FEMA

Operating Guidance No. 3-11

For use by FEMA staff and Flood Hazard Mapping Partners

Title: Communicating Flood Risk with Risk MAP Datasets and Products

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

Background: Moving from identification of flood hazard to identification of the associated flood risk represents a significant shift in emphasis at the local level towards mitigation of those risks. A shift of this nature requires careful coordination and communication at the local level to ensure success.

Issues: In order to ensure effective communication of flood risk, a variety of flood risk datasets and products have been developed. Effective use and communication of these datasets and products is a key tenet to success of the program.

Actions Taken: This Operating Guidance document provides local officials with an overview of the Risk MAP datasets and products that will enable them to better understand and proactively communicate the value that these datasets and products hold to local stakeholders.

Supersedes/Amends: This Operating Guidance document does not supersede or amend any existing guidance.

Attachments:

Attachment A – Communicating Flood Risk with Risk MAP Datasets and Products

Distribution List (electronic distribution only):

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Communicating Flood Risk with Risk MAP Datasets and Products

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1. Introduction

As the focus of the National Flood Insurance Program (NFIP) shifts from identifying flood hazards to helping communities understand their flood risks and take action to reduce those risks, the Federal Emergency Management Agency (FEMA) has created a suite of Risk MAP Datasets and Products (hereinafter referred to as "Flood Risk Datasets and Products") to accompany the traditional flood hazard elements provided in the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS).

- **Flood hazard** refers to naturally occurring or man-made flooding conditions (e.g., rise in water levels) that could cause harm.

- **Flood risk** refers to the likelihood or chance that someone or something is harmed when the flood hazard is encountered.

Flood Risk Datasets and Products are being provided to local communities to enhance their understanding of flood risks that affect them and this information may be used to enhance local flood risk mitigation plans. In addition to these Flood Risk Datasets and Products, FEMA provides planning and outreach support to strengthen the local community's ability to communicate flood risk to residents and business owners, and to make informed decisions about flood risk reduction. As such, it is incumbent upon the community to use these Flood Risk Datasets and Products for outreach to the public, media, industry, and local citizens. It is important that these stakeholders understand the difference between flood hazard and flood risk, and know what they can do to mitigate this risk.

It is important to note that although a high level summary of flood risk will be provided in the Flood Risk Map and a Flood Risk Report, detailed maps that show the wide variety of flood risk data discussed in this document will not be provided. All of the flood risk data (including the information shown on the Flood Risk Map and Flood Risk Report) is provided in the Flood Risk Database. Maps showing specific flood risk themes may be created from the Flood Risk Database using standard Geographic Information System (GIS) software.
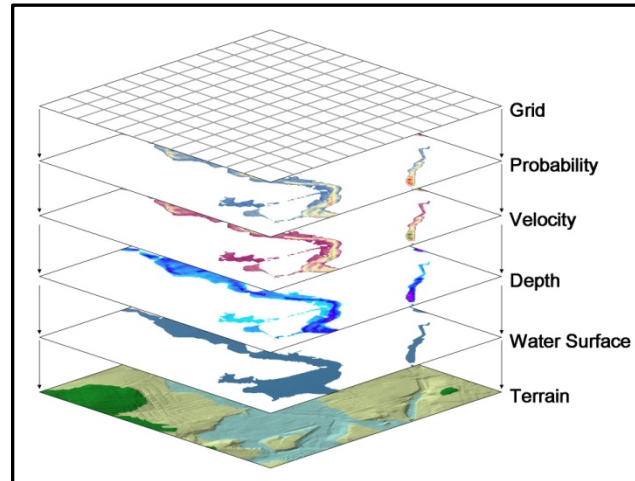
2. Flood Risk Datasets and Products

During the course of a Flood Risk Project, FEMA will work in cooperation with local communities to determine the flood hazards and flood risks within the project area. These project areas will most often be for a specific watershed, but could also be for a coastal or other targeted area. For each Flood Risk Project, project teams (comprised of FEMA and contractor staff) will prepare FISs and FIRMs reflecting new or updated flood hazard information, and companion Flood Risk Datasets and Products for use at the local level to help assess, visualize, and communicate flood risk. While there is more complete documentation about the development of these Flood Risk Datasets and Products and their use, the following is a brief description of each.

