Guidance for Stakeholder Engagement

Risk Awareness Phase

This Document is Superseded.
For Reference Only.

November 2015

FEMA

Requirements for the Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment, and Planning (Risk MAP) Program are specified separately by statute, regulation, or FEMA policy (primarily the Standards for Flood Risk Analysis and Mapping). This document provides guidance to support the requirements and recommends approaches for effective and efficient implementation. Alternate approaches that comply with all requirements are acceptable.

For more information, please visit the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage (www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping). Copies of the Standards for Flood Risk Analysis and Mapping policy, related guidance, technical references, and other information about the guidelines and standards development process are all available here. You can also search directly by document title at www.fema.gov/library.

Document History

Affected Section or Subsection	Date	Description
First Publication	November 2015	Initial version of new transformed guidance. The content was derived from Operating Guidance (OG) 04-11, Risk MAP Meetings Guidance, dated June 30, 2011; OG 3-11, Communicating Flood Risk with Risk MAP Dataset and Products, dated July 21, 2011; and OG 6-11, User Guidance for Flood Risk Datasets and Products, dated December 21, 2011. It has been reorganized and is being published separately.

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1.0 Introduction

This guidance document has been prepared to expand on and supersede Risk Mapping, Assessment, and Planning (Risk MAP) program guidance provided in Sections 1 and 5 of Federal Emergency Management Agency (FEMA) Operating Guidance (OG) 04-11, Risk MAP Meetings Guidance, dated June 30, 2011. Specifically, this guidance document addresses stakeholder engagement during the Risk Awareness Phase (formerly referred to as the Risk Awareness and Mitigation Outreach Phase in OG 04-11) of the Risk MAP project lifecycle.

The reason for this expansion is the assumption that, to be effective, stakeholder engagement needs to be continuous throughout each phase of the Risk MAP project lifecycle. The content of OG 04-11 was focused on specific milestones – that is, the Resilience Meeting discussed in Section 5 of this document and other meetings held during the process – and did not emphasize continuous engagement.

The content in Section 5 of OG 04-11 also was based on the original guidance to Regional Offices and Project Teams that Resilience Meetings should be held separately from other Risk MAP project meetings and should be held before the Preliminary Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report are delivered to the community for review and the Consultation Coordination Officer Meeting(s) and Flood Risk Open House(s) are held.

Some Regional Offices/Project Teams, in consultation with affected communities, have chosen to comply with the timing guidance, but hold the Resilience Meetings at the same time as the Flood Risk Review Meetings. (See FEMA Guidance Document No. 61, Guidance for Stakeholder Engagement: Data and Product Development Phase. Guidance Document No. 61 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.)

Some Regional Offices have chosen to hold the Resilience Meetings later, during the Due Process Phase, following the issuance of the Letter of Final Determination that starts the adoption/compliance period.

This guidance document also provides content from two other FEMA guidance documents to help explain the Flood Risk Datasets and Flood Risk Products that FEMA will provide and how they may be used by community officials and other stakeholders:

- OG 3-11, Communicating Flood Risk with Risk MAP Dataset and Products, dated July 21, 2011
- OG 6-11, User Guidance for Flood Risk Datasets and Products, dated December 2011

With the issuance of this guidance document, the content in OG 3-11 is superseded. This guidance document should be used in conjunction with OG 6-11, which is not superseded. OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

The objectives of the Risk Awareness Phase (formerly referred to as the Risk Awareness and Mitigation Outreach Phase in OG 04-11) of the Risk MAP project lifecycle are (1) to provide a comprehensive view of mitigation planning and mitigation options available to communities, and (2) to share success stories and potential mitigation actions that communities can initiate.

The primary audiences for this guidance document are staff from the 10 FEMA Regional Offices, FEMA Headquarters (HQ), and the Project Teams that are formed to carry out the projects in support of the Regional Offices. However, this guidance document also is intended for Risk MAP providers that may not be actively involved in individual flood risk studies, but may be called on to support activities during the Risk Awareness Phase as "internal stakeholders." (See Subsection 3.2.3.)

The guidance in this document is consistent with the Risk MAP program vision. The Risk MAP vision includes collaborating with local, State, and Tribal entities throughout a 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 transformed its traditional flood hazard identification and mapping efforts into a more integrated process of identifying, assessing, communicating, planning, and mitigating flood-related risks. The goals of the Risk MAP program 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, stakeholder coordination and engagement is necessary throughout the Risk MAP project lifecycle. Engagement is particularly important during the Risk Awareness Phase because of the importance of encouraging and supporting community and stakeholder commitment to the planning and implementation of flood risk reduction activities.

As mentioned earlier in this document, the guidance, context, and other information in this document is not required unless it is codified separately in a statute, regulation, or policy. Alternate approaches that comply with all requirements are acceptable. Each Regional Office has an Action

Strategy that will inform the engagement support and activities performed during the Risk Awareness Phase; the FEMA Project Officer will identify the required level of support.

1.1 Risk Awareness Overview

As shown in Figure 1, the Risk Awareness Phase is the fourth phase in the Risk MAP project lifecycle.

Figure 1: Risk MAP Project Lifecycle

Activities that occur during this phase of the lifecycle include the following as appropriate:

- Update and continue implementation of the stakeholder engagement plan for the project developed earlier in the lifecycle.
- Deliver Flood Risk Datasets and Flood Risk Products (formerly referred to as non-regulatory products) to community officials and other key stakeholders for review.
- Use information obtained during earlier project phases to determine how best to leverage community activities, assets, and concerns in support of mitigation actions and to remove barriers or create incentives for mitigation action.
- Identify and discuss relevant mitigation actions and best practices.
- Document completed, in-progress, and planned mitigation actions for inclusion in future updates to community Hazard Mitigation Plans.
- Prepare for, plan, hold, and follow up on Resilience Meetings.

1.2 Stakeholder Engagement Goals for Risk Awareness Phase

Stakeholder engagement during the Risk Awareness Phase should be flexible and scalable, and will not look the same in all areas, as each FEMA Regional Office, each watershed or study area, each Project Team, and each stakeholder group to be engaged will vary. For example, the Resilience Meetings discussed in this guidance document may be held as separate meetings, they may be combined with Flood Risk Review Meetings (discussed in Guidance Document No. 61, Guidance for Stakeholder Engagement: Data and Product Development, which can be found

on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage) and they may be held before or after the Preliminary NFIP Map Release Phase of the project lifecycle.

Final decisions regarding meeting timing and format will continue to be the responsibility of the FEMA Regional Project Officer.

The stakeholder engagement activities that FEMA-led Project Teams might conduct during the Risk Awareness Phase are intended to accomplish the following:

- Improve implementation of the previously developed stakeholder engagement plan.
- Provide a comprehensive view of mitigation planning and mitigation options available to communities, including integration with other community planning processes.
- Continue to build stakeholder understanding of, confidence in, and ownership of the process being followed.
- Build stakeholder understanding of, confidence in, and ownership of the Flood Risk Datasets and Flood Risk Products provided by FEMA and how they may be used effectively.
- Enhance and expand the relationships with key influencers and stakeholders developed during the earlier phases of the project and develop relationships with newly identified key influencers and stakeholders.
- Improve stakeholder awareness and understanding of flood risk and the potential impacts on homes, businesses, and families.
- Encourage mitigation actions by community officials and individual property owners.
- Provide continued transparency into the Risk MAP process.
- Gain 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.

Engagement with both internal and external stakeholders is appropriate during the Risk Awareness Phase and will be needed to achieve success.

1.3 Coastal and Levee Accreditation Project Considerations

All newly initiated Risk MAP projects must be watershed-based, with the exception of coastal projects and small-scale projects related to levee accreditation status. Coastal projects and levee projects may have longer timelines than Risk MAP projects for watersheds, separate prioritization protocols, widely varying stakeholder audiences, as well as other differences. For example, levee projects require the formation of a Local Levee Partnership Team that includes a diverse group of stakeholders.

Please refer to separate guidance related to coastal projects and levee projects in the Project Delivery portion of the FEMA Knowledge Sharing Site, which is accessible online through the password-protected Risk MAP Program Portal at https://riskmapportal.msc.fema.gov/kss/.

Individuals who do not have access to the Risk MAP Program Portal should contact their Regional Office for assistance.

1.4 Tribal Considerations

When Tribal lands are included in a watershed/project area, consultation with Tribal entities may be appropriate and is to be coordinated with the Regional Office Tribal Liaison. During the Discovery Phase, the Regional Office Tribal Liaison should have consulted with the appropriate Tribal entities on whether they wanted to be included in other planned engagement efforts and Risk MAP meetings, or if separate engagement efforts or meetings with them would be more appropriate.

This will depend on established working relationships between the Regional Office Tribal Liaisons and the Tribal entities within each Region and other factors. For instance, if a Tribal entity participates in a multijurisdictional Hazard Mitigation Plan, it might be appropriate for them to participate in the Resilience Meetings held for the entire watershed or geographic area that is the focus of the flood risk project.

Even if the FEMA Regional Office determines that a Tribe does not have the land use authority needed to implement the requirements of the NFIP, the Discovery process might have provided an opportunity to inform the Tribe about the NFIP, Risk MAP program, and other mitigation activities, such as the benefit of developing Hazard Mitigation Plans. During the Discovery Phase, the Regional Office should have made a final decision, in coordination with Tribal entity, on whether the Tribe meets the NFIP definition of a community and how the Tribal entity should be included in the flood risk project.

Only the FEMA Regional Office Tribal Liaison or other approved Regional Office staff members are to work directly with federally recognized Tribes and Tribal entities. Therefore, if a Tribal entity contacts a Project Team member about participation in the NFIP or participation in the ongoing project, that Project Team member is to notify the FEMA Regional Office Lead for the project and the Regional Office Tribal Liaison immediately.

When appropriate during the Risk Awareness Phase, Tribal entities may need to be considered as external stakeholders, and the Regional Office may need to consider the potential impacts that the additional engagement will have on project budget considerations. Within this document, the term “communities” includes Tribes/tribal entities that have chosen to participate actively in a flood risk project.

1.5 Key Terms Defined

The terms listed below are key terms that will be used in this guidance document and other stakeholder engagement guidance documents.

- *Chief Executive Officer (CEO)* – The official of a community who has the authority to implement and administer laws, ordinances, and regulations for that community.
- *Consultation Coordination Officer (CCO)* – The individual on the FEMA Regional Office staff who is responsible for coordinating with a community on activities related to the NFIP.

