

Version ID Update to Flood Risk Analysis and Mapping Guidance & Standards

Yellow highlighted content reflects updates made during the Fall 2021 Maintenance Cycle

2.8.5.6

- Digit 1: No change
- Digit 2: Updated to reflect changes to the Flood Insurance Rate Map (FIRM) Database Schema to support the implementation of the Automated Map Production tool
- Digit 3: No change
- Digit 4: No change

Main Reason for Change

Changes were made to several FEMA standards, technical references and guidance documents in November 2021 to accommodate use of the FIRM panel creation tool, also known as Automated Map Production (AMP). Most changes were minor, but because the FIRM Database Schema needed to be updated, a new version number is needed.

Table 1: Flood Risk Analysis and Mapping Version Identification

DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)
1 = Map Modernization	1 = 2003 Appendix KL	1 = 2008 FEMA GS	0 = No Flood Risk Products
2 = Risk MAP	2 = 2011 Appendix KL	2 = 2011 FEMA GS	1 = 2010 Flood Risk Products Specs.
	3 = 2013 FIRM DB TR and 2013 FIRM Panel TR	3 = 2013 FEMA Policy	2 = 2013 Flood Risk Products Specs.
	4 = Fall 2016 FIRM DB TR, and Fall 2016 FIRM Panel TR	4 = 2019 FEMA GS	3 = 2014 Flood Risk Products Specs.



FEMA Flood Risk Analysis and Mapping Version Identification

DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)
	5 = Fall 2017 FIRM DB TR and Fall 2016 FIRM Panel TR	5 = 2020 FEMA GS	4 = 2016 Spring Flood Risk Products Specs.
	6 = 2019 FEMA Policy		5 = Fall 2016 Flood Risk Products Specs.
	7 = 2020 FEMA Policy and FIRM DB TR		6 = Fall 2017 Flood Risk Products Specs.
	8 = 2021 FEMA Policy and FIRM DB TR		

Digit 1: All new studies and areas updated by Letter of Map Revision (LOMR), or Physical Map Revision (PMR) should use “2” for Risk MAP for the study area footprint.

Digit 2: Identifies the FIRM Database specifications used to create the data. All National Flood Hazard Layer (NFHL) data converted from the 2003 database specifications are assigned with "1" to indicate that the data were originally created in the 2003 database schema. When updating a study for a PMR, the study must start with the effective data in the NFHL and match that database format (currently 2013 or "3").

However, for PMRs, the individual features for streams that were not scoped to be updated during the PMR but fall within the PMR footprint would have the second digit remain what is currently coded in the NFHL unless the region has scoped for these streams to be updated fully to the most recent database format. LOMRs started from the NFHL may be produced in the new FIRM graphics format but do not require the database to be fully updated if the NFHL contains "1" for the second digit of the version ID. If the second digit is higher than "1" the LOMR data must be updated based on that version of spec.

Digit 3: Indicates the version of engineering standards applied to the study area and its review. PMRs and LOMRs reviewed under the 2013 standards should use “3”.

Digit 4: Indicates the version of Flood Risk Products included in the study Scope of Work (SOW).

Risk MAP products are labeled with a version number to indicate which version(s) of the guidelines and standards are used on those products. Products are labeled with the version number corresponding to the most recent update to that product. In many cases only a portion of a product is revised, so the version number does not necessarily represent the standards used for all portions of that product. In the Flood Insurance Rate Map (FIRM) database and the Flood Risk database, individual features also have version identification (ID) numbers. These provide more granularity regarding which sections were produced using each version of the standards.

Table 2 presents common examples of how the version numbers might be applied; however, it does not capture every possible version number. This table also summarizes a brief explanation as to why a particular digit was updated during the referenced maintenance cycle.