A. Flood Risk Datasets are a compilation of data gathered during the Flood Risk 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 more fully understand the associated flood risks. Four flood risk dataset families or groupings that convey important flood risk information are summarized below, with example graphics that can be generated from the dataset using standard and readily available software:

- **Changes Since Last FIRM**: This dataset shows the changes to the width of the mapped floodplain and floodway since the last FIRM was published 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 the community official explain to stakeholders why the mapped floodplain and/or floodway boundaries were changed.

- **Flood Depth and Analysis Grids**: This 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:


  Grids may be used to effectively communicate a wide variety of flood risk information within each 10 x 10 meter grid cell

  o **Flood Depth Grids**: This dataset communicates the depth of flooding at any given location. This dataset is generally easier for local stakeholders to understand than the more traditional flood elevation data provided in the FIS and FIRM, because people can more easily relate to a flood depth than they can to a flood elevation. For example, knowing that the water could be 4 feet deep is generally easier to understand than a flood elevation of 548 feet above sea level.

  o **Percent Annual Chance Probability Grid:** This dataset provides insight into the possibility of flooding within any given year and is useful for communicating the true risk of flooding as it relates to statistical probabilities.

  o **30-Year Chance Probability Grid:** This dataset provides insight into the possibility of being flooded over the course of a 30-year mortgage, which is especially helpful for 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 that they are located in a 1- percent annual chance (100-year) floodplain.

  o **Water Surface Elevation Change Grid:** This dataset provides insight into areas where the Flood Risk Project resulted in changes to the calculated water surface flood elevations. This dataset is the vertical equivalent of the Changes Since Last FIRM dataset, since it depicts differences in flood elevations from the prior FIRM to the new FIRM.

  o **Velocity Grid:** This dataset provides floodwater velocity information to communicate the increased hazards and risk associated with rapidly moving floodwaters.

- **Flood Risk Assessment Data**: This dataset provides an assessment of the potential financial consequences associated with structures located within the full extent of the 0.2% annual chance (500-year) floodplain. Flood risk assessment data is also expressed as an annualized estimate of damages that (for example) a homeowner might expect to incur in any given year if they are located within the floodplain.

- **Areas of Mitigation Interest**: This dataset raises awareness of potential flood risk mitigation opportunities (including specific flood risk mitigation projects), encouraging local collaboration, and communicating how various mitigation activities can successfully reduce flood risk.

B.   The Flood Risk Datasets are used to create the following three Flood Risk Products, which communities can use as they develop community-specific hazard mitigation plans or conduct comprehensive planning activities:

- **Flood Risk Report**: The Flood Risk Report provides summary flood risk data for the Flood Risk Project area and also provides summary information, such as flood risk data for the entire flood risk project as well as the individual community 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 should be used in conjunction with other data sources to provide a comprehensive picture of flood risk within the project area.

- **Flood Risk Map**: The Flood Risk Map provides a high level overview of specific flood risk data for the project area, such as the potential flood losses associated with a one- percent annual chance event reported for each census block within the project area.

