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Title: Risk Map Meetings Guidance

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Approval: Paul Huang
Branch Chief, Data and Dissemination Management Branch
Risk Analysis Division
Federal Insurance and Mitigation Administration

A handwritten signature in black ink, appearing to read "Paul Huang".

Operating Guidance represent program best practices. This guidance is intended to support existing program standards and provide effective, efficient approaches to the relevant tasks. However, nothing in Operating Guidance is mandatory, other than program standards that are defined elsewhere and reiterated in the operating guidance document. Alternate approaches that comply with program standards and effectively and efficiently support program objectives are also acceptable.

Background: This guidance includes information on implementing the vision for Risk Mapping, Assessment, and Planning (Risk MAP) community engagement throughout each phase of the Risk MAP timeline, including the Discovery Meeting, the Flood Risk Review Meeting, the Resilience Meeting, and the CCO/Open House meetings.

Issues: In order to reach Risk MAP goals, enhanced community engagement is required.

Actions Taken: This document provides best practices for conducting community engagement for Risk MAP projects.

Supersedes/Amends: This is entirely new Operating Guidance.

Attachments:

Risk MAP Meetings Guidance

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Risk MAP Meetings Guidance

July 20, 2011



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Operating guidance documents provide best practices for the Federal Emergency Management Agency's (FEMA's) Risk MAP program. These guidance documents are intended to support current FEMA standards and facilitate effective and efficient implementation of these standards. However, nothing in Operating Guidance is mandatory, other than program standards that are defined elsewhere and reiterated in the operating guidance document. Alternate approaches that comply with program standards that effectively and efficiently support program objectives are also acceptable.

1. Introduction

This document provides guidance to Federal Emergency Management Agency (FEMA) Regional Office staff, contractors, and Cooperating Technical Partners (CTPs) (hereinafter referred to as “project teams”) in engaging stakeholders throughout the Risk Mapping, Assessment, and Planning (Risk MAP) project timeline, including conducting Risk MAP meetings.

The Risk MAP vision includes collaborating with state, local, and Tribal entities throughout the watershed to deliver quality data that increases public awareness and leads to mitigation actions that reduce risk to life and property. To achieve this vision, FEMA has transformed its traditional flood identification and mapping efforts into a more integrated process of identifying, assessing, communicating, planning, and mitigating flood-related risks. The goals of Risk MAP are:

- Goal 1: Address gaps in flood hazard data to form a solid foundation for flood risk assessments, floodplain management, and actuarial soundness of the National Flood Insurance Program (NFIP).
- Goal 2: Ensure that a measurable increase of the public’s awareness and understanding of risk management results in a measurable reduction of current and future vulnerability to flooding.
- Goal 3: Lead and support States, communities, and Tribes to effectively engage in risk-based mitigation planning that results in sustainable actions that reduce or eliminate risks to life and property from natural hazards.
- Goal 4: Provide an enhanced digital platform that improves management of limited Risk MAP resources, stewards information produced by Risk MAP, and improves communication and sharing of risk data and related products to all levels of government and the public.
- Goal 5: Align Risk Analysis programs and develop synergies to enhance decision-making capabilities through effective risk communication and management.

To achieve these goals, watershed stakeholder coordination and engagement is necessary throughout the Risk MAP project timeline. Risk MAP’s community engagement approach guides communications by identifying community engagement opportunities that occur during each Risk MAP project from the time FEMA sequences a project through the final meeting. This approach will help create partnerships with communities, help set and document clear project objectives early on, and keep communities apprised of the Risk MAP project status.

Risk MAP projects may include revising Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) reports, providing risk assessments in areas with updated engineering analysis, and/or Mitigation Planning Technical Assistance.

This document provides guidance related to the required and strongly recommended Risk MAP meetings, as well as information regarding engagement before, between, and following these meetings. We have placed a particular emphasis on stakeholder engagement during the Discovery phase of the timeline, as it is during this phase that initial relationships will be established.

Tools and templates for use by FEMA, contractors, and CTPs in conducting required meetings (e.g., invitations, announcements, agendas, etc.) are available through coordination with FEMA.

1.1. Coastal Considerations

Coastal projects may have a longer timeline than watershed Risk MAP projects. Appendix I of FEMA's guidelines outlines the extended timeline for pre-Discovery and Discovery efforts related to coastal projects.

1.2. Tribal Considerations

When Tribal lands are included in a watershed, consultation with Tribal Nations will be coordinated with the Regional Offices' Tribal Liaison and the Risk Analysis and Floodplain Management and Insurance Branches. The affected Tribes should be consulted as to whether or not they want to be included in other planned community engagement efforts and Risk MAP meetings or if separate meetings with them would be more appropriate. This will depend on established working relationships between the Regional Offices and the Tribes within each Region, and other factors. For instance, if a Tribe participates in a multi-jurisdictional hazard mitigation plan, it would be appropriate for them to participate in the Resilience Meeting.

Even if a Tribe is determined not to have the land use authority needed to implement the NFIP, Discovery is an opportunity to educate the Tribe regarding the NFIP and other mitigation programs, such as the benefit of developing Hazard Mitigation Plans. During Discovery, a determination must be made on whether the Tribe meets the NFIP definition of a community and whether it should, or should not, be included in a potential flood risk project.

Only FEMA Regional Office staff should work directly with federally-recognized Tribes, unless specific arrangements and coordination have been made to allow mapping partners or other contractors to directly contact a Tribe. Within this document, the term "communities" includes Tribes as appropriate.

2. Planning and Budgeting

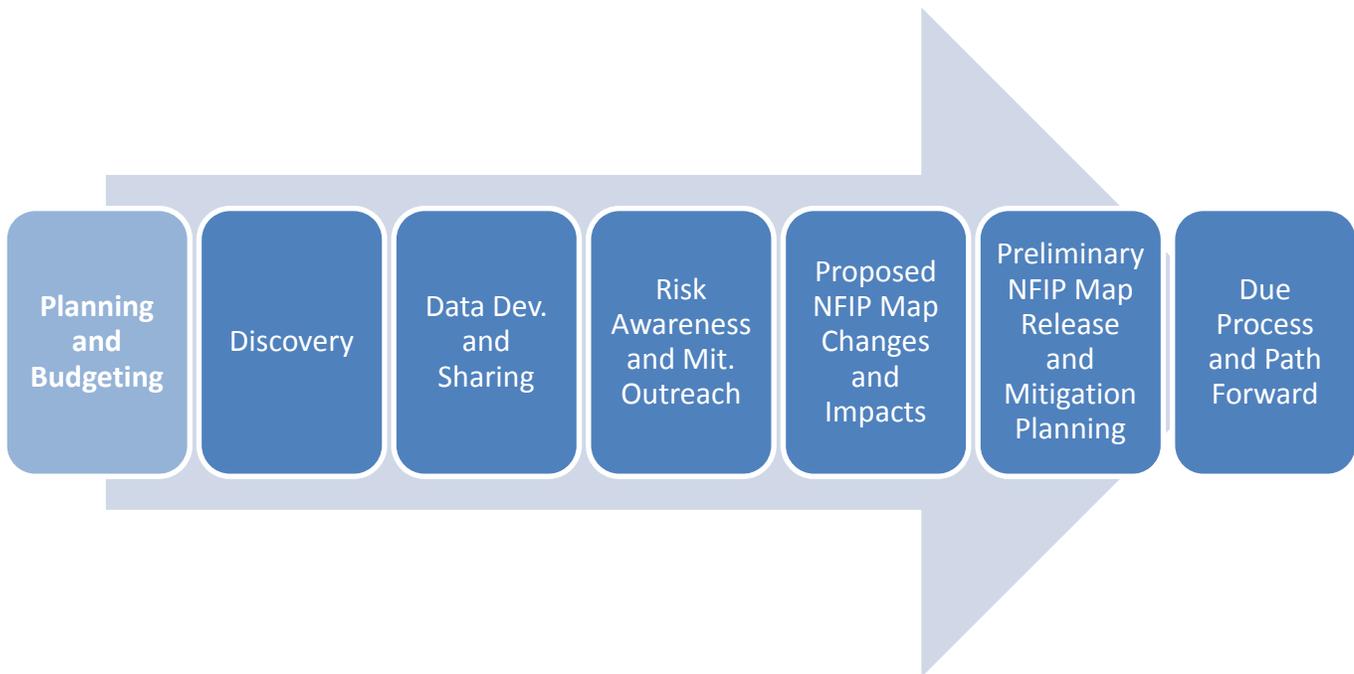


Figure 1. Risk MAP Project Phases

The objectives of the Planning and Budgeting phase are to prioritize watersheds for review and to develop project budget estimates. Activities undertaken by FEMA include developing Regional budgets and performing watershed prioritization. This phase includes primarily FEMA-only activities, with minimal contractor support.

Coordination with Federal, Tribal, and state-level partners should occur on a state or Regional level during this phase, while watersheds of concern are being prioritized and sequenced. These partners may include:

- National Flood Insurance Program (NFIP) Coordinators
- State Hazard Mitigation Officers (SHMOs)
- Bureau of Indian Affairs (BIA)
- U.S. Environmental Protection Agency (EPA)
- U.S. Forest Service (USFS)
- U.S. Geological Survey (USGS)
- State Historic Preservation Office (SHPO)
- State dam safety officials
- State transportation departments
- National Weather Service (NWS)
- Natural Resources Conservation Service (NRCS)
- State Mitigation Planners

- Community Rating System (CRS) coordinators and Insurance Services Office (ISO) specialists
- State and Federal Agencies that own and/or operate levees or dams
- U.S. Army Corps of Engineers (USACE) District, Division, and/or Flood Risk Management Program representatives
- Others, as appropriate

Project teams should consider these entities FEMA partners, rather than simply stakeholders, and therefore the coordination should be continuous and ongoing. Discussions with state officials and other Federal agencies (OFAs) may include discussions of the watersheds in the Region and priority project areas based on their local knowledge.

Project teams should work with the State NFIP Coordinator and SHMO to identify organizations that may be interested in and valuable to the project, including regional watershed or planning districts and Federal agencies with ongoing or planned projects. There may also be national organizations with ongoing or planned efforts. OFAs such as USACE, National Oceanic and Atmospheric Administration (NOAA), NWS, EPA, USGS, Bureau of Reclamation (USBR), NRCS, Bureau of Indian Affairs (BIA), and others have programs that support communities in reducing their flood risk. Some of these programs include increasing community awareness and building understanding of flood risk to spur mitigation planning and risk-reduction action, which is also a goal of Risk MAP.

