Guidance for Stakeholder Engagement

Project Planning and Discovery Process

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). 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.

Table of Revisions

Affected Section or Subsection	Date	Description
First Publication	November 2019	Initial version of streamlined stakeholder engagement guidance incorporates content from superseded Guidance Document No. 21, Stakeholder Engagement Project Planning Phase and Guidance Document No. 22, Stakeholder Engagement Discovery Phase. The initial transformed guidance was derived from Operating Guidance 04-11, Risk MAP Meetings Guidance, and subsequently revised to provide additional clarity on the implementation of enhanced stakeholder engagement requirements resulting from Section 216 of the Biggert- Waters Flood Insurance Reform Act of 2012, as amended by the Homeowner Flood Insurance Affordability Act of 2014.

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1.0 Introduction

This document is meant for Flood Risk Project teams involved in the Project Planning and Discovery phases of the Risk Mapping, Assessment, and Planning (Risk MAP) program. It describes the kinds of community and stakeholder engagement activities to consider during these phases. This document is designed to complement Discovery guidance provided in Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery.

Figure 1: Risk MAP Project Lifecycle

The goal of Project Planning and Discovery is to help community members understand their risk and become more resilient. While the flood map is a critical product delivered through Risk MAP, it is meant to be a tool for communities to use when evaluating their flood risk. All short-term goals for the Project Team and partners should support the overarching goal of resilience for each community in the watershed or project area. As such, the Project Team and partners should support communities as they develop mitigation actions personalized to their unique needs. Stakeholder engagement is a key ingredient for achieving these outcomes.

More guidance on interacting with stakeholders (in all phases of the Risk MAP process) is available in Guidance Document No. 105, Guidance for Stakeholder Engagement: Introduction and Key Terms. It includes overviews of the following topics:

- Issues that Project Teams should consider during coastal or levee Flood Risk Projects;
- Issues that Project Teams should consider when working with sovereign tribal nations;
- Effects of National Flood Insurance Program (NFIP) reform legislation on flood mapping studies;
- Federal policies related to flood mapping studies;
- Supplemental resources to consider when engaging with project stakeholders; and
- Definitions for common key terms.

More guidance on the Discovery phase—specifically on identifying flood hazards and associated flood risk and mitigation activities in this phase—is available in Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery. Additional guidance on the Project Planning phase can be found in Guidance Document No. 96, Guidance for Flood Risk Analysis and Mapping: Project Planning.

2.0 Audiences

The primary audiences for this guidance document are staff from the 10 Federal Emergency Management Agency (FEMA) Regional Offices and FEMA Headquarters, and the Project Teams formed to carry out the Project Planning and Discovery processes. While Project Planning typically requires involvement by FEMA staff (with some support provided by the Regional Program Management Liaison [RPML] and Program Management [PM] provider staff], the Discovery phase can include significant participation by other Risk MAP providers and partners serving FEMA Headquarters and the Regions, such as the Community Engagement and Risk Communication (CERC) provider, the Production and Technical Services (PTS) provider, and Cooperating Technical Partners (CTPs).

3.0 Additional Resources and Tools

Throughout this document, you will find links to supplemental materials on the FEMA Risk Management Directorate (RMD) SharePoint Portal. These supplemental materials, which are meant to complement the information in this guidance document, include the following:

- Tactical tips or "how-to" guides on topics like designing effective presentations, handling contentious community questions, or working with local media.
- Resources for best practices in community engagement, such as the CERC Playbook.
- Case studies that highlight community and stakeholder engagement during the Project Planning and Discovery phase.
- Videos and outreach toolkits that can be used in community meetings to persuade stakeholders that it is important to understand their flood risks and act appropriately.

4.0 Project Planning and Discovery—Overview of Objectives

4.1 Project Planning Phase

Project Planning, which takes place every year, is the first phase in the Risk MAP lifecycle. It is used to prioritize project areas and to estimate the budget for (1) the Discovery process or (2) developing and delivering Flood Risk Projects after the Discovery process.

The objectives of the Project Planning phase are to prioritize watersheds/project areas for review and to develop budget estimates for projects.

4.2 Discovery Phase

FEMA begins the Discovery process after planning and allocating a budget, when watersheds/project areas of interest have been identified and selected. FEMA's primary objectives are to:

- Engage project stakeholders to start the foundation for relationships that will be built throughout the project
- Understand the communities' data needs
- Introduce or enhance flood risk discussions

- Balance local mapping and data needs with FEMA resources and plan for a possible Flood Risk Project.

Discovery activities include developing a stakeholder engagement plan for the community or watershed, gathering data and information, developing a Discovery Map (optional) and a Discovery Report (required), and engaging project stakeholders before, during, and after Discovery Meetings. If FEMA decides that a Flood Risk Project may be appropriate based on need, the available resources, and the community's interest, Discovery activities will also include engaging with communities to discuss expected changes to flood hazard information, defining the scope of the Flood Risk Project, and outlining for project stakeholders the expected next steps (e.g., engineering models to be used, products and services to be provided, timeline, outcomes, roles/responsibilities, data sources). All Flood Risk Projects must have a communication plan designed to keep project stakeholders informed of all key decisions, draft findings, and finished outputs. The plan should also be designed to regularly involve key stakeholders in discussions about local risks and potential actions to manage and reduce those risks.

5.0 The Importance of Stakeholder Engagement

While developing updated flood maps for a community or watershed/project area is an important aspect of Risk MAP, the overarching goal of the process is to help communities have a more holistic understanding of their changing risks and know what actions they can take to achieve resilience. Communities are much more likely to act when they feel invested in the process, and these early phases are an opportunity to show that FEMA is fully committed to helping local officials and other stakeholders throughout this journey—not just during Risk MAP meetings or at other Flood Risk Project milestones.

FEMA and its Project Teams should think of themselves as partners to the communities they work with, and a critical objective of these first phases—beyond making decisions about Flood Risk Projects—is establishing or strengthening collaborative working relationships with key local stakeholders. Through a stronger approach to stakeholder engagement, FEMA can also make it easier for federal, state, and local mapping partners to exchange information throughout the lifecycle of a Flood Risk Project.

5.1 Stakeholder Engagement Goals

5.1.1 Project Planning Phase

The stakeholder engagement activities that Project Teams should conduct during the Project Planning phase are intended to assist in prioritizing project areas. Engagement with both internal and external stakeholders is essential.

Key questions that the project planning teams typically ask during this phase include:

1. What can the project planning team learn that will help the community become more resilient?
2. What other stakeholders should be considered for this project area, beyond traditional stakeholders such as other federal agencies, state agencies, and local officials? For example, librarians, who may be able to help community members understand flood mapping resources and information; major land holders that could be a strategic partner;

or local non-governmental or civic organizations that can help advocate for the goals of the Flood Risk Project.

3. How can the project planning team incorporate local demographic and socioeconomic information to inform FEMA's stakeholder engagement approach?

Ultimately, the goal is to learn as much as the project planning team can about the community before the Discovery Meeting, so the meeting is tailored to be as useful and productive as possible.

Stakeholder engagement during the Project Planning phase should be flexible and scalable—each FEMA Regional Office, watershed, and community is unique. While it is not possible to offer a comprehensive recommendation for data collection during this phase, some common goals of successful stakeholder engagement during Project Planning are listed here:

- Stronger relationships, a sense of partnership, and shared objectives between FEMA, community officials, and other stakeholders
- A clearer understanding of which Flood Risk Project activities may benefit the area most
- Plans and estimates for how the Risk MAP investment may be used to identify, communicate, or reduce risk in a targeted area
- A clearer understanding of state preferences and priorities for the scope and prioritization schedules for the Flood Risk Project
- Information that FEMA Regional Offices can use to prioritize project areas for Discovery or for Flood Risk Projects and to develop project plans and budget estimates
- Compliance with the requirements of Section 216 of the Biggert- Waters Flood Insurance Reform Act of 2012 (BW12), as amended by the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA)
- Information that may help Project Teams meet other Risk MAP metrics as they are identified

5.1.2 Discovery Phase

Although engagement with federal, state, regional, and local partners begins during the Project Planning phase, engagement with communities and other stakeholders is substantially expanded during the Discovery phase. During the initial coordination with watershed/project stakeholders, the Project Team collects data and information that will help them accomplish the following:

- Understand the watershed or project area—and the community/communities within it—in a more comprehensive and holistic way (not through mapping and engineering study needs alone)
- Establish or improve relationships with state partners, community officials, key influencers, and other project stakeholders
- Establish the trust and transparency required for successful, longer term collaboration with communities, to last across the Risk MAP lifecycle and into the future

- Help communities understand why identifying flood hazards is important to their long-term resilience, and connect them to mitigation planning and action through reducing local flood risk
- Determine the level and types of mitigation planning and other assistance (such as outreach and communication) the communities need
- Learn about the communities' capabilities, including GIS knowledge, to see what kind of assistance they will need from FEMA or other partners to understand and use the data generated by a Flood Risk Project
- Identify data that may be used to create regulatory products, including Flood Insurance Rate Maps (FIRMs), Flood Insurance Study (FIS) reports, and FIRM databases
- Identify data that may be used to create Flood Risk Products, such as Flood Risk Databases, Flood Risk Reports, and Flood Risk Maps
- Identify factors that may be contributing (positively or negatively) to flooding and flood losses in a watershed. (Some of these items may eventually be used for Areas of Mitigation Interest, one of the Flood Risk Datasets)

If FEMA knows at this stage which engineering models it will use to update the flood hazard information shown on the FIRM, then the Project Team must notify each community affected by the update of the engineering models it plans to use. In addition, the Project Team must give the communities (1) an explanation of the appropriateness of using these models, and (2) a 30-day period to consult with FEMA on the appropriateness of the engineering models. These actions will meet the requirements of Section 216 of BW12 and FEMA Standard ID (SID) 620. The Project Team can access templates to support the implementation of SID 620 through the password-protected RMD SharePoint Portal in the Flood Mapping Letter Repository or by contacting the FEMA Project Officer. This step can also be performed later in the study, after the Discovery phase.