- **Flood Risk Database**: This is a database that stores all flood risk data for a Flood Risk Project, including the information shown in the Flood Risk Report and on the Flood Risk Map. The Flood Risk Database provides a wealth of data that may be used to communicate and visualize flood risk in an ad-hoc basis for a variety of difference end users.
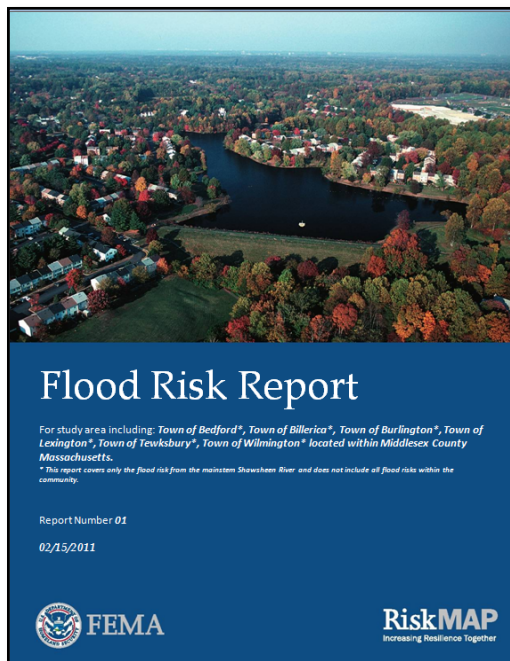
Flood Risk Report
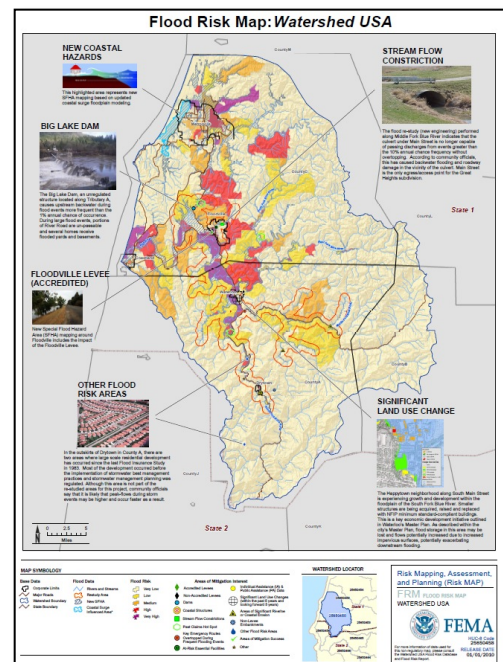
Flood Risk Map

These Flood Risk Datasets and Products will help community officials understand their community's flood risk and the mitigation actions needed to reduce this risk. As a result, they will be better able to communicate that flood risk and its impact to their citizens. There are benefits to the community beyond just using these Datasets and Products for communicating flood risk. For example, the variety and depth of community-specific data that is captured through this process can be used to assist in developing a community's comprehensive master plan. Engaging a broad range of community agencies and departments in communicating about the Flood Risk Products and Datasets will further identify ways in which the data can be used to help accomplish parallel departmental goals and objectives.

3. Communicating Flood Risk Using Flood Risk Datasets and Products

Community officials are encouraged to use the Flood Risk Datasets and Products to share and communicate flood risk information more effectively with their stakeholders. Table 1, Flood Risk Datasets and Products for Key Stakeholders, shows which product or dataset is most appropriate for use by the identified Key Stakeholder. The descriptions that follow Table 1 present four Key Stakeholder Groups that should be engaged, the Flood Risk Datasets and Products that may be most useful to help communicate flood risk to each audience, and suggested messages and methods to reach these Stakeholder Groups.

Table 1: Flood Risk Datasets and Products for Key Stakeholders

Flood Risk Product or Dataset		Key Stakeholder Groups			
		Elected & Community Officials	Insurance, Lending & Real Estate Professionals	Media	Public
	Changes Since Last FIRM	✔	✔	✔	✔
	Flood Depth & Analysis Grids	✔	✔	✔	✔
	Flood Risk Assessment Data	✔			✔
	Areas of Mitigation Interest	✔			✔
	Flood Risk Report	✔		✔	✔
	Flood Risk Map	✔		✔	✔
	Flood Risk Database	✔			

3.1. Elected and Community Officials

Local elected 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. For example, elected officials can adopt ordinances that make the new flood maps an official decision-making tool that requires responsible building and floodplain management practices in high flood risk areas. 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 internally and externally about flood risk, and the steps people can take to protect themselves and their properties, is critically important to help build a more flood-resistant and resilient community.

In addition to communicating with citizens and businesses, internal communication is necessary to help ensure that key staff and officials from local government departments (e.g., Emergency Management, Public Works, and Planning) understand the 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. In some cases, a meeting with the entire council/commissioners using a PowerPoint presentation and handouts is most effective. Other times, a one-on-one meeting to talk about their areas of interest is warranted to ensure specific issues and concerns are addressed. Additional internal communication efforts could include articles in internal newsletters and information on the community's government TV station and Web site.

Flood Risk Datasets and Products can be used by local officials to inform internal and external audiences about the community's flood risk, the changes that are occurring, and to support the actions (e.g., purchase of flood insurance, mitigation, and outreach) that need to be taken to reduce the risk in the community. The following are examples of how the different Products and Datasets can be used by elected officials to help explain the risk, which leads to actions that reduce this risk. Elected officials are strongly encouraged to use the graphic depiction of these datasets in communicating with their constituents.

