



Risk MAP Standards and Guidance

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ASFPM – Phoenix 2018

RiskMAP
Increasing Resilience Together



Guidelines & Standards Strategic Plan

- **Developed in FY2011 with a set of goals and supporting objectives to overcome existing challenges in the way FEMA's standards are developed, communicated and managed**
- **Challenges include:**
 - Navigation that is not user-friendly (i.e., voluminous and static PDF files)
 - Level of prescription
 - Lack of clarity in requirements
 - Lengthy and cumbersome maintenance cycle
 - Rare opportunities for sharing knowledge
- **FEMA Directive on Review of Agency Policy**
 - All policy must be revised within the past 3 years
 - Existing guidelines and specifications designated as containing policy
 - New standards separates policy from guidance

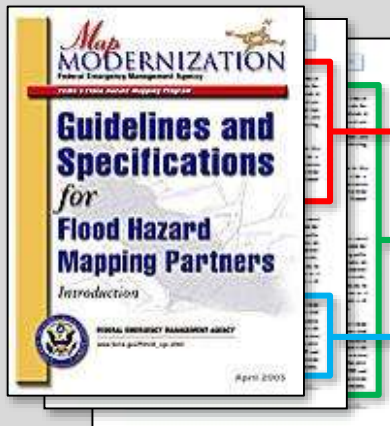
Guidelines and Standards Team

- **PM – Jonson Lum**
- **Compass – Andy Bonner [Chris MacDougall]**
- **Starr II – Marc Pearson**
- **CERC – Lisa Messano**
- **Many great Alumni**

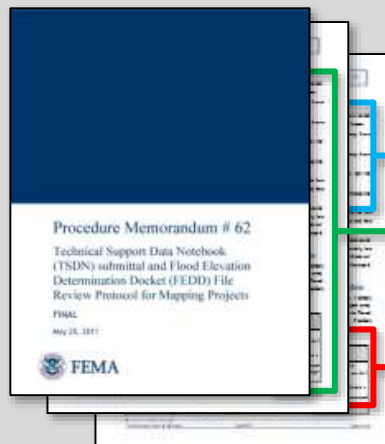
Standards & Guidance Transformation

Legacy G&S Documents

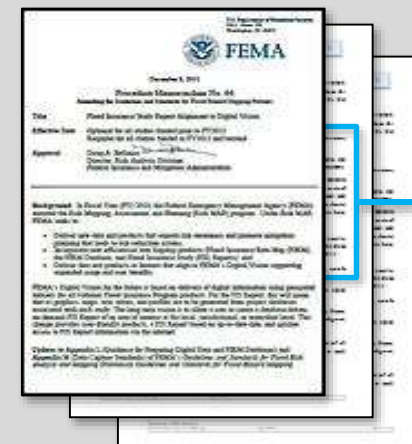
Vols 1-3 / Appendices A - P



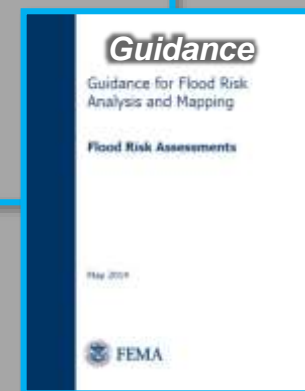
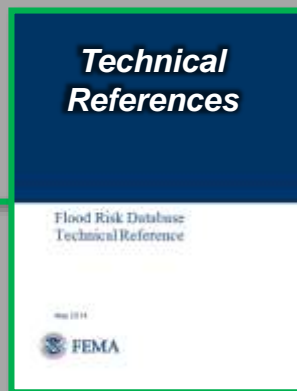
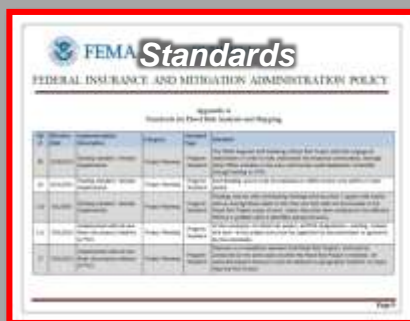
Procedure Memos



