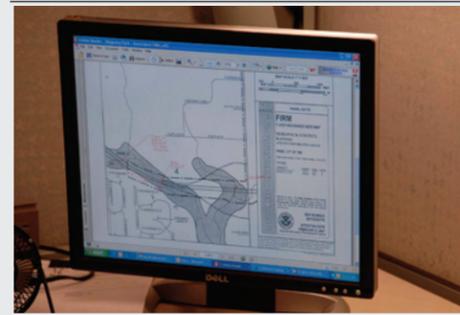


PM 42 Implementation

FLOOD MAP MODERNIZATION



FLOOD MAP MODERNIZATION



Procedure Memorandum No. 42:
www.fema.gov/plan/prevent/fhm/gs_memos.shtm

Guidelines and Specifications for Flood Hazard Mapping Partners:
www.fema.gov/plan/prevent/fhm/gs_main.shtm

Document Control Procedure Manual:
www.fema.gov/plan/prevent/fhm/gs_dcpm.shtm

Mapping Information Platform:
<https://hazards.fema.gov>

Flood Hazard Mapping:
www.fema.gov/plan/prevent/fhm_main.shtm

partners should begin preparing the administrative components of the MSC package (such as the final SOMA list, FIS text, requisition forms, SC Print Processing Form, Community Map Action List, and the community letter) along with the LFD before submitting the DFIRM and FIRM to Quality Review 5. This will ensure that

the LFD is submitted on time to **Quality Review 6**, Check LFD before Distribution. The LFD date needs to be met since the 6-month compliance period begins with the distribution of the LFD and sets the effective date for the maps.

SELF CERTIFICATION

FEMA may grant mapping partners who consistently satisfy the requirements of the quality review steps in PM 42 the authority by FEMA to self-certify their submittals for certain quality review steps. In such cases, FEMA may conduct audits as necessary ensure the intent of the quality control steps are maintained.

The following non-automated (visual) quality review steps will be eligible for exemption:

- Quality Review 3: Validate Preliminary Map Panels
- Quality Review 5: Validate Final DFIRM Database and Map Panels (FEMA can grant self certification only for visual review of map panels; the mapping partner still must submit the DFIRM Database to FEMA for automated check and pass before the LFD can be issued)
- Quality Review 7: Validate MSC Deliverable Package (only the submission for FEMA's review would

be exempt; the submission of the package to the MSC 14-days after the issuance of an LFD is still required)

FEMA will determine whether to grant a mapping partner the ability to self-certify these quality review steps based on the partner's demonstrated ability to pass the quality review steps consistently. A mapping partner can request this type of MIP exemption for a particular study or eligible study step if not all the partners working on a study are eligible for exemption.

The automated review of the DFIRM database in the following quality review steps will always be performed by FEMA and can not be considered for self certification:

- QR#1: Validate Draft DFIRM Database Within Data Development
- QR#2: Validate Preliminary DFIRM
- QR#5: Validate Final DFIRM Database and Map Panels

PM 42 Implementation

WHAT IS PM 42?

On June 21, FEMA issued Procedure Memorandum No. 42 (PM 42), *Quality Control Requirements in the Digital Flood Insurance Rate Map (DFIRM) Production Process*.

PM 42 realigns the study process's Quality Assurance timeline to support FEMA's goals of transforming the flood hazard mapping process from paper-driven to a DFIRM database-driven process and to deliver the DFIRM data and paper maps to communities sooner. This will allow communities ample time to adopt their maps before they are scheduled to become effective.

WHAT ARE THE OBJECTIVES OF PM 42?

PM 42 establishes the framework for a fully digital map production process. PM 42 will help FEMA achieve the following objectives:

- Make DFIRM databases drive the mapping process
- Ensure that communities receive maps well in advance of their effective date
- Validate that mapping products meet quality standards
- Ensure that DFIRM data and paper maps (Flood Insurance Rate Maps (FIRMs)) are always available at the same time

WHAT DID PM 42 CHANGE?

The old study production process had six quality review steps. PM 42 added one DFIRM automated quality review, bringing the total number of reviews to seven.

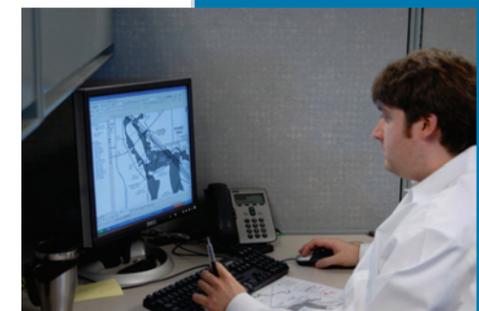
Additionally, before PM 42 there were not specific timeframes for the quality reviews. PM 42 introduced the following changes to the study production process:

- The timing of the quality reviews was revised, with three quality reviews required during the pre-preliminary phase and four during the post-preliminary phase of the production process.
- The DFIRM databases and FIRMs must pass quality control reviews before FEMA or the mapping partner can issue an LFD.

All mapping partners, including Indefinite Delivery/Indefinite Quantity contractors and Cooperating Technical Partners, must follow the revised DFIRM production process. However, mapping partners that consistently satisfy the requirements of the quality review steps following the implementation of this policy may be granted the authority to self-certify submittals for certain quality review steps, as described on page 4.

EFFICIENCIES IN THE QUALITY ASSURANCE PROCESS

- Develop DFIRM databases from the beginning of the mapping process.
- Schedule/plan for Community Coordination Meeting during Preliminary Phase.
- Pre-populate the BFEs on the Web Tool
- Submit DFIRM and map panels as soon as the appeal period ends or appeals are resolved. Entire submittal must be made 60 days prior to LFD date.
- Submit MSC package 14 days after completing Quality Review 5.