- **Changes Since Last FIRM**

  o This dataset helps highlight where mapped floodplain boundaries, flood zones, and floodways are changing based on the information provided within the new preliminary FIRM. This dataset makes it easy to see the changes, and can spark a discussion about flood hazard changes, what potentially caused those changes, and what residents and businesses can do to protect themselves from the associated flood risks.
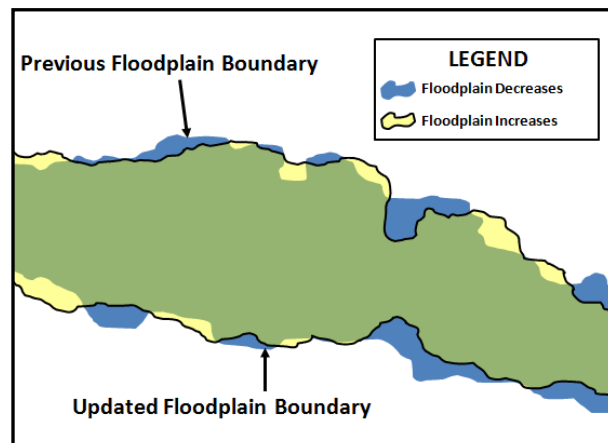

Illustration of Changes Since Last FIRM

  o In addition, this dataset helps identify where a significant number of households and/or business may be affected, leading to targeted outreach in

these areas to raise risk awareness. Likewise, it can be used to help identify and support plans for funding projects to reduce the flood hazards and associated flood risk in specific areas.

- **Flood Depth and Analysis Grids**

  o The multiple datasets in this category work well with the Changes Since Last FIRM dataset to communicate a wide variety of flood risk information for all areas within the mapped floodplain, ranging from the depth of flooding for flood events, to the velocity (speed) of flood waters, to 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 one-percent annual chance floodplain is not uniform, and varies by location. Rather than simply knowing that a structure is located in the one-percent annual chance floodplain, this dataset can be used to graphically communicate the variations in risk at all locations within the mapped floodplain.
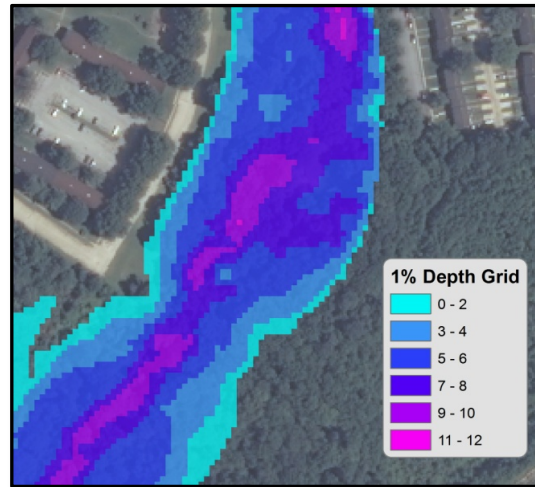

  Illustration of Flood Depth Grid

  o Flood Depth and Analysis Grids may be used to help enlist the support of other elected 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, 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.

  o 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. As such, 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.

  o These grids may also be used to inform first responders during flood events of roads that should be closed due to anticated flood depths and/or flood water velocity.

- **Flood Risk Assessment Data**

  o Flood Risk Assessment Data helps when discussing the financial risk associated with flooding for business owners and helps emphasize that business owners should take action to reduce that risk (e.g., elevate sensitive equipment such as heating and air conditioning units, purchase adequate flood insurance on building and contents). This data also helps communities make decisions regarding future land use and development

  o This dataset 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.

- **Areas of Mitigation Interest**

    o The Areas of Mitigation Interest 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.

    o Local officials can use this dataset to visually explain why specific mitigation actions are being undertaken.

**Undersized Culvert
(Potential Area of Mitigation Interest)**

- **Flood Risk Report**

    o The Flood Risk Report 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 outreach, and to raise the general level of awareness of local flood risk.

- **Flood Risk Map**

    o The Flood Risk Map may be used by community and elected officials to visually support high level presentations, proposals, and discussion 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 discussions 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**

    o The Flood Risk Database is a product that contains a wide variety of flood risk data, ranging from potential annual flood losses to the probability of being flooded in any given year or in a 30-year period. Elected and community officials are encouraged to use this database for targeted visualization of flood risk to support mitigation efforts and to raise the awareness of the true flood risk that citizens face.