Operating Guidance

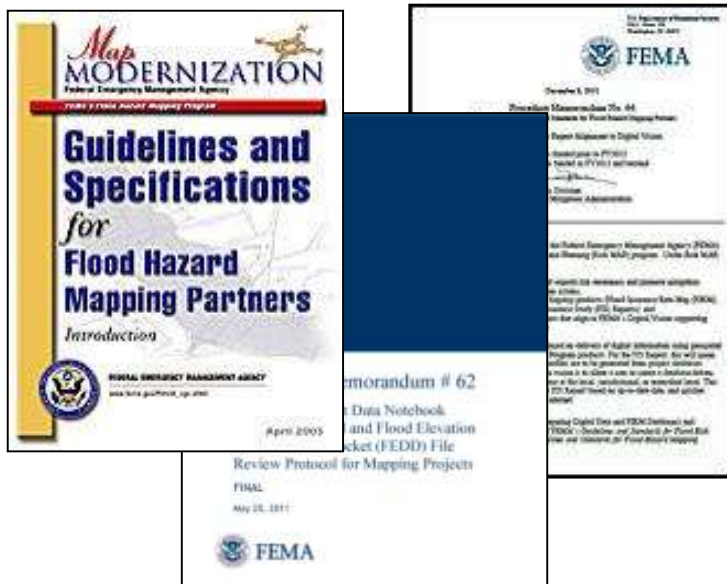


Transformed Standards & Guidance

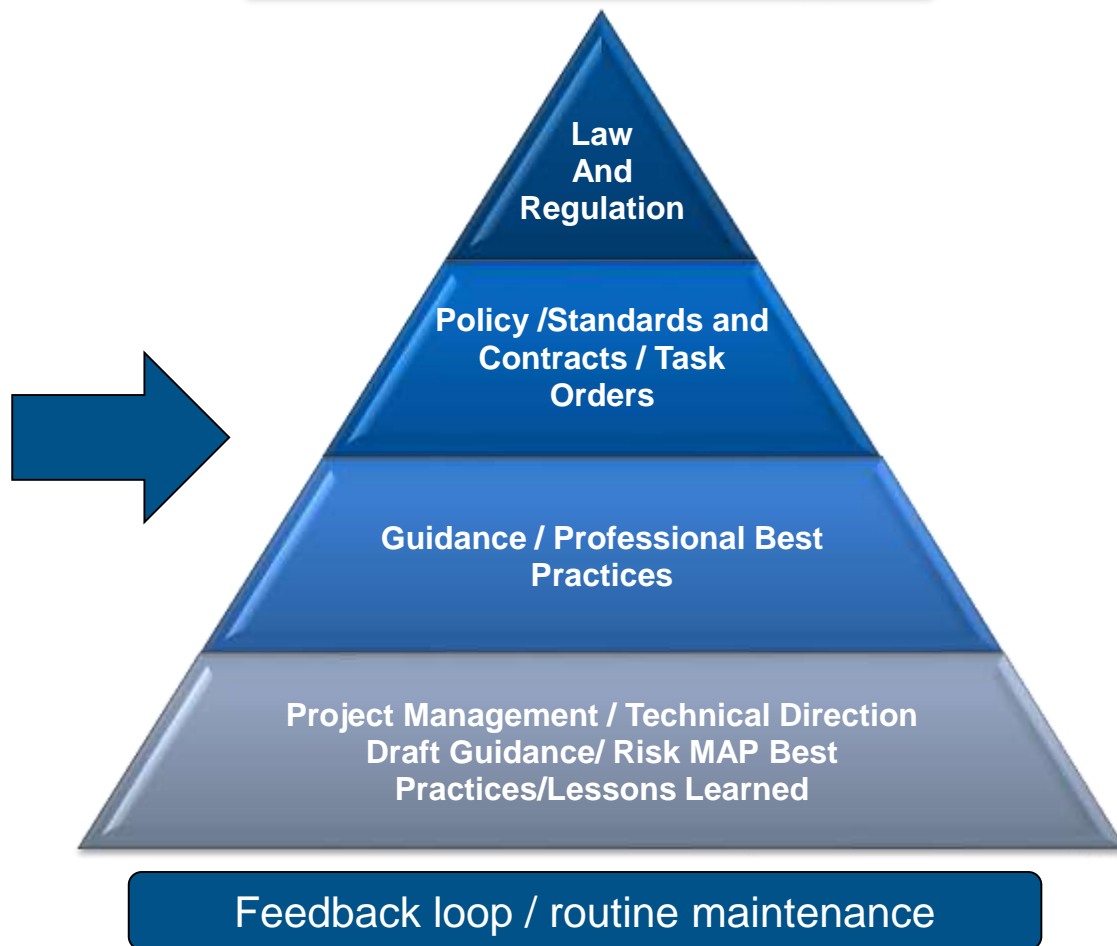


Transformation of G&S is Complete

Mandatory & Non-mandatory Elements Mingled



Distinct Content



Mapping Policy / Compendium of Standards

- **Initial Policy for Flood Hazard Mapping and Risk Analysis approved in 2013**
- **One FEMA policy - 419 standards originally. Currently 432 standards.**
- **Primary goal of the effort was to clarify existing standards**
- **Biggest change is what was NOT in the standards**
- **About 10% were new or significant changes to existing standards**
- **Policy has been updated regularly since 2013 to reflect changes in the program and to clarify standards intent**

Using Standards and Guidance



What is an Exception?

- Exceptions are non-repeating, project-specific variances to Risk MAP standards.
- Risk MAP is formalizing this process along with the new standards to increase clarity and accountability
- Exceptions are normally granted for a single project only and are not intended to be issued globally.
- Exceptions for any given standard should be rare.
- Working Standards require one approval, Program standards require two approvals

Types of Standards

