floodplain Boundary Standards \(FBS\) Guidance](#) for additional information.

## 3.3 MIP Submittal of Preliminary Regulatory Products

Please refer to FEMA's [Data Capture Technical Reference](#) for the required documents that should be included in the MIP Submittal for the Preliminary regulatory products package. This includes the product naming conventions, digital formats required as well as the folder directory structure for submittal to the MIP. Additional information can be found specifying the Preliminary Technical Support Data Notebook (TSDN) submittal.

## 3.4 Preliminary Data on the MSC

The Mapping Partner will submit the Preliminary regulatory products through the MIP and those products will be made available for public viewing in a centralized location at [www.fema.gov/preliminaryfloodhazarddata](http://www.fema.gov/preliminaryfloodhazarddata) and at <https://msc.fema.gov/portal>. These sites should be reviewed to ensure preliminary data are correct, including verifying the correct preliminary date and products are shown. Please note that when completing the 'Distribute Preliminary Products' MIP task, the manually-entered date for the field 'Actual Preliminary Date' will be the same date shown on the public facing site, thus it should be the same date that is stamped on the preliminary products. Preliminary data must be available for public view before the start of the statutory Appeal

Period. Preliminary data will be removed from the public-facing site when the 'QR8' task is completed (in close proximity to the Letter of Final Determination (LFD) date). In rare situations where a panel is being revised by multiple studies, further coordination will be needed with MIP Help to ensure that the correct data is being displayed. If a product issued for Preliminary does not go through QR8, it will not be automatically removed from the public-facing site. MIP User Care will provide additional information specific to completing tasks and purchases related to Preliminary issuance.

### 3.5 Mailing of Preliminary Regulatory Products

The Mapping Partner must distribute Preliminary copies of the FIRM panels, FIS Report, and FIRM Database to the community Chief Elected Official (CEO) and floodplain administrator; State NFIP Coordinator, FEMA Regional Office, Federal, State, and county agencies, and other Mapping Partners identified by FEMA as appropriate. The exact distribution requirements may vary, depending on regional preference or as discussed with interested parties.

## 4.0 Revised Preliminary

### 4.1 Key Decisions Points (KDPs) and Congressional Notification

When a revised preliminary is issued, all corresponding KDPs must be updated by the Region and, in some instances, resubmitted for Headquarters (HQ) review. The need for HQ to reevaluate a 'Go' decision will depend on the circumstances surrounding the Revised Preliminary. Please refer to the [KDP Revised Preliminary Tip Sheet](#) on FEMA's Risk MAP SharePoint KDP site for more information on Revised Preliminary scenarios.

In general, KDP 3 (the decision to issue a preliminary map) will need to be updated prior to issuing the revised maps. Additionally, the monthly Congressional Notification, coordinated through the regional offices, will need to be updated to include the Revised Preliminary date. Please work with your Regional Program Management Lead (RPML) or Regional Service Center (RSC) to make sure the accurate revised preliminary date is included in the Congressional Notification.

KDP 4 (the decision to start an Appeal Period) may be needed to be updated depending on the scenario for your Revised Preliminary. If a KDP 4 had not previously been submitted for the original Appeal Period, you may need to create a KDP 4 entry in order to be compliant with KDP requirements. Be sure to coordinate with your Region and RPML concerning the KDP process. Also, be mindful of the required 30-day comment period associated with the Revised Preliminary Project, and confirm whether a 90-day Appeal Period will be required prior to advancing KDP 5 (the decision to issue the LFD).

Detailed guidance on KDPs is contained in the [Key Decision Point \(KDP\) Process Guidance](#) document.