3.2. Insurance, Lending, and Real Estate Professionals

Representatives from affected insurance, real estate, and lending professions can be instrumental in communicating important flood risk messages and recommended actions to their colleagues and customers. Keeping local representatives from these professions updated about key developments in the Flood Risk Project, getting their feedback on the outreach process, 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 this feedback is to consider forming a stakeholder advisory group that meets regularly to react to, refine, distribute, and deliver key messages and materials. Community officials may also 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.

Insurance, Lending, and Real Estate Professionals can use the Flood Risk Datasets and Products in the following manner to share flood risk information with their clients.

- **Changes Since Last FIRM**

    o   This is a valuable dataset graphic for these stakeholders to *visually* see and understand where mapped floodplain and floodway boundaries are changing, and therefore, be better prepared to talk with their clients and prospects about the changes, and their effects. To help explain what these changes mean, outreach materials, such as fact sheets, FAQs, and talking points, should be provided. A listing of examples of these is provided in Appendix A.

    o   Insurance professionals can also use this dataset graphic to target new customers (e.g., direct mail campaign, local newspaper ad), for both those being mapped into a higher risk zone, as well as those being mapped into a lower risk zone. With the community having this graphic on their Web site, the insurance professional should link this graphic to their Web site, as well as have it available on their computer (or a printout) to show walk-in customers, or to refer to when on the phone with a customer.

    o   Likewise, realty offices need to keep this dataset graphic easily accessible (i.e., online) and visible (i.e., printout) in their office so that their real estate 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.

    o   Local lenders and mortgage brokers should also have the dataset graphic easily accessible and visible in their office. By being aware of where the mapped floodplain changes are occurring, lenders and mortgage brokers can inform their prospective borrower (and their real estate agent) about the potential (or actual upcoming change, if the FEMA FIRM Letter of Final Determination has been issued) change and any change in flood insurance requirements (i.e., if newly mapped into a high-risk area, flood insurance will be required at closing. If being mapped out of a high risk hazard area, there will no longer be a Federal flood insurance requirement; however, it is strongly recommended, as the risk has only been reduced, not removed).

- **Flood Depth and Analysis Grids**

  o Within this group of stakeholders, this dataset is most effective for insurance agents. It works well with the Changes Since Last FIRM dataset in explaining flood risk to existing and potential customers when discussing flood insurance. While the Changes Since Last FIRM tool helps to visually explain the changes in flood risk related to the changes in flood zone boundaries, this tool offers help for the agent to 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.

  Explaining that the flood water will enter their house and ruin their couch or TV and sound system is an effective risk communication method. This dataset can help the agent sell flood insurance outside the high hazard floodplain, as well as show that the risk or depth of water is not zero as soon as the property is outside the mapped floodplain. Generally, using this with the Changes Since Last FIRM dataset visualization will help provide a clearer understanding of the flood risk for any given area within the community.

  o Not all real estate professionals may find this dataset as useful as insurance professionals, because they are not in the business of selling flood insurance. However, they should be made aware of this dataset and the information it has to offer, and the importance of communicating this information to prospective buyers. This dataset can help increase the awareness of which neighborhoods may have a greater risk for flooding with greater potential for damage than others. This will be critically important information to share with a buyer who may be interested in a particular area.

  o Lenders and mortgage brokers are at the end of the property sale/purchase process and are focused on what is necessary for closing. While the information would be useful to share with these stakeholders, there is not much impact on the compliance requirements they need to ensure are fulfilled.

3.3. Media

Research shows that the media plays an important role in communicating the risk of flooding. Using the Flood Risk Datasets and Products to communicate accurately with the local media is increasingly important. Local and regional media outlets will want to know how the changes to flood hazards and flood risk identified by this Flood Risk Project will affect the average citizen. Providing the media with timely, accurate, and easy-to-use information in advance of the release of new maps will help ensure that the media has a solid understanding of the changes and resulting recommended actions. Holding media pre-briefings, and making presentations to newspaper editorial boards prior to the release of new maps, will allow reporters and editors to learn the key issues, and ask important questions that will help them to cover the map release accurately.