Project teams should also engage other organizations such as non-profits and groups that focus on land or water conservancy on a state or Regional level during Planning and Budgeting. State, Regional, Tribal, or national groups that may have data or other contributions might include:

- Association of State Floodplain Managers
- National Association of Flood & Stormwater Management Agencies
- National Emergency Management Association
- American Planning Association
- National Flood Determination Association
- Nature Conservancy
- American Rivers
- American Water Resources Association
- American Society of Civil Engineers
- American Public Works Association
- Others as appropriate

These organizations may have watershed- or state-wide data available. Project teams should collect the data and information at one time on a state or Regional level to assist in project sequencing. Because it is costly and inefficient, collecting the same information from these organizations for each watershed is highly discouraged. The project team should consider these organizations partners in Risk MAP because they can help to communicate flood risk and support flood risk reduction activities.

FEMA has developed tools and templates to assist project teams in engaging OFAs, non-profits, and associations.

3. Discovery

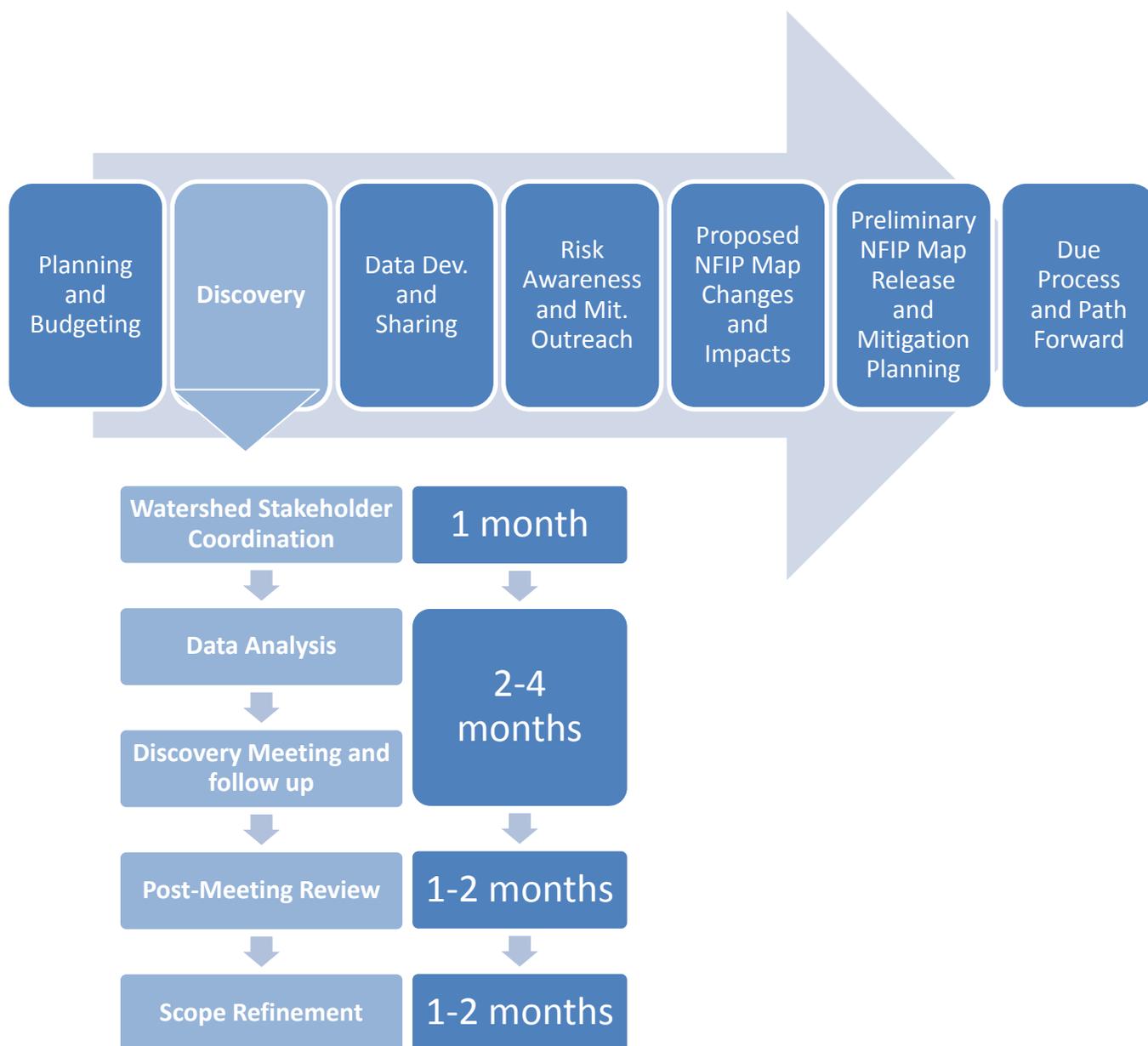


Figure 2. Discovery Process Steps.

The objectives of Discovery are to engage watershed stakeholders, understand the needs of the communities in a watershed, introduce or enhance flood risk discussions, and balance FEMA’s resources with a plan for a possible Risk MAP project. Discovery activities include developing a community/watershed engagement plan (templates available), gathering data and information, developing a Discovery Map and Discovery Report, engaging watershed stakeholders at a Discovery Meeting, and if it is decided that a Risk MAP project may be appropriate, engaging with

communities regarding expected changes, defining the scope of the Risk MAP project, and producing a Project Charter if a project will be initiated.

The steps in the Discovery process are outlined in Figure 2, and guidance for Risk MAP Discovery is included in Appendix I of FEMA's guidelines and standards. The guidance provided in this document is supplemental to Appendix I, *Discovery*. This document is intended to provide ideas and options for Regional or CTP implementation of Discovery.

It is important to note that the Discovery effort on a watershed should be approximately 5-10% of the eventual Risk MAP project cost. It is important to "right-size" Discovery for the risk and need associated with the potential project. Although the project team would not know the project cost until after all of the Discovery activities have been completed, the Regions should use their best judgment at the time of Planning and Budgeting based on input from State NFIP Coordinators, SHMOs, prioritization data, other resources, and their own experience. Discovery efforts in a large, urban watershed with many communities that have Hazard Mitigation Plans will be a larger effort than a small watershed with few communities and no Hazard Mitigation or other plans. Any Discovery efforts that are less than 5-10% of the eventual project cost are likely inappropriate for performing Discovery, whereas efforts that are greater than 10% of the total expected project cost may only provide diminishing returns.

3.1. Stakeholders

Although coordination with state and Federal-level partners occurs during Planning and Budgeting, coordination with communities and other stakeholders begins in, and is a very important component of, Discovery. During the initial coordination with watershed stakeholders, the project team will collect data and information that will help project teams to:

- Understand the watershed in a more comprehensive and holistic way as opposed to the NFIP's historical emphasis on mapping and engineering study needs;
- Determine the level and types of mitigation planning and other assistance (such as outreach and communications) that may be needed in the watershed (see *Risk MAP Guidance for Incorporating Mitigation Planning Technical Assistance and Training into Risk MAP Projects*);
- Determine the capabilities of watershed communities, including Geographic Information Systems (GIS) capabilities, in order to determine appropriate assistance in possible future Risk MAP product deployment;
- Identify data that may be used in Risk MAP products, both regulatory (FIRMs and FIS reports) and non-regulatory (Flood Risk Database, Flood Risk Report, and Flood Risk Map); and
- 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 Risk MAP datasets).

Project teams may need to coordinate with several different officials or offices during Discovery. Some of these groups are described below. In drawing together this diverse group, the project team should be able to clearly articulate why each of these stakeholders should participate. Project teams should be aware of what each stakeholder can contribute to the effort, and what each takes

away. After putting together an initial contact list using community websites, FEMA's Community Information System (CIS) contact lists, etc., the project team may find it helpful to refine the list with the State NFIP Coordinator, SHMO, and representatives of larger communities in the watershed.

Local Officials: The project team must engage at least one representative from each affected community during Discovery, but a broader array of stakeholders is one of the guiding principles for engaging communities under Risk MAP. For example, if a community's parks department is responsible for drainage system maintenance, then the project team should include the park's department in the watershed stakeholder coordination efforts, as drainage systems are directly related to flooding and flood risk. If there is a lot of planned development in the community, then it would be appropriate to include the community engineer or code official as they will review development plans and can ensure that flood risk isn't increased based on development patterns. The Floodplain Administrator (FPA) may assist in the effort to identify the appropriate community leaders and officials. The FPA likely has contact information for local organization leaders and officials like city engineers, planners, or GIS specialists that may be beneficial to the Discovery effort.

In addition to the Chief Executive Officers (CEOs) (e.g., mayors, county/parish judges, county executives, board of supervisor chairs/presidents), FPAs, CRS coordinators (if applicable), local planners or economic development contacts, GIS specialists, and emergency managers are all valuable community representatives to contact during Discovery. Other valuable representatives may include:

- City/town/borough councils
- Hazard mitigation planners and officials involved in implementation (few communities have a designated hazard mitigation planner; project teams should use the mitigation plan to identify those involved in the planning effort for engagement in Discovery and other stages of the RiskMAP process)
- Lead community planners
- Congressional staff, if appropriate
- State-level elected officials, if appropriate
- Other community representatives identified by the stakeholders

Business Community: When there is known flood risk in areas of the watershed that have significant business and commercial districts, the project team may find it valuable to engage local economic development and commerce representatives during Discovery. These groups may have data to offer and would benefit from an understanding of flood risk, including the increased risks of putting more businesses in areas subject to flood hazards and what that would mean to community rebuilding efforts if a flood disaster occurs. These groups may also be interested if the risk is primarily in residential areas, because flooding in those locations will affect their customers and employees. It may also be helpful for these groups to learn more about the risk so they can make safe and educated decisions. The local Chamber of Commerce may be a beneficial resource for this effort.

Non-Profits and Non-Governmental Organizations (NGOs): Project teams should also consider including non-profits and NGOs that focus on land or water conservancy, flood

risk management, emergency management, or other related topics. State or watershed groups that may have data or other contributions might include regional watershed organizations, planning districts, or grassroots watershed groups. Additionally, associations such as the local chapters of American Public Works Association, American Water Resources Association, American Society of Civil Engineers, and others can provide valuable insight and data regarding flooding sources and local flood risks. Other groups may also be appropriate in some watersheds and may include local citizen groups and others.