- *Floodplain Administrator (FPA)* – The community official who is responsible for operating a floodplain management program in a community in accordance with NFIP regulatory standards.
- *Flood Risk Dataset* - A compilation of data gather during a flood risk project. The information in a Flood Risk Dataset is typically provided electronically in table format and is able to be used in other format, such as in a Geographic Information System. Four groupings of information that are typically provided as a result of a flood risk project are the Changes Since Last FIRM, Areas of Mitigation Interest, Flood Depth and Analysis Grids, and Flood Risk Assessment Data datasets.
- *Flood Risk Products* – The term used to describe products provided to community officials by FEMA as a result of a flood risk project that, unlike the FIRM and FIS report, are not subject to statutory due-process requirements. Flood Risk Products include the Flood Risk Database, Flood Risk Map, and Flood Risk Report.
- *Key Influencers* – The term used to describe public- or private-sector organizations and individuals who have direct or indirect power to affect the decisions of others because of their real or perceived authority, knowledge, position, or relationship.
- *Mitigation* – A sustained action taken to reduce or eliminate long-term risk to people and property from flood hazards and their effects. Mitigation distinguishes actions that have a long-term impact from those are more closely associated with preparedness for, immediate response to, and short-term recovery from specific events.
- *Outreach* – The activity, process, or channel used to engage or communicate to others.
- *Project Management Team* – The term used to describe the individuals who will manage a project for its entire lifecycle. The Project Management Team includes the FEMA Risk Analysis Branch staff member who is the FEMA Project Officer for a project; project manager or senior-level staff from the Cooperating Technical Partners (CTPs) and/or Risk MAP providers who are participating on the Project Team; the State NFIP Coordinator; and the FEMA Regional Office Contracting Officer.
- *Project Team* – The term used to describe the team of individuals and organizations who will execute a project over its lifecycle. In addition to the FEMA Project Officer for the project, the Project Team can include management and staff from the CTP(s) and/or Risk MAP provider(s) who are participating in the project; the State NFIP Coordinator and State Hazard Mitigation Officer (SHMO); other Federal agencies; and others, such as regional planning agencies and water management districts.
- *Resilience Meeting* – The term used to describe a formal meeting held with community officials and stakeholders for a flood risk project carried out under the Risk MAP program to review Flood Risk Datasets and Flood Risk Products and potential mitigation actions to incorporate into local Hazard Mitigation Plans.
- *Risk MAP Providers* – The term used to collectively refer to the teams of private-sector companies that support the Risk MAP program under contract to FEMA; i.e., the Customer and Data Services (CDS), Community Engagement and Risk Communication (CERC), Production and Technical Services (PTS), and Program Management (PM) providers.

- *Stakeholder Engagement* – The process by which an organization involves people or organizations that may be affected by the decisions it makes or can influence the implementation of those decisions.

1.6 Potential Impacts of Recent NFIP Reform Legislation

Through enactment of the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12) and the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA), the U.S. Congress has placed a number of community/stakeholder engagement and outreach requirements on FEMA. For a complete breakdown of the new regulatory requirements, visit the Flood Insurance Reform portion of the FEMA website (www.fema.gov/flood-insurance-reform).

As part of the reform legislation, the U.S. Congress also required the establishment of a new Technical Mapping Advisory Council (TMAC) to advise FEMA on certain aspects of the national flood mapping program. Additional information on the TMAC is accessible through the FEMA website at https://www.fema.gov/technical-mapping-advisory-council. Because of the breadth and depth of the new statutory requirements, FEMA established the Flood Mapping Program Integrated Program Team (IPT) to review each requirement and to make recommendations for implementation.

As the TMAC and Flood Mapping Program IPT participants continue their deliberations and issue interim and final recommendations or guidance on how FEMA should address the requirements, and new FEMA standards for the Project and Planning Phase are established, FEMA may find it necessary to update and reissue this guidance document.

2.0 Documenting Outreach and Engagement Activities

To ensure a clear understanding on the part of all Project Team members, all outreach and engagement activities should have been documented in an implementable written plan earlier in the project lifecycle. Such plans are required for all Risk MAP projects. The plan may have been referred to as a communications plan, outreach plan, or community engagement plan. For the purposes of this document, the plan used to document activities during the Risk Awareness Phase is referred to as a stakeholder engagement plan.

2.1 Reviewing and Updating the Plan

At the beginning of the Risk Awareness Phase, Project Team members will need to review the existing stakeholder engagement plan. The purpose of this review is to determine whether it is accurate based on contractual arrangements made with CTPs and Risk MAP providers and current guidance from the Flood Mapping Program IPT and FEMA HQ.

Project Team members also will need to verify that the plan includes the following information, at a minimum:

- Environment/background in which the outreach and engagement will take place
- Goals/objectives

- Roles and responsibilities of Project Team members, which will include some combination of:
  - FEMA Risk Analysis Branch, Floodplain Management and Insurance Branch, and Hazard Mitigation Assistance Branch staff
  - CTP staff
  - State NFIP Coordinator
  - SHMO
  - PTS provider staff
  - CERC Liaison (CERC-L) and other CERC provider staff
  - CTP contractor staff
  - Other Federal agency staff
- Roles and responsibilities of non-Project Team members, such as staff from:
  - Regional Office of External Affairs
  - Other FEMA Regional Offices and HQ offices
  - CTP
  - Risk MAP providers
  - Other Federal agencies
- Key message content and format
- Engagement tools and techniques to be used
- Audiences to be engaged, including external (public- and private-sector) stakeholders, internal (FEMA and Risk MAP provider) stakeholders, and key influencers
- Outreach and engagement strategies and tactics
- Activities timeline
- Expected outcomes
- Potential barriers to success
- Monitoring plan and proposed solutions

If specific information had been included for the Risk Awareness Phase in a stakeholder engagement plan for the project developed during an earlier phase, the Project Team should verify that the information is still correct and make appropriate changes to ensure the document is useful to the team. If no information has been provided for the Risk Awareness Phase, the Project Team should amend the stakeholder engagement plan to include appropriate information.

Given the engagement and communication responsibilities of the CERC provider, the CERC-L would likely be the appropriate Project Team member to lead the effort to update the stakeholder engagement plan. However, this assignment will be made by the Project Management Team.

Once the plan has been updated, it would be beneficial for the Project Management Team to distribute the updated stakeholder engagement plan and to emphasize to Project Team members the importance of carrying out assigned activities and responsibilities, as documented, and

reporting progress. It also may be beneficial for the Project Management Team to establish a process for amending the plan later in the Risk Awareness Phase should this become necessary.

2.2 Using Multiple Stakeholder Engagement Levels

When developing the original stakeholder engagement plan, the Project Management Team and other Project Team members may have determined – based on the size of the project, the complexity of the project, and the number of stakeholders identified – that it would not be possible or appropriate for the Project Team members to carry out a robust or comprehensive engagement effort with every stakeholder/stakeholder group. Therefore, they may have determined that it would be appropriate to establish multiple levels of engagement.

Based on their subsequent experience during the earlier phases, the Project Team members may choose to continue this approach or to amend the approach entering the Risk Awareness Phase. If appropriate, the Project Team should update the stakeholder engagement plan to document the changes in the approach.

2.3 Documenting Key Influencer Roles and Responsibilities

During the earlier phases of the project lifecycle, Project Team members may have identified organizations or individuals that are, or have the potential to be, key influencers who are trusted sources of information. Additional information on key influencers is provided in Subsection 3.2 of FEMA Guidance Document No. 61, Guidance for Stakeholder Engagement: Data and Product Development Phase. Guidance Document No. 61, which can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

The names or titles of the key influencers and their roles and responsibilities should have been included in the stakeholder engagement plan. If appropriate information on key influencers was not included, the Project Team should determine who the key influencers are moving forward and update the plan to include this information. The Project Team also may determine that information on key stakeholders has been included in the existing stakeholder engagement plan, but should be updated based on their more recent experience with these individuals and organizations or their knowledge about their roles in the watershed.

3.0 Engaging Stakeholders

Engagement with a variety of external and internal stakeholders at each phase of a flood risk study project is vital for a project to be completed successfully. Information on potential external stakeholders to be engaged during the Risk Awareness Phase is provided in Subsection 3.1, while information on potential internal stakeholders (i.e., FEMA HQ, FEMA Regional Offices, Risk MAP providers that are not represented on the Project Team) to be engaged during the Risk Awareness Phase is provided in Subsection 3.2.

3.1 Engagement with Local Community Officials and Other External Stakeholders

Engagement with a variety of external stakeholders during this phase will enable the FEMA Project Officer and other Project Team members to accomplish the following:

- Further engage with community officials and stakeholders/partners to identify areas of emphasis for public outreach, and develop outreach strategies that incorporate the new understanding of flood risk and what steps the community is taking or considering to address that risk.
- Further educate community officials and other stakeholders about the types of Flood Risk Datasets and Flood Risk Products that are available and how they can be used to increase flood risk awareness and encourage planning and execution of flood risk reduction activities.
- Further educate community officials and other appropriate stakeholders about funding and other support resources available through FEMA (or others) to help community leaders begin to solidify thinking regarding future mitigation efforts.
- Encourage and support communities' taking ownership of Flood Risk Datasets and Flood Risk Products.
- Encourage and support community officials' planning of, and taking a leadership role in, communicating to the public about flood risks and actions citizens can take to improve community resilience.
- Build on relationships with the key influencers who have been identified as being able to help deliver the flood risk-related messages to community officials (including supporting the use of Flood Risk Datasets and Flood Risk Products) and continue the momentum toward improved resilience during subsequent project phases and even after the FIRM and FIS report have become effective.
- Maintain positive, cooperative relationships with appropriate Federal and State agencies, regional entities, and private-sector organizations that are not represented on the Project Team or otherwise actively participating in the project.

The following stakeholder groups, which could be engaged by the Project Team during the Risk Awareness Phase, are discussed in Subsections 3.1.1 through 3.1.6:

- Community officials
- Regional entities
- State partners and other State agencies
- Federal agency partners and other Federal agencies
- Federal and State elected officials
- Private-sector organizations, including the media

During the Risk Awareness Phase, Project Team members should assess their level of engagement with each of these stakeholder groups and amend their approach, if appropriate, to meet project goals and objectives. All changes in approach should be documented in the

stakeholder engagement plan discussed in Section 2 and approved by the Project Management Team.

3.1.1. Engaging Local Community Officials

Through the earlier phases of the project, the Project Team should have established and maintained a consistent level of engagement with community and county officials in the watershed or geographic area that is the focus of the project. This engagement should have started before or during the Discovery Phase, as documented in Section 2 of FEMA Guidance Document No. 22, Guidance for Stakeholder Engagement: Discovery Phase, dated May 2014. (Guidance Document No. 22 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.) As indicated in that document, engagement with a broad array of stakeholders is one of the guiding principles for working with communities under the Risk MAP program.