5.1.2.1 Collecting and Maintaining Stakeholder Contact Information

During Discovery, the Project Team must engage all communities and the appropriate level of project stakeholders identified within the project area. Getting the project stakeholders to the table early and engaging them in a meaningful way are very important. The contacts and stakeholder information identified during the Project Planning and Discovery phase will be used throughout the Flood Risk Project. It is important for the Project Team to collect contact information for community officials—particularly the Chief Executive Officers (CEOs) and Flood Plain administrators (FPAs)—and keep them current throughout the Flood Risk Project.

One source of this information is the FEMA Community Information System (CIS). After compiling an initial contact list using community websites and CIS, the Project Team may find it helpful to refine the list with the assistance of the state NFIP Coordinator, the State Hazard Mitigation Officer (SHMO), and representatives of larger communities in the watershed/project area. In addition, to avoid unnecessary duplication of federal, state, or local mapping efforts, coordinating with state and federal partners at the beginning of the Flood Risk Project is very important. Note that CIS is accessible to users with FEMA Personal Identity Verification (PIV) cards. Other Project Team members may request access to CIS by visiting https://portal.fema.gov/famsVuWeb/home.

5.2 Types of Stakeholders

This section broadly outlines the kinds of stakeholders—internal and external, federal and local, government and private—that might be considered when building a stakeholder engagement plan during the Project Planning and Discovery phases of the Flood Risk Project. Project Teams should determine their project stakeholders appropriately, based on the area being studied.

5.2.1 Introduction

During the Risk MAP lifecycle, Project Teams may tend to refer to "stakeholders" or "the community" as if these terms represent a single group with similar goals and objectives. Instead, for more successful engagement, it is important to consider the many kinds of stakeholders and community audiences, and the needs (and values) of these distinct groups.

If tribal lands are included in a project area, Project Teams must coordinate with the Tribal Liaison in the FEMA Regional Office. Additional tribal considerations are addressed in Section 4.0 of Guidance Document 105, Guidance for Stakeholder Engagement: Introduction and Key Terms.

5.2.2 Internal Stakeholders

In addition to coordinating with external stakeholders, the Project Team may want to engage (or continue to engage) with internal partners, such as the following:

- Federal Insurance and Mitigation Administration (FIMA) staff at FEMA Headquarters
- FEMA Regional Offices that are not represented on the Project Team (neighboring or geographically similar Regions)
- Regional Branches, both within and outside of the Mitigation Division
- Any Risk MAP providers (e.g., the CERC, PTS, Customer and Data Services (CDS), or Program Management providers) that are not represented on the Project Team

FIMA is charged with integrating the efforts of teams who oversee individual programs within its organization, to ensure that resources are well leveraged and that FIMA takes steps to reduce duplication and cooperate to achieve complementary goals and objectives. The FIMA Risk Management Directorate (RMD), Mitigation Directorate (MD), Federal Insurance Directorate (FID), Fund Management Directorate, Office of Environmental Planning and Historic Preservation (OEHP), and Office of the Flood Insurance Advocate (OFIA) are uniquely positioned to accomplish this because of the natural synergies among the staff and the programs, initiatives, and activities they oversee. Some of the program initiatives and activities FIMA oversees are listed in Table 1.

Potential inputs the team might receive from internal stakeholders are listed below.

- Key Decision Point information
- Planning and funding memorandums released by RMD, including metrics and areas of focus
- Coordinated Needs Management Strategy (CNMS) data and New, Valid, and Updated Engineering (NVUE) forecast/projection data

- Project Planning and Purchasing Portal (P4) data
- Available risk data or prioritization algorithm data (previous version available in P4 as a reference layer)
- Population data from the FEMA Community Layer
- Mitigation Planning Portal data, such as information on the Mitigation Plan Cycle to help synchronize the timing of plan updates with Risk MAP projects
- Community Rating System (CRS) information
- BureauNet insurance information
- CIS data
- Information on communities' potential for taking mitigation actions, which could be in the form of a database or spreadsheet and could include an assortment of community information, hazard information, insurance and NFIP-related information, planning and grant information, mapping information, and disaster-related information, such as Mitigation Assessment Team reports/data, Recovery Advisories, and Case Studies (if applicable)
- Internal records that can help identify congressional, regional, and local priorities, including:
    - Congressional and Freedom of Information Act correspondence
    - Other correspondence exchanged between FEMA, communities, and other stakeholders
    - Email messages and telephone records from the FEMA Map Information eXchange, other FEMA call centers, and OFIA
- Lessons learned/institutional knowledge that may not be documented in the Knowledge Sharing Site
- New tools, such as the CERC Playbook, which offers tools to help decision-makers think strategically and consistently about community engagement

Table 1: FIMA Directorates – Programs, Initiatives, Activities

FIMA Directorate	Programs, Initiatives, and Activities
RMD	• Building Science Activities and Initiatives • CTP Program • Data Warehouse, Flood Mapping Information eXchange, and Information Technology Management • Mitigation Assessment Team Program • Multi-hazard Risk Assessment • National Dam Safety Program • National Earthquake Hazards Reduction Program • Multi-hazard Mitigation Planning • National Levee Safety Program • Natural Hazards Risk Assessment Program • Rehabilitation of High Hazard Potential Dams (HPPD) Grant Program • Risk MAP Program
MD	• Community Assistance Program • Community Assistance Program–State Support Services Element program • Community Rating System • Flood Mitigation Assistance Program • Floodplain Management • Hazard Mitigation Grant Program • Hazard Mitigation Grant Program Post Fire • Interagency Floodplain Management Task Force • Pre-Disaster Mitigation Grant Program

OFIA is another potential resource for Project Team engagement within FIMA. Section 24 of HFIAA directed FEMA to establish a Flood Insurance Advocate to work for the fair treatment of NFIP policyholders and property owners. This resulted in the OFIA, which responds to requests from the public regarding fair treatment in the areas of flood hazard mapping, flood risk identification, and actions that minimize the risk of flooding.

As a result of their day-to-day activities, OFIA staff may have information that could help Project Teams identify areas with mapping or risk assessment needs in specific watersheds or communities. Project Teams are encouraged to engage with OFIA staff, and the two-way communication that takes place during Discovery may be equally beneficial to the OFIA. Project Teams may provide information on planned Flood Risk Projects for areas that the OFIA encounters when responding to an inquiry.

5.2.3 External Stakeholders – Public Sector

Other Federal Agencies

Project Teams should consider other federal agencies as partners in the Risk MAP program. These agencies may be able to support the development of hazard information as well as helping to communicate flood risk and support activities to reduce flood risk in communities. Other federal agencies may also help the Project Teams prioritize project areas, based on their spheres of knowledge and their planned or in-progress risk mitigation activities.

Project Teams should collect data and information at the state or regional level all at once, when possible, to assist in project sequencing. This will keep the Risk MAP program activities efficient and within budget.

For additional information on coordination with other federal agencies and the types of data and information that may be available through coordinating with federal partners, interested parties should refer to Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery.

Regional and State Partners

State CTPs, state NFIP Coordinators, and SHMOs are considered partners of the Risk MAP program, but Project Teams should also consider other state agencies as partners. They also may be able to support the development of hazard information, help communicate flood risk, and support activities to reduce flood risk.

During the Project Planning phase, engagement with CTPs, state NFIP Coordinators, SHMOs, and other state agency officials could include discussions of the watershed/project area and which areas they would prioritize for mitigation or new data, based on their local knowledge.