There are 2 primary types of standards: Program and Working

Regardless of type, the initial approval for exceptions to most standards is done by the region with a few exceptions for work primarily managed by HQ.

A secondary approval by the HQ Branch Chief is required for all Program Standard exceptions

About 75% of the standards are Working Standards

About 90% of the standards have initial exceptions approved at the region

2018 Standards and Guidance

- **Typical Schedule is one standards and guidance update in November.**
- **Now that all standards and guidelines have been evaluated, a routine maintenance is planned for each standard and guideline at least once every 5 years**
- **Provider teams have been evaluating 20% of the standards and guidance for routine update needs. Beginning engagement with FEMA SMEs**
- **Update is being delayed 3 months until February 2019**

Maintenance Planned

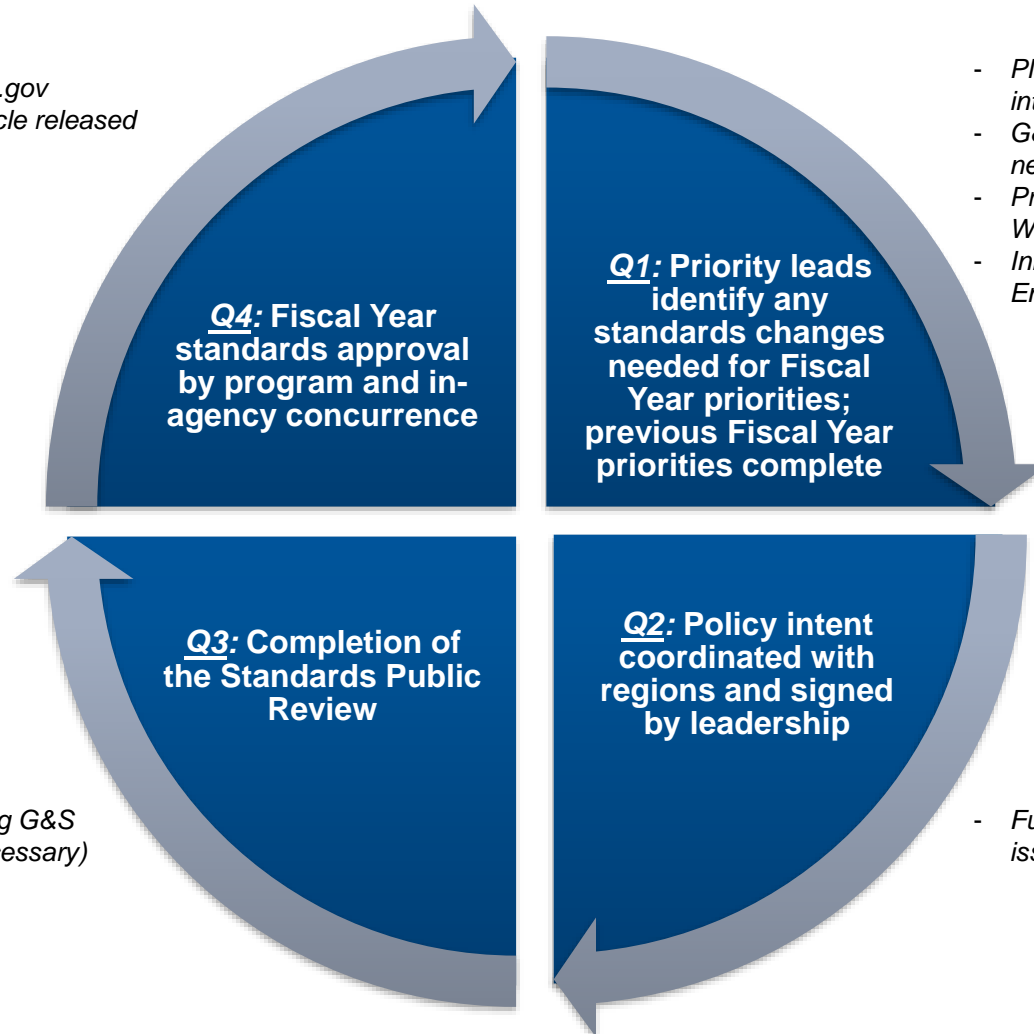
- **Significant changes:** updated based on leadership priorities or created for new requirements
- **Minor-maintenance:** minor technical changes, clarifications
- **Routine maintenance:** updated as part of a 5-year plan based on balance of resources (last review and SME availability)