**Table 2: KDPs and Revised Preliminaries**

	KDP 3	KDP 4
Additional Appeal Period Required	Update Documentation HQ Reviews and Approves	Update Documentation HQ Reviews and Approves
Additional Appeal Period NOT Required	Update Documentation HQ Approval Not Needed	Updated Documentation Not Needed HQ Approval Not Needed

## 4.2 Revised Preliminary Distribution

After Preliminary distribution, the FEMA Lead may decide that revisions to the Preliminary copies of the FIS Report, FIRM panels, or FIRM Database are warranted because changes to Preliminary flood hazard determinations are required or changes must be made to address a non-technical issue. In such cases, the Mapping Partner, at the direction of the FEMA Lead, must prepare and distribute Revised Preliminary copies of the FIS Report, FIRM panels, and FIRM Database, followed by a 30-day comment period and/or a 90-day Appeal Period.

Any products affected by such changes should be included in the Revised Preliminary Distribution such as the FIS Report, FIRM panels, and FIRM database, and/or Index. Only those communities that fall on the Revised Preliminary FIRM panels need to be issued Revised Preliminary FIRM panels. The FIS Report, FIRM database, and/or Index only need to be distributed to those communities within the Revised Preliminary footprint if those materials are revised. If FIS or FIRM panels do not require revisions, coordination will be required with MIPhelp specific regarding the MIP Validation requirements. Table 3, Revised Preliminary Distribution, outlines what should be included.

The Revised Preliminary Transmittal letter template can be located at [www.fema.gov/media-library/assets/documents/32786?id=7577](http://www.fema.gov/media-library/assets/documents/32786?id=7577). Please reach out to the respective FEMA Regional office to determine if there are regional preferences or modifications that are needed prior to mailing.

**Table 3: Revised Preliminary Distribution**

Type	FIS Report*	FIRM	FIRM Database	FIRM Index	SOMA	Transmittal Letters
Revised Preliminary to First Time Countywide Format	All Jurisdictions that have revised FIRMs	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs.	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs.	Not necessary to re-distribute if there are no changes to Preliminary FIRM Index – if changes then redistribute to all Jurisdictions impacted	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs that have LOMCs.	All Jurisdictions that are sent any of the Revised Preliminary regulatory products.
Revised Preliminary to Physical Map Revision (PMR):	All Jurisdictions that have revised FIRMs	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs.	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs.	Not necessary to re-distribute if there are no changes to Preliminary FIRM Index – if changes then redistribute to all Jurisdictions impacted	Distributed to Jurisdictions that are impacted and intersect the revised FIRMs that have LOMCs.	All Jurisdictions that are sent any of the Revised Preliminary regulatory products.

\*Please note a Revised Preliminary FIS Report, Revised Preliminary FIRM Database, Revised Preliminary FIRM Index and Revised Preliminary SOMA must contain all the information and data that was published in the Preliminary products with the applicable data revised.

Scenarios where a Revised Preliminary is typically not necessary and may be addressed during final map production and distributed with the LFD include:

- Minor changes to base map information
- Index only changes such as corrections to the Community Map Repositories (see CMR Program Standard 601)
- Incorporation of comments (not actual appeals) received during Appeal Period that do not impact flood hazard information

Scenarios that would trigger a Revised Preliminary include, but are not limited to the following:

- Any changes to new or modified flood hazard determinations:
  - Areas showing new or revised Base Flood Elevations (BFEs) or base flood depths;
  - Areas showing new or revised Special Flood Hazard Area (SFHA) boundaries (including increases or decreases in the extent of the SFHA);
  - Areas where there is a change in SFHA zone designation; and
  - Areas showing new or revised regulatory floodway boundaries (including increases or decreases in the extent of the regulatory floodway).
- Introduction of new data (LiDAR, Orthos, datum, H&H modeling, etc.)
- Levee status changes or seclusion
- Community status changes (adding / removing communities / tribes, annexation, de-annexation, etc.)
- Changes to Preliminary flood hazard determinations due to an appeal
- Any changes to Preliminary flood hazard determinations outside of appeal-eligible areas or areas not directly challenged by an appeal.
- Introduction of new technical data during the Appeal Period

If an appeal is incorporated after the statutory 90-day Appeal Period, Revised Preliminary products will be issued, followed by a 30-day comment period. If the changes are limited to only those necessary for appeal resolution, a new 90-day Appeal Period is not required. If a comment is incorporated that does not qualify as an appeal, and results in no new or modified flood hazard determinations, then a Revised Preliminary is not required, but may be requested by a Region.