During the Discovery Phase (and periodically in later phases), Project Teams should plan to engage with any relevant regional agency or organization in the watershed or geographic area that is the focus of the project.

Potential Regional and State Partners

- Cooperating Technical Partners
- State NFIP Coordinators
- State Hazard Mitigation Officers and state mitigation planners
- Community Rating System coordinators and Insurance Services Office specialists
- State/Regional agencies that own/operate levees or dams
- State/Regional historic preservation offices
- State/Regional dam safety officials
- State departments of environmental protection
- State/Regional transportation or transportation planning departments

- State housing and economic development authorities
- State/Regional planning districts and authorities
- State/Regional flood control, water management, and soil and water conservation districts and authorities
- State/Regional economic development commissions, councils, boards, authorities, and agencies

Collecting and assessing the information obtained during the Project Planning phase may help the Project Team identify which areas have the highest risk or involve contributing factors that indicate which Risk MAP activities may be appropriate and the potential level of effort required to accomplish them. The detailed evaluation of information for the watershed or project area takes place during the Discovery Phase. For additional information on the types of data and information that may be available through coordination with state and regional partners, refer to Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery.

Federal and State Elected Officials

It is wise to engage with federal and state elected officials who represent the watershed/project area, early in the Flood Risk Project process. These officials could include U.S. senators and representatives, state senators and representatives, and the governor. Notifying these officials about the Flood Risk Project is an opportunity to remind them of the broader goals of the Risk MAP program in encouraging community resilience. Moreover, winning their support early in the mapping process could be helpful later to minimize disruptions or delays that could be caused by misunderstanding and under-involvement. These are also good opportunities to ask elected officials to champion mitigation projects within local communities and emphasize to community officials the importance of adopting the latest consensus-based hazard-resistant building codes and standards. Many citizens also report flooding and flood-related concerns to their officials. FEMA may hear about additional problem areas and challenges by including senators, representatives, and governors in the Discovery conversation.

National, Regional and State Associations and Nongovernmental Organizations (NGOs)

Project Teams may also consider engaging with state-level or regional professional associations or NGOs that focus on land or water conservancy. These organizations may have helpful data to share, or individual members could be potential key influencers in communicating flood risk and supporting activities that reduce flood risk in the watershed/project area.

Potential National Associations and NGO Partners (which may have regional, state, or local affiliates)

- American Planning Association
- American Red Cross
- American Rivers
- American Society of Civil Engineers
- American Public Works Association

- American Water Resources Association
- Association of State Dam Safety Officials
- Association of State Floodplain Managers
- National Association of Counties
- National Association of Flood and Stormwater Management Agencies
- National Emergency Management Association
- National Flood Determination Association
- National League of Cities
- Natural Hazard Mitigation Association
- Nature Conservancy
- Natural Resource Defense Council
- Others, as appropriate for the watershed or geographic area being considered

Project Teams should also consider whether engagement with the Resilient Nation Partnership Network (RNPN) could be helpful in a study project. The RNPN is a network of NGOs, private sector groups, and federal and state agencies. FEMA established this network to bring together organizations for more holistic conversations about resilience. These partners—or the local or regional branches of member organizations—may be helpful in supporting FEMA's mapping projects. To date, the RNPN has grown to more than 160 organizations, featuring a diversity of thought leaders in many areas of resilience. Represented sectors include academia, infrastructure, policy, science and research, conservation, law enforcement, local and state governments, medicine, and more.

To learn more about or engage with the RNPN, Project Teams can coordinate with the CERC provider.

Local Partners

While engaging at the local level during the Project Planning phase is encouraged, community-level engagement is essential during the Discovery phase. These community contacts usually include, at a minimum, the Chief Elected Officers (CEOs)—mayors, county/parish judges, county executives, or the president or chair of the board of supervisors or council—and Flood Plain Administrators (FPAs).

Beyond community CEOs and FPAs, Project Teams should consider a broad array of community stakeholders to engage when starting a Flood Risk Project mapping study. These community members may have information that can help the Project Team learn more about the community and inform a better assessment of its risks or highlight unique challenges the community has faced in the past. They can also offer insights into unique capabilities or experiences within the community that can be leveraged as the mapping process continues. In addition, early engagement with community stakeholders can help inform an approach to community engagement that will affect all phases of the Flood Risk Project, not just Discovery.

The community FPA can be a key partner in helping identify which other community stakeholders would be most helpful to work with during the Flood Risk Project. Agencies, departments, or groups in the following disciplines are potential partners:

- Infrastructure
  - Planning and emergency management (including GIS or CRS coordinators)
  - Transportation
  - Land use (including private developers)
  - Environment (including local environmental Non-Governmental Organizations)
  - Parks and Recreation
  - Building/code enforcement
- Social Services
  - Community affairs
  - Housing, Health and Human Services
  - Local civic organizations and non-profits
  - Economic development agencies
  - Utilities
  - Sewer
  - Water
  - Power
  - Electric
  - Telecommunications
- Others
  - Critical facilities e.g., hospital administrators, police and fire chiefs, school administrators)
  - Chambers of Commerce
  - Faith-based organizations
  - Local universities or other academic institutions
  - Civic organizations

5.3 Pre-Meeting Engagement Activities

Before contacting any local officials or other stakeholders for Discovery, Project Team members should gather as much publicly available information and data about the community as possible and coordinate with internal stakeholders and partners. Reviewing a community website could provide an overview of its floodplain, stormwater, mitigation, and emergency management

activities and organizational structure, which could guide the selection of community contacts for the Discovery process. Other useful community information can include:

- Organization of the community and the various departments and divisions, including their roles and responsibilities
- Planning documents (e.g., Hazard Mitigation Plans, Emergency Management Plans, Master Plans)
- Stormwater ordinances
- Maps
- Contact information for community officials
- Lists of levee districts or drainage districts, district contact information, levee maintenance plans, or drainage master plans
- Floodplain management ordinances
- Building codes and amendments
- Emergency Action Plans for dams owned and operated by community
- Recent news stories about flooding, mitigation, building codes, land development, or other relevant topics in local media outlets

The Project Team should gather information that will provide insight into how a community communicates about risk and its actions to reduce flood risk.

All Flood Risk Projects should have a communication plan (referred to here as a stakeholder engagement plan). The goal of this plan is to help Project Teams keep project stakeholders engaged during Discovery (and after, if a Flood Risk Project moves forward). The plan also helps Project Teams effectively integrate stakeholder engagement into other activities in ways that will build sustained, positive relationships with the community. The engagement plan should include elements such as the following:

- Identifying Stakeholders:
    - Who are the primary decision makers in the community? Who are the points of contact for the study team?
    - Are other local, regional, or national stakeholders a priority to include?
- Understanding the Community and Audience
    - Basic information about previous flood risk in the community, including the information listed above as well as the history of major flooding, number of NFIP policyholders, Repetitive Loss properties, and CRS rating.
    - Other information that can help Project Teams understand opportunities and barriers to effective communication and can help frame the key messages within a study area. These can be drawn from U.S. Census data, recent media coverage, scans of social media conversation, and other sources of demographic data or community sentiment.

- Building Key Messages
    - The message themes should include understanding flood risks (and the fact that they may be changing); collaboration and partnership with FEMA to make the flood maps as accurate as possible; and the importance of mitigating and reducing risks to long-term community resilience.
- Tactics for Engaging Stakeholders
    - The tactics that Project Teams will use to drive the outreach to the community through the Discovery process (and beyond). More about common outreach tactics can be found in the section below.
- Timelines for Engagement

These messages, timelines, and tactics should be aligned with flood study milestones, so the emphasis on certain messages will shift as a flood study progresses. For example, the emphasis at the beginning of a mapping study may be, "We want to share data with you to build the best possible map of your flood risk." That may change to "We want to make sure you agree with where we've identified risk" during the Preliminary phase, and to "We want to help you communicate flood risks to your community and identify actions you can take to reduce risks" during the Post-Preliminary phase.

The CERC provider can be helpful in working with the Project Team to develop a stakeholder engagement plan, including key messages, appropriate for the project area.

The CERC Playbook is another stakeholder engagement resource for Project Teams. The Playbook offers tools (not rules) for adapting and applying community engagement resources and best practices effectively. The Playbook has chapters for every phase of the Risk MAP lifecycle, as well as chapters that examine the special needs of coastal communities and communities with levees. It also includes a chapter on using behavioral science insights for effective community engagement. The Playbook can be accessed through the password-protected RMD SharePoint Portal or the FEMA Project Officer.

5.4 Stakeholder Engagement Techniques and Tools

The bullets below describe the most common tactics for engaging with stakeholders during a mapping project. Many—such as face-to-face meetings and webinars—are particularly important in the lead-up to the Discovery Meeting; others, such as newsletters and listservs, can be useful between flood study milestones to sustain a positive relationship with the community and keep stakeholders notified of progress. It is also important to consider who is sharing this information. A flyer from a trusted source, or one posted in a communal area, may be better received than a phone call from an unknown person. Ultimately, the selected techniques and tools should be scalable and appropriate for the project stakeholders the team has identified.