Communities engaged in mitigation planning activities may be holding meetings that can be held in conjunction with Discovery meetings to maximize effectiveness and reduce the burden on affected stakeholders and officials. Stakeholder engagement may also be coordinated in conjunction with mitigation plan development, maintenance, and update activities. For example, some communities post their plans online for review and comment, especially when they participate in a multi-jurisdictional plan. Similarly, there may be mitigation planning web pages that keep communities informed about plan maintenance and update activities that can be leveraged and used throughout the Risk MAP process, starting with Discovery.

Before contacting any local officials for Discovery, project teams should mine community websites to gather as much publicly-available data as possible. Examples include:

- The organization of the community and the various departments and divisions, including their roles and responsibilities
- Planning documents (e.g. Hazard Mitigation Plan, Emergency Management Plan, etc.)
- Stormwater ordinance, master plans, maps, etc.
- Contact information for community officials
- List of any levee districts or drainage districts, district contact information, levee maintenance plans, or drainage master plans
- Floodplain ordinances
- Other various pieces of information

A review of a community's website may provide an overview of their floodplain, stormwater, mitigation, and emergency management activities and the organizational structure of a community, and should serve as a guide to determine community contacts for Discovery. Project teams should gather information that will provide insight into the production of regulatory and non-regulatory Risk MAP products, and into a community's risk communications and flood risk reduction actions. Many stormwater or floodplain management activities are part of a community's day-to-day routine; some of these activities support flood risk reduction but do not necessarily correlate to the NFIP and therefore may not be known to project teams.

Contact with watershed stakeholders must be a two-way communication (phone call, web meeting, in person as opposed to a letter or email with no two-way follow-up). When the initial contact with a community is made, the project team member should explain the Risk MAP program to the local official, discuss the community's flood and mitigation programs and efforts, request data, and discuss setting up the Discovery Meeting. Additionally, project teams should listen to the local officials about community concerns related to flood risk, everyday activities that they conduct that may reduce flood risk, and any other related information that they may share. This communication will likely be needed with multiple community officials, as the FPA may not have complete insight into activities undertaken by other community departments and programs. This is an opportunity

for the project team to confirm the information that was gathered prior to community contact (e.g., during Planning and Budgeting, website review, etc.).

Community officials or other stakeholders may suggest or offer a location for the Discovery Meeting. Note that, in some cases, it may be appropriate to hold multiple Discovery meetings. In these cases, the project team should invite all watershed stakeholders to all of the meetings although it would generally be expected that each stakeholder would only attend one of the meetings. This will increase transparency into the process, encourage watershed-wide communication and awareness, and support watershed risk and mitigation planning concepts. Likewise, the project team should include meeting notes from all Discovery Meetings in the Discovery Report, which the project team will share with all of the watershed stakeholders.

Many stakeholders could participate in Discovery. It is likely that the project team will contact multiple community officials more than once during this process. However, not every contact will be made by phone during Discovery; other forms of communication such as email, letters, and other practices will also be used. FEMA has developed tools and templates to assist project teams in engaging watershed stakeholders including assessments and questionnaires, letter and email templates, and other items. Project teams are encouraged to use the tools and templates as appropriate for the watershed or project, and to revise or change them as necessary.

Project teams should review the *Risk MAP Action Measure Fact Sheet*, and *Action Measure Data Collection Sheet*, which captures the extent to which Risk MAP Communities are moving down the path to taking action to reduce risk from flooding. Discovery is an opportunity to discuss Risk MAP goals with communities and Tribes and to begin collecting information that will help identify Risk MAP successes. Project teams should discuss with communities and Tribes what mitigation actions are appropriate and, most importantly, what information, resources, etc., would help the community or Tribe undertake those actions.

3.2. Data and Information Collection

One of the goals of the stakeholder coordination effort is for the project team to become familiar with the watershed. This includes information on the communities' flood hazards, flood risks, and stormwater and floodplain management activities (such as public works or parks department activities). This also may include the collection of some socioeconomic data, information about economic drivers in the watershed, and other information. Project teams may need to plan their community engagement strategy using this information.

The data collection activities will not only help support the Risk MAP products (regulatory and non-regulatory), but will also provide project teams with a context and background to make decisions on the appropriate Hazard Mitigation Technical Assistance and support the development of a practical and effective communication and outreach plan that best suits each community.

Stakeholder coordination will help determine whether the local community has a comprehensive plan, if the hazard mitigation plan is coordinated with the community's comprehensive plan, whether the local government has experience with flood disasters and flood disaster recovery, and whether the community coordinates floodplain management programs with programs for management and planning of open space. Stakeholder coordination will also help determine if the community has planning staff or a planning/zoning commission and other mechanisms, such as

ordinances, administrative plans, or other programs to mitigate against flood loss and contribute to effective administration of floodplain and stormwater management.

Project teams should gather information about daily activities and actions that communities take to reduce stormwater runoff, maintain channels, and other activities. These activities may support managing or reducing flood risk and therefore are important pieces of information for understanding risk in the watershed. In addition, this information will help project teams to determine how best to assist communities in incorporating flood risk communication, mitigation planning, and risk reduction into the actions that they perform as a matter of routine. This information will also help project teams to discuss opportunities for CRS candidates or CRS classification improvements when appropriate.

Project teams should also review historical information on community participation and compliance in the NFIP program. This information will contribute to an understanding of past relations between the community and FEMA, and support a project team's insight into a community's activities and efforts towards flood risk reduction. A major activity to reduce flood losses is participation in and full compliance with the NFIP. Some compliance issues that may be of use for Discovery efforts include physical changes in the Special Flood Hazard Areas (SFHAs) or floodways without Conditional Letters of Map Revision and Letters of Map Revision. If encroachment issues are identified, project teams can discuss the related compliance issues as early as possible in the Risk MAP process. Information regarding the number of Submit to Rate policies, and existing Letter of Map Change violation cases should also be reviewed. This information can help project teams to make recommendations for improvements.

Project teams may use 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 the factors such as county decile, population growth data, repetitive losses, and at-risk infrastructure, can vary within a watershed. The risk classifications can be agreed to by the community, state, and FEMA during Discovery.

Project teams should ask communities and Tribes what their flood risk communication, management, and mitigation planning needs are. Where there are specific community needs that can be supported with an enhanced Risk MAP dataset, FEMA and the community will discuss the dataset as a potential project element.

In order to help determine what kinds of Mitigation Planning Technical Assistance would be appropriate in a watershed, project teams should also request information about whether the community or Tribe has received, is currently using, or intends to apply for Federal grants to achieve mitigation planning, including whether an application for mitigation planning grants is under review. If using Federal funds, project teams should determine whether the community or Tribe hires a contractor to assist with the development of mitigation plan or whether they need FEMA or CTP assistance.

The SHPO may help project teams to determine where assets (including sites of cultural, historic, and religious significance) are within a watershed, and project teams can verify or discuss this information with communities. This information is integral to the planning process and to mitigation.

Several of the valuable data and information types and sources are listed below. Much of this data is available in FEMA data systems, through OFAs, or on the internet. Note that the project team

should collect some of the data and information as described in Planning and Budgeting – in one pass, if possible, for all areas of a state or Region.

To Be Collected/Consulted Before Consultation with Communities

- Coordinated Needs Management Strategy (CNMS) information
- Community Assistance Visit (CAV)/Community Assistance Contact (CAC)
- Community Rating System (CRS) status
- Disaster history or history of disaster declarations
- Disaster high water marks (HWMs)
- Information on existing dams and/or levees
- Mid-term Levee Inventory (MLI)
- Individual Assistance (IA)/Public Assistance (PA) information
- Hazard Mitigation Assistance Program (HMA) grants received
- Letters of Map Change (LOMCs)
- Flood insurance claims and policies
- Available topographic data
- Average Annualized Loss (AAL) data
- Gauge data/locations
- Structure information (bridges, culverts)
- Information obtained from researching other Federal agencies, non-profit organizations, NGOs, and other sources such as universities
- Existing or potential Endangered Species Act (ESA) issues

To Be Collected Through Consultation with Communities

- Confirmation of risk classes
- Information on new construction of culverts and bridges
- Information on new levees or levees not shown on map (and condition, if known)
- Dams (locations, condition, and classification, if known)
- Information on areas of recent development
- Development plans
- Ongoing or future topographic acquisition efforts
- Community plans to alleviate flooding
- Political issues between communities that may affect watershed studies
- Day-to-day stormwater management activities
- Structure information
- Hazard mitigation plans
- Structural and flooding issues not represented on effective NFIP maps
- Risk input data
- Information from dam Emergency Action Plans (EAPs)
- Field data
- Building footprints
- Information on local communication capabilities and needs
- Information on mitigation actions, projects, and plans
- Information on the economic impacts of a potential project
- Existing floodplain studies
- Information on local GIS capabilities

If Areas of Mitigation Interest (AOMI) will be ordered, complete the AOMI questionnaire:

Areas of Mitigation Interest (AOMI) Questionnaire

One of the primary sources for FEMA to collect data for the Areas of Mitigation Interest is from our local partners during the flood study process. To accomplish this, please let us know if you have the following information which we will coordinate with you to collect (answer “yes” or “no”):

- _____ Local Hazard Mitigation Plan
- _____ Community Rating System (CRS) Floodplain Management Plan
- _____ Local Comprehensive Plan and/or Land Use Plan
- _____ Regional Watershed Plans
- _____ Coastal plans including USGS long-term erosion maps, Coastal Zone Management Plans, beach renourishment plans, and/or coastal restoration plans
- _____ Sustainability Plans
- _____ Habitat Conservation Plans
- _____ Completed or In Progress Hazard Mitigation Projects
- _____ Neighborhoods or Roads that Receive Repetitive Flooding
- _____ CRS Activities that may include higher ordinance standards, open space purchase, zoning restrictions in hazardous areas
- _____ Any known undersized culverts or narrow bridge openings that cause water to ‘back up’ and flood
- _____ Areas of historical flooding
- _____ GIS Data Layers to include:
 - _____ Building Footprints or Parcel Data
 - _____ Administrative/Jurisdictional Boundaries and Transportation Routes
 - _____ Hydrography
 - _____ Topographic or Survey Data
 - _____ Essential Facilities
 - _____ Locations of Previous Flood Damage
 - _____ Non-SFHA Flooding Boundaries
 - _____ Dams and Levees
 - _____ Land Use/Zoning
 - _____ Culvert/Bridge Inventories
- _____ Recently constructed large-scale development
- _____ Planned large-scale development
- _____ Recent Letters of Map Revision (LOMRs) or Conditional Letters of Map Revision (CLOMRs)
- _____ Recent multiple Letters of Map Amendment (LOMAs) in concentrated areas
- _____ Results of any recent Community Assistance Visits (CAVs)

This information is used in part to identify the best available data that the project team could potentially use in a Risk MAP project. Please see the *Guidance for Flood Risk Dataset Enhancement Selection Criteria*, which lists the types of data necessary for Risk MAP products and enhancements. As much as possible, the project team should collect and analyze these data *before* the Discovery Meeting. Project teams should be very specific about the types of data that can be used for a Risk MAP project and request them. The project team should explain the importance of receiving the data by a specified date. If an official agrees to send data, the project team should follow up if the data are not received by an agreed-upon date. Although following up on data requests may be necessary, the Discovery Meeting is *not* a data collection meeting. If a Risk MAP

project is initiated in the watershed, further data development and sharing will occur; however, it is important to collect as much data as possible during the initial stakeholder engagement, so that the project team can complete the post-meeting review and scope refinement phases of Discovery.