PM 42 Implementation

Quality Review 1 (QR#1): Validate draft DFIRM database within data development. This is the only new step introduced by PM 42. The auto-validation takes less than 24 hours to complete, but because of the possibility of corrections, 1 week should be planned for this review.

Quality Review 2 (QR#2): Validate Preliminary DFIRM. This step is also an auto-validation in the MIP. One week should be planned for this review.

Quality Review 3 (QR#3): Validate Preliminary map panels. This step can be performed concurrently with Quality Review 2. As soon as the Preliminary study is ready to be issued, it should be submitted for review. This review takes approximately 30 days to complete.

Quality Review 4 (QR#4): Validate BFE Notice and CEO letters; Publish proposed BFEs in Federal Register. This review should begin as soon as the Preliminary maps are issued and takes 30-45 days to complete.

DFIRM DATABASE-DRIVEN MAPPING TECHNOLOGY

To successfully implement PM 42, all mapping partners should produce map panels using DFIRM database-driven technology (such as Geographic Information Systems). Emphasizing DFIRM database development from the beginning of the mapping process will ensure that both DFIRMs and FIRMs are available throughout the process and that modifications will be accurately reflected on the FIRMs as soon as they are made to the DFIRM database. By using FEMA's Mapping Information Platform (MIP) study workflow, mapping partners will be able to produce DFIRMs while completing the standard mapping process.

To assist with passing automated DFIRM quality control reviews on the first attempt, FEMA allows mapping partners to test compliance through the MIP at any time with the DFIRM Verification Tool (DVT). Mapping partners should use the DVT to test for compliance in addition to their internal DFIRM quality control processes.

Mapping partners who produce a DFIRM database from the beginning of a study should easily pass the following quality reviews:

- **Quality Review 1**, the validation of the draft DFIRM database within data development. *This is the only new step introduced by PM 42.*
- **Quality Review 2**, the validation of the preliminary DFIRM database.
- **Quality Review 5**, the auto-validation of the DFIRM database and a visual check of the FIRM.

BUILD A SCHEDULE THAT ACCOUNTS FOR EACH QUALITY REVIEW

Mapping partners must begin planning for post-preliminary processes during the pre-preliminary stage to mitigate impacts on the schedule. Because Quality Review 5 must be passed before an LFD is issued, mapping partners can no longer arrange study schedules around the effective date. Additionally, mapping partners can no longer use a portion of the post 6-month LFD period to finalize a DFIRM. By placing the emphasis on completing the study before the anticipated LFD date,

the study can go effective on the desired date.

Mapping partners should plan their remaining schedule based on their LFD date as soon as the study completes **Quality Review 3**, the validation of preliminary map panels, and the Preliminary map is issued.

PM 42 does not remove any flexibility from the Regions to manage schedules; it only eliminates the ability to issue an LFD without the completion of the final map products.

Pre-populate the BFEs on the Web Tool

FEMA recommends that mapping partners pre-populate the "BFEs on the Web Tool" during the development of the preliminary Summary of Map Actions (SOMA) list. This will simplify the transition from preliminary to post-preliminary by capturing all BFE changes and will allow the mapping partner to more easily finalize the BFE information immediately following the 30-Day community comment period. This will also help avoid delays in publishing the BFEs in the Federal Register, and if an appeal period is necessary (if BFEs have changed from the previous effective

map), a mapping partner will avoid delays in publishing the BFE notice in local newspapers.

By prepopulating the BFE, **Quality Review 4**, the Federal Register Publication and Visual Validation of the BFE Notice, can occur as soon as the Preliminary map is issued. This will mitigate risks to the post-preliminary schedule associated with publishing the BFEs and beginning the Appeal process.

Schedule the CCO meeting Pre-Preliminary

If a Consultation Coordination Officer (CCO) meeting is necessary, it should be scheduled before distribution of the Preliminary map. Planning the meeting as early as possible will ensure that it takes place 30-60 days of FEMA issuing the map. By holding the meeting in this timeframe, the Appeal Period begins sooner and risks to the study's schedule are removed.

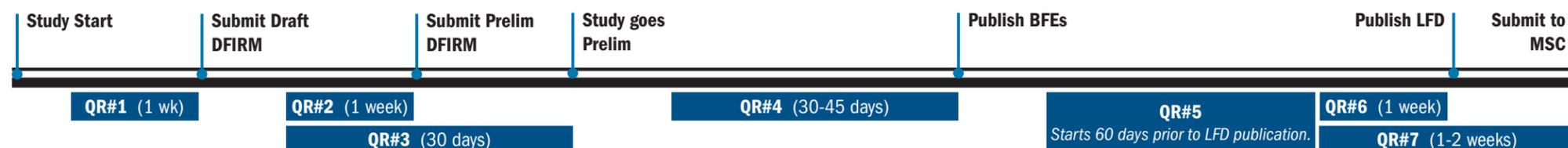
Prepare Map Service Center Package Early

The MSC package must be submitted to **Quality Review 7**, Validate MSC Deliverable Package, within 14 days of successfully completing **Quality Review 5**. To meet these schedule requirements, mapping

Quality Review 5 (QR#5): Validate final DFIRM database and map panels. Because the DFIRM has already been verified twice, changes resulting from community comments or appeals will have minimal impact on this review. This step takes 30-60 days depending on study size.

Quality Review 6 (QR#6): Check LFD before distribution. The LFD and final SOMA list must be submitted to FEMA 14 days prior to the scheduled LFD date. The 6-month compliance period begins with LFD distribution, which sets the map effective date.

Quality Review 7 (QR#7): Validate MSC deliverable package. The package must be submitted FEMA 14 days after successful completion of QR#5 and must be complete 30 days from initiation.



*Note: Timeline not to scale.

Submit for QR#7 14 days after completion of QR#5