- **Changes Since Last FIRM**

  o When the new FIRM is released, working with the media to tell the 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 maps will have on their readers, viewers, or listeners. This dataset graphic may be used to illustrate the changes to mapped floodplain and/or floodway boundaries, to explain the reason for the changes, and to identify areas that were not previously shown within the mapped floodplain.

- **Flood Depth and Analysis Grids**

  o Using Flood Depth and Analysis Grids in conjunction with the Changes Since Last FIRM dataset helps explain a wide variety of flood risk issues, ranging from (at any given location) 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 from the Flood Risk Database.

- **Flood Risk Report**

  o Section 3 (Flood Risk Analysis Results) of the Flood Risk Report 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, and information for a community Web site), will allow for a clear picture, and help provide additional credibility to the study and its findings.

- **Flood Risk Map**

  o This map 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.

3.4. General Public/Private Citizens

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

- **Changes Since Last FIRM**

  o The Changes Since Last FIRM dataset illustrates to community members where flood zones have changed and provides a starting point for discussing how they can reduce their risk through mitigating and obtaining flood insurance. The Changes Since Last FIRM dataset, illustrated visually, should be made available on the community's Web site and at all public meetings. It is

one of the best tools available for identifying those areas that were not known before to be at high-risk, and those where the risk is reduced, but not removed. In addition to the Changes Since Last FIRM dataset, there are several fact sheets that are available and contain information on the NFIP, which would be helpful in communicating flood risk with the general public. Refer to Appendix A for links to these resources.

- **Flood Depth and Analysis Grids**

  o The Flood Depth and Analysis Grids datasets help visually communicate flood risk in a variety of different ways, such as communicating the depth and velocity of floodwaters as well as the probability of being flooded over specific timeframes (one year and 30 years). The grids in this dataset help translate the traditional flood hazard information shown on the FEMA FIRM to an understanding of the associated flood risks in the area.

- **Flood Risk Assessment**

  o Providing information that relates flood risk to potential financial losses is a very effective tool for raising flood risk awareness. Flood Risk Assessment data helps to determine the financial risk associated with flooding events for the general public and helps emphasize that property owners should take action to reduce that risk (e.g., physically elevate sensitive equipment, such as air conditioners) and purchase adequate flood insurance on building and contents.

  o Flood Risk Assessment data also enables a high level quantification of potential flood losses to the built environment, which helps to justify building restrictions and regulations.

- **Areas of Mitigation Interest**

  o The Areas of Mitigation Interest dataset helps to create an understanding of flood risk and the associated factors that affect it. This dataset helps the general 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 by the general public for flood hazard and flood risk mitigation activities can be established. This support can in turn put pressure on decision makers to advocate for the successful planning for, and implementation of flood risk mitigation projects, making the community flood-resistant and resilient in the face of future flooding events.

  o This dataset also allows residents of neighboring communities in a Flood Risk Project study 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**

  o Section 3 (Flood Risk Analysis Results) of the Flood Risk Report provides Flood Risk Assessment results which summarizes the risk analysis data for the entire study area. 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 Web site provides a clear picture, as well as additional credibility and support to the findings.

o   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**

o   This map is an excellent first visual for community meetings and to have it visible in areas where the public would visit the respective community department(s). This map illustrates the flood risks in the watershed and shows new or restudied areas, providing citizens further insight into what has changed regarding risk within the mapped floodplains.

4. Summary

The Flood Risk Datasets and Products represent a powerful set of outreach tools for community officials to help explain the community's flood risk internally, and to the public, stakeholders, and the media. These tools should be used with other outreach tools (e.g., fact sheets, brochures) to fully inform and engage these audiences to foster a better understanding of their flood risk, and enable better preparation to take action to reduce that risk. Ultimately, this will result in a more flood-resistant and resilient community.

This Document is Superseded.
For Reference Only.

Appendix A – Additional Resources

The following is a list of related fact sheets and Web sites that provide more information as well as links to national stakeholder groups that may have local, regional or State chapters that may be able to assist or bolster communication efforts.