In addition to requesting data, the project team should encourage community officials to talk more generally about their community's flood issues and note opportunities for FEMA to assist the community. Project teams should review *Risk MAP Guidance for Incorporating Mitigation Planning Technical Assistance and Training into Risk MAP Projects* so that they can share with communities the types of Mitigation Planning Technical Assistance that FEMA could offer for Risk MAP projects.

3.3. Evaluating Collected Data and Information

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

1. To support the project team in a more holistic understanding of the nature of flooding in the watershed and the activities that the communities take to address their flood hazards and risk. It is important to note that communities often undertake activities that address the reduction of flood hazards and risks in ways that are not related to any NFIP programs. However, this information is useful if Risk MAP is to be successful in encouraging communities to take action to reduce their flood risk. Understanding flood risk from the community's perspective, rather than solely from an NFIP point of view, can potentially improve the success of Risk MAP.

2. To summarize the data that may be used for developing the regulatory and non-regulatory Risk MAP products. It is important to understand where the data exists within a watershed, if the data are usable and meet FEMA's quality standards and specifications for use in products, and if the data are available in areas where there is the highest flood risk. During Discovery, it is important to distinguish where the quality data are and whether those data are in areas of high risk or low risk. Even if quality data are available in areas of low risk, it may not be beneficial to initiate a Risk MAP project if the project is not warranted by risk and need.

The data and the analysis should be included on the Discovery Map as appropriate and described in the Discovery Report.

3.3.1. Discovery Map

A "Discovery Map" is a database holding all of the spatial data collected during Discovery that can be used to identify areas of risk or concern. A draft Discovery Map will be brought to the Discovery Meeting to spur discussion and a final Discovery Map will be provided to communities after the Discovery Meeting. See Appendix I of FEMA's guidelines for more information on Discovery Map versioning.

GIS specialists and cartographers should include all spatial data in the Discovery Map database, so that it can be presented during the meeting. While it is likely that some of the data layers will combine best to show areas of risk, all data should be available for use. In addition to standard

base map layers showing political boundaries, watershed boundaries, and transportation, include as much data as possible, especially:

- Annualized Average Loss (AAL)
- Mitigation plan status information
- Hydrography
- Effective floodplains
- Areas noted in CNMS as needing study
- Valid/invalid stream segments
- Existing elevation data for all areas
- Areas of concentrated losses, damages, insurance claims, and LOMCs
- Recent, planned, or desired local mitigation actions
- Recent or planned development
- Locations of dams and levees
- Areas of repetitive loss, if possible
- Critical habitat areas, if applicable
- Areas of cultural, historical, or religious significance
- Location of critical facilities
- Location of completed mitigation actions, if any
- Declared (and other known) disasters or areas of historical flooding
- Disaster HWMs
- Midterm Levee Inventory data
- Gauge data
- All GIS data supplied by community or Tribal officials
- Other information as appropriate and feasible, such as locations of Individual Assistance/Public Assistance grants, areas of concern or issues identified in Community Assistance Visit reports, CRS status, structure or parcel layers, etc.

Cartographers should take care with each layer to be consistent with border and shading colors and patterns. If possible, use one (or similar) color or pattern consistently in each layer to illustrate an indication of risk. Explain each data layer during the meeting so that attendees can quickly understand what each data set shows with regard to risk.

If a hard copy of the Discovery Map is provided, the project team should consider using very few basic layers, so that it can be printed on letter-sized paper. Meeting attendees may wish to make notes on the map. One example would include the watershed boundary and major flooding sources (and those with identified risk), dots to represent community locations rather than political boundaries, and polygons to show areas that have been identified as having a high flood risk.

The project team should include locations of planned and desired mitigation projects from local mitigation plans on the Discovery Map. If projects have been recently completed or are underway, include these on the map as well and mention them as mitigation successes during the Discovery Meeting. Community master plans may also have information about future zoning; compare these to current FIRMs. If possible, identify areas of concern and risk on the Discovery Map based on information in the plans. After the Discovery Meeting, a final Discovery Map will be created and shared with all communities.

FEMA will not provide a standard template for the Discovery Map. FEMA Regional Offices should use their discretion on what the physical appearance of the map will look like. The appearance of the Discovery Map may depend on the data collected and how best to facilitate discussions during the Discovery Meeting.

3.3.2. Discovery Report

The Discovery Report is a living document that is updated throughout the Discovery process. The Discovery Report will include a listing of all of the stakeholders contacted, the data and information collected, information about whether they can be used for Risk MAP products, and a thoughtful analysis or description of the information. Some examples include:

State, Tribal, and local mitigation plans should be reviewed thoroughly as part of Discovery. HMA may be a solution for funding of the mitigation actions identified in mitigation plans. In the Discovery Report, describe which activities and communities might benefit from HMA programs and review the HMA grant cycles, application, and submission requirements to be prepared to discuss options with those communities at the Discovery Meeting.

Identify the CRS status for each community and be prepared to advise specific communities a high-level overview as to how they can move in or participate in the program (if applicable and appropriate) and what the benefits would be for their community. The Regional CRS coordinator or ISO representative can help determine what activities watershed communities already undertake. If there are existing data sharing agreements in place between Federal or state agencies or regional organizations, review these for relevance to potential projects and document it in the Discovery Report.

Project teams will share an initial version of the Discovery report that includes a list of the data and information collected, the analysis of the data and information, and the stakeholders contacted prior to the Discovery Meeting. Project teams will share a second and final version of the Discovery Report with watershed stakeholders after the Discovery Meeting. This version of the report will be updated with meeting information including meeting notes, sign-in sheets, and other information. The *Risk MAP Templates Guidance* includes information about the Discovery Report, including a Discovery Report template and other guidance.

3.4. Discovery Meeting

The Discovery Meeting is the first required meeting that the project team has with community officials, affected Tribes (if appropriate as per Tribal Considerations, Section 1.2), and other key stakeholders across the watershed or project area. It is important for the project team to understand as much as possible about the watershed's flood hazards and risk prior to the Discovery Meeting. The Discovery Meeting is a working meeting, not a FEMA briefing, so it is important that attendees expect to participate in discussions about their flood risk. The meeting brings communities and other stakeholders in the watershed together. The Discovery Meeting is focused on introducing or enhancing watershed risk concepts and discussing the flooding hazards in the watershed and their associated flood risk. The meeting is co-led by the project team, state officials, and a local champion, if possible.

3.4.1. Meeting Timing

The Discovery Meeting occurs in the middle of the Discovery phase, after all of the data and information have been collected and analyzed. The Discovery Meeting is planned in coordination with the watershed communities.

3.4.2. Meeting Attendees

It is important to identify the right stakeholders to attend the Discovery Meeting. Although many stakeholders will be included in Discovery efforts, not every contact needs to or is expected to attend the Discovery Meeting. FEMA has developed tools and templates to help project teams identify and share information with meeting participants.

At least one representative from every affected community should be invited, although a wider array of stakeholders is required. Required invitees for each community include:

- State NFIP Coordinator
- SHMO
- Community FPAs and CEOs
- Regional CRS Coordinator (if applicable)
- Local planner/economic development contact

It may not be possible for NFIP Coordinators and SHMOs to attend all of the Discovery Meetings in their states; however, their input is invaluable and they should be coordinated with beforehand if attendance is not possible and they should be able to provide suggestions on who to include at the community level. It is also important to follow up with state-level partners after the meeting if they are unable to attend. It is highly recommended that a community GIS contact, community and/or county emergency manager, engineering, public works, and/or parks/recreation staff member(s) also be included as applicable. Communities and their governments can be organized in many different ways. It is important that the community's organizational structure is taken into account. In some watersheds, it may also be possible to include OFAs, NGOs, and other state and Tribal officials.

3.4.3. Inviting Stakeholders

The project team should send invitations to the Discovery Meeting at least one month before the meeting, with follow-up emails or telephone calls to confirm and encourage attendance. Note that planning for the meeting should begin during watershed stakeholder coordination. In some areas, it may be beneficial for FEMA to send an introductory email or letter to watershed stakeholders in order to explain the process and note that FEMA contractors will be contacting them for data and information and meeting planning.

3.4.4. Meeting Objectives

The overarching Discovery Meeting objectives are to introduce watershed stakeholders to each other and discuss areas of flood risk, potential mitigation activities, priority study areas, and risk communication strategies. To accomplish these objectives, the project team must perform a considerable amount of up-front research, data collection, and analysis as described in Sections 3.2 and 3.3. The Discovery Meeting is a working meeting, so it is important that attendees are prepared to contribute and that the meeting encourages participation.

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 array of topics that may be discussed and is dependent on the specifics of each Discovery effort:

- To solicit input from watershed stakeholders regarding their flood risk and needs in the watershed.
- To discuss the flood risk data collected from Federal, regional, state, Tribal, and local sources and collectively identify areas in need of studies, outreach, mitigation planning, risk assessments, and other Risk MAP products and services.
- To discuss the regulatory and non-regulatory flood risk products FEMA produces and what types of data are usable for each.
- To discuss the importance of flood risk assessments in determining and addressing flood risk as a means to protect the viability and economy of a community(ies) and explain how local data can significantly improve the value of a flood risk assessment.
- To discuss the critical role of mitigation planning in helping communities mitigate against, prepare for, and recover from all hazards, how the flood risk information gathered can bolster the flood risk portion of mitigation plans.
- To set expectations for planning inputs and available technical support.
- To discuss the FEMA and non-FEMA programs that support flood risk reduction, and to provide an overview of FEMA resources and other resources (such as USACE) for mitigation planning and implementation assistance, such as grant programs, and related eligibility and cycle information.
- To encourage NFIP participation, review benefits and responsibilities of joining, and sanctions that will apply in disaster situations if they do not join (for non-participating communities).
- To encourage NFIP compliance, and target communities that are already compliant for CRS participation (for participating communities).
- To review and begin to fill in the *Risk MAP Action Measure Data Collection Sheet*, which captures the extent to which Risk MAP Communities are moving down the path to taking action to reduce risk from flooding. To discuss the role of community officials in raising stakeholder awareness of flood risk and mitigation activities.
- To introduce the concept or enhance the watershed vision with stakeholders. What will the watershed look like in 20 years? 50 years?
- To introduce the concept or enhance discussions about long-term erosion, sea level rise, and subsidence for a coastal community or region. What will the community or region look like in 20 years? 50 years?
- To validate information gathered before the Discovery Meeting regarding flood risk, mitigation and mitigation plan status, mitigation activities planned or underway, and risk assessment.
- To discuss multi-hazard issues if necessary and appropriate while noting that Risk MAP provides products and assistance focusing on the flood risk.
- To confirm best available data and follow up on data sharing agreements.
- To identify a number of champions, information conduits, or other community contact leads if appropriate.
- To determine communication points-of-contact and share next steps (expectations for length of process and future interactions).