Timely, appropriate, and comprehensive engagement should help the Project Team continue to maintain solid relationships during the Risk Awareness Phase. Potential local officials (county and community) with whom the Project Team may want to engage during the Risk Awareness Phase include, but are not limited to, the following:

- CEOs
- FPAs
- Emergency managers
- Engineers
- Planners
- Building officials and other code enforcement officials
- Geographic Information Systems (GIS) managers/coordinators/specialists
- Hazard mitigation planners and officials involved in implementation
- Community development and economic development officials and organizations
- Metropolitan planning and transportation organizations/entities

3.1.2. Engaging Regional Entities

It is appropriate for the Project Team to engage at least periodically with select regional entities in the watershed or geographic area that is the focus of the project. This engagement may have started during the Discovery Phase and continued through the Data and Product Development Phase. Potential regional entities with whom the Project Team may want to engage during the Risk Awareness Phase include, but are not limited to, the following:

- Planning districts and authorities
- Flood control, water management, and water conservation districts and authorities
- Economic development commissions, councils, boards, authorities, and agencies
- Regional planning and transportation planning organizations

3.1.3. Engaging State Partners and Other State Agencies

State CTPs, State NFIP Coordinators, SHMOs, and their staff likely will already be active Project Team members. Before the Risk Awareness Phase, Project Team members may have engaged with representatives of some or all of the State agencies listed below because they were able to help identify resources – themselves or other agency representatives – that may be available to communicate about flood risk and support flood risk reduction activities in the watershed. In fact, some agency representatives may have been identified as key influencers.

- Community Rating System (CRS) Coordinators (and supporting Insurance Services Office specialists)
- State agencies that own and/or operate levees or dams
- State historic preservation offices
- State dam safety officials
- State departments of environmental protection
- State transportation departments
- State housing and economic development authorities

3.1.4. Engaging Other Federal Agencies

Some existing Federal agency partners and their staff may be active Project Team members. During the Data and Product Development Phase, Project Team members may have engaged with regional or district office representatives of some or all of the Federal agencies listed below because they were able to help identify resources that may be available to communicate about flood risk and support flood risk reduction activities in the watershed. In fact, some Federal agency representatives may have been identified as key influencers

- National Oceanic and Atmospheric Administration (NOAA), including the National Weather Service and Office for Coastal Management
- Natural Resources Conservation Service
- U.S. Army Corps of Engineers (USACE), including the Flood Risk Management Program office
- U.S. Bureau of Indian Affairs, when Tribal lands are affected and Tribal entities are participating in the project
- U.S. Bureau of Reclamation
- U.S. Census Bureau
- U.S. Department of Housing and Urban Development
- U.S. Economic Development Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Geological Survey (USGS)

3.1.5. Engaging Federal and State Elected Officials

Engagement with the following elected officials and their staff may have proven to be beneficial during the earlier project phases to minimize disruptions in the flood risk study process, to obtain support for products, or to obtain support for mitigation projects:

- U.S. Senators
- U.S. Representative(s) for the watershed
- State Senator(s) for the watershed
- State Representative(s) for the watershed
- Governor

The Project Team, working in close coordination with the Regional Office of External Affairs staff, may want to continue an appropriate level of engagement with the elected officials and their staff during the Risk Awareness Phase.

3.1.6. Engaging Private-Sector Organizations and the Media

The Project Team may have initiated engagement activities with regional, State, and local affiliates of the professional associations and other nongovernmental organizations (NGOs) and nonprofit organizations (NPOs) listed below during earlier phases of the project. The members of these organizations, by and large, are embedded in the community; have routine interactions with, and often can influence, Federal, State, and local elected officials and other decision-makers; and have daily interactions with local officials and the media.

Depending on the their previous experience with these organizations and the Project Management Team's and Project Team members' perspective on the ability of organization representatives to advance flood risk reduction through mitigation, the team may want to continue, and build on, their partnerships with these organizations and other professional associations, NGOs, and NPOs.

Professional Associations

- American Congress of Surveying and Mapping
- American Planning Association
- American Public Works Association
- American Society of Civil Engineers
- American Water Resources Association
- Association of State Floodplain Managers
- Association of State Wetland Managers
- National Association of Counties
- National Association of Flood and Stormwater Management Agencies
- National Association of Home Builders
- National Association of Realtors

- National Emergency Management Association
- National Flood Determination Association
- National League of Cities
- Natural Hazard Mitigation Association

Other NGOs and NPOs

- American Red Cross
- American Rivers
- American Shore and Beach Preservation Association
- Coastal Conservation Association
- Institute for Business and Home Safety
- The Nature Conservancy
- U.S. Chamber of Commerce

Communications and Outreach staff in the Risk Analysis Division (RAD) of the Federal Insurance and Mitigation Administration (FIMA) are formulating a National Partnership Network as a platform for thought leaders who have a complementary disaster resiliency perspective. The CERC provider is providing support on this effort. If they have not already engaged with participants in the National Partnership Network, the FEMA Project Officer or a Project Team member designated by the FEMA Project Officer may want to initiate this engagement by coordinating with the CERC-L.

The other key private-sector stakeholder group with which the Project Team may need to initiate or continue engagement is the local media. Engagement with the local media – which could consist primarily of working with the editorial boards of newspapers, television stations, and radio stations in the watershed – should be carried out under the leadership of the Regional Office of External Affairs.

As during other project phases, the print and broadcast media are likely to be very active in communicating to the general public, covering most, if not all, of the stakeholder groups discussed in this subsection. Getting the media to provide timely, accurate information may be labor-intensive, but worth the effort.

3.2 Engagement with Internal Partners and Programs

In addition to coordinating with external stakeholders, Project Teams will want to continue their engagement with the following primary internal partners:

- FIMA offices at FEMA HQ
- FEMA Regional Offices that are not represented on the Project Team
- Risk MAP providers that are not represented on the Project Team (i.e., CERC provider, CDS provider, PTS providers)

3.2.1. Engaging with Federal Insurance and Mitigation Administration Offices

FIMA is charged with integrating the efforts of individual teams who oversee individual programs within its organization to ensure that resources are better leveraged and steps are taken to reduce duplication of effort and to better achieve complementary goals and objectives. The FIMA RAD, Risk Reduction Division (RRD), Risk Insurance Division (RID), and Office of Environmental Planning and Historic Preservation (OEHP) are uniquely positioned to accomplish this because of the natural synergies among the staff and the programs they oversee. Periodic engagement with the RAD, RRD, RID, and OEHP staff may be appropriate during the Risk Awareness Phase for Project Team members to obtain the following:

- Latest information on existing programs and initiatives, especially those programs and initiatives that provide potential sources of funding or other support for mitigation activities
- Latest mitigation planning guidance and outreach materials
- Information on near-term and longer-term initiatives that are in progress or planned and that are expected to have a positive impact on stakeholder engagement during the Risk Awareness Phase
- Support for answering community questions regarding existing programs and initiatives and any newly implemented programs and initiatives
- Support for responding to inquiries from U.S. Congress and State legislature

The Project Team may also find it beneficial to engage with another key internal stakeholder, the Office of the Flood Insurance Advocate (OFIA). The U.S. Congress directed the FEMA Administrator to establish a Flood Insurance Advocate through enactment of Section 24 of the Homeowner Flood Insurance Affordability Act of 2014. The Flood Insurance Advocate and OFIA staff advocate for the fair treatment of flood insurance policyholders under the NFIP and for property owners in the mapping of flood hazards, the identification of flood risks, and the implementation of measures to reduce flood risks. OFIA is staffed by experts in all aspects of the NFIP, including claims processes, the map review and amendment process, floodplain management, and flood mitigation techniques and resources.

As a result of their day-to-day activities, the Flood Insurance Advocate and the OFIA staff may have information and documentation that will help the Project Team identify problems or concerns regarding the area of study that were not raised during earlier project phases. Therefore, the Project Team may want to engage with the OFIA staff to obtain their insights, which may assist the Project Team with fine-tuning the engagement plan and carrying out documented activities. In addition, the Flood Insurance Advocate and OFIA staff may have developed specific recommendations regarding regional mapping outreach and education that the Project Team needs to implement during the Risk Awareness Phase.

The two-way communication that takes place during engagement may be equally beneficial to the Flood Insurance Advocate and the OFIA staff. The Flood Insurance Advocate and OFIA staff will be able to obtain project-related information for areas that may be the subject of, or pertinent to responding to, a particular inquiry.

3.2.2. Engaging with Other Regional Offices

Where a watershed or geographic area that is the focus of the study abuts or crosses regional boundaries, continued engagement by the FEMA Project Officer and the Project Team with the FEMA Project Officer(s) and Project Team(s) in the adjoining Region(s) is vital. Such engagement should help to ensure that Flood Risk Datasets and Flood Risk Products and related messaging are consistent and that community and State officials' planning and implementation of mitigation activities across community, county, and state boundaries is well coordinated.

Periodic engagement with other Regional Offices that do not have a geographic stake in the project might be carried out by the FEMA Project Officer or Project Team members to obtain information on lessons learned and best practices developed for similar projects or situations, particularly with regard to Resilience Meetings.

3.2.3. Engaging with Risk MAP Providers

As mentioned earlier, some Risk MAP provider staff (i.e., PTS staff, CERC-L) may participate actively on the Project Team. When Risk MAP provider staff members are not actively involved, periodic Project Team engagement with the providers could still prove valuable and should be considered, as summarized below.

- Engagement with the CDS provider may be appropriate to obtain recent email messages and telephone records from the FEMA Map Information eXchange (FMIX) staff and to provide FMIX staff with information they can use to answer incoming flood risk study-related questions.
- Engagement with the CERC-L (if not a Project Team member) and other CERC provider staff that are not Project Team members may be appropriate for the following:
  - Monitoring media and recent congressional correspondence for the watershed
  - Responding to inquiries from, or preparing presentations for, Federal, State, and local elected officials and the media
  - Obtaining the latest community engagement and risk communication materials related to products that might be used during the Resilience Meeting(s)
  - Obtaining assistance with modifying communication engagement and risk communication materials to meet Region or project requirements
  - Facilitating key influencer and partner relationship building
  - Obtaining information on capacity for, and interest in, taking mitigation action
  - Arranging for professional meeting facilitation and dispute resolution support
  - Facilitating training of Project Team members
  - Coordinating project engagement activities with other planned and in-progress CERC-related activities
- Engagement with a PTS provider that does not have members on the Project Team may be appropriate to share information when a watershed abuts or crosses regional boundaries and to obtain information on lessons learned and best practices from other projects.

3.3 Potential Tools and Techniques to Support Stakeholder Engagement Effort

Project Team members may want to consider a number of tools and techniques when determining how to engage effectively with both external and internal stakeholders during the Risk Awareness Phase. For example, it may be beneficial to consider development of a community-led engagement/outreach initiative that continues through subsequent phase to help the community begin and then continue a dialogue about its efforts to build resilience.