- Transformation was a multi-year project to improve the way guidelines and standards are published, maintained, and used – to produce better overall consistency and more efficient operation of mapping activities
- Now that all standards and guidelines have been evaluated, a routine maintenance will occur for each standard and guideline at least once every 5 years

G&S Standards Maintenance Process

- Updates published on FEMA.gov
- Leadership intent for next cycle released



- Planning memo distributed, clarifying intent
- G&S Major Release Cycle formalizes new standards and guidance
- Priorities/targets discussed at RMD Workshop
- Initiatives reviewed at Senior Engineers Meeting

- Any adjustments made during G&S Minor Release Cycle (as necessary)

- Funding realized and Funding Memo issued



G&S Key Benefits

Central mechanism

keeping the program up-to-date with scientific, technology, and policy changes

Important for addressing **emerging issues and evolution in the program**

Allows us to **keep in compliance** with FEMA policy related to refreshing policy periodically

How People Think It Works



How It Really Works



Subject Matter Experts

FEMA SMEs

are assigned for each key program topic

SMEs

G&S Process is structured to rely on the expertise of the individual SMEs to develop standards and guidance



SMEs

play a key role on G&S maintenance, but also play a key role in managing escalated operational issues

Major issues and standards changes are reviewed across all SMEs to fully vet changes and benefit from combined program knowledge

FEMA SMEs

typically leads a team of provider SMEs who develop standards and guidance and engage across the program on their subject area

Communities of Practice (CoP)

- Coastal
- Dam and Levee
- Communications
- Regulatory & Non-Regulatory Product Teams

Where Do I Find Guidance?

August 2013

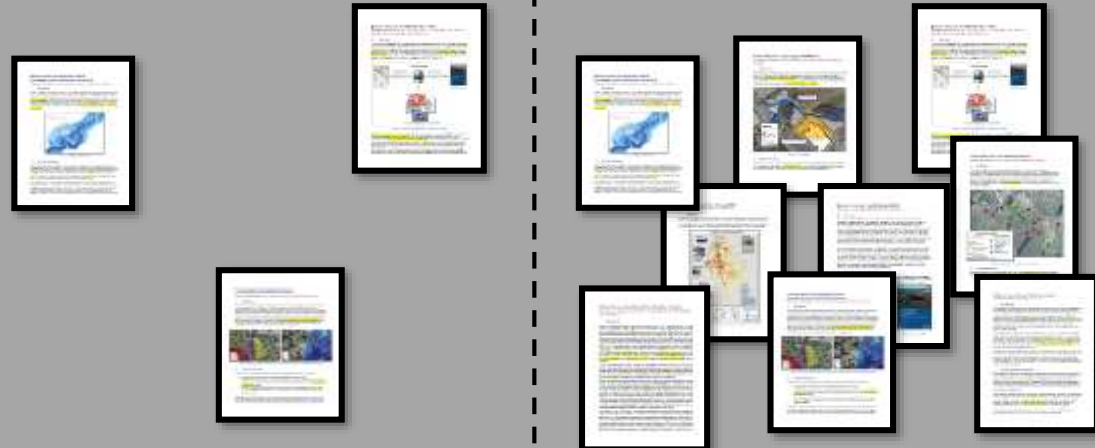
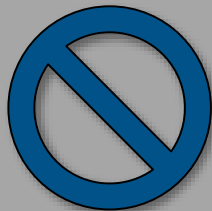
Valley of Despair

Now!!