3.4.5. Meeting Messages

The Discovery Meeting messages include:

- We want to help you develop or enhance your vision for the watershed. What should the watershed look like in 20 years? 50 years? We want to better understand your watershed vision so that we can better align our study activities and products to facilitate you achieving that vision.
- We want to listen to your thoughts and concerns regarding flood risk in your community(ies), and share the information we have gathered to provide a clear picture about your flood risk.
- Risk MAP can provide mapping, assessment, and planning assistance in areas where a project is appropriate or needed.

FEMA has developed tools and templates for the Discovery Meeting, including information on meeting messages, talking points, and other items.

3.4.6. Pre-Meeting Activities:

Meeting-related actions and materials to compile prior to the Discovery Meeting include:

- Up-front coordination with stakeholders to obtain data and understand local flood hazards; learn risk assessment, mitigation planning, and risk communication needs or interests of the community or Tribe; learn about a community or Tribe's resources, assets, future plans, watershed vision, etc.
- Confirm Best Available Data including the timing of 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 studies, flood risk assessment, and mitigation planning; the watershed approach; and the project lifecycle.
- Review Meetings Guidance for FEMA Personnel and other related guidance.
- Prepare to bring NFIP compliance/adoption information if appropriate.
- Prepare and send a meeting invitation letter, meeting agenda appropriate for the watershed, Discover Report, and Discovery Map.
- Prepare a Tribal Contact List and other documentation from contact with Tribal officials, Tribal Historic Preservation Officers, etc.
- Additional items needed when Tribal Nations are affected, as defined through consultation and coordination with Tribal Officials.

3.4.7. Meeting Activities

Discovery Meeting activities include:

- The Discovery Meeting is where FEMA listens to communities and learns what is important to watershed stakeholders. A Discovery Meeting should include an interactive, collaborative discussion. At Discovery Meetings, project teams should facilitate discussions between community officials and watershed stakeholders, offer suggestions, and manage the time. Meeting participants must own recommendations resulting from the meeting, making them more likely to relay the risk information to their colleagues, constituents, and other stakeholders and generate support for projects that may follow.

- The Discovery Map is shared with communities at the Discovery Meeting to provide a watershed-wide picture of flood risk. The GIS format of the Discovery Map allows a project team member to zoom in and out to specific, targeted areas for discussion purposes at the meeting. For this reason, it is important that a GIS specialist attend the meeting on behalf of the project team. If the project does not have a GIS specialist at the meeting, the project team member attending the meeting could bring print outs of the watershed as a whole and of the highlighted areas of importance based on the Discovery effort. A state, Tribal, or local partner may be able to assist with the Discovery Map presentation as well.
- The most efficient and productive Discovery Meeting will include simplified 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 analyzed data and information should be presented in a logical way that illustrates the risk areas and allows the majority of the meeting time to be focused on gaining a better understanding of the flood risk for all participants.

Tools and templates, including a Discovery Meeting agenda, presentation, and other items have been developed for project team use.

3.4.8. Post-Meeting Activities

Several activities are necessary after the Discovery Meeting to finalize the Discovery effort. The project team should add the meeting notes and other meeting information to the Discovery Report and distribute it to attendees and those who could not attend. 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 teams will also conduct follow-up as appropriate to determine progress toward FEMA Risk MAP metrics.

FEMA will determine if a project may be appropriate with the information gathered by the project team. Risk MAP projects may include mapping, risk assessment, *and/or* Mitigation Planning Technical Assistance and other assistance such as outreach and communications planning. A Risk MAP project may be necessary 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 project may not be needed. If the communities have no interest in Risk MAP, then efforts may be better utilized in areas where the Risk MAP products would be desired.

3.5. Post-Meeting Review and Scope Refinement

If a flood risk project is appropriate for the watershed and the project involves remapping of regulatory products, additional coordination is required with impacted communities to discuss anticipated changes to the flood risk identification depicted on the FIRM and in the FIS. This engagement will serve to help set community expectations regarding map revisions, impacts to existing structures, and help refine the scope of the Risk MAP project.

Project teams should use the information collected during Discovery including mapping needs, CNMS information, information collected on new development, pinch points, and other information to inform this engagement. For example, if the information collected during Discovery and discussed at the Discovery Meeting reveals that significant development has occurred since the

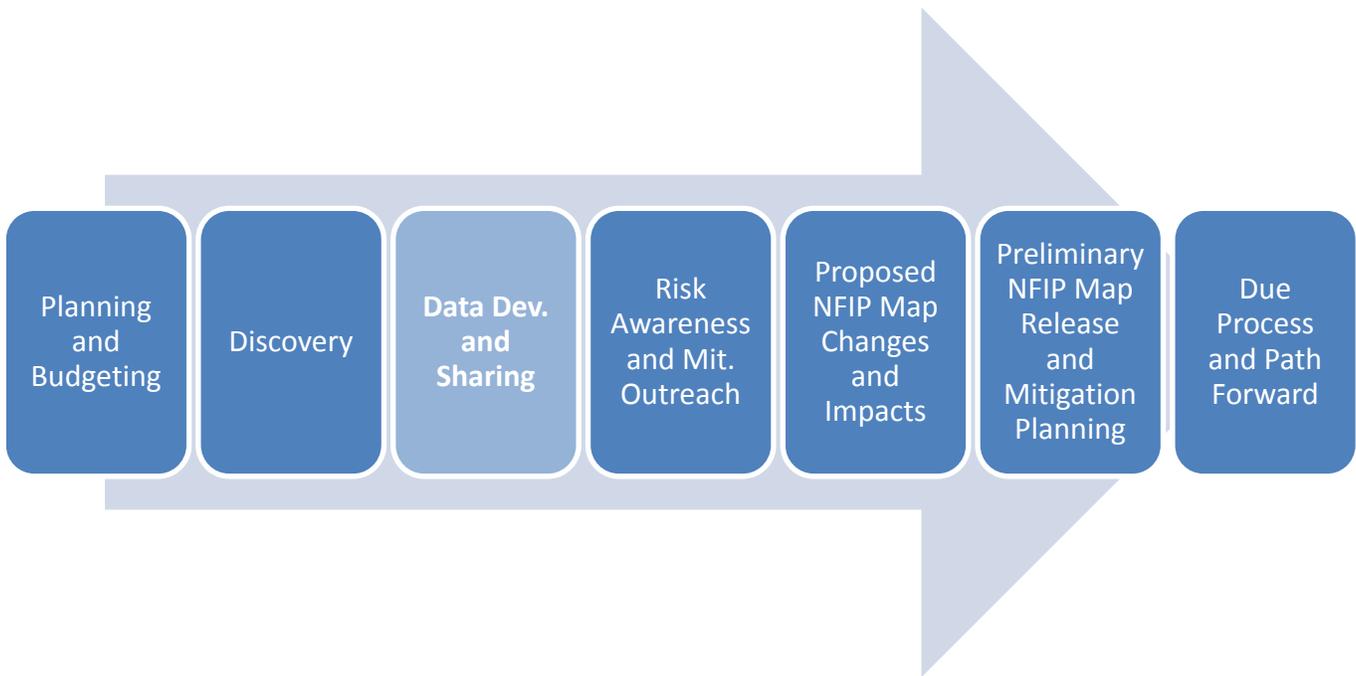
original flood study that has increased discharges, then the discussion should elaborate on areas where the flood elevations are likely to increase if a new study was initiated. This engagement occurs prior to initiating a flood risk project. The discussions must include an explanation of the expected impacts of potential study results (i.e. increase/decrease in flood hazard area delineations, flood elevations, etc.). Those expectations will also be documented in the project charter, which should be developed concurrently through coordination with communities and Tribes.

In coastal areas where an updated surge model is available, data from the model should be used to foster these discussions with communities. As described in Appendix I of FEMA's guidelines and standards, the surge study occurs in advance of the Discovery effort and this information is reviewed and discussed at the Discovery Meeting.

3.6. Project Charters

If a Risk MAP project will occur in the watershed, a project charter will be used to document the scope of the project and other items. Project charters should be developed in coordination with the communities and Tribes in the watershed, and signed by all parties. Project charter requirements are discussed in Appendix I of FEMA's guidelines. A project charter template is available from the FEMA Regional Office. Project charters may be renamed if the term "charter" is undesirable.

4. Data Development and Sharing



The objectives of the Data Development and Sharing Phase are to provide communities with engineering data and drafts of Risk MAP products as they are developed (collecting feedback and revising as needed), and to build confidence in those products. Activities that occur during this phase include acquisition of new data if appropriate; development of hydraulic and hydrologic models; developing FIRM database and FIS elements if appropriate; developing work maps and producing draft datasets; developing the Flood Risk database, Flood Risk Map, and Flood Risk Report; delivering draft products to watershed communities; and developing or refining the community engagement plan in accordance with the draft products.

This phase includes the optional, yet strongly recommended, Flood Risk Review Meeting. Even if a Flood Risk Review Meeting is not held, project teams should communicate throughout the Data Development and Sharing phase with communities. This may be a long phase and continued engagement is necessary and appropriate build upon the relationships established or enhanced during Discovery, and provide transparency into the Risk MAP process. This may occur through monthly or quarterly updates or project status calls with community leaders, project websites (including updates at several milestones or along a specific timeline), or other methods.

4.1. Flood Risk Review Meeting

The Flood Risk Review Meeting is optional but *strongly* recommended if appropriate for the project. This is a technical/engineering focused meeting that gives community officials the opportunity to review the draft Risk MAP products if they are included as part of the Risk MAP project scope. This type of meeting may also be important for Risk MAP projects that include significant changes in the identified hazard. The Flood Risk Review Meeting allows the project

team to highlight the flood risk associated with the changes, and gives communities the opportunity to review the results and begin communicating that risk to impacted residents and businesses.