Several potential tools and techniques that Project Team members may consider using during the Risk Awareness Phase are listed below.

- **Facilitated Conference Calls:** The Project Team will need to carry out ongoing periodic engagement with both internal and external stakeholders/partners that are actively involved or otherwise interested in the project and whose support is required for the overall success of the project. This periodic engagement can be accomplished via facilitated conference calls. Facilitated conference calls may be an effective way to accomplish coordination between and among Regional Offices and Project Teams when a watershed or geographic area that is the focus of the study abuts or crosses regional boundaries or planned mitigation actions cross regional boundaries. Each conference call should have an agenda, and the Project Team should document the results of the conference call in writing for future reference as discussed in Section 6.
- **Facilitated Webinars**: For engagement opportunities that involve the delivery of a large volume of information, that require attendees to see materials being discussed, or that require orientation and training, properly facilitated webinars using Adobe Connect or a similarly capable platform can be very effective. Depending on the platform used, these sessions can also be recorded, allowing participants to review sessions at a later date or direct other stakeholder staff to listen to the recording. A facilitated webinar may be an appropriate method for preparing for the Resilience Meetings or to follow up on mitigation activities discussed during the Resilience Meetings. Facilitated webinars also may be an effective way to accomplish the coordination between and among Regional Offices and Project Teams when a watershed or geographic area that is the focus of the study abuts or crosses regional boundaries or planned mitigation actions cross regional boundaries. Unless the recording of the session can be posted to the files discussed in Section 6, the Project Team should document the results of the webinar for that purpose.
- **In-Person Meetings/Site Visits**: In-person meetings (including the Resilience Meetings discussed in Section 4 of this document) and interim site visits to the watershed or other geographic area that is the focus of the project are invaluable opportunities for Project Teams to engage with key influencers and other stakeholders. Depending on the size of the watershed or geographic area, the Project Team may need to hold multiple Resilience Meetings and follow-up meetings to monitor progress on mitigation actions. The Project Team also should consider the types of community events where engagement and outreach can be leveraged, either events that already exist or events that FEMA develops in cooperation with community leaders, stakeholders, and partners as part of the stakeholder engagement effort. Where appropriate, the Project Team should prepare an agenda for in-person meetings and should document key decisions. Project Team

members should include meeting agendas and other documentation in the files discussed in Section 6.

- **Correspondence**: Before or after a facilitated conference call, webinar, or in-person meeting, tailored letters and email messages are an effective way to keep stakeholders engaged. Email messages might also be effective for delivering interim status updates; for distributing key materials before and after the Resilience Meeting(s) and other meetings and webinars; and for soliciting feedback from community officials and other stakeholders regarding meetings and webinars. Project Team members should include copies of correspondence with communities in the files discussed in Section 6.

- **Fact Sheets, Flyers, and Brochures**: Project Teams have, for many years, relied on fact sheets, flyers, brochures, and other print-type publications to communicate information. These tools are most effective as a means of communicating information one way. However, the Project Team also can use them effectively as an integral part of engagement efforts to announce facilitated webinars, meetings, conferences, and workshops. They also can be effective as "leave-behinds" at in-person meetings and workshops, as digital attachments to email messages, as attachments for webinars, or as content posted to partner or Regional Office websites to increase risk awareness and encourage local mitigation activities.

- **Newsletters, ListServs, or Other Means of Maintaining General, Ongoing Engagement:** The Project Team could continue to use newsletters, ListServs, or other means of monthly or bimonthly engagement with communities, Federal and State partners, regional entities, and private-sector organizations. This kind of ongoing communication encourages relationship building with existing and potential partners and can help provide transparency into the Risk MAP process.

- **State/Regional Conferences, Meetings, and Workshops:** Participation in State and Regional conferences, meetings, and workshops sponsored by key professional associations, other NGOs, and NPOs, when possible, can be an effective way to engage with multiple entities and individuals directly. Likewise, Regional Office- or Project Team-led workshops can be valuable mechanisms for ongoing relationship building and information sharing.

- **Templates**: To assist Project Teams with engaging Federal and State partners, professional associations, and other NGOs, FEMA, FEMA partner, and FEMA provider staff have developed templates for letters, email messages, and newsletter articles. These template materials have been, and can continue to be, modified to fit Project Team needs. Project Team members should consult with the FEMA Project Officer about the availability of previously developed templates that may be appropriate for the project during the Risk Awareness Phase.

- **Websites/Web Content**: If a CTP is a member of the Project Team, it may be possible and beneficial to engage with stakeholders through a project-dedicated website or through the posting of project-related information to web pages controlled by the CTP. As with fact sheets, flyers, and brochures, websites and web content have been used most often and effectively as a means of communicating information one way. However, they also can be

used effectively as an integral part of engagement efforts to announce webinars, meetings, conferences, and workshops.

Where Regional Offices already have established websites, these sites also could be used to announce webinars, meetings, conferences, and workshops or for posting of project-related fact sheets, flyers, and brochures. Before establishing new websites, however, Regional Office staff should confer with the FEMA HQ Office of External Affairs.

Where resources are available, chat rooms or other two-way communication vehicles hosted on websites also can be effective.

- **Videos**: Video production can be expensive. However, videos provide consistent messaging and are invaluable for explaining complex technical and programmatic issues. Videos also can be developed to showcase a community's flood risk and collective focus on building resilience in digestible formats for stakeholders and the public. They can be used effectively during in-person meetings (such as Resilience Meetings), webinars, conferences, and workshops to promote discussion. It may be possible for Project Teams to use videos developed for other projects, including projects in other FEMA Regions, or videos developed by other Federal agencies (e.g., NOAA, USACE, USGS) for other programs to reduce production costs.
- **Animations:** Because of their visual impact, animations also are an effective way to explain processes and complex concepts. Animations also can be developed to showcase a community's flood risk and collective focus on building resilience in digestible formats for stakeholders and the public. Animations may not be as expensive to produce as videos, depending on what is being created; however, it would be beneficial for the Project Team to use animations developed for other projects or animations developed by other Federal agencies (e.g., NOAA, USACE, USGS) for other programs.
- **Social Media:** Project Team members may want to encourage community leaders and partner organizations to deliver social content to help build attention to the community's resilience efforts and focus on maintaining/improving it for the future. Social channels are important to consider for reaching the public and engaging partner organizations. For interim contacts that do not require real-time exchanges of information, to issue updates, and to remind invited participants about upcoming events (e.g., conference calls, webinars, conferences, workshops), Project Team members should consider using social media such as YouTube, Facebook, and Twitter to their advantage. The Project Team may need to confer with the Regional Office of External Affairs to determine the correct protocol for the use of social media in that Region.

4.0 Flood Risk Datasets and Flood Risk Products to Support Stakeholder Engagement

The Flood Risk Datasets and Flood Risk Products produced by the Project Team represent a powerful set of tools to help explain flood risks in a watershed or individual community. The Project Team should use and share these tools – in conjunction with the tools and techniques discussed in Subsection 3.4 – to fully inform and engage the external stakeholders discussed in Subsection 3.1 to foster a better understanding of their flood risk and enable better preparation to take action to reduce that risk. When selecting communication tools and techniques, it will be important for

the Project Team to frame communications with each intended stakeholder audience in a way that is digestible and easier to understand.

Although all Flood Risk Datasets and Flood Risk Products are discussed in this section, the Flood Risk Datasets and Flood Risk Products that will be produced for a particular project will be determined based on the project scope of work. The Project Team will need to work with local FPAs, GIS specialists, and other community officials to determine the capabilities of the community to use the datasets and products provided to develop additional risk communication tools.

4.1 Flood Risk Datasets

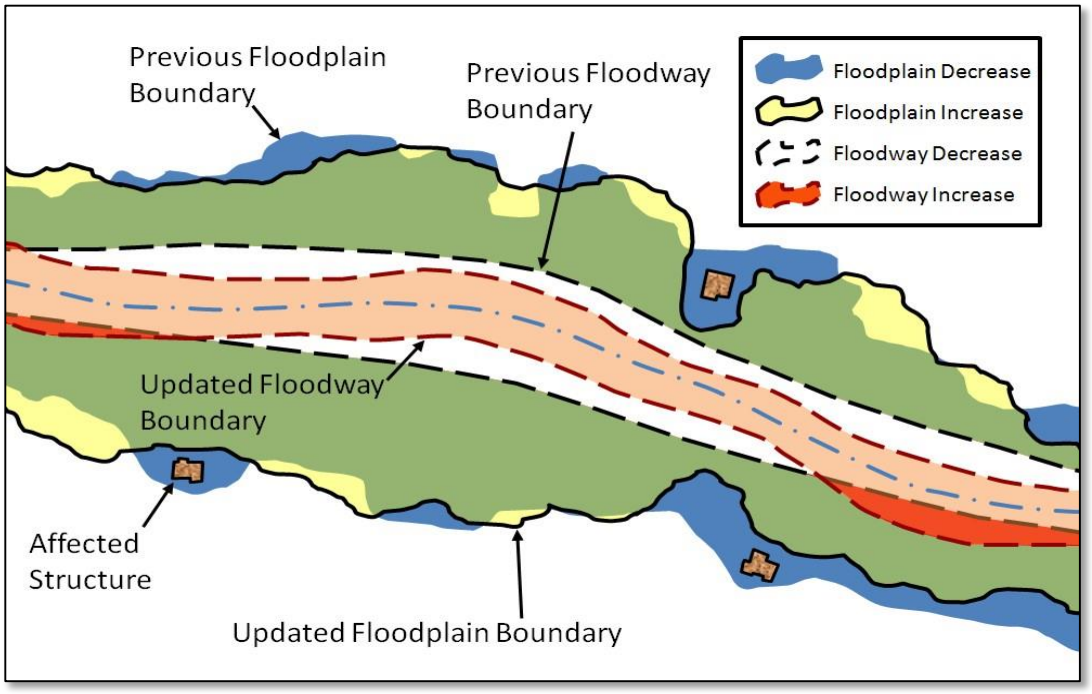
Flood Risk Datasets are a compilation of data gathered during the flood risk study project. Information in a dataset is typically provided electronically in table format, and is able to be used in other applications, such as a GIS. Data shown graphically or visually can help the user understand the associated flood risks more fully. Subsections 4.1.1 through 4.1.4 provide summaries of the four FEMA Flood Risk Dataset families or groupings, which convey important flood risk information. Sample graphics that can be generated from the dataset using standard and readily available software are provided where appropriate.

