FEMA Region II

Summary of Outreach and Community Engagement Investments

New York/New Jersey Coastal Risk MAP Flood Study







September 4, 2015

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I. Executive Summary

The coastal flood study of the New York and New Jersey coastline was initiated in 2009 by the Federal Emergency Management Agency's (FEMA's) FEMA Region II Risk Analysis Branch. Never before had a Risk MAP coastal flood study impacted a vast geographic area with such high property values and population density. These factors presented FEMA Region II with challenges as to how to effectively engage and inform all stakeholders, including community officials and residents, about their changes in flood risk.

FEMA Region II made significant efforts throughout the multi-year project to increase transparency of the coastal flood study and floodplain mapping process. Many of the project's community engagement milestones are summarized in Figure 1 below