FEMA has developed tools and templates to assist project teams in conducting Flood Risk Review Meetings, including letter and email templates, and other items. Project teams are encouraged to use the tools and templates as appropriate for the watershed or project, and to revise or change them as necessary.

To encourage discussions about flood risk, rather than talking primarily about the flood insurance implications or what locations are “in or out” of high-risk flood hazard areas, the project team should not present the regulatory Risk MAP products (FIRM and FIS) and the non-regulatory Risk MAP dataset related to it (Changes Since Last FIRM) at this meeting. In some cases, project teams may decide that, based on Regional knowledge of the communities involved and other aspects of the watershed, delaying the presentation of the draft regulatory products may not be possible or appropriate and may choose to present the products at this time.

4.1.1. Meeting Timing

This meeting occurs at the end of the Data Development and Sharing phase, when draft Risk MAP non-regulatory products are available.

4.1.2. Meeting Attendees

Suggested meeting attendees/Invitees include:

- FEMA Regional Office staff as appropriate and project team or contractor staff
- State NFIP Coordinator and SHMO
- Other Federal or state agencies with vested interest in area where engineering was conducted
- Community CEOs, community engineer and/or planner and/or building inspector and/or GIS specialist from the affected communities, local FPAs, emergency management officials, community and regional planners
- Mitigation planning team/lead
- For special considerations regarding conducting Flood Risk Review Meetings with Tribes, please see Section 1.2 of this document
- Other key stakeholders (such as private sector representatives, academia, etc.)

4.1.3. Meeting Objectives

The objectives of the Flood Risk Review Meeting are to:

- Present the draft Risk MAP products to the communities’ designated “technical” stakeholders
- Increase stakeholder understanding about the Flood Risk Map, Flood Risk Report, and Flood Risk Database
- Present community officials with additional outreach opportunities to assist them in communicating Risk MAP products to citizens in affected communities
- Gather information on the focus for the upcoming Resilience Meeting
- Further identify and fill in the Risk MAP Action Measure Fact Sheet, which captures the extent to which Risk MAP Communities are moving down the path to taking action to reduce risk from flooding

4.1.4. Meeting Messages

The messages of the Flood Risk Review Meeting are:

- Here is what available data suggests about your flood risk; we are here to confirm whether this is accurate and get your perspective.
- The Risk MAP products can help your community(ies) be more resilient by prioritizing mitigation actions, and providing assistance in understanding risk data and improving mitigation plans, especially risk assessments and mitigation strategies.
- Teamwork is vital to our collective success on identifying and communicating flood risk, and making informed decisions about how to address the risk. Let's talk about our next steps on this project as a team.

4.1.5. Meeting Activities

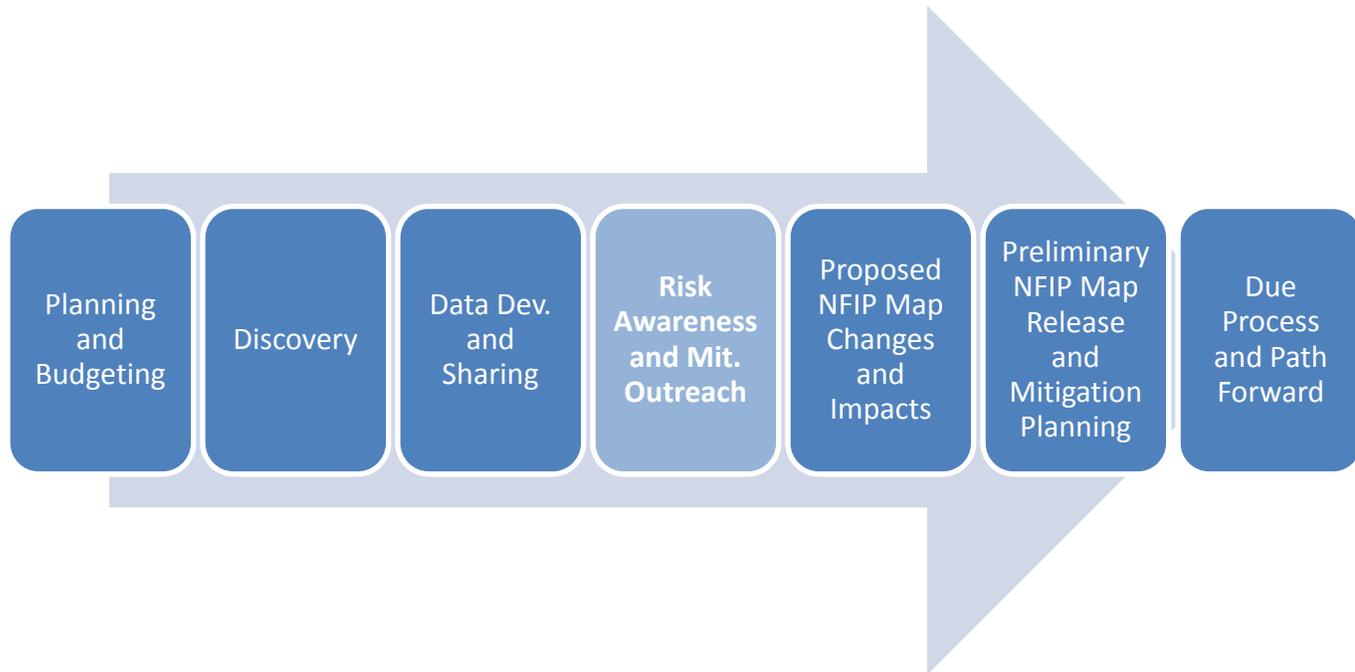
Flood Risk Review meeting activities include:

- Present the draft non-regulatory Risk MAP products including: Flood Depth and Analysis Grids, Flood Risk Assessment Data, Flood Risk Report, and other enhanced datasets as defined by the project scope. Project teams may want to provide interactive workstations with a specific product at each station and have meeting participants move through the stations.
- Use the *Risk MAP Products User Guidance* to guide discussions on how communities can use the Risk MAP products being offered.
- Discuss outreach tools and potential areas of the community(ies) in need of flood risk outreach and communications. Be sure to include possible connections with communities involved in the mitigation planning process. This will help leverage resources and existing networks developed for plan development, maintenance, and update activities that require ongoing public involvement and support updates based on new data as they become available.

4.1.6. Post-Meeting Activities

After the Flood Risk Review Meeting, the project team should provide a Flood Risk Review meeting report, minutes, or notes (format determined by Region) to all stakeholders involved. Project teams will also conduct follow-up as appropriate to determine progress toward FEMA Risk MAP metrics.

5. Risk Awareness and Mitigation Outreach



The objectives of the Risk Awareness and Mitigation Outreach phase are to provide a comprehensive view of mitigation planning and mitigation options available to communities, and to share success stories and potential mitigation actions that communities can initiate. Activities during this phase include reviewing non-regulatory flood risk analyses and assessments, identifying relevant mitigation best practices, holding a Resilience Meeting, and developing a Community Outreach Plan (template available).

Robust Discovery efforts include an understanding of community activities, drivers (economic drivers, etc.), assets, the location of high-risk areas relative to those assets, and other community concerns (economic, health and safety, education, environmental, etc.). This will result in a better understanding of how to leverage community activities, assets, and concerns in support of mitigation actions and to remove barriers or create incentives for mitigation action. This is an essential concept that will help project teams to plan for the Resilience Meeting.

5.1. Resilience Meeting

The Resilience Meeting is one of several watershed-wide meetings (and the second meeting required) that the project team has with community officials and other key stakeholders during a Risk MAP project. The purpose of the meeting is to continue to build local capacity for implementing priority mitigation activities within the watershed. For special considerations regarding conducting Resilience Meetings with Tribes, please see Section 1.2 of this document.

In preparation for a Resilience Meeting, project teams should:

- Prepare and send meeting invitation letter/email with an agenda to attendees
- Prepare to promote an understanding of flood risk:
 - Review Risk MAP non-regulatory products
 - Review *User Guidance for Risk MAP Products*
 - Review *Communicating Flood Risk with Risk MAP Datasets and Products*
- Prepare to promote strategies to reduce flood risk:
 - Review areas of mitigation interest
 - Review areas targeted for key development or redevelopment, and unique areas such as sites of cultural, historic, or religious significance
 - Review study area for any critical habitat areas
 - Review State and/or local mitigation plans as well as associated plans, such as the stormwater, land use, or comprehensive plans, local subdivision regulations, plans developed by communities in the CRS, or plans funded under the Flood Mitigation Assistance (FMA) grant program
 - Request State and local best practices from the SHMO and nearby CRS participants
 - Request model ordinances from State NFIP Coordinators, State Building Code Offices, and APA Chapters
 - Identify related best practices from FEMA database, coordination with the SHMO, and FEMA Building Sciences Toolkit CD
 - Prepare handouts related to the best practices
- Review available resources to facilitate implementation:
 - Review Discovery discussions regarding existing barriers and incentives for the communities to take action to reduce risk. Identify local economic and situational drivers, tensions, and synergies
 - Identify FEMA and other Federal grants related to the areas of mitigation interest.
 - Identify technical resources available from NFIP, FEMA, CRS, floodplain management, and technical associations related to the areas of mitigation interest.
 - Identify any state level technical resources available through the office of the SHMO.
 - Review FEMA's Disaster Assistance Policy, *Hazard Mitigation Funding Under Section 406*, in order to educate communities about the availability of hazard mitigation discretionary funding and promote this FEMA priority.
- Review communication roles and responsibilities:
 - Review community assessment tool findings or local hazard mitigation plans which may identify special populations present and local communication capabilities.

5.1.1. Meeting Timing

This meeting is held after the non-regulatory Risk MAP products have been developed, during the Risk Awareness and Mitigation Outreach phase of the Risk MAP timeline. If a Flood Risk Review meeting is held, the Resilience Meeting follows it.

5.1.2. Meeting Attendees

This meeting is led by the project team, with support from a FEMA Regional planner or designee and the Regional Building Sciences Specialist, when available. Project teams are encouraged to identify and assign local champions key speaking roles during this meeting to help project teams collaborate with communities and help them build capacity. These champions may have been identified during Discovery.

All individuals contacted during the Discovery process or who attended the Discovery meeting should be invited to the Resilience Meeting. In addition to these participants, the following attendees should be considered. Interested communities may also modify the attendee list to help meet the public participation requirements of the mitigation planning process.