4.1.1. Changes Since Last FIRM Dataset

The Changes Since Last FIRM (CSLF) dataset provides information regarding the changes made to the mapped floodplain and regulatory floodway since the effective FIRM for the watershed or community was published. The CSLF dataset that can be used to create a graphic of the changes. In addition to the extent of changes, this dataset also includes information to help community officials explain to stakeholders why the mapped floodplain and/or regulatory floodway boundaries were changed. For additional details on the CSLF dataset, see Subsection 2.1 of FEMA OG 6-11. OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

A visualization of the CSLF dataset is provided in Figure 2.

Figure 2: Visualization of CSLF Dataset



4.1.2. Areas of Mitigation Interest Dataset

The Areas of Mitigation Interest (AOMI) dataset identifies physical factors that may contribute (positively or negatively) to flooding and flood losses, warranting further research and focus to determine if it is feasible to address them through the implementation of mitigation actions. The Flood Risk Map (see Subsection 4.2.2) will include callouts (space permitting) showing examples of potential mitigation opportunities.

The AOMI dataset helps to raise awareness of potential flood risk mitigation opportunities (including specific flood risk mitigation projects), encourage local collaboration, and communicate how various mitigation activities can successfully reduce flood risk. The AOMI dataset is useful in formulating building code enhancements and prioritizing mitigation actions and identifying needed resources. It allows neighboring communities in a watershed or other geographic area to see factors that may impact them, fostering local collaboration. For additional information on the AOMI dataset, see Subsection 2.4 of FEMA OG 6-11, User Guidance for Flood Risk Datasets and Products. OG6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

4.1.3. Flood Risk Assessment Data Dataset

The Flood Risk Assessment Data dataset provides an assessment of the potential financial consequences associated with structures located within the full extent of the 0.2-percent-annual-chance floodplain. Flood risk assessment data also are expressed as an annualized estimate of damage that, for example, a homeowner might expect to incur during any given year if they are located in the mapped floodplain. The Flood Risk Assessment Data dataset is stored in the Flood Risk Database and is used to create the community-specific tables presented in the

Flood Risk Report. The Flood Risk Report and Flood Risk Database are discussed in Subsections 4.2.1 and 4.2.3, respectively.

The Flood Risk Assessment Data dataset helps guide community mitigation efforts by quantifying future potential flood losses, thereby showing where flood mitigation actions may produce the highest return on investment. This dataset estimates potential flood losses for different flood frequency levels and reports the results at the census block level. These flood loss estimates provide valuable information for local planners and emergency managers to develop a vulnerability assessment for mitigation planning purposes.

For additional information on the Flood Risk Assessment Data dataset, see Subsection 2.3 of FEMA OG 6-11 User Guidance for Flood Risk Datasets and Products. OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

4.1.4. Flood Depth and Analysis Grids Dataset

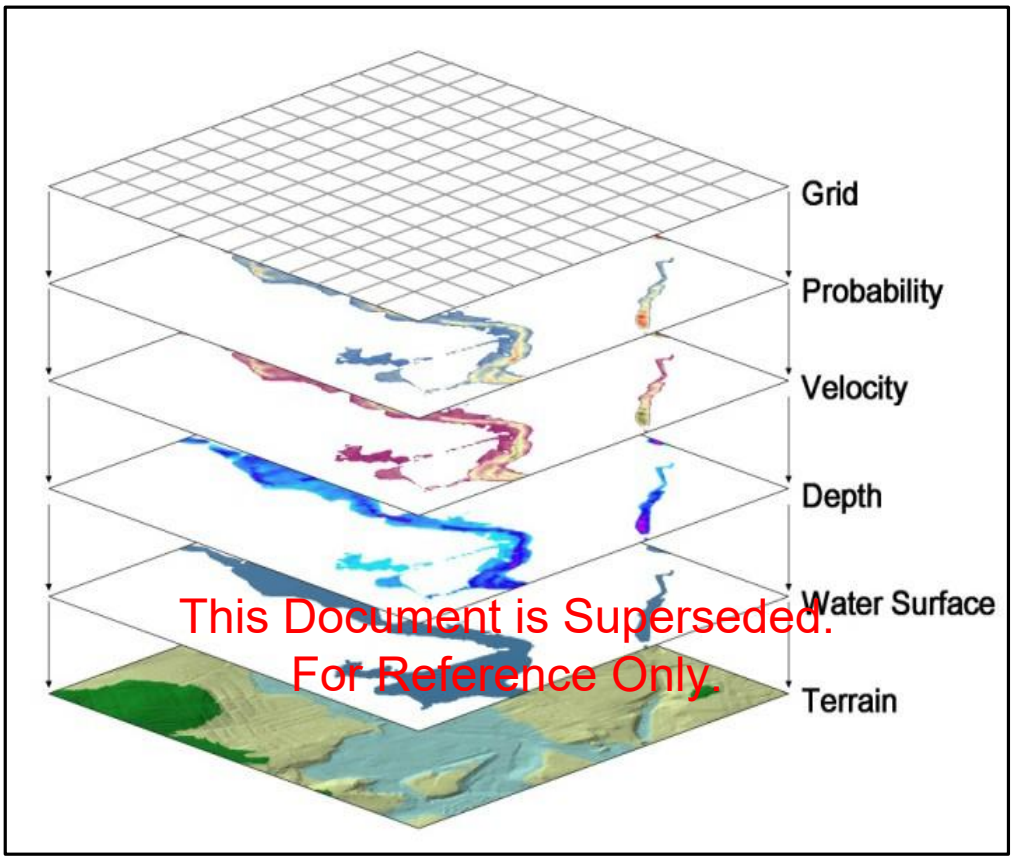
The Flood Depth and Analysis Grids dataset provides a wide variety of information associated with determining and visualizing flood risk. The dataset is comprised of a variety of different grids that provide the basis to communicate different elements of flood risk for all mapped floodplain areas shown on the FIRM. A grid dataset represents features that vary continuously over an area such as flooding depth by showing an average value every 10 meters. Several of the flood risk elements represented as grids in the Flood Risk Database are summarized below.

- ***Flood Depth Grids*** communicate the depth of flooding at any given location and are generally easier for local stakeholders to understand than the flood elevation data provided in the FIS report and on the FIRM because people can more easily relate to flood depth than they can to a flood elevation referenced to a vertical datum. For example, seeing that floodwater could be 4 feet deep is generally easier to understand than seeing the floodwater could rise to an elevation of 2,224 feet referenced to the North American Vertical Datum of 1988.
- ***Percent Annual Chance Probability Grids*** provide insight into the possibility of flooding within any given year and are useful for communicating the true risk of flooding as it relates to statistical probabilities.
- ***30-Year Chance Probability Grids*** provide insight into the possibility of being flooded over the course of a 30-year mortgage. These grids are especially helpful for enabling property owners and other local stakeholders to understand flood risk. For example, telling a mortgage holder that they have a 26-percent chance of flooding over the course of their mortgage is generally more effective than telling them they are located in a 1-percent-annual-chance flood zone.
- **Water-Surface Elevation Change Grids** provide insight into areas where the flood risk study resulted in changes to the calculated flood water-surface elevations. This dataset is the vertical equivalent of the CSLF dataset, because it depicts differences between the effective flood elevations and the new flood elevations.

- ***Velocity Grids*** provide floodwater velocity information to communicate the increased hazards and risk associated with rapidly moving floodwater.

A graphic depiction of the flood depth and analysis grids is provided in Figure 3.

Figure 3: Flood Depth and Analysis Grids



The Flood Depth and Analysis Grids dataset can help stakeholders better understand more characteristics of the mapped floodplain and the areas of highest flood risk in addition to the standard 1-percent-annual-chance floodplain/flood zone information. It visually shows varying levels of risk within the same mapped floodplain and depths of flooding for multiple return frequencies at any location. It is a powerful communication and planning tool, enabling users to convey that a property may not just be in or out of the 1-percent-annual-chance floodplain, but that it may receive a specified level of flooding from an event of lesser magnitude. Using depth of flooding for a 4-percent-annual-chance event, for example, simple depth-to-damage curve calculations can be applied to tell a particular property owner that in a particular event they can expect a specified amount of financial damage.

For additional detailed information on the Flood Depth and Analysis Grids dataset, see Subsection 2.2 of FEMA OG 6-11, User Guidance for Flood Risk Datasets and Products. OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

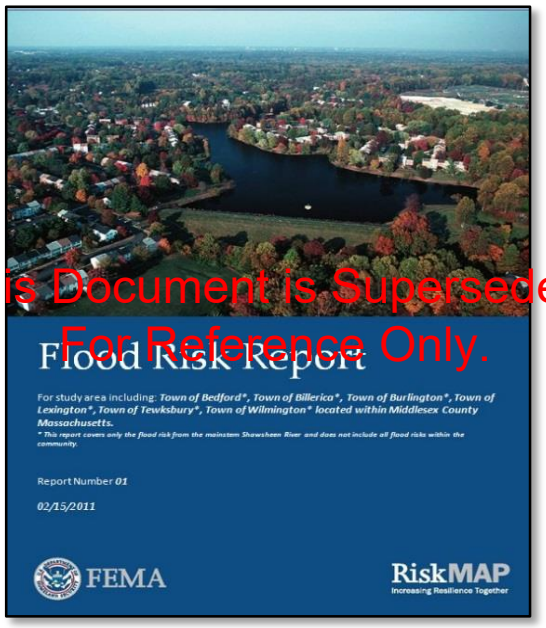
4.2 Flood Risk Products

The Flood Risk Datasets discussed in Subsection 4.1 are used to create the three Flood Risk Products – Flood Risk Report, Flood Risk Map, and Flood Risk Database. The three Flood Risk Products are discussed in Subsections 4.2.1, 4.2.2, and 4.2.3, respectively.

4.2.1. Flood Risk Report

The Flood Risk Report provides summary flood risk data for the entire geographic area covered by the flood risk project as well as the individual communities within the project area. The Flood Risk Report is not intended to be the regulatory or the final authoritative source of all flood risk data in the project area. Rather, it is to be used in conjunction with other data sources to provide a comprehensive picture of flood risk within the project area. A sample Flood Risk Report cover is shown in Figure 4.