Table 2: Versioning Scenarios and History

VERSION #	DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)	REASON FOR CHANGE
1.1.1.0*	Map Modernization	2003 FIRM Database Specification (Appendix KL)	2008 FEMA Guidelines and Specifications (including procedure memos)	No Flood Risk Products	Baseline Map Modernization Version Number. *This version applies to most projects initiated between 2003 and 2008.
2.1.2.1*	Risk MAP	2003 FIRM Database Specification (Appendix KL)	2011 FEMA Guidelines and Specifications (including procedure memos – excluding FIRM specs. and Flood Risk Products specs.)	2010 Flood Risk Products Specification (Procedure Memo 65 / Draft Appendix O)	Addition of Non-Regulatory Products (Appendix O). *This version typically applies to projects initiated in 2009 and 2010 at the beginning of Risk MAP.
2.1.2.2*	Risk MAP	2003 FIRM Database Specification (Appendix KL)	2011 FEMA Guidelines and Specifications (including procedure memos – excluding FIRM specs. and Flood Risk Products specs.)	2013 Flood Risk Products Specification (Flood Risk Database Technical Reference)	Addition of Non-Regulatory Products 2013 Flood Risk Database Specification. *This is an unusual version that applies to projects begun prior to the implementation of the new FIRM database specifications in 2011 but where the Flood Risk Database was upgraded to the 2013 specification.
2.2.2.1*	Risk MAP	2011 FIRM Database Specification (Appendix KL)	2011 FEMA Guidelines and Specifications (including procedure memos – excluding FIRM specs. and Flood Risk Products specs.)	2010 Flood Risk Products Specification (Procedure Memo 65 / Draft Appendix O)	2011 Updates to FIRM Database Specification and Non-Regulatory Products (Appendix O). *This version typically applies to projects begun in 2011 and 2012 using the new FIRM database specification, prior to the implementation of the new Flood Risk Database specification.

FEMA Flood Risk Analysis and Mapping Version Identification

VERSION #	DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)	REASON FOR CHANGE
2.2.2.2*	Risk MAP	2011 FIRM Database Specification (Appendix KL)	2011 FEMA Guidelines and Specifications (including procedure memos – excluding FIRM specs. and Flood Risk Products specs.)	2013 Flood Risk Products Specification (Flood Risk Database Technical Reference)	2011 Updates to FIRM Database Specification and 2013 Non-Regulatory Products. *This is an unusual version that applies to project begun in 2011 and 2012 using the 2011 FIRM specification where the Flood Risk Database was updated to the 2013 specification.
2.3.2.2*	Risk MAP	2013 FIRM Database Specification (FIRM Database and FIRM Panel Technical References)	2011 FEMA Guidelines and Specifications (including procedure memos – excluding FIRM specs. and Flood Risk Products specs.)	2013 Flood Risk Products Specification (Flood Risk Database Technical Reference)	2012/2013 Updates to FIRM Database Specification and 2013 Updates to the Flood Risk Database Specification. *This version typically applies to projects begun in 2011 and 2012 (or earlier) that used the 2013 version for both database specifications.
2.3.3.2*	Risk MAP	2013 FIRM Database Specification (FIRM Database and FIRM Panel Technical References)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	2013 Flood Risk Products Specification (Flood Risk Database Technical Reference)	Includes LAMP and several other technical changes. *This version applies to projects initiated in 2013 or earlier projects that implement the standards changes included in the 2013 standards policy memo (i.e., revised procedures for mapping non-accredited levees, new dune erosion procedures, etc.).
2.3.3.3*	Risk MAP	2013 FIRM Database Specification (FIRM Database and FIRM Panel Technical References)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	2014 Flood Risk Products Specification (Flood Risk Database Technical Reference)	2014 Updates to the Flood Risk Database Specification. Updates to Coastal Non-Regulatory tables. *This version applies to projects beginning Data Development after November 30, 2014.
2.3.3.4*	Risk MAP	2013 FIRM Database Specification (FIRM Database and FIRM Panel Technical References)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	2016 Flood Risk Products Specification (Flood Risk Database Technical Reference)	Spring 2016 Updates to the Flood Risk Database Specification. Removal of the AAL data as a required Flood Risk Assessment dataset and updates to the overall Flood Risk Assessment methodology.