Land-Use Decision-Makers

City/Town/Borough Councils

Local planning commissions, local mitigation planning committee members, Watershed

Management Districts

Land Trusts, if appropriate

Local Elected Officials

Chief Executive Officers (e.g., Mayors, County and Parish Judges, County Executives, Board of Supervisors Chairs/ Presidents)

Public Infrastructure Owners

State and Federal agencies that own and/or operate a levee or dam in the project area

Department of Transportation, if appropriate

Property Owners

Developers, if appropriate

Independent neighborhood or condo associations, if appropriate

Federal Agencies

USACE District, Division, and/or Flood Risk Management Program representatives

FEMA CRS representative, if appropriate

Environmental Protection Agency, if appropriate

NOAA (for coastal communities)

U.S. Fish and Wildlife Service, if appropriate

Other OFAs as appropriate

State and Local Communities

Floodplain Administrators

Emergency Managers

Hazard Mitigation Planners

Public Works

Those responsible for comprehensive, general, and/or land use planning

Planning Commissions, if appropriate

Building, Construction Permit, or Construction Inspection Officials

Coastal Commissions (for coastal communities)

GIS Managers and Specialists

Engineers and Surveyors

State Mitigation Planner and other State officials involved in hazard mitigation planning

SHMO

State NFIP Coordinator

State Building Code Officer

State Dam Safety Official (if a dam is present in the project area)

Other officials as appropriate

NGOs

Watershed groups

State or Regional representatives from related associations such as ASFPM, NAFSMA, NEMA, APA, NFDA, National Hazard Mitigation Association, if appropriate

Other NGOs, if appropriate

Interested non-profits, such as those focused on land conservancy, watershed protection, flood risk reduction, or resilience, if appropriate

Private Organizations

Insurance agents or firms (contacts can be identified from the Floodsmart referral list for that area and from professional associations)

Real estate organizations

5.1.3. Meeting Objectives

The goal of the meeting is to build local capacity for implementing priority mitigation activities within the watershed. The objectives of the meeting are to help communities better understand:

- Their flood risk
- The strategies they can use to reduce that risk and improve their watershed's resilience to floods
- The resources available to help them implement those strategies
- The importance of and opportunities for communicating flood risk to their constituents

5.1.4. Meeting Messages

Meeting messages include:

- The Risk MAP Products provide a more accurate, comprehensive picture of your community's and your watershed's flood risk than you have likely had before.
- Although Risk MAP focuses primarily on floods, the tools and information provided can provide a framework for planning for and addressing other natural hazards that you face.
- There are many strategies you can use to reduce your flood risk.
- A wide variety of resources are available from the State, Federal agencies, and associations to help you take action to reduce your flood risk.
- Communicating flood risk to those who live and work in your community(ies) will help them make informed decisions to reduce their risks.
- By taking action to reduce your flood risk, the individuals, property, and businesses within your watershed will be more resilient to flooding.

To the extent possible, meeting messages should focus on flood risk and how to address it, rather than flood insurance requirements.

5.1.5. Meeting Activities

The Resilience Meeting will include the following activities.

Understanding Flood Risk

- Provide a brief overview of the final Discovery Maps for the watershed to remind participants where we left the conversation after the Discovery Meeting. If possible, recruit participants to provide a quick synopsis of their community's challenges ahead of time to engage meeting participants in the discussion from the beginning.

- Share the non-regulatory Risk MAP flood risk products (see *User Guidance for Flood Risk Products* for guidance on how to present the products). Although it is at the project team's discretion whether to share the Changes Since Last FIRM dataset at this time, it is not encouraged as the dataset may focus the conversation around flood insurance instead of flood risk.
- Note: if a Flood Risk Review Meeting occurs before the Resilience Meeting, the project team can abbreviate this section of the meeting.

Strategies to Reduce Flood Risk

- Use the Areas of Mitigation Interest dataset and/or specific areas of local concern as discussed at the Discovery Meeting to create focus areas for this discussion.
- Highlight and applaud communities for mitigation strategies they have already included in their plans, including measures such as enforcing International Code Council (ICC)/state building codes. Note areas where existing strategies may be expanded or applied to address other problems they face, where applicable (e.g., a tactic they are using for stormwater management that can apply to floodplain management).
- For those Areas of Mitigation Interest or areas of local concern where they have not yet identified mitigation strategies, share related best practices from local sources (request from the SHMO), across the State, Region, and/or from FEMA's national databases. These may include best practices related to mitigation planning or implementation, such as construction and hazard retrofit design resources, model ordinances, and national building codes. When possible, invite a local or State official to present the best practice and highlight their success.
- Highlight strategies pertaining to any critical habitat areas under the Endangered Species Act and/or unique areas such as sites of cultural, historic, or religious significance.
- Distribute handouts pertaining to the best practices and request best practices from participants that can be shared with other communities.
- Note that new strategies identified should be added to existing local hazard mitigation and flood risk plans when possible.
- Reinforce the importance of integrating hazard mitigation plans into other community plans.
- Further identify and fill in the Risk MAP Action Measure Fact Sheet, which captures the extent to which Risk MAP Communities are moving down the path to taking action to reduce risk from flooding.

Resources to Facilitate Implementation

- Discuss resources that can either address barriers or act as drivers to incentivize communities to take action to reduce flood risk.
- Share ideas for mitigation activities that may be implemented with existing financial resources.
- Describe resources available to local, regional, state and Federal agencies that may assist with the specific mitigation strategies identified, such as:
 - FEMA grants available to communities that participate in the NFIP.
 - Other Federal grants available from the U.S. Department of Housing and Urban Development (HUD) and others.
 - Resources from the NFIP, CRS (when applicable), and floodplain management.
 - FEMA technical resources available online, such as design guides for hazard resistant construction and structure retrofits.

- Technical assistance by other Federal agencies and professional associations such as ASFPM, NAFSMA, state floodplain management associations, and others.

Communication Roles and Responsibilities

- Explain that it is important to share flood risk information with constituents because it allows people to make informed decisions to protect themselves, their families, and their businesses from flood risk. Note that constituents expect to hear about flood risk from their local officials (reference Risk MAP survey findings).
- Share that there is guidance available to help local officials communicate about the flood risk products with the people who live and do business in their communities (see *Communicating Flood Risk with Risk MAP Datasets and Products*).
- Share that a *Community Outreach Plan Template* is available, and that the project team would like to meet with the appropriate contacts at each community to develop a personalized outreach plan for each (if interested). Note that the project team will follow up with each community to identify interest and a time/date to discuss by phone or in person.

Breakout Groups

When possible, break participants into smaller groups to focus on specific areas of interest. Ideas for breakout groups include:

- **Technical breakout group:** Led by the project team engineer, this group may include engineers and GIS specialists. The focus of this group is to review the flood risk datasets and discuss how the data can be used.
- **Planning group:** Led by the SHMO or FEMA Regional planner or designee, this group may include community planners and related specialties, and focus on how the flood risk products and mitigation strategies can enhance existing mitigation plans. The group can also discuss the Mitigation Planning Technical Assistance provided through Risk MAP (if applicable), and how to incorporate the public participation requirements of the planning process into Risk MAP meetings.
- **Senior officials group:** Led by FEMA, this group may include mayors and other senior officials and will describe the incentives available to encourage mitigation, such as grants and CRS, the importance of communication, and how these tools can help build more resilient communities.

Action Item List

- Ask each meeting participant to list the next three actions they personally will take to encourage development or implementation of flood mitigation strategies.
- Ask participants to sign their list, and provide their name, title, and community. Collect the lists and return them with meeting notes to participants.

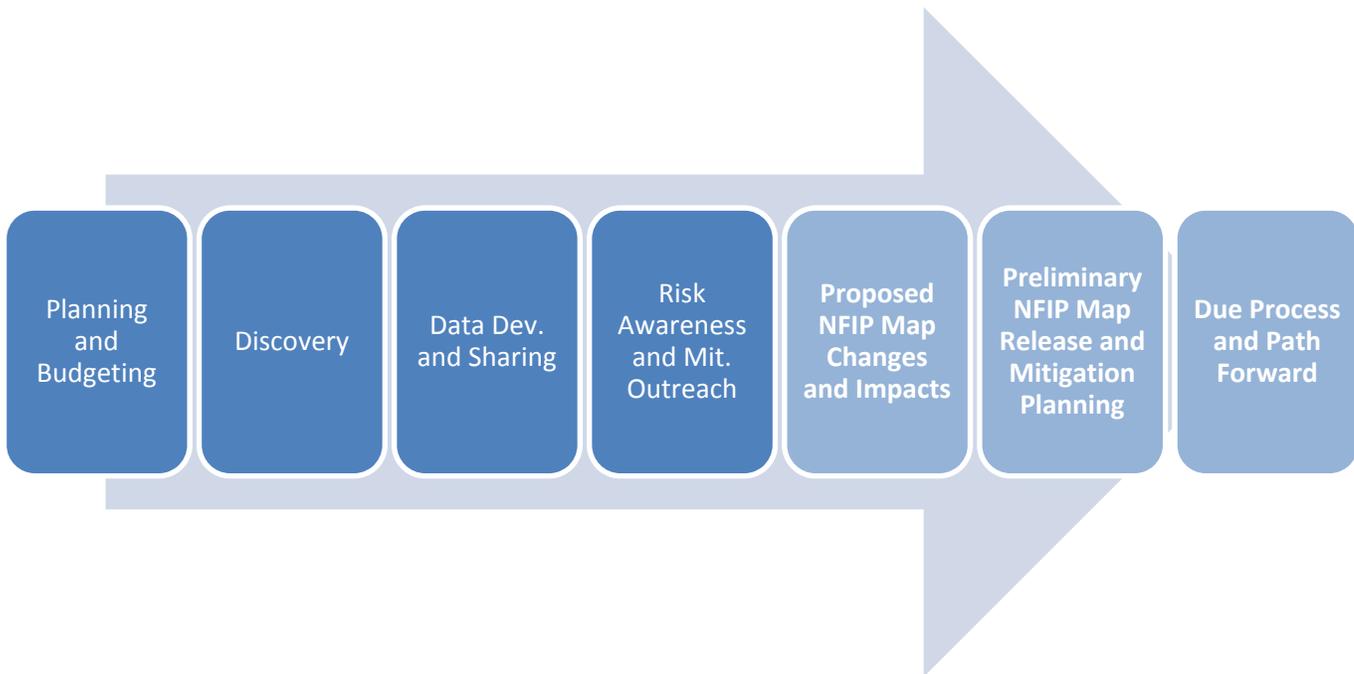
5.1.6. Post-Meeting Activities

Following the Resilience Meeting, project teams should:

- Distribute attendee list with email or letter thanking attendees for their participation
- Distribute Resilience Meeting report, minutes, or notes (format determined by Region)
- Distribute individual action item lists and include resource lists (e.g., websites, reports, maps, mitigation funding, and technical assistance)
- Hold meeting or conference call with appropriate local officials to draft a community outreach plan, using the existing Community Outreach Plan Template

- Conduct follow-up as appropriate to determine progress toward the actions agreed upon during the meeting and toward FEMA Risk MAP metrics relating to local actions to reduce flood risk
- Notify U.S. Congress, State Executives, and State Legislature, if appropriate

6. Regulatory Product Release Phases



For Risk MAP projects that include regulatory products, the following three phases of the Risk MAP Timeline occur within short timeframes of each other and the phases are inter-related. They are presented here as one set of phases, as the community engagement that occurs during these phases may all occur at the Consultation Coordination Officer (CCO)/Open House Meeting, or may occur as separate engagement activities depending on the watershed and on the specific Risk MAP project.