Figure 4: Sample Flood Risk Report

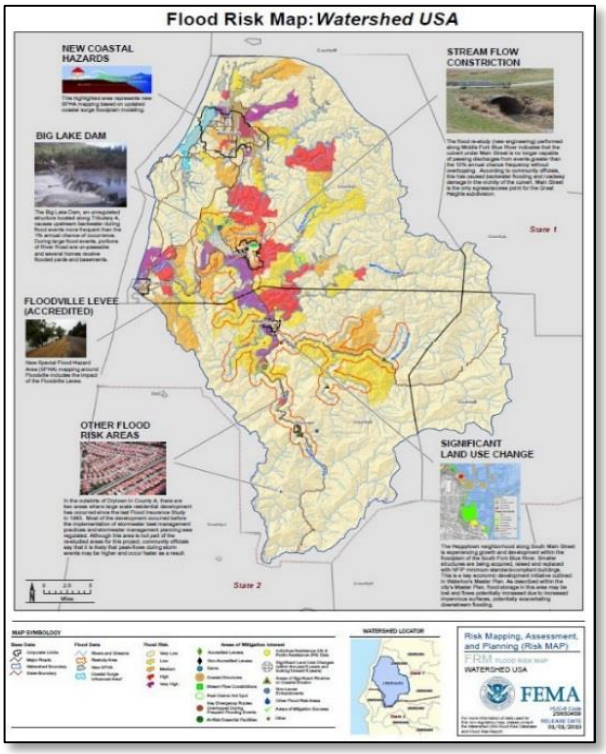


4.2.2. Flood Risk Map

The Flood Risk Map, which combines multiple datasets from the Flood Risk Database, provides local officials with a high-level flood risk overview of the project area to enable them to identify flood risk "hot spots" and AOMI to facilitate coordination with neighboring upstream and downstream communities. The Flood Risk Map also includes the composite total 1-percent-annual-chance loss per census block as one of the GIS layers and charts with losses per community. Local officials may also create their own customized maps from within the Flood Risk Database.

A sample Flood Risk Map is presented in Figure 5.

Figure 5: Sample Flood Risk Map

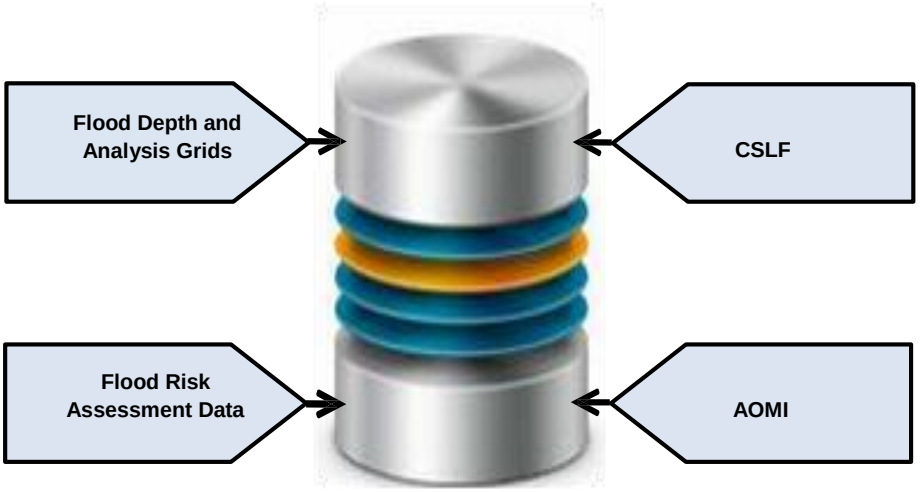


4.2.3. Flood Risk Database

The Flood Risk Database is a product that contains the raw data and results from the Flood Risk Assessment analysis. It would include all of the datasets generated for a community, including the CSLF, AOMI, Flood Risk Assessment Data, and Flood Depth and Analysis Grids datasets. (See Figure 6.) The Flood Risk Database is the Flood Risk Product that will contain the results of the following Flood Risk Assessment Data:

- Average Annualized Loss (Hazus) results for the entire project area
- Refined Hazus results for areas restudied
- Composite Flood Risk Assessment
- Analysis Required for Flood Risk Assessment Data in the Flood Risk Report
- Analysis Required for Flood Risk Assessment Data in the Flood Risk Map

Figure 6: Flood Risk Database



4.3 Communicating Flood Risk Using Flood Risk Datasets and Products

Before, during, and after the Resilience Meeting(s), the Project Team should encourage community officials, key influencers, and other key stakeholders to use the Flood Risk Datasets and Flood Risk Products to share and communicate flood risk information more effectively with others. Subsections 4.3.1 through 4.3.4 present information on four key external stakeholder groups to be engaged, the Flood Risk Datasets and Flood Risk Products that may be most useful in communicating to each group, and suggested messages and methods to reach these stakeholder groups.

As discussed earlier, when selecting communication tools and techniques, it will be important for the Project Team to frame communications with each intended stakeholder audience in a way that is digestible and easier to understand.

Information on how Project Teams may use the Flood Risk Datasets and Flood Risk Products to add value for the following other activities is provided in Section 5 of FEMA OG 6-11, User Guidance for Flood Risk Datasets and Products:

- Hazard mitigation planning
- Floodplain Management and CRS
- Building code requirements, including use of flood-resistant designs and construction materials
- Comprehensive planning and future land use planning
- Community investment (capital improvement planning)
- Hazard Mitigation Assistance grant application prioritization and support (including Benefit-Cost Analysis (BCA) or BCA screening)
- Other non-FEMA grants to reduce flood risk
- Response and recovery planning

OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

4.3.1. Local Officials

Local officials are ultimately responsible for minimizing or reducing flood impacts on local citizens and businesses by first understanding local flood hazards and associated flood risks, and then making informed decisions about mitigation actions to take based on that risk. Research shows that the public expects to hear about flood risk from their local officials. As a result, the local officials' ability to clearly and effectively communicate externally about flood risk, and the steps people can take to protect themselves and their properties, is important to help build a more flood-resistant and resilient community.

Local officials also need to communicate internally to help ensure that key staff from other local government departments understand changes in flood risk, and actions that should be taken to ensure that citizens are better prepared. Each community knows best how to communicate internally, perhaps using some of the same techniques and tools discussed in Subsection 3.3.

Examples of how local officials may use the Flood Risk Datasets and Flood Risk Products to help explain the risk to both external and internal audiences, ultimately leading to actions that reduce this risk, are presented below. The Project Team will want to strongly encourage local officials to use the graphic depictions of the datasets and products in their risk communications.

- ***CSLF Dataset*** – This dataset helps highlight where mapped floodplain boundaries, flood zones, and regulatory floodways are changing based on the Preliminary FIRM. The CSLF dataset makes it easy to see the changes, and can spark a discussion about a number of topics, including: flood hazard and risk changes, what potentially caused those changes, what residents and businesses can do to protect themselves; what are the potential future floodplain management and flood insurance ramifications of the changes. The CSLF dataset also helps identify where a significant number of households and businesses may be affected, facilitating the type of targeted communications requested by the U.S. Congress in the recent reform legislation.
- ***Flood Depth and Analysis Grids Dataset*** – The datasets in this category work well with the CSLF dataset to communicate a variety of flood risk information for all areas within the mapped floodplain, including the depth of flooding for flood events, the velocity of floodwater, and the probability of being flooded in any given year, or in a 30-year period (the life of a typical home mortgage). For example, the annual chance and 30-year probability grids in this dataset are very helpful in communicating that flood risk within the 1-percent-annual-chance floodplain is not uniform and varies by location. Rather than knowing only that a structure is located in the mapped 1-percent-annual-chance floodplain, the Project Team can graphically communicate the variations in risk at all locations within the mapped floodplain.

  Flood Depth and Analysis Grids may be used to help enlist the support of other local officials and key local leaders for mitigation projects that reduce flood risk by identifying areas of highest flood risk according to flood frequency and depths. For example, making decisions, based on the Flood Depth and Analysis Grids, to maintain these areas as open space will enhance a community's chance to recover after a flood

because no important facilities (e.g., schools, water treatment plants) would have been built there in the first place.

These grids may be used by building officials to easily explain flood risk to builders and developers, including how the building elevation requirements for specific sites may change over time due to increased floodplain development. Thus, these grids are very useful for enabling sound floodplain management and/or development decisions, in that they can easily communicate the relative risk of floodplain development.

These grids may also be used to inform first responders during flood events of roads that should be closed due to anticipated flood depths and/or floodwater velocities.

- ***Flood Risk Assessment Data Dataset*** – This dataset helps when discussing the financial risk associated with flooding for business owners because it quantifies the risk to make it more relatable in real-world terms. It also helps emphasize that business owners should take action to reduce that risk. This dataset also helps communities make decisions regarding future land use and development. It can be used to prioritize mitigation actions and support proposals for mitigation actions by communicating the financial risk associated with flooding and its potential effect on public buildings, utilities, and community infrastructure, thereby helping to justify where the community can take steps to reduce risk and further guard against future financial loss.
- ***AOMI Dataset*** – This dataset helps communicate about areas where conditions have contributed to the severity of flooding and to losses (e.g., where an undersized culvert may be contributing to flood hazards and flood risks), and therefore identify where a community needs to spend money on reducing those risks, and support proposals to community and elected officials to reduce risk in those areas. Local officials can use this dataset to visually explain why specific mitigation actions are being undertaken.
- ***Flood Risk Report*** – This Flood Risk Product provides valuable information to understand the concept of flood risk, while providing community- and watershed-specific flood risk information extracted from the Flood Risk Database. The Flood Risk Report, used in combination with the Flood Risk Map, is a good tool for community and elected officials to use for local communication and to raise the general level of awareness of local flood risk.
- ***Flood Risk Map*** – This Flood Risk Product may be used by local officials to visually support high-level presentations, proposals, and discussions about flood risks in the watershed. For example, the Flood Risk Map identifies flood risk “hot spots” within the community and potential flood risk mitigation opportunities. This would facilitate discussion within the community about future land use and economic development planning and steps to reduce potential flood risk for community citizens and business owners.
- ***Flood Risk Database*** – This Flood Risk Product contains a variety of flood risk data, ranging from potential annual flood losses to the probability of being flooded during any given year or during a 30-year period. Local officials could be encouraged to use the Flood Risk Database for targeted visualization of flood risk to support mitigation efforts and to raise citizens’ awareness of the true flood risk.

4.3.2. Professional Associations

Representatives of State, regional, and local affiliates of NGOs representing insurance, real estate, and lending professionals can be effective in communicating flood risk messages and recommended actions to their colleagues and customers. Keeping local representatives from these State, regional, and local affiliates updated about key developments in the flood risk project, getting their feedback on engagement activities, and using them to convey information are effective ways to help ensure that accurate flood risk messages reach colleagues and clients. One option for gathering feedback is to consider forming a "stakeholder advisory group" that meets regularly to react to, refine, distribute, and deliver key messages and materials. Local officials also may engage this group to identify the best way to help them share information, including a combination of articles for newsletters, information (or links) for their web sites, and presenting at their meetings.

Examples of how the Project Team may use the Flood Risk Datasets and Flood Risk Products to share flood risk information with representatives of State, regional, and local affiliates of NGOs, so they may then use them to share flood risk information with their colleagues and clients are provided below.