Guidance Documents

- User Guidance for Risk MAP Products

- Mitigation Planning Guidance:

    o http://www.fema.gov/plan/mitplanning/resources.shtm

    o http://www.fema.gov/library/viewRecord.do?id=3115 for State Multi-Hazard Mitigation Planning Guidance

    o http://www.fema.gov/library/viewRecord.do?id=3336 for Local Multi-hazard Mitigation Planning Guidance

    o http://www.fema.gov/library/viewRecord.do?id=4135 for Tribal Multi-Hazard Mitigation Planning Guidance

- FEMA Guidelines and Standards - Appendix N (Flood Risk Data Development and Analysis)

- FEMA Guidelines and Standards – Appendix O (Flood Risk Products)

Risk MAP Fact Sheets

- What is Risk MAP Fact Sheet: www.fema.gov/library/viewRecord.do?id=4119

- Hazus Risk Assessments Support Mitigation Planning Fact Sheet: www.fema.gov/library/viewRecord.do?id=4189

- Mitigation Planning Fact Sheet: www.fema.gov/library/viewRecord.do?id=2066

- Why Historic Maps Are Important: www.fema.gov/library/viewRecord.do?id=4384

- Increased Cost of Compliance: How You Can Benefit: www.fema.gov/library/viewRecord.do?id=3010

- eLOMA: Electronic Letters of Map Amendment Fact Sheet and Registration: www.fema.gov/library/viewRecord.do?id=2230

- FEMA Map Information eXchange Fact Sheet: www.fema.gov/library/viewRecord.do?id=2258

Flood Insurance

- Myths and Facts about the NFIP: www.fema.gov/library/viewRecord.do?id=3002

- Preferred Risk Policy for Businesses (English or Spanish):
  www.fema.gov/library/viewRecord.do?id=1410

- Preferred Risk Policy for Homeowners (English or Spanish):
  www.fema.gov/library/viewRecord.do?id=3907

- Preferred Risk Policy Extension – Fact Sheets For Community Officials:
  www.fema.gov/library/viewRecord.do?id=4387

- Preferred Risk Policy Extension – Fact Sheet For The Public:
  www.fema.gov/library/viewRecord.do?id=4383

- Preferred Risk Policy Extension – Fact Sheets, FAQs and Talking Points for Insurance
  Professionals: www.fema.gov/library/viewRecord.do?id=4384

- Answers to Questions about the National Flood Insurance Program :
  www.fema.gov/library/viewRecord.do?id=1404

- National Flood Insurance Program Summary of Coverage (English or Spanish):
  www.fema.gov/library/viewRecord.do?id=3011

- Why You Need Flood Insurance (English or Spanish):
  www.fema.gov/library/viewRecord.do?id=1891

- Flood Preparation & Safety (English or Spanish):
  www.fema.gov/library/viewRecord.do?id=1506

- Top 10 Facts Every Consumer Needs to Know about the National Flood Insurance Program:
  www.fema.gov/library/viewRecord.do?id=1622

- NFIP Grandfather Rules – A Fact Sheet for Insurance Agents:
  www.fema.gov/library/viewRecord.do?id=3745

- Agent Tips on Flood Map Changes: www.fema.gov/library/viewRecord.do?id=2797

- Converting Standard-rated Policies to Preferred Risk Policies:
  www.fema.gov/library/viewRecord.do?id=2797

Other Useful Resources

- FEMA Risk MAP Program: www.fema.gov/plan/prevent/fhm/rm_main.shtm

- Flood Insurance for Consumers: www.FloodSmart.gov

- Flood Insurance for Insurance Professionals: www.Agents.FloodSmart.gov

- FEMA Floodplain Management: www.fema.gov/plan/prevent/floodplain/index.shtm

- FEMA's Map Service Center: http://msc.fema.gov

Other Federal Agencies

- U.S. Fish and Wildlife Service: www.fws.gov

- National Oceanic and Atmospheric Agency- Coastal Sciences Center: www.csc.noaa.gov

- U.S. Geological Survey: www.usgs.gov

Associations

- Association of State Floodplain Managers: www.floods.org

- National Association of Flood and Stormwater Managers: www.nafsma.org

- National Association of Realtors: www.realtor.org

- National Association of Home Builders: www.nahb.org

- National Association of Mortgage Brokers: www.namb.org

- Mortgage Bankers Association: www.mbaa.org

- Independent Insurance Agents & Brokers Association: www.iiaba.org

- National Association of Professional Insurance Agents: www.pianet.com

- National Association of Insurance Women: www.naiw.org