FEMA Flood Risk Analysis and Mapping Version Identification

VERSION #	DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)	REASON FOR CHANGE
					*This version applies to projects initiated in Fiscal Year 2016.
2.4.3.5*	Risk MAP	Fall 2016 FIRM Database Specification (FIRM Database Technical Reference)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	Fall 2016 Flood Risk Products Specification (Flood Risk Database Technical Reference)	Fall 2016 updates to FIRM Database and Flood Risk Database Specifications. FIRM Database updates include changes to field names within S_Submittal_Info. Several Flood Risk Map- and Flood Risk Report-specific tables in the Flood Risk Database were changed from required to optional. *This version applies to projects initiated in Fiscal Year 2017.
2.5.3.6*	Risk MAP	Fall 2017 FIRM Database Specification (FIRM Database and Fall 2016 FIRM Panel Technical References)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	Fall 2017 Flood Risk Products Specification (Flood Risk Database Technical Reference)	Fall 2017 updates to FIRM Database and Flood Risk Database Specifications. FIRM Database updates include changes to STUDY_TYP/STUDY_MTH fields in various tables, along with new domains for these fields; S_Levee ID fields to align with the National Levee Database. Several Flood Risk Product-related changes were made based on stakeholder feedback and updates to standards and guidance to produce higher-quality Water Surface Elevation grids; making the Flood Risk Report and Flood Risk Map optional; and simplifications made to other Flood Risk Database tables to make them more user-friendly. *This version applies to projects initiated in Fiscal Year 2018.
2.6.3.6*	Risk MAP	Fall 2018 FEMA Policy for Flood Risk Analysis and Mapping (removing Coastal Barrier Resources System (CBRS) data from FIRM panels and databases)	2013 FEMA Policy for Flood Risk Analysis and Mapping (excluding FIRM specs. and Flood Risk Products specs.)	Fall 2017 Flood Risk Products Specification (Flood Risk Database Technical Reference)	FEMA worked in coordination with the U.S. Fish and Wildlife Service (FWS) to remove potentially outdated Coastal Barrier Resources System (CBRS) information from the FEMA FIRM panels and databases, and switch to the authoritative, dynamically updated digital CBRS

FEMA Flood Risk Analysis and Mapping Version Identification

VERSION #	DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)	REASON FOR CHANGE
					<p>boundaries provided by USFWS website at: www.fws.gov/cbra.</p> <p>*This version applies to projects initiated in Fiscal Year 2019.</p>
2.6.4.6*	Risk MAP	Fall 2018 FEMA Policy for Flood Risk Analysis and Mapping	February 2019 Guidelines and Standards updates to references USGS Bulletin 17C and revise regulatory QR checklists	Fall 2017 Flood Risk Products Specification (Flood Risk Database Technical Reference)	<p>Changes were made to several FEMA guidance documents in February 2019, referencing the USGS Bulletin 17C, which outlines updates in statistical methods for floodplain modeling. Also, changes were made to the regulatory quality review (QR) checklists, reflecting alignment with other recent updates and revisions to the program.</p> <p>*This version applies to projects initiated in Fiscal Year 2019.</p>
2.7.5.6*	Risk MAP	Fall 2020 FEMA Policy for Flood Risk Analysis and Mapping	November 2020 Guidelines and Standards (FEMA GS) updates to accommodate 2D floodway development	Fall 2017 Flood Risk Products Specification (Flood Risk Database Technical Reference)	<p>Changes were made to several FEMA standards, technical references and guidance documents in November 2020 to accommodate the use of 2-dimensional (2D) floodplain modeling and analysis for the development of floodway areas. Changes were also made to several FEMA standards, technical references and guidance to accommodate use of the FIRM panel creation tool, also known as Automated Map Production (AMP). Most changes were minor, but because the FIRM Database Schema needed to be updated, a new version number was needed.</p> <p>*This version applies to projects initiated in Fiscal Year 2020.</p>

FEMA Flood Risk Analysis and Mapping Version Identification

VERSION #	DIGIT 1 (PROGRAM)	DIGIT 2 (FIRM DATABASE)	DIGIT 3 (ENGINEERING AND OTHER STANDARDS)	DIGIT 4 (FLOOD RISK PRODUCTS)	REASON FOR CHANGE
2.8.5.6*	Risk MAP	Fall 2021 FEMA Policy for Flood Risk Analysis and Mapping	November 2020 Guidelines and Standards (FEMA GS)	Fall 2017 Flood Risk Products Specification (Flood Risk Database Technical Reference)	<p>Changes were made to several FEMA standards, technical references and guidance documents in November 2021 to accommodate use of the FIRM panel creation tool, also known as Automated Map Production (AMP). Most changes were minor, but because the FIRM Database Schema needed to be updated, a new version number is needed.</p> <p>*This version applies to projects initiated in Fiscal Year 2021 or any project utilizing the AMP tool.</p>