- Face-to-Face Meetings: It is important to have ongoing periodic face-to-face meetings with both internal and external stakeholders/partners who are actively involved in delivering Risk MAP projects and initiatives. These people may have valuable insights to offer, and their support for the flood mapping study will be key to its success. Although face-to-face meetings are resource intensive, they are invaluable for developing relationships and fostering trust, especially among new partners.

- Conference Calls: Facilitated conference calls are useful for ongoing periodic engagement with internal and external stakeholders/partners who are actively involved in the delivery of Risk MAP projects and initiatives and support the overall success of the Risk MAP program.
- Webinars: Webinars (using a platform such as Adobe Connect) can be effective for engagement opportunities that involve delivering a lot of information, that require attendees to see the materials being discussed, or that include orientation and training. Depending on the platform, these sessions can also be recorded, allowing participants to review sessions at a later date or forward the recording to others.
- Social Media: Social media can be used effectively to remind invited participants about upcoming events (e.g., conference calls, webinars, conferences, workshops) and engage with communities as a project progresses. In coordination with the External Affairs Office in a FEMA Region, Project Teams could consider posting upcoming community meetings on the Region's social media accounts. .
- Fact Sheets, Flyers, and Brochures: Project Teams have often relied on printed publications for communicating with stakeholders. These one-way communication tools can be effective for making complex information easier to understand and pass on. While these materials are helpful, Project Teams should not rely on them. They should be used for purposes such as webinar or meeting announcements, or as "leave-behinds" at in-person meetings and workshops. They should also be written in plain language—aiming for an 8th-grade reading level.
- Newsletters and Listservs: Project Teams can use e-newsletters or email ListServs to communicate on a regular basis with federal and state partners, regional entities, and local communities that have signed up to receive this information—particularly between project milestones.
- State/Regional Conferences, Meetings, and Workshops: Participation in state and regional conferences, meetings, and workshops sponsored by key professional associations and non-governmental organizations can be an effective way to engage with multiple groups and individuals. Likewise, workshops led by the Project Team can be valuable mechanisms for building relationships and sharing information on an ongoing basis.

- Templates: To facilitate engagement with federal and state partners, professional associations, and other NGOs, FEMA Regional Offices and FEMA Headquarters have developed templates to use for letters, email messages, newsletter articles, and communication tracking. Many templates are available in the CERC Playbook on the password-protected RMD SharePoint Portal. Project Teams should coordinate with their FEMA Project Officer to use preferred methods of communication and templates during all phases of the Risk MAP lifecycle.

Stakeholder Outreach Best Practice: Videos and Community Toolkits.

Videos (though they are expensive to produce) can be powerful tools for storytelling and for making flood risk and resilience personally meaningful to stakeholders. Toolkits offer resources that can help influential members of the community engage with residents in ways that are more credible and relevant.

By putting powerful stories and other tools in the hands of those who already have the ear of the community—rather than in FEMA's hands—communication around a mapping study can be much more effective, and study milestones can be more closely linked to the importance of mitigation investment and community resilience.

FEMA's Flood Risk Communication Toolkit for Community Officials includes a set of eight videos for community use. FEMA Regions and Project Teams are encouraged to share this toolkit with local community officials. The tools and videos are intended to empower community officials to communicate more effectively with the public about flood risk. By doing so, they can help residents and other stakeholders become full partners in increasing resilience. The toolkit is available at https://www.fema.gov/media-library/assets/documents/179697, and the videos are available on FEMA's YouTube channel at https://www.youtube.com/playlist?list=PL720Kw_OojIIUiWw2bDc-On5MjQw13E6e.

Stakeholder Outreach Best Practice: Establishing Community Working Groups.

Project Teams should consider creating community working groups in the early stages of a mapping project. These working groups are typically made up of influential stakeholders from the community—elected officials, business leaders, and civic leaders, for example. These local leaders typically have more credibility with residents and can help them understand the purpose of the mapping study and how it can contribute to long-term community resilience.

An example of a working group in this type of setting is the Lackawanna County Flood Risk Coalition (LCFRC) in Lackawanna County, Pennsylvania. The LCFRC was was brought together by FEMA Region III to support the community's understanding of a mapping update that will result in the county's first digital, countywide maps. The LCFRC is made up of more than 20 community members from 14 organizations, united by a shared commitment to increase flood risk awareness and adopt measures to protect the area's property and prosperity from the effects of flooding. The LCFRC has members from both state and local organizations.

Project Teams should work with the CERC provider early in the mapping study process to determine whether a community working group approach might be the right fit for a particular study area.

6.0 Discovery Activities

6.1 Initial and Sustained Contacts with Project Stakeholders

Contacts with watershed/project area stakeholders must involve an ongoing, two-way dialogue (e.g., a telephone call, web-enabled meeting, or in-person meeting, as opposed to a letter or email message with no two-way followup conversation) that starts well in advance of Discovery Meetings and continues with regular touchpoints after Discovery Meetings. This consistent dialogue is essential to building a collaborative relationship and partnership throughout the Project Team.

During the initial contact with a community, the assigned Project Team member should explain the Risk MAP program to local officials, discuss the community's flood mitigation programs and projects (completed, ongoing, and planned), request data, and discuss setting up Discovery Meetings. Additionally, during conversations with local officials, Project Team members should listen for, or even ask for, community concerns related to flood risk, everyday activities they conduct that may reduce flood risk, and related information. Such conversations are likely to be needed with multiple community officials, because the FPAs may not have enough insight into the activities of other departments and programs in the community. These contacts provide opportunities for the Project Team to confirm the validity of information that was gathered prior to the Project Planning Phase or during the community website review.

Many stakeholders can participate in the Discovery process. Depending on the size of the watershed/project area, the Project Team is likely to contact multiple community officials more than once during this process. However, not every contact must be made by telephone; email messages, letters, and social media may also be used. FEMA has developed tools and templates (including assessments, questionnaires, and letter and email templates) to assist Project Team

members in engaging stakeholders. Project Team members are encouraged to use the tools and templates that seem appropriate for their watershed or project and to revise or change them as necessary, in accordance with the guidance provided by the FEMA Project Officer. The tools and templates are accessible through the password-protected RMD SharePoint Portal. Project Team members should confer with the FEMA Project Officer to determine whether a Region-specific version of a template is available, before using the templates above.

The Discovery process provides an opportunity to discuss Risk MAP goals with communities and to begin collecting information that will help identify Risk MAP successes. The Project Team should engage communities and tribes in a dialogue about what mitigation looks like, what the community's existing mitigation priorities are, and—most importantly—what information and resources the community has to take those actions.

6.2 Mitigation Planning Activities and Local Hazard Mitigation Plans

The Discovery process, as the first opportunity for engagement in each Risk MAP project, is an optimal time to talk with communities about mitigation actions related to their flood risk. Through the Discovery process, FEMA will work with the local, tribal, regional, state, and federal partners in the watershed/project area to define the scope of the Risk MAP project, based on the area's flood risk and capabilities. Through this process, the Project Team should identify current, completed, and planned mitigation actions within the watershed/project area. These will help define the project scope, but also begin the work with communities to help them better understand the role of mitigation in reducing their risk.

6.2.1 Data and Information Collection

At the beginning of the Discovery process, the Project Team will begin collecting data and information from federal, state, tribal, and local sources. In addition to the more technical data, the Project Team should collect information on areas of vulnerability that need to be mitigated through future actions, as well as details on completed mitigation projects. The Project Team can gather this information from the following sources: current Hazard Mitigation Plans (HMPs), records of past flooding issues and high-water marks, records of projects and applications for Hazard Mitigation Assistance (HMA) program funding, applications for Rehabilitation of High Hazard Potential Dam Program funding, and community interviews or questionnaires. The information will help the communities understand how such actions will reduce their flood risk and begin to identify areas that would benefit from future action (for the Areas of Mitigation Interest Flood Risk Product dataset).

A review of the local HMPs and Mitigation Assessment Team reports, Recovery Advisories, and Case Studies for communities in the watershed or project area will help identify areas that were highly vulnerable to flooding during past disasters, determine previously identified actions to address community vulnerabilities, and identify ongoing or completed projects that address these flood vulnerabilities. The Project Team can review past Flood Insurance Study Reports, high-water mark data from state Silver Jackets teams or the U.S. Geological Survey, and other community records to identify areas that were strongly affected by disasters in the past. Identifying past HMA projects will show what has been done to address previously identified vulnerable areas, as well as identifying areas that are still vulnerable to flooding despite a concentration of completed projects.