6.1. Proposed NFIP Map Changes and Impacts

For Risk MAP projects that include regulatory products (FIRM and FIS), the Proposed NFIP Map Changes and Impacts phase will occur. The objectives of this phase are to plan for preliminary FIRM release, build consensus with communities on impacts as a result of changes to the regulatory map, and encourage mitigation implementation and use of available resources. Activities that occur during this phase include sharing the proposed Changes Since Last FIRM dataset, planning for preliminary FIRM and FIS release, and building and understanding of the impacts resulting from changes.

Sharing the Changes Since Last FIRM will occur as appropriate for the communities receiving regulatory product updates. If many communities will receive preliminary FIRMs and FISs, it may be appropriate to hold a large meeting in the watershed. If there are a small number of communities or if it is deemed appropriate for the project, an online meeting may be appropriate. Sharing of the Changes Since Last FIRM is up to Regional discretion. It may also be appropriate to present this at the CCO Meeting portion of the CCO/Open House Meeting. The Changes Since Last FIRM product is a powerful communication tool to communicate the impacts of regulatory map changes from FEMA to the watershed communities, and from communities to their citizens.

6.2. Preliminary NFIP Map Release and Mitigation Planning

For Risk MAP projects that include regulatory products (FIRM and FIS report), the Preliminary Map Release and Mitigation Planning phase will occur. The objectives of the Preliminary Map Release and Mitigation Planning phase are to share the preliminary map with the communities, reinforce the use of the Risk MAP products, provide information on the value of and timeline for updates to mitigation plans, and solicit commitment to act. Phase activities include releasing the preliminary map to the community(ies) as planned and discussing the value of updating the mitigation plan with the latest flood risk information and the timeline for plan updates.

6.3. Due Process and Path Forward

For Risk MAP projects that include regulatory products (FIRM and FIS report), the Due Process and Path Forward phase will occur. The objectives of the Due Process and Path Forward phase are to empower the community(ies) to share information with local citizens about the communities' flood hazards and risks, new proposed maps, actions taken and planned, and the individual's responsibility to manage their own risks; and to encourage communities to identify short- and long-term efforts to progress towards increasing flood risk awareness and management. During this phase, FEMA will discuss the preliminary map and its implications, support the community(ies) in sharing the flood risk information with local citizens and businesses, and discuss resiliency.

The activities that occur during this phase include holding a CCO Meeting/Open House to share the preliminary FIRM and FIS report with the community(ies), kick off the comment and appeal period, update FIRMs and FIS reports as needed based on comments and appeals, issue Letter(s) of Final Determination, initiate the 6-month adoption period, manage revalidation activities, assist the communities in developing an action item list for continued progress toward watershed resiliency, and deliver final Risk MAP Products.

6.3.1. CCO Meeting and Flood Map Open House

For Risk MAP projects that include regulatory map and FIS report updates, the CCO Meeting and Flood Map Open House will be the last official set of meetings that the project team will have with communities during a Risk MAP project. These are two distinct meetings: the CCO Meeting is a meeting held by the project team for the local officials in communities receiving new or updated regulatory products (FIRM and FIS report). The Open House is held by the project team and community officials and the objective is to present the preliminary FIRM and FIS report to the public. The project team should hold this set of meetings directly after the release of the new preliminary FIRM. A primary goal of Risk MAP is to promote community ownership of risk and in turn, risk reduction and mitigation. To promote this goal, the project team should use the CCO Meeting to provide resources and information to community officials to prepare them to more effectively share risk reduction messages and information with the public.

The purpose of the CCO Meeting is to present the preliminary FIRM panels and data to identified stakeholders, including community officials, before presenting the information to the public. The Open House is a separate meeting that provides an opportunity for community officials and other stakeholders to provide information to the public. Preferably, the new preliminary FIRM will be presented to the public in an open house format in cooperation with all stakeholders, or other format deemed most appropriate for conveying information effectively to the community(ies). In addition, communities actively involved in the mitigation planning process can use the regulatory

and non-regulatory products to update or validate their risk assessment, and possibly meet public participation requirements inherent in the plan development, maintenance, and update processes.

Tools and template documents are available to support Regional implementation of CCO Meetings and Open House Meetings. Because each Region is different, these documents should be revised to fit Regional needs and preferences. Before the CCO portion of the meeting, project teams should also review the document, *Answers to Tough Questions at Public Meetings*, which can help prepare project teams for answering questions related to flood insurance, flood mapping, and other common questions.

6.3.1.1 Meeting Timing

This meeting occurs during the Due Process and Path Forward Phase, closely following preliminary FIRM release.

6.3.1.2 Meeting Attendees

A FEMA Insurance Specialist is an important attendee at the CCO Meeting and Open House. In addition, individuals who were invited to the Discovery Meeting and the Resilience Meeting would be included in the invitation and planning of this set of meetings, as well as:

- Individuals included in Discovery Meeting, Flood Risk Review Meeting (if held) and Resilience Meeting from impacted communities (communities receiving new FIRMs and FIS reports)
- General public from impacted communities (Open House only)
- Other community officials interested in viewing the preliminary maps from impacted communities
- For special considerations regarding conducting CCO Meetings and Open Houses with Tribes, please see Section 1.2 of this document
- U.S. Congress and state legislature delegates and their staff, if appropriate
- Media, if appropriate

6.3.1.3 Meeting Objectives

The objectives of this set of meetings are firmly rooted in the results of the study as depicted in the preliminary FIRM and the accompanying FIS report. While the Resilience Meeting is focused on the flood risk and non-regulatory products, this set of meetings focus on the regulatory FEMA products. Specifically, the meeting objectives are:

- To present preliminary FIRM to CCO Meeting and Open House attendees
- To provide a brief explanation of the scientific methods (i.e., hydrologic analyses, hydraulic analyses, coastal analyses, alluvial fan analyses, shallow flooding analyses) that went into determining the flood hazards and depicting the results of the analyses on the FIRM
- To review changes in flood hazard information from effective maps
- To explain the comment and/or appeals process
- To discuss how community officials should submit appeals and other comments on the preliminary FIRM and FIS report
- To discuss how the public can submit appeals or other comments on the preliminary FIRM and FIS report

- To discuss FIRM and FIS report maintenance after the effective date through LOMCs and CNMS
- To discuss alternatives for appropriate outreach methods for the public to review the preliminary FIRM and FIS report and engage in the mitigation planning process (CCO meeting only)
- To explain the process for adopting the FIRMs in the floodplain ordinances and the required timeline (CCO Meeting only)
- To explain the data needed to support an appeal and/or comment and explain the role of the Scientific Review Panel
- To discuss impact of insurance purchase, including grandfathering and the Preferred Risk Policy extension
- For the community(ies) to share information with local citizens about the communities' flood hazards and risks, new proposed maps, actions taken and planned, the status of mitigation planning activities, and the individual's responsibility to manage their own risks (Open House)
- To discuss LOMCs and timelines associated with submission by the public (Open House)
- To turn over the final Risk MAP products to the communities

6.3.1.4 Meeting Messages

CCO/Open House Meeting Messages include:

- While FEMA was drafting the preliminary FIRM, we shared the results with you and listened to your comments and concerns regarding potential revisions to your maps. This is another opportunity to submit comments/concerns regarding the revisions made to the FIRMs and FIS.
- Teamwork is vital to our collective success of identifying the risk through the mapping process, communicating the risk within the community(ies), and making informed decisions about how to address the risk.
- We want to understand how we can best support your efforts in communicating the release of these preliminary FIRMs and FIS report and other outreach efforts outside of the Open House meeting. (CCO Meeting only)
- We want to understand how we can best support your efforts in adopting the new FIRMs and updated FIS report? (CCO meeting only)
- Take note of your flood insurance status. It may benefit you to purchase flood insurance before the revised FIRMs and FIS report become effective. In addition, a low-cost policy may be available.
- Information in the new regulatory maps can be incorporated into mitigation plan updates.
- Participation in the Community Rating System can benefit residents and business owners through reduced flood insurance costs. Take the opportunity to find out more and determine if CRS is right for your community(ies). (CCO meeting only)

6.3.1.5 Meeting Activities

CCO/Open House Meeting activities include:

- Present or discuss an overview of revisions to FIRM panels and FIS report, including the Changes Since Last FIRM product if not already presented
- Discuss the appeals and/or comment process for regulatory products and the compliance/adoption timeline

- Explain how revised FIRM panels may impact flood insurance premiums, including grandfathering options and Preferred Risk Policy extension
- Explain how this information can be used as part of the mitigation planning process and coordinated with other planning activities related to future development, beneficial uses of the floodplain, and protecting sites of cultural, historic, and religious significance
- Discuss outreach and risk communication tools available to the community(ies)
- Further identify and fill in the Risk MAP Action Measure Fact Sheet, which captures the extent to which Risk MAP Communities are moving down the path to taking action to reduce risk from flooding

6.3.1.6 Post-Meeting Activities

A key follow-up for the CCO/Open House Meeting will be documentation that captures participant reactions to the preliminary Risk MAP products (regulatory and non-regulatory). The Regional Project Lead or other project team member may also post a summary along with other CCO Meeting/Open House documents to the FEMA Sharepoint or project-specific web site, as appropriate.

It may be appropriate to hold an additional public meeting after the Letter of Final Determination has been issued due to the large amount of time that may have passed between the CCO/Open House meetings and the FIRM effective date(s).

Project teams will also conduct follow-up as appropriate to determine progress toward FEMA Risk MAP metrics.