- ***CSLF Dataset*** – This is a valuable dataset when presented graphically so these stakeholders can see and understand where mapped floodplain and regulatory floodway boundaries are changing, and therefore, be better prepared to talk with their clients and prospects about the changes and their effects.

  Insurance professionals can also use this dataset graphic to target new customers (e.g., direct mail campaign, local newspaper advertisement), for both those being mapped into a higher risk area and those being mapped into a lower risk area. If the community had this graphic on their website, insurance professionals could link this graphic to their own website, as well as have it available on their computer (or a printout) to show walk-in clients or to refer during telephone conversations with existing or new clients.

  Real estate offices would benefit from keeping this dataset graphic easily accessible (i.e., online) and visible (i.e., printout) so that their agents and brokers become and stay aware of how the flood hazards (and flood insurance requirements) may change when the revised FIRMs go into effect. This can prevent losing a sale or delaying a closing if the agent or broker is unaware of the changes. This dataset visualization can also be placed in their local newsletters to existing and prospective clients.

  Local lenders and mortgage brokers would benefit from having the dataset graphic easily accessible and visible in their offices. By being aware of where the mapped floodplain changes are occurring, lenders and mortgage brokers can inform their prospective borrowers (and their real estate agents) about the potential change and any change in flood insurance requirements.

- ***Flood Depth and Analysis Grids Dataset*** – The Flood Depth and Analysis Grids dataset is most effective for insurance professionals. It works well in combination with the CSLF dataset to explain flood risk to existing and potential customers when discussing flood insurance. While the CSLF tool helps customers visualize the changes in flood risk as elated to the changes in floodplain/flood zone boundaries, the Flood Depth and Analysis

Grids dataset helps the agent explain not only how the chance of flooding changes across the mapped floodplain (i.e., you are not just "in or out" of a flood zone, and therefore either have a zero or high chance of flooding), but also how deep the water may get in their neighborhood or individual property. It also helps show that that the risk or depth of water is not zero as soon as the property is outside the mapped floodplain.

Real estate professionals may not find the Flood Depth and Analysis Grids dataset as useful as their insurance counterparts because they are not in the business of selling insurance. However, this dataset can help increase their awareness, and the awareness of their customers, about which areas have a greater risk of flooding with greater potential for damage. This is important information to share with prospective buyers and sellers. Lending professionals may also benefit from having this information available when making decisions with customers. However, there is not much impact on the compliance requirements that lending professionals need to fulfill.

4.3.3. Media

Research shows that the local and regional media plays an important role in communicating the risk of flooding. Using the Flood Risk Datasets and Flood Risk Products to communicate accurately with the local and regional media is increasingly important. Local and regional media outlets will want to know how the changes to flood hazards and flood risk identified by the Project Team will affect the average citizen. Providing the media with timely, accurate, and easy-to-use information will help ensure that the media has a solid understanding of the changes and resulting recommended actions. As discussed in Subsection 3.1.6, one way to do this is through engagement with editorial boards.

Examples of how the Project Team may use the Flood Risk Datasets and Flood Risk Products to share flood risk information with the media, so they may then provide accurate flood risk information to the public, are provided below.

- ***CSLF Dataset*** - Working with local and regional media outlets to tell a story is critically important. The media will want to answer the "so what" question for the public, and will want to know what effects the new FIRM will have on readers, viewers, or listeners. The CSLF dataset graphic will help illustrate the changes to mapped floodplain and/or regulatory floodway boundaries, explain the reason for the changes, and identify areas that were not previously shown within the mapped floodplain and/or regulatory floodway.
- ***Flood Depth and Analysis Grids Dataset*** - Using the Flood Depth and Analysis Grids dataset in conjunction with the CSLF dataset helps explain a wide variety of flood risk issues, including depth of flooding, floodwater velocity, relative probability of being flooded in any given year, and relative probability of being flooded in a 30-year period. Depending on the specific topic or issue being communicated, a wide variety of custom visualizations or graphics may be created using these datasets.
- ***Flood Risk Report*** – Section 3 of this Flood Risk Product provides Flood Risk Assessment results for the entire flood risk project area. Using more technical information like local flood statistics to support information products (e.g., PowerPoint presentations, newsletter articles, fact sheets, posters), will allow for a clear picture, and help provide additional credibility to the study and its findings.

- ***Flood Risk Map*** – This Flood Risk Product is an excellent first visual to show the media, as it illustrates the flood risks in the watershed and conditions that may cause flooding. The media could be encouraged to print the map, as it will show new or restudied areas, providing citizens further insight into what has changed in the watershed.

4.3.4. General Public

Residents and business owners need clear messages about flood hazards, the associated flood risks, why and where the risks have changed, as well as life-saving and cost-saving options for physically or financially reducing their risk. It is also important to explain to residents and business owners what has caused these changes, and what local officials are doing to make the community more resistant and resilient to floods. Local officials can use the Flood Risk Datasets and Flood Risk Products to communicate flood risk information to the public more effectively.

- ***CSLF Dataset*** – This dataset illustrates to community members where flood zones have changed and provides a starting point for discussing how they can reduce their risk through mitigation actions and by obtaining flood insurance. The CSLF dataset, illustrated visually, is one of the best tools available for identifying those areas that were not known before to be at a high risk of being flooded as well as those where the risk is reduced, but not removed.
- ***Flood Depth and Analysis Grids Dataset*** – This dataset helps visually communicate flood risk in a variety of ways, such as communicating the depth and velocity of floodwaters as well as the probability of being flooded over specific timeframes (1 year and 30 years). The grids in this dataset help translate the traditional flood hazard information shown on the FIRM to an understanding of the associated flood risks.
- ***Flood Risk Assessment Data Dataset*** – This dataset provides information that relates flood risk to potential financial losses, making it an effective tool for raising flood risk awareness. This dataset helps to determine the financial risk associated with flooding events for the public and helps emphasize that property owners should take action to reduce that risk and purchase adequate flood insurance. This dataset also enables a high-level quantification of potential flood losses to the built environment, which helps to justify building restrictions and regulations.
- ***AOMI Dataset*** – This dataset helps to create an understanding of flood risk and the associated factors that affect it. The AOMI dataset helps the public to better understand how physical factors, such as undersized culverts or past insurance claims hotspots within the watershed contribute to potential flood losses, or on the flip side, help to reduce flooding impacts. With this understanding, broad-based support for flood hazard and flood risk mitigation activities may be established. The public can advocate for the successful planning for, and implementation of, flood risk mitigation projects, making the community more flood-resistant and resilient. The AOMI dataset also allows residents of neighboring communities in a project area to see factors that may affect each other, fostering collaboration to take mitigation steps that could reduce overall risk in the future.
- ***Flood Risk Report*** – Section 3 (Flood Risk Analysis Results) of this Flood Risk Product summarizes the risk analysis data for the entire watershed or geographic area that is the focus of the project. Using more technical information like local flood statistics to support

information products like PowerPoint presentations, newsletter articles, fact sheets, posters, and information for a community website provides a clear picture, as well as additional credibility and support for the findings. The Flood Risk Report also includes important data, such as critical facility exposure, shelter needs, and agricultural losses from the Hazus data.

- ***Flood Risk Map*** – This Flood Risk Product is an excellent first visual for community meetings and to have it visible in areas where the public would visit various community departments. Because it illustrates the flood risks in the watershed and shows new or restudied areas, citizens get further insight into what has changed regarding risk within the mapped floodplains.

5.0 Resilience Meetings

The purpose of the Resilience Meeting is to continue to build local capacity for communicating risk and implementing priority mitigation activities within the watershed.

5.1 Meeting Timing

The Project Management Team – in consultation with Project Team members, affected communities, key influencers, and other stakeholders – will determine the appropriate timing for the Resilience Meetings for a particular project. Generally speaking, the Resilience Meetings should occur when the appropriate Flood Risk Datasets and Flood Risk Products for the project are available. As discussed in Section 1, Resilience Meetings have been held, and may continue to be held, as follows:

- At the same time as the Flood Risk Review Meetings
- As separate meetings before the Preliminary FIRM and FIS report are delivered to the community for review and the CCO Meeting(s) and Flood Risk Open House(s) are held
- During the Due Process Phase that begins with the CCO Meeting(s) and Flood Risk Open House(s) being held, perhaps following the issuance of the Letter of Final Determination that starts the adoption/compliance period

5.2 Meeting Preparation

The Project Team members who will be leading or facilitating the Resilience Meeting(s) may need to do some preparation in the months immediately preceding the meeting. The level of effort required to prepare for meeting will depend on how familiar Project Team members are with the following:

- Flood Risk Datasets and Flood Risk Products being provided by FEMA and how they may be used
- Risk-related information collected during the Discovery and Data and Product Development Phases
- Other resources available to facilitate implementation of mitigation activities

A thorough understanding of the Flood Risk Datasets and Flood Risk Products is critical. The content provided in Section 4 of this document previously appeared in OG 3-11, Communicating Flood Risk with Risk MAP Dataset and Products. While some content from OG 6-11, User Guidance for Flood Risk Datasets and Products, is included in Section 4, the Project Team will need to be familiar with additional content provided in that document, particularly the discussion in Section 5. OG 6-11 can be found on the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage.

To prepare to promote strategies to reduce flood risk, assigned Project Team members will need to do the following:

- Review AOMI identified by community officials and key stakeholders.
- Review areas targeted for development or redevelopment and unique areas, such as sites of cultural, historic, or religious significance.
- Review the study area for any critical habitat areas.
- Review State and/or local Hazard Mitigation Plans, associated local plans (e.g., stormwater plans, land use plans, comprehensive plans); local subdivision regulations; plans developed by communities in the CRS; or plans funded under the Flood Mitigation Assistance grant program.
- Obtain State and local best practices from the SHMO and nearby CRS participants.
- Obtain model ordinances from the State NFIP Coordinator(s), the State Building Code Office(s), and the local American Planning Association chapters.
- Identify related best practices from the FEMA database, from coordination with the SHMO(s), and from the FEMA Building Sciences Toolkit.
- Prepare handouts related to the best practices.

To facilitate implementation of mitigation actions, the Project Team members will need to do the following:

- Review earlier 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 grants and other Federal grants related to the AOMI.
- Identify technical resources available from FEMA and professional associations related to the AOMI.
- Identify State technical resources that may be available from the State NFIP Coordinator(s) or the SHMO(s).
- Review FEMA's Disaster Assistance Policy, *Hazard Mitigation Funding Under Section 406*, to educate communities about the availability of hazard mitigation discretionary funding and promote this FEMA priority.