Legacy G&S Docs

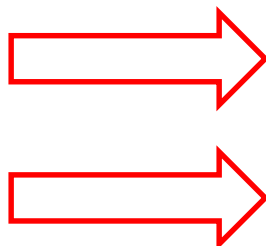


New Guidance
(KSS & fema.gov)



Flood Hazard Mapping

View and Obtain Flood Maps

[Change my Flood Zone Designation](#)[Risk MAP](#)[Flood Mapping Products](#)[Status of Map Change Requests](#)[Forms and Documents](#)[Frequently Asked Questions](#)[Guidelines and Standards for Flood Risk Analysis and Mapping](#)[Guidelines & Standards Maintenance](#)[Final Guidelines for Using Future-Conditions Hydrology](#)[Coastal Flood Hazard Analysis and Mapping](#)[Guidelines for Coastal Flood Hazard Analysis and Mapping for the Pacific Coast of the United States](#)[Software](#)[Tutorials and Training](#)[Technical Mapping Advisory Council](#)[Living with Levees](#)[Numerical Models Meeting the Minimum Requirements](#)[User Groups](#)[Coordinated Needs Management Strategy](#)

Guidelines and Standards for Flood Risk Analysis and Mapping

This page provides Federal Emergency Management Agency (FEMA) guidelines and standards for flood risk analysis and mapping activities under the Risk Mapping, Assessment and Planning (Risk MAP) Program.

These guidelines and [standards](#) define the implementation details of the statutory and regulatory requirements for National Flood Insurance Program (NFIP) mapping. They describe how FEMA performs Flood Risk Projects, Letters of Map Change (LOMC), and related coordination activities. They are intended for mapping professionals and Cooperating Technical Partners (CTPs) under the Risk MAP Program.

The guidelines and standards are organized in a hierarchy. Standards are mandatory FEMA policy. They are divided into two categories: Program Standards and Working Standards.

Program Standards – Define important elements of the Risk MAP Program. Exceptions to program standards can be granted only by program leadership.

Working Standards – A required element of the Risk MAP Program, usually at a more detailed level than the program standards. Working standards are applied by specialists (engineers, planners, technicians, scientists, etc.) and generally have minimal ethical, political, and legal impacts to the program. FEMA Regional Offices may occasionally grant exceptions to these requirements.

Guidance – A recommended approach to meet the Risk MAP standards. Acceptable approaches are not limited to this recommended approach; other methods may be used if they meet or exceed the standards.

Best Practices/Lessons Learned – Any method, in addition to guidance, that helps to meet or exceed Risk MAP standards. Best practices are shared by FEMA Regions and Mapping Partners following successful approaches to program activities.

All standards for the Risk MAP Program have been published as a [FEMA policy](#). Guidance has been published separately as a series of documents focusing on specific topics. This policy and the related guidance and technical references supersede all of the previous *Guidelines And Specifications For Flood Hazard Mapping Partners* and associated procedure memorandums.

[Expand All Sections](#)[Finding Standards, Guidance And Related Documents](#)[Guidelines And Standards Maintenance](#)[FEMA Guidance](#)[Technical References](#)[Templates And Other Resources](#)[Document Control Procedures Manual](#)[Guidelines And Standards Archives](#)

Guidance Organization

- **Topics organized by subject area / function, not by project timeline / process**
 - Guides and Specs was a mix of functional and process oriented
 - New guidance topics often combine information from multiple part of old Guides and Specs
 - E.g. – Base Map used to appear in Volume 1 (Studies), Appendix K (Graphics), Geospatial Coordination Implementation Guide
- **Index of Standards and Guidance**
 - Defines cross references between standards and guidance
 - Compiled as index document with links to standards and guidance
 - Links to related forms, checklists, templates, etc.
 - Lists individual FEMA SMEs
 - Adobe and Excel versions available
- **Giant PDF**
 - Will be distributed via the E&M CoP shortly
 - Combines all documents in a single file

Q&A