FPAs, elected officials, planners, and emergency managers in each community have the best information about the areas of flooding vulnerability, opportunities for future action, previously identified projects or actions, and ongoing or completed projects. The Project Team should begin gathering this information at the beginning of the Discovery process and use the collected information to improve its engagement with the communities and to identify additional information to include in the Discovery Report.

6.2.2 Discovery Meeting

The information collected during the Discovery process will inform the content of the Discovery Meeting. It will also guide engagement with community representatives before, during, and after the Discovery Meeting (see Section 7.0 for additional information on the Discovery Meeting). The Discovery Meeting provides an opportunity to help community representatives understand the Risk MAP process and to identify the type of information that best informs that process. It also gives the Project Team a chance to begin discussions with the community about the relation of action to risk reduction. During the Discovery Meeting, the Project Team should present the actions that have been identified and accomplished to address the area's flood vulnerability; explain the importance of identifying and implementing additional actions in each affected community; and describe how these actions relate to the Risk MAP process, to the HMP, and to the HMA cycle. After discussing these issues at the meeting, the Team can identify additional areas of vulnerability that communities may want to address.

6.2.3 Coordination with Mitigation Planning Activities and Hazard Mitigation Plans

Throughout the Risk MAP process, the Project Team should coordinate with other ongoing efforts in the watershed/project area, including mitigation projects and the process of developing or updating HMPs. During the Discovery phase, this can start with aligning project meetings and engagement with related community meetings. For example, if a community is meeting to maintain or update its HMP, the Project Team can align project meetings with the HMP meeting schedule. This can increase attendance and participation by stakeholders involved in both processes. Additionally, if a community maintains a website that community members view regularly, the Project Team can work with the community to post information about its meetings, information requests, and project statuses there. Relevant websites could be sponsored by community administrative, business, projects, or planning departments, including work on comprehensive plans, HMPs, or other emergency management plans.

Coordination between the Risk MAP and HMP processes extends beyond engagement. It includes sharing information from the Flood Risk Project and the HMP. The HMP is a good source of information for the Discovery process, but as the plan is maintained and projects are completed, their effects can also inform later phases of the Flood Risk Project. The HMP can help the Project Team identify new stakeholders, new land development that changes an area's vulnerability, and completed projects that reduce the effects of flooding. Similarly, many products that Risk MAP delivers can help community members develop and update their HMP. Identifying the potential areas of coordination with the stakeholders involved in the communities' HMPs during Discovery will help ensure that these areas can be integrated into the Flood Risk Project at the outset.

Mitigation Assessment Team reports, Recovery Advisories, and Case Studies also may help the Project Team identify additional stakeholders as well as recommended mitigation activities and local floodplain management and building code update needs.

6.3 Data and Information Collection and Evaluation

One goal of the stakeholder engagement effort is for the Project Team to become familiar with the watershed or project area. On the technical side, this includes getting information on community flood hazards, flood risks, and stormwater and floodplain management activities, such as public works or parks department activities. It may also include collecting socioeconomic data, information about economic drivers in the watershed, and other information that helps Project Team members engage strategically with community officials on the issues that matter most to them.

6.4 Data and Information Collection Activities

Before engaging with communities, the Project Team should work, as appropriate, with people in the public and private sectors (including FEMA Headquarters staff) to collect and review the extensive variety of data and information documented in Section 7 of Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery.

Data and information collection activities should begin immediately after the initial contact with key flood risk project stakeholders, so that when the Discovery Meetings are held, the Project Team has collected most of the necessary information. The data collection activities will help support the production of regulatory products and Flood Risk Products, but they will also give Team members the context and background to make decisions on the appropriate Hazard Mitigation Technical Assistance and support needed to develop a practical and effective communication and outreach plan that suits each community. Data collection activities may also help the Project Team develop a better understanding of the best ways to share information with the community in the future.

Working closely with project stakeholders allows the Project Team to gain a sense of the community staff and their ability to contribute to the Flood Risk Project. If the communities in a specific watershed or project area do not have dedicated FPAs or GIS analysts, for example, the Project Team may need to develop a comprehensive implementation plan for delivering the Flood Risk Products to ensure the products are used to the fullest advantage.

Working in partnership with project stakeholders will help the Project Team determine whether (1) the affected communities have comprehensive plans, (2) the HMPs are coordinated with the comprehensive plans, (3) local governments have experience with flood disasters and flood disaster recovery, and (4) the communities coordinate floodplain management programs with programs for managing and planning for open space. The partnership also will help the Project Team determine if the communities have planning staff or planning/zoning commissions and mechanisms such as ordinances, administrative plans, or other programs, to mitigate flood loss and contribute to effective floodplain and stormwater management.

Project Team members should build relationships with community officials to learn about the daily activities and actions the communities take to reduce stormwater runoff, maintain channels, etc. Because these activities may work to manage or reduce flood risk, knowing that they take place

is important for the Project Team to understand the level of risk in the watershed. In addition, this information will help Project Team members work with communities to determine where they can incorporate flood risk communication, mitigation planning, and risk reduction into their plans. This information will also help Project Team members explore how communities can become involved in the CRS or expand their activities to improve their CRS classification.

A major activity that reduces a community's flood losses is participation in, and full compliance with, the NFIP. Therefore, Project Team members also should review historical information on community participation in the NFIP and its compliance with NFIP regulations. This information will contribute to an understanding of past relations between the community and FEMA and will improve the Project Team's insight into community efforts toward flood risk reduction.

Some NFIP compliance issues that may be helpful to know about during Discovery are physical changes to Special Flood Hazard Areas (SFHAs) or regulatory floodways that took place without Conditional Letters of Map Revision (CLOMRs) and Letters of Map Revision (LOMRs). If the Project Team identifies any issues of non-compliant development in SFHAs or floodways, members can discuss those issues with the community early in the Risk MAP lifecycle. Project Team members also should review information on the number of "Submit to Rate" flood insurance policies and cases that represent a potential violation of NFIP regulations. This information can help the Project Team recommend improvements.

In regions of the United States where ice jams are typical, the Project Team should investigate historical floods for evidence of ice-jam contribution. The Project Team will coordinate their methodology with the affected communities and state as part of the Discovery process.

Project Team members are encouraged to ask for community input on planned development to determine the risk class of the study areas, with input from the state and local officials. The risk class, which can be based on factors such as county decile, population growth data, repetitive losses, and at-risk infrastructure, can vary within a watershed. The community, state, and FEMA representatives can agree to the risk classifications during the Discovery process.

Additionally, the Project Team should identify areas of increasing population and development within the 1- and 0.2-percent-annual-chance floodplains.

Project Team members should ask communities what they need to support their flood risk communication and mitigation planning. Where an enhanced Risk MAP dataset can support specific community needs, FEMA and the community will discuss the dataset as a potential element of the project.

The Project Team will also determine what kinds of Mitigation Planning Technical Assistance could be appropriate. To do this, Project Team members should request information about whether the community has received, is currently using, or intends to apply for federal grants to support mitigation planning, or whether an application for a mitigation planning grant is under review. If federal funds are being used, Project Team members should determine whether the community needs FEMA or CTP assistance or has hired a contractor to help develop the mitigation plan.

The state Historical Preservation Office may help Project Team members determine the location of relevant assets (including sites of cultural, historic, and religious significance), and Project Team members can verify or discuss this information with communities. This information is integral to the planning process and to mitigation.

6.5 Data and Information Analysis Activities

As data and information are collected, they should be analyzed thoughtfully. This analysis has two main purposes:

1. To give the Project Team a more complete understanding of the nature of flooding in the watershed/project area and the activities that communities take to address their flood risk:

   Communities often act to reduce flood hazards and risks in ways that are not directly related to the NFIP, such as stormwater management plans. Understanding flood risk from the community's perspective may make the Project Team more successful in encouraging the community to reduce its flood risk.

2. To summarize the data and information available to develop the regulatory products and Flood Risk Products.

   It is important to know what kind of data and information are available, which parts of the watershed or project area they relate to, whether they are usable and meet FEMA's quality standards for developing Risk MAP products, and whether they cover the areas with the highest flood risk. If quality data and information are available, but only for areas of low risk, the Project Team may still determine that a Flood Risk Project would not be beneficial. A project must be warranted by both risk and need.

The data, information, and analysis may be used in an optional Discovery Map, as appropriate, and the collection and analysis processes will be described in a required Discovery Report. The Discovery Map and Report are discussed in more detail in Sections 6.6 and 6.7.

6.6 Discovery Map

The Project Team may create a draft Discovery Map using the collected data and information and share it with communities and other stakeholders to facilitate discussion and collaboration about future mapping and mitigation actions in the watershed. If produced, the Project Team will bring a draft Discovery Map to Discovery Meetings to spur discussion and may provide a final Discovery Map after the Discovery Meetings.