5.3 Meeting Planning

Once the Project Team has established a definitive date for when the agreed-upon Flood Risk Datasets and Flood Risk Products for the project will be completed and all of the meeting preparation activities discussed in Subsection 5.2 have been completed, the date(s) for the Resilience Meeting(s) should be determined. Initially, the date(s) will be based on when the FEMA Project Officer and other key Project Team members will be available to participate in meetings, either in person or remotely. However, as with other meetings held during the project lifecycle, the Project Team also should coordinate with the community FPAs and other active community representatives to ascertain the date(s) that would be best for the individuals listed in Subsection 4.3 and to solicit suggestions for the location(s) of the meeting(s).

If the location(s) for the Discovery Meeting(s) or other project-related meetings involving a large number of participants were appropriate – according to the feedback provided by meeting attendees – and a sufficient number of community officials and other key stakeholders attended the meeting(s) at the site(s), the Project Team may want to suggest using the same site(s) for the Resilience Meeting(s). Depending on the project and the Project Team members' established relationships with community officials, it also may be appropriate to involve a key influencer in the choice of meeting time(s) and location(s).

If the site(s) of the Discovery Meeting(s) or other large meetings would not be suitable, the Project Team will need to work with community representatives to identify the site(s) that meet access, space, seating, table, electrical, video conferencing (if appropriate), Internet (if appropriate), and telephone requirements for the meeting(s).

About 2 to 3 months before the meeting(s), it may be beneficial for the Project Team to send an email message – or, perhaps, a letter – under FEMA signature to the invited stakeholders indicating the proposed meeting date(s) and reasons for the meeting(s). The community FPAs or the Project Team members could then follow up with the recipients of the email message or letter to verify availability.

If multiple Resilience Meetings are held, the Project Team should consider inviting all stakeholders to all of the meetings, although it is likely that each stakeholder would attend only 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.

At least 1 month before the first Resilience Meeting, the Project Team should send the invitation(s), via Outlook appointment, to all appropriate stakeholders. Project Team members will then need to follow up by email or telephone with those stakeholders who do not respond to the appointment(s) to confirm or encourage attendance/participation in the meeting(s). The invitation(s) should clearly spell out the reason for the meeting(s) and the expectations for stakeholder participation.

At least 2 weeks before the first Resilience Meeting, the Project Team should conduct a dry run of any presentation(s) to be used and any content to be delivered to the attendees electronically. Where possible, content to be projected to a screen should be tested in a room with similar size and lighting characteristics to assure attendees may view the content without problems.

At this same time, the Project Team also will want to verify that all appropriate resource materials, in either hard copy or electronic form, have been received by each community that is hosting a meeting.

Regardless of how resource materials are delivered, a final quality control review of the meeting resource materials is encouraged. These reviews will minimize potential errors and will allow Project Team members to have amended materials available for the meeting(s) if necessary.

At this same time, it will also be important for the Project Team to clarify leader and facilitator roles and responsibilities. This is particularly true if the breakout groups discussed in Subsection 5.7 are to be used.

5.4 Meeting Invitees and Attendees

In addition to the FEMA Project Officer and other Project Team members who will be leading or facilitating portions of the meeting(s) – FEMA Planner(s), State NFIP Coordinator(s), SHMO(s), CTP(s), Risk MAP provider(s), and key influencer(s) – all individuals contacted during the Discovery process or who attended the Discovery Meeting(s) should be invited to the Resilience Meeting(s). The key stakeholders listed below, among others, should be considered as potential invitees/attendees as appropriate.

- Community elected officials (e.g., CEOs, council members, administrators, aldermen)
- Community FPAs, emergency managers, engineers, planners, GIS managers/coordinators/specialists, hazard mitigation planners and officials involved in implementation, code enforcement (building, construction, and construction permit) officials
- Local planning commissions
- Watershed management districts
- Land trusts
- Regional planners and emergency management officials
- State Mitigation Planner and other State officials involved in hazard mitigation planning
- State Building Code Officer
- State Dam Safety Official
- Federal or State agencies with a vested interest in the area where engineering studies were conducted
- Representatives of State, regional, of local affiliates of professional associations, other NGOs, and NPOs focused on land conservancy, watershed management/protection, floodplain management, flood risk reduction, or resilience)
- Developers and representatives of developers' professional associations
- Representatives of insurance and real estate industry professional associations
- Independent neighborhood or condominium associations

Based on the interest of some congressional and State delegations, it may be appropriate to invite district office staff to the Resilience Meeting(s). These invitations should be handled separately from the invitations discussed in Subsection 5.3 and should be coordinated through the Regional Office of External Affairs.

5.5 Meeting Objectives

The primary goal of the Resilience Meeting is to build local capacity for, and commitment to, implementing priority mitigation activities within a watershed or other geographic area. The objectives of the Resilience Meeting are to help community officials and other stakeholders better understand:

- Their flood risk
- Their role as leaders in flood risk identification, communication, and mitigation
- Strategies they can use to reduce the flood risk and improve the watershed's resilience to floods
- Resources available to help them implement the appropriate risk reduction strategies
- Resources available to help them communicate effectively with the public about flood risk and why that is important

5.6 Meeting Messages

The messages of the Resilience Meeting are as follows:

- The Flood Risk Datasets and Flood Risk Products provide a more accurate, comprehensive picture of your community's and your watershed's flood risk.
- Although the Risk MAP program focuses primarily on floods, the tools and information provided can provide a framework for planning for and addressing other natural hazards.
- Many strategies to reduce your flood risk can and should be used.
- A wide variety of resources are available from regional, State, and Federal agencies and private-sector organizations to help stakeholders take action to reduce the flood risk.
- Communicating flood risk to those who live and work in the community, watershed, or other geographic area in more relatable, real-word terms will help them make informed decisions to reduce their risks.
- Resources are available from FEMA, other Federal agencies, State agencies, regional entities, and private-sector organizations to help local officials and other stakeholders communicate flood risk.
- By taking action to reduce flood risk, the individuals, property, and businesses within the community, watershed, or other geographic area will be more resilient to flooding.

5.7 Meeting Activities

Resilience Meeting activities that the Project Team should consider are summarized below.

Understanding Flood Risk

- Provide a brief overview of the final Discovery Maps for the watershed to remind participants where the conversation after the Discovery Meeting ended (when Resilience Meeting(s) held before first Flood Risk Review Meeting). 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 appropriate Flood Risk Products. It is the Project Management Team's discretion whether to share the CSLF at this time, keeping in mind that presentation of the CSLF may focus the conversation around flood insurance rather than flood risk.
- Abbreviate this section of the meeting as appropriate when the Flood Risk Review Meetings occur before the Resilience Meetings.

Strategies to Reduce Flood Risk

- Use the AOMI dataset and/or specific areas of local concern as discussed at the Discovery Meeting to create focus areas for this discussion.
- Highlight and congratulate communities for mitigation strategies they have already included in their plans. 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).
- Share related best practices from local sources, across the State, Region, and/or from the national FEMA databases tor the AOMI or areas of local concern where they have not yet identified mitigation strategies,. 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 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 Plans 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 taking action to reduce risk from flooding.

Resources to Facilitate Implementation

- Discuss resources that can 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 and entities that may assist with the specific mitigation strategies identified, including, but not limited to, the following:
  - FEMA grants available to communities that participate in the NFIP
  - Federal grants available from the U.S. Department of Housing and Urban Development 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 available from State and Federal agencies
  - Technical assistance available from professional associations and other NGOs

Communication Roles and Responsibilities

- Explain that it is important to share flood risk information with the public 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 information about the guidance available to help local officials communicate about the flood risk products with the people who live and do business in their communities.
- Encourage the preparation of a Community Outreach Plan; indicate that a template is available; and indicate that Project Team members are available to, and will follow up with, community officials to discuss on the telephone or in person.

Breakout Groups

When possible, break participants into smaller groups to focus on specific areas of interest. Ideas for breakout groups include, but are not limited to, the following:

- **Technical breakout group** – Led by a Project Team engineer, this group may include engineers, GIS specialists, and other technically driven participants. 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, this group may include community planners and related specialties, and should focus on how the Flood Risk Datasets, Flood Risk Products, and mitigation strategies can enhance existing mitigation plans. The group can also discuss the Mitigation Planning Technical Assistance provided through the Risk MAP program (if applicable), and how to incorporate the public participation requirements of the planning process into Risk MAP meetings.

- **Senior officials group** – Led by the FEMA Project Officer or other FEMA staff, this group may include CEOs, other State and local elected officials, and other senior staff and will describe the incentives available to encourage mitigation (e.g., grants, 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 affiliation.
- Collect the lists and explain that the lists will be returned to them with meeting notes following the meeting(s).

5.8 Post-Meeting Activities

The Project Team will need to complete the following activities after the Resilience Meeting:

- Distribute the attendee list with an email message (or letter) thanking attendees for their participation.
- Prepare and distribute the Resilience Meeting report, minutes, or notes (format to be determined by the Regional Office) to all meeting attendees.
- Solicit additional feedback from stakeholders on the draft work maps and Flood Risk Products.

- Distribute individual action item lists and include resource lists (e.g., websites, reports, maps, mitigation funding, and technical assistance).
- Prepare and distribute a revised version of the Resilience Meeting report, minutes, or notes summarizing additional feedback received and the changes made to the work maps and Flood Risk Products.
- Update the community and stakeholder contact list(s) to include information on newly identified community contacts and other stakeholder contacts.
- Conduct follow-up as appropriate to determine progress toward the actions agreed upon during the Resilience Meeting(s) and toward Risk MAP metrics relating to local actions to reduce flood risk.
- Notify Federal and State elected officials that were not represented at the Resilience Meeting(s).
- Post the final Resilience Meeting report, minutes, or notes and all other appropriate documentation to the community file discussed in Section 6.

6.0 File Maintenance

To be compliant with Section 66.3 of the NFIP regulations (44 CFR 66.3), the Project Team should continue to maintain community files for the communities affected by the project. The required community files for all affected communities should have been set up during the Discovery Phase following protocols established by the Regional Office. The Project Team should place records of engagement activities (e.g., letters, email messages, memorandums, and meeting notes) in the community files.

7.0 Outcomes from Stakeholder Engagement Effort

Successful stakeholder engagement during the Risk Awareness Phase should result in the following outcomes:

- Increased community understanding of flood risk and commitment to implement appropriate mitigation actions
- Improved stakeholder understanding of, confidence in, and ownership of the Flood Risk Datasets and Flood Risk Products provided by FEMA and how they may be used
- Improved non-community stakeholder awareness and understanding of flood risk, the potential impacts on homes, businesses, and families, and the mitigation actions that citizens may take
- Enhanced relationships with community officials, other key influencers, and other stakeholders
- Continued transparency into the Risk MAP process
- 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