If technical data is submitted during or after the Appeal Period for an area that is not appeal-eligible, and it is determined in coordination with the Region and Project team to warrant revisions to Preliminary flood hazard information determinations, then FEMA is introducing new data and, therefore, a new statutory 90-day Appeal Period must be provided for the new changes that are being proposed. A Revised Preliminary is necessary in this scenario and should be provided in advance of a new Appeal Period being run.

If it is determined that an active appeal can be resolved without a new 90-day Appeal Period, the Revised Preliminary products shall be issued with the appeal resolution letter only, followed by a 30-day comment period. If no additional community comments are received following the appeal resolution 30-day comment period the Mapping Partner can proceed to LFD. The Final Notice,

produced at LFD, will be issued to reflect all necessary flood hazard determination changes incorporated due to appeal and shall be published in the same format as they were proposed.

### **4.3 Issuance of Revised Preliminaries**

If the issuance of a Revised Preliminary is needed a Preliminary purchase will be created and identified with the purchase type indicator of 'Revised Preliminary' within an existing project and will have the same MIP case number as the overall project. If the revised preliminary includes revisions to any of the data development tasks already submitted, it is critical that the updates are captured in the MIP for any data development purchases and tasks. This can be due to incorporation of an appeal or revisions to the any of the data development purchases and tasks.

Data Development tasks (i.e. revisions based on hydraulics, topography, terrain, hydrologic, coastal etc.) will be created with the purchase type indicator of 'Revised Preliminary' based on the nature of the revised preliminary. The geography of the Preliminary purchase that is identified with the purchase type indicator of 'Revised Preliminary' and any data development purchases and tasks will be established and refined based on the data submitted and the impact of the revision(s).