Project Team members should include all spatial data in the Discovery Map database, so that it can be presented during the meeting. While combining certain data layers may work best to show areas of risk, all data should be available. The data and information to include on the optional Discovery Map is documented in Section 9 of Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery. A sample Discovery Map also is provided in that section.

6.7 Discovery Report

The Project Team should update the required Discovery Report as needed throughout the Discovery process. The Team should consider it a "living" resource that is just as important to the community as it is to FEMA. It should be written with the community's needs in mind, and an 8th-

grade reading level is ideal. Community officials should be able to use it to build awareness and support for reducing the community's risk.

The Discovery Report can be a key community engagement tool for the FEMA Project Team as the flood study progresses. Developing an approachable and easy-to-understand report can help establish trust and transparency at the beginning of the study process and potentially avoid misunderstandings down the line. Organize the content clearly, so that it can be easily followed. Break up copy with visuals, such as photos of local landmarks or simple graphics that explain complex concepts. Many mapping-related graphics are available on the RMD SharePoint Portal. (The CERC provider can help the Project Team develop useful and accessible Discovery Reports.)

The Project Team should include the following information in the Discovery Report:

- A list of the stakeholders contacted
- The data and information collected
- Whether the data can be used for regulatory products, Flood Risk Products, or both
- A thoughtful analysis and description of the data and information, explaining why it is relevant to the study and how it will be used or applied.

The Project Team should share an initial version of the Discovery Report with project stakeholders before the Discovery Meetings. It will contain the information listed above. After the Discovery Meetings, the Project Team should share a final version. This report should also include meeting notes, sign-in sheets, and information obtained during the meeting.

Additional information on Discovery Reports is provided in Section 10 of FEMA Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery. The Project Team can obtain a template for a Discovery Report from the Flood Risk Templates and Other Resources webpage at https://www.fema.gov/media-library/assets/documents/32786?id=7577.

7.0 Discovery Meeting

A Discovery Meeting with project stakeholders is required, but it should not be the Project Team's first contact with community officials. Rather, it is an opportunity to increase understanding, confirm priorities, and identify any remaining knowledge gaps. It is also an opportunity to build deeper relationships with communities and to help decision makers think about creating a more resilient future. If possible, the Project Team and a local champion or key influencer should co-lead each Discovery Meeting.

The Discovery Meeting is also a crucial way to get the additional data and information needed to inform the next phase of the mapping project. To accomplish this, the Project Team must understand as much as possible about the area's flood hazards and risk before the meeting. Discovery Meetings are intended to be working meetings, not FEMA briefings; the Project Team should encourage open dialogue and two-way communication with all participants.

Before preparing for the meeting, Project Teams should consider three important questions:

1. What do community leaders hope to get out of this meeting?
2. What will community officials get from FEMA at this meeting?
3. What does FEMA hope to get out of this meeting?

To answer these questions before the Discovery Meeting, the Project Team should consider a planning meeting or conference call with key stakeholders. This is also an opportunity to choose a time and place for the Discovery Meeting(s) that will allow the most people to attend and actively participate. The Discovery Meeting may be the Project Team's first formal face-to-face meeting with most, if not all, key stakeholders. Invite a broad representation of watershed/project area stakeholders. When appropriate, hold multiple Discovery Meetings to enable greater attendance and participation.

Practical tips for holding successful Discovery Meetings are included in the CERC Playbook. The Playbook also includes links to templates and tip sheets, including a tip sheet on giving successful presentations. These tools are available on the password-protected RMD SharePoint Portal.

7.1 Meeting Timing

The Discovery Meeting occurs in the middle of the Discovery Phase, after the Project Team has collected and analyzed appropriate data and information. The Project Team should work with the communities in the project area to choose a time and place. The best time for a Discovery Meeting depends on the location. For example, some communities plan to avoid the opening day of hunting season or dates before and after elections, while coastal communities often plan to avoid peak tourist season or choose months when part-time citizens can be present. During the initial stakeholder engagement, FEMA Project Officers can get a sense from state and local stakeholders for times of the day and year to avoid.

7.2 Meeting Attendees

It is vitally important that the Project Team identify and invite all appropriate stakeholders to the Discovery Meeting. However, not all the stakeholders that participated in the Discovery process need to attend the Discovery Meetings. At least one representative from each affected community or tribe should be invited and attend. A wider array of stakeholders may be appropriate, depending on the project area. Potential invitees for each project include:

- State NFIP Coordinator
- SHMO
- Community FPAs and CEOs
- FEMA Regional CRS Coordinator (when applicable)
- Local planner/economic development contacts
- Local emergency management and building officials

It may not be possible for state NFIP Coordinators and SHMOs to attend all the Discovery Meetings in their states; however, their input is invaluable, and the Project Team should talk to them before the meetings if they can't attend. The state NFIP Coordinators and SHMOs should

be able to suggest community-level participants to include. The Project Team should also follow up after the meeting with state-level partners who could not attend.

The Project Team is strongly encouraged to invite a community GIS contact; community and/or county emergency manager; and engineering, public works, and/or parks/recreation staff members, as applicable. Community governments can be organized in different ways, so the team should consider the community's organizational structure. In some watersheds, it may be possible to include representatives of other federal agencies, NGOs, and other stakeholders.

7.3 Inviting Stakeholders

The Project Team should send invitations at least 1 month before the first Discovery Meeting, with followup email messages or telephone calls to confirm and encourage attendance. The Project Team should begin planning for the Discovery Meeting during the stakeholder coordination stage. In some areas, it may benefit FEMA to send an introductory message to stakeholders to explain the process. This message could note that Project Team members will contact them for data, information, and meeting planning. This message should also encourage invited stakeholders to disseminate the meeting information to others with relevant interests in the Discovery process.

7.4 Meeting Objectives

A Discovery Meeting has the following overarching objectives:

- Engage stakeholders to start a foundation for project-long relationships.
- Understand the needs of each community and tribe within the watershed or project area.
- Introduce or enhance flood risk discussions.
- Balance local needs with FEMA resources, and plan for a possible Flood Risk Project.

Though it is better for the Project Team to meet key stakeholders before the Discovery Meeting, this may be the first time they meet in person. As a result, the Discovery Meeting represents an important step in the ongoing development of relationships between FEMA and the communities in the watershed.

A comprehensive list of Discovery Meeting objectives is included below. It is not possible to cover all of these objectives at every Discovery Meeting. However, this list includes the variety of topics that may be discussed, depending on specific community needs or characteristics:

- Discuss the importance of a Flood Risk Project to help communities understand their risk and act to reduce it.
- Emphasize that the process is collaborative, and that community input is vital to a successful flood mapping study.
- Introduce the idea of resilience and discuss the various tactics a community can use to achieve it.
- Discuss the role of community officials in raising awareness of flood risk and in achieving resilience.

- Offer the Flood Risk Communication Toolkit as resources for community leaders to use to discuss flood risks with residents.

  Toolkit: https://www.fema.gov/media-library/assets/documents/179697

  Videos: https://www.youtube.com/playlist?list=PL720Kw_OojIIUiWw2bDc-On5MjQw13E6e

- Get input from stakeholders regarding their flood risk and needs. Identify areas in need of studies, outreach, mitigation planning, risk assessments, and other Risk MAP-related products and services.
- Validate the flood risk data, documentation, and information collected from federal, state, regional, tribal, and local sources.
- Explain that if a Flood Risk Project is initiated for this watershed or project area, FEMA would produce regulatory products (e.g.., new or updated FIRM[s], FIS Report[s], FIRM database) and, if chosen, Flood Risk Products.
- Discuss FEMA's regulatory products and Flood Risk Products, the types of data and information presented by each product, and how communities can use the products to reduce flood risks.
- Discuss the critical role of mitigation planning in helping communities mitigate, prepare for, and recover from the effects of flooding and other hazards, and how up-to-date flood risk data is key to these efforts.
- Discuss community building codes and emphasize the importance of adopting the latest consensus-based hazard-resistant building codes and standards.
- Discuss the FEMA and non-FEMA programs that help communities reduce their flood risk, as well as resources for mitigation planning and assistance, such as grant programs, along with related eligibility and cycle information.
- Encourage communities to participate in the NFIP and review the benefits and responsibilities of joining. For NFIP participants, encourage compliance with requirements and participation in the CRS.
- Discuss multi-hazard issues, if necessary and appropriate, while noting that the Risk MAP program provides products and assistance focusing on flood risk.
- In a coastal community or region, discuss the ways that long-term shoreline erosion, sea level rise, and sinking land levels (subsidence) may affect them in the future. What will the community or region look like in 20 years? In 50 years?
- Discuss potential impacts of dams/reservoirs, including HHPDs, as appropriate.
- Ask attendees to see if the data and information gathered before the Discovery Meeting is valid, or if something better is available. Discuss the information collected about flood risk, mitigation plans, ongoing or planned mitigation projects, and risk assessments.
- Confirm that data-sharing agreements are understood.