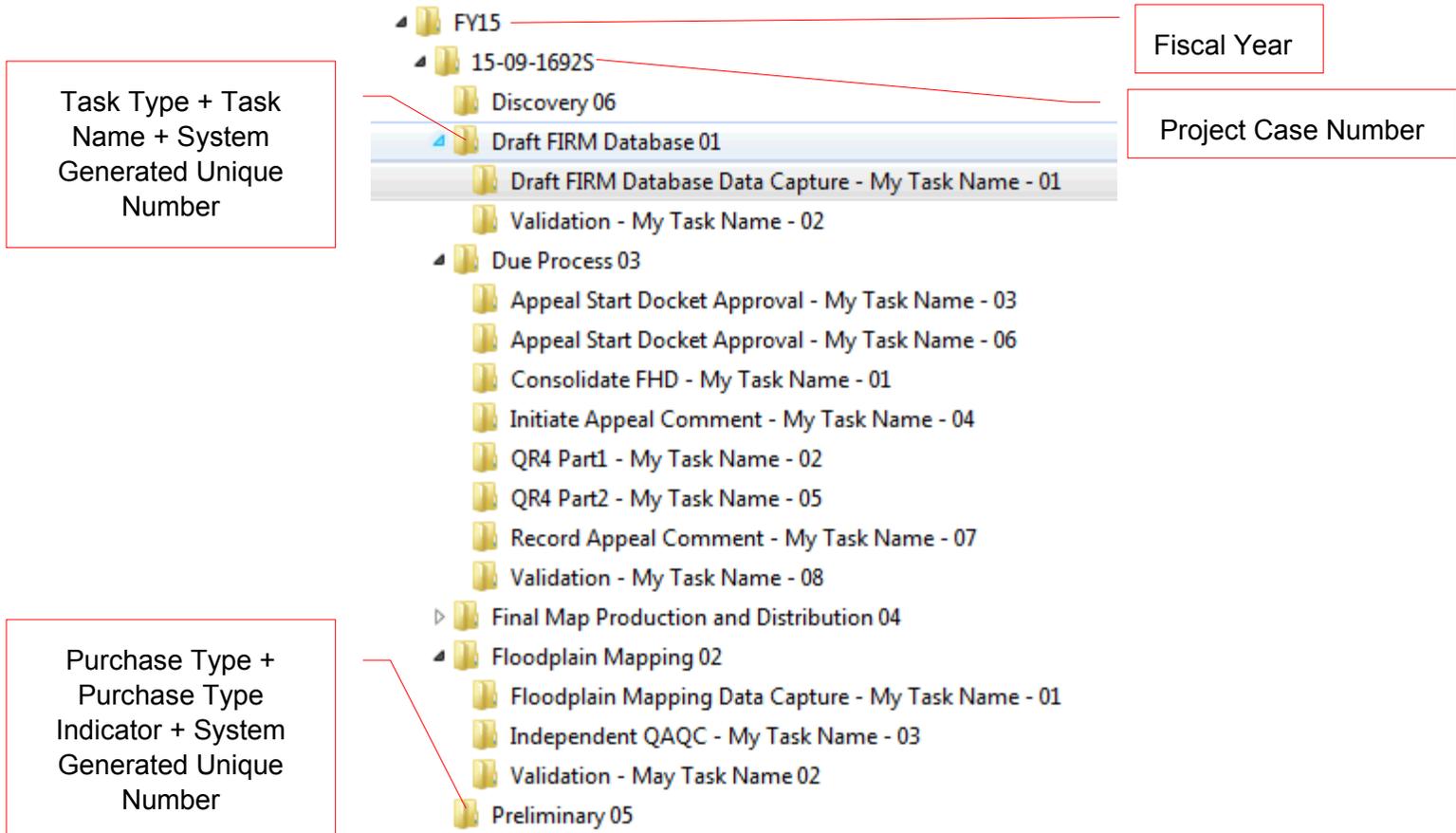
All Preliminary purchases identified with the purchase type indicator of 'Revised Preliminary' are subject to Quality Reviews (QRs) 1, 2, and 3. Should a second statutory 90-day Appeal Period be required, a Due Process purchase will also be required.

### **4.4 Completing Data Development Tasks for the Revised Preliminary Purchase**

Once the new data development purchases and tasks for the issuance of a Revised Preliminary are created and tasks assigned, the appropriate data for each task should be uploaded to the MIP per the Data Capture Technical Reference.

Revised data needs to be uploaded per MIP User Care and Data Capture Technical Reference. Figure 2 provides an example of the folder structure.

**Figure 2: Purchase Folder Example**



It is important to clarify which data on the MIP has been revised due to the issuance of a Revised Preliminary. This is accomplished by adding a readme file to any of the data development tasks originally submitted to the MIP that are being revised due to the issuance of the Revised Preliminary. Note that a readme file is needed for each data development task impacted by the issuance of the Revised Preliminary so that future data users are aware that those versions are superseded by additional data submitted during the issuance of the Revised Preliminary. Coordination with a project level user(CHAMP/ RPML) so that the current tasks can be made available for additional data upload is necessary to getting these readme files uploaded to the MIP, please see MIP User Care for additional information. The readme file should include:

- Identify the area of revision (streams, models and/or panels affected)
- Provide location on the K Drive of the updated data
- Document within the TSDN checklist when submitted

This is important to maintain data integrity and this will be validated by the MIP Blackbelt to ensure the readme file is uploaded properly to the original data development tasks that are impacted by the issuance of the revised preliminary.

## 4.5 Issuing the Revised Preliminary Regulatory Products in the MIP and the MSC

In order to clearly identify any data revised by the issuance of the Revised Preliminary that is part of the data development purchases and tasks, updates to the metadata submitted for those needs to be changed. These Metadata changes are required to be made to the metadata for all data development tasks impacted by the issuance of the revised preliminary to help identify what is being revised, which communities are impacted and the cause of the revision. These changes help facilitate the identification of revised data issued through the project life.

Figure 4 is a metadata example for the Hydraulic task, please refer to FEMA's Templates and Other Resources website for sample metadata files for XML metadata files for each of the data development task. <https://www.fema.gov/media-library/assets/documents/32786>

**Figure 4: Sample Data Development Task Metadata Update for Process Description**

```
- <procstep>
  <procdesc>The Hydraulics Analysis was revised after the original preliminary map was issued under case number [Insert Study Case number: 00-00-0000S], Hydraulics Purchase Type [Insert Purchase Type + Purchase Type Indicator + System Generated Unique Number]. Other hydraulics data that was part of the original preliminary map and issued under case number [Insert Study Case number: 00-00-0000S], Original Hydraulics Purchase Type [Insert Original Hydraulics Purchase Type + Purchase Type Indicator + System Generated Unique Number]. The following [Insert Flooding Sources] within [Insert Community, County] were revised due to[appeal incorporation or new data] received from [insert data source].</procdesc>
  <procdesc>20141101</procdesc>
</procstep>
- <procstep>
  <procdesc>Hydraulic Study data development involves compiling survey and hydrologic analysis data, selecting an appropriate hydraulic model, preparing model input data, estimating model parameters, simulating water surface elevations for required recurrence intervals and delineating flood hazard boundaries.</procdesc>
  <procdesc>20141101</procdesc>
</procstep>
```

Once a study passes QR1 thru QR3 and KDP3 has received a 'GO' decision, the Mapping Partner should complete the 'Distribute Preliminary Products' MIP task, identified with the purchase type indicator of 'Revised Preliminary', which will upload the Revised Preliminary data to:

- The MSC Site, which is updated nightly by the primary site (<https://msc.fema.gov/portal/>)
- The Primary Site, which is updated automatically via MIP workflow tasks and MIP Help activities (<https://hazards.fema.gov/femaportal/prelimdownload/>),
- The Alternate Preliminary Site (<https://floodmaps.fema.gov/prelim/index.htm>).

Preliminary data files (FIS Report and FIRM available as PDF files; FIRM Database available for download as a zip file) are available for public viewing when the 'Distribute Preliminary Products' task, identified with the purchase type indicator of 'Revised Preliminary', is completed on the Primary Site and made available within 24 hours on the MSC Site. The original preliminary data will be automatically removed from the Primary and MSC websites and the new materials will made available within 24 hours. Please note that when completing the 'Distribute Preliminary Products' MIP task, identified with the purchase type indicator of 'Revised Preliminary', the manually-entered date for the field 'Date Preliminary Mailed' will be the same date shown on the public facing site, thus it should be the same date that is stamped on the revised preliminary products. In rare situations where a panel is being revised by multiple studies or when a Preliminary purchase is set up as a separate case number, further coordination will be needed within MIP Help to ensure that the correct data is being displayed.

**IMPORTANT: Please confirm that the correct preliminary data is on the MSC site and contact MIP Help ([miphelp@riskmapcdfs.com](mailto:miphelp@riskmapcdfs.com)) to manually “hide” the original preliminary data files that were revised if it does not automatically occur.**

If a Preliminary Index Panel and L\_COMM\_INFO need a revision due to an error/update in the Community Map Repository Address(s), no Revised Preliminary Project is required. To make a change to the Preliminary Index Panel, and L\_COMM\_INFO, please coordinate with the project creator (CHAMP/RPML) and refer to MIP User Care for guidance.

## **5.0 Preliminary and Revised Preliminary SOMA**

When SOMAs are required for Preliminary release or when a Preliminary SOMA needs revision as a result of a Revised Preliminary please refer to the SOMA/Revalidation Guidance document.