- Identify people to champion goals and pass on information and find other community members or leaders to contact.
- Determine whom to communicate with as the project progresses and discuss what comes next (including how long the process is estimated to take, final products, and how they could or should be involved in the future).
- Discuss the community Building Code Effectiveness Grading Schedule (BCEGS) ratings, a classification system for building departments and process for obtaining a rating for those communities that do not have these ratings.

7.5 Meeting Messages

The Discovery Meeting messages should include the following:

- We want to talk about your community's flood risks and the fact that they may be changing. We want to listen to your thoughts and concerns about flood risk in your community and share the information we have gathered to provide a clear picture about your flood risk. We are fully committed to partner with your community in this effort.
- We want to gather local information to help make the flood maps as accurate as possible.
- We want to collaborate with you on planning, mitigating, and communicating about flood risk.

7.6 Pre-Meeting Activities

The Project Team should take the following actions and compile these materials before the Discovery Meeting:

- Coordinate with project stakeholders, in advance and consistently, to obtain data, documentation, and information to understand local flood hazards; to learn about the area's risk assessment, mitigation planning, and risk communication needs or interests; and to identify their resources (including people), assets, future plans, and the vision.
- Confirm details on the best available data, including the timing of obtaining such data; discuss data-sharing agreements; and discuss data that may be useful for mitigation plan updates and FEMA HMA grant applications.
- Prepare talking points to discuss flood hazard studies, flood risk assessments, mitigation planning, the watershed approach; and the Risk MAP project lifecycle.
- Review FEMA guidance.
- Prepare to bring information on NFIP compliance/adoption, if appropriate, such as paper or electronic copies of FEMA 495, *Adoption of Flood Insurance Rate Maps by Participating Communities*, and FEMA 496, *Joining the National Flood Insurance Program*.
- Prepare and send meeting invitations, a meeting agenda appropriate for the watershed or project area, a draft Discovery Report, and a draft Discovery Map. The invitation letter should clearly state the expectations for the Discovery Meeting, including the need for active participation by community officials and other stakeholders.

- Prepare a tribal contact list and documentation from contacting tribal officials, tribal Historic Preservation Officers, and others. (If tribal lands are included in a project area, Project Teams should coordinate with the Regional Office Tribal Liaison.)
- Compile the additional items needed when tribal nations are affected, as defined through consultation and coordination with tribal officials.
- Obtain copies of the FEMA Building Science Toolkit CD.
- Review the PowerPoint presentation associated with FEMA Building Science, titled "Integrating Building Science into Risk MAP Projects.
- Prepare information to facilitate community adoption of, and compliance with, the latest consensus-based hazard-resistant building codes and standards, and prepare talking points on the relevance of FEMA Building Science and building codes.
- Compile FEMA Regional Building Science contact information to give to the community participants.
- Obtain information on BCEGS ratings and the process for obtaining a rating, including the BCEGS Questionnaire, to give to the community participants.

7.7 Meeting Activities

During the Discovery Meeting, the Project Team listens and learns what is important to community officials and project stakeholders. Each Discovery Meeting should include an interactive, collaborative discussion. During the Discovery Meeting, the Project Team should facilitate discussions between community officials and watershed stakeholders, offer suggestions, and manage the time. Meeting participants must have a sense of ownership for the recommendations resulting from the meeting. If so, they will be more likely to take this information back to their colleagues or constituents and generate support for projects that may follow.

The Project Team may share the Discovery Map at the Discovery Meeting to provide an overall picture of flood risk in the watershed/project area. The GIS format of the Discovery Map allows a user to zoom in and out to specific areas in response to the meeting discussions. It is best to have a GIS specialist present to help in this way, but if that is not possible, Project Team members could bring printed copies of the Discovery Map if produced. Some copies should show the whole watershed/project area, and others should show highlighted areas of importance, based on the Discovery effort. Alternatively, a state, tribal, or local partner may be able to assist with the Discovery Map presentation.

The most efficient and productive Discovery Meeting will include simple documents and maps that summarize the data and illustrate the risk areas. The meeting is not the time for all stakeholders to evaluate the data independently; the Project Team should present the analyzed data and information in a logical way that allows the majority of the time to be focused on gaining a better understanding of the flood risk for all participants.

Project Team members can use the tools and templates, including an agenda and presentation, that FEMA developed for Discovery Meetings; however, the Project Team should tailor the materials for the communities they are engaging. The tools and templates are accessible through the password-protected RMD SharePoint Portal or the FEMA Project Officer.

7.8 Post-Meeting Activities

Several activities are necessary after the Discovery Meeting to finalize the Discovery effort. The Project Team should give all community and tribal participants an opportunity to review and correct any data and information collected during the Discovery process before the final Discovery Map and Discovery Report are distributed. The Project Team should add the meeting notes and other meeting information, such as attendance records, to the Discovery Report and distribute it to attendees and those who could not attend. The Project Team should keep this information on file, along with any community or stakeholder correspondence records and a community contact list that includes contacts for the counties and every incorporated community in the project area.

The Project Team should also update the Discovery Map with any additional information, including areas discussed or decisions made at the Discovery Meeting, and distribute it to communities. Project team members will also follow up with community officials, as appropriate, to determine their progress toward FEMA Risk MAP metrics.

The FEMA Project Officer will determine whether to proceed with a Flood Risk Project, given the data, documentation, and information the Project Team gathered during the Discovery process. As mentioned earlier, Flood Risk Projects may include mapping, risk assessment, Mitigation Planning Technical Assistance, and/or other assistance, such as outreach and communication planning. A project may be appropriate in an area, even if the effective flood hazard information is found to be valid, because Mitigation Planning Technical Assistance is needed. Alternatively, if the FIRMs are valid, the risk is low, and the watershed communities are involved in actions to reduce their risk, a Flood Risk Project may not be needed. If the communities have no interest in the Risk MAP program, efforts may be better spent in areas where the products are desired.

If the engineering model or models that will be used to update the flood hazard information shown on the FIRM(s) are known at this stage, to comply with Section 216 of BW12, the Project Team must notify each community affected by the update of the planned model or models to be used and provide the community with (1) an explanation of why the model or models are appropriate, and (2) a 30-day period (beginning on the date of notification) to confer with FEMA regarding the appropriateness of the model or models to be used. Project Team members should refer to Guidance Document No. 103, Guidance for Stakeholder Engagement: Preliminary Production for more detailed information about implementation, best practices, and associated tools and templates. The Project Team should file copies of all communications with the community CEO and FPA regarding the models in the community file discussed in Section 11.0 of this document.

8.0 Automated Engineering

If a Flood Risk Project is appropriate for the watershed/project area and the project involves the issuance of new or revised regulatory products (i.e., FIRM(s), FIS Report(s), or a FIRM database), the Project Team should coordinate with the affected communities to discuss anticipated changes to the flood hazard and risk depicted on the FIRM and in the FIS Report. This engagement will help set community expectations regarding map revisions and their effects on existing structures and help refine the scope of the Flood Risk Project.

The Project Team should use the information collected during the Discovery process, including mapping needs, Community Needs Management System information, and information collected

on new development to inform this engagement. For example, if the information collected during the Discovery process and discussed at the Discovery Meeting(s) reveals that significant development after the original flood study has increased flood discharges, then the discussion should elaborate on areas where the flood elevations are likely to increase if a new study is initiated. This engagement occurs before the Project Team initiates a Flood Risk Project. The discussions must include an explanation of the expected impacts of potential study results (i.e., increase/decrease in flood hazard area delineations, increase/decrease in flood elevations). Those expectations will also be documented in the Project Charter, if appropriate. The Project Team should develop the Project Charter concurrently through coordination with community officials and tribal entities (when appropriate).

In coastal areas where an updated surge model is available, the Project Team should use data from the model to foster these discussions with communities. In cases where the surge study is completed before Discovery, the Project Team should ensure that this information is reviewed and discussed at Discovery Meetings.

9.0 Scope Refinement

The Project Team must develop a scope of work for the Flood Risk Project in coordination with community officials, tribal entities (if appropriate), and state partners. Several standards related to regulatory product production could be discussed with communities during the process to refine this scope of work. For instance, because all regulatory floodway changes must be coordinated with affected community officials and other stakeholders as early as possible, the scope refinement process may be a good time to start these conversations if a regulatory floodway change is expected. Other examples are listed below:

- The Project Team should engage communities to determine their preference on a vector-based map versus a raster-based map.
- Communities should discuss with FEMA whether any reservoirs are in the watershed/project area and how they are to be analyzed.
- If a community wants to use local transportation features data in place of the default U.S. Census Bureau Master Address File /Topologically Integrated Geographic Encoding and Referencing transportation data, the Project Team should discuss the format and structure of the data with the community.
- To calculate regulatory floodways using methodologies other than steady-state, one-dimensional models, the FEMA Project Officer and the affected communities and states with floodway authority must approve the approach in advance.
- For coastal FIRM updates, the Limit of Moderate Wave Action (LiMWA) must be included in the FIRM database if it has been calculated as part of a coastal Flood Risk Project, and it will normally be shown on the affected FIRM panels. Communities can request not to have the LiMWA shown on the FIRM, but certain timelines and requirements apply. Scope refinement would be a good time for the Project Team to introduce the LiMWA concept, describe its purpose, and share information with the community.
- In all cases, regulatory products and Flood Risk Products must be based on hydrologic and hydraulic analyses or coastal analyses using existing ground conditions in the

watershed and floodplain, and multiple-profile and floodway runs must have the same physical characteristics in common for existing ground conditions. However, a community may choose to include flood hazard information that is based on future conditions on a FIRM (shown as shaded Zone X); in an FIS Report; or in Flood Risk Products, in addition to the existing-conditions. Scope refinement may be a good time to discuss whether a community would be interested in showing future conditions and whether data exist to support showing such information on a FIRM.

- Areas of shallow flooding must not have modeled/computed regulatory floodways due to the inherent uncertainties associated with their flow patterns. However, communities can choose to have administrative floodways for such areas. Scope refinement is a good time for the Project Team to discuss whether a community is interested in having an administrative floodway shown on the FIRM.
- Because any existing mismatches in floodplain and flood hazard information between communities and counties must be resolved as part of a FIRM and FIS Report update, scope refinement is a good time for the Project Team to identify such locations and discuss with the communities the best way these mismatches can be resolved.
- Where ice jams occur, the Project Team must take backwater effects into account. The Project Team should coordinate with the community to determine the appropriate methodology for the floodway designation in areas mapped with an ice-jam analysis. The Discovery process provides an opportunity to acquire as much data as possible concerning ice-jam events in the community, on the streams being studied, and in the region. Scope refinement is a good time for the Project Team to discuss these issues with communities.
- The FEMA Regional Risk Analysis Branch Chief must provide written approval regarding the use of an alluvial fan methodology before a full analysis is begun. To inform this decision, the Project Team must provide sufficient field data and analysis and records of community engagement relative to the scope and methodology.
- If a revised FIS Report will be prepared, an assessment of the current, effective FIS Report may be helpful in determining the level of effort needed. A section-by-section review of the effective FIS Report may be useful, and community input is valuable for this process. Scope refinement is a good time for the Project Team to obtain this input from community officials.

FEMA's goal is to have the entire inventory of flood hazard products referenced to the North American Vertical Datum of 1988 (NAVD88), and several standards are related to datum conversions. If regulatory product revisions are planned, datum conversion may be an appropriate topic for the Project Team to discuss during scope refinement with communities that have an effective FIRM referenced to the National Geodetic Vertical Datum of 1929. The Project Team should explain the datum conversion process to the community and clarify why conversion to NAVD88 is a recommended.

The Project Team also should inform community officials that FEMA, in collaboration with the National Geodetic Survey, has developed many datum conversion protocols, all designed to ensure that all converted flood elevations retain their original value to within 0.25 foot, and to

ensure that no existing flood hazard determinations (primarily Letters of Map Amendment and Letters of Map Revision Based on Fill) would change as a result.

The Project Team also should inform community officials that full documentation of the datum conversion will be shared with them during the process and will be documented in the Technical Support Data Notebook after the project has been completed. For communities that do not wish to have their FIRM and other products converted to NAVD88, FEMA may grant a waiver; however, the Project Team should explain the negative impact this decision will have on the ability to revise the products in the future.

FEMA also has some standards associated with the types of data collected and how these data can be used. For instance, locally provided, sourced, or validated building footprint, location, and/or population data are the only acceptable data sources for populating structure and population count attributes within the Changes Since Last FIRM dataset.

To the extent that these data sources will be used for the Flood Risk Project, the Project Team should discuss this standard with community officials who may be providing such information. The Project Team should also inform the community officials that FEMA must be able to distribute the base map data and floodplain information freely to the public in hardcopy and digital formats. Therefore, if community-supplied base map data will be used, this should be discussed during scope refinement.

To validate and revise the preliminary list of potentially useful geospatial data for use in a Flood Risk Project, the Project Team should invite comments on the list from members of the geospatial data community interested in the geographic area of the project. Also, Project Team members should communicate with the appropriate federal, state, and local entities.

Many of the Flood Risk Datasets require a significant amount of data collection and coordination, but rely on other federal, state, and local sources. An outreach process in which the Project Team familiarizes stakeholders with the type and format of data sought is important.

A community CEO or FPA may provide feedback on the engineering model or models that will be used to update the flood hazard information shown on a FIRM during the stakeholder engagement process discussed in Subsection 5.1.2. The Project Team must notify each community affected by the new model or models to be used, in writing, via hardcopy or email message, to satisfy the requirements of SID 620.

FEMA must be notified of any potential floodplain management violations identified through the submittal of new or revised flood hazard data. If data are submitted or violations are uncovered through the Discovery process, the Project Team should notify appropriate FEMA Regional Office staff of the issue(s) so the appropriate Regional office staff can conduct appropriate coordination with the state and community.

The Project Team must share the final, purchased scope of work with project stakeholders.

The Project Team should maintain all project documents, including letters; transmittals; memorandums; general status reports and queries; documentation of technical issues; a narrative that summarizes the scope, assumptions, and issues; and any information that may be useful for

everyone working on the Flood Risk Project or subsequent users of the data generated during the Discovery process.

In addition to scopes of work for mapping and engineering activities, scopes of work for community engagement and risk communication should be developed. These will cover engagement activities for the next phase or phases of the Risk MAP lifecycle. The Project Team should tailor these activities to the needs of each community, include ongoing communication and dialogue with key stakeholders, and focus on (1) increasing awareness of and belief in local flood risks, (2) establishing the value of mapping data as a tool for increasing local resiliency, and (3) increasing the propensity of communities to commit to mitigation actions.

9.1 Project Charter

If a Flood Risk Project will be undertaken in the watershed/project area, the Project Team, community, and other key stakeholders could use the Project Charter as a means of documenting the scope of the project and other items. The Project Team should develop a Project Charter in coordination with stakeholders in the watershed/project area, and all parties should sign it where possible. The Project Team should obtain the Project Charter template from the Project Officer or other FEMA Regional Office staff. The Project Charter should be renamed if the term “charter” is not acceptable to community officials.

The Project Charter is not a binding agreement, but a tool to convey a clear understanding of the project scope and its impact in a community. The Project Charter also is a way for the Project Team to assist communities in developing a sense of “ownership” in the Flood Risk Project. Therefore, while not required, the Project Team should encourage community officials to sign and return a final Project Charter. If used, the Project Team should encourage as many affected communities as possible to sign the Project Charter.

10.0 Finalizing Discovery

The goals of stakeholder engagement during the Discovery process are to understand the needs of the communities in a watershed/project area, introduce or enhance flood risk discussions, balance FEMA resources with a plan for a possible Flood Risk Project, and coordinate with project stakeholders to define the project scope. For watersheds/project areas that will not receive a Flood Risk Project, the Discovery process is finalized after FEMA has delivered the final Discovery Report and Discovery Map to the affected communities. For watersheds/project areas for which Flood Risk Projects will be performed, the Discovery process is finalized after the automated engineering analysis and communication (if required) have been completed, and a project scope of work and Project Charter, if used, have been prepared. In accordance with the Americans with Disability Act (ADA) and Section 508 of the Rehabilitation Act to ensure that all people have equal access to communication, reports that will be posted to a government website should be made 508 compliant prior to posting.

Additional information on the project scope of work and Project Charter is provided in Section 13 of Guidance Document No. 5, Guidance for Flood Risk Analysis and Mapping: Discovery.

11.0 File Maintenance

To be compliant with Section 66.3 of the NFIP regulations (44 CFR 66.3), the Project Team needs to maintain community files for the communities affected by the project, following protocols established by the FEMA Regional Office. The Project Team should place records of engagement activities (e.g., letters, email messages, memorandums, meeting notes) during the Discovery Phase in the community files. The Project Team should add the meeting notes and other Discovery Meeting information distributed to Discovery process participants, along with a community contact list that includes contact information for the county and every incorporated community in the watershed/project area, in the community file.

Any letters or memorandums used to implement the requirements of Section 216 of BW12, as discussed in Subsection 5.1.2, should also be included in the community file. If, for any reason, community files had not been established previously, the Project Team should establish these files at this time, following protocols established by the FEMA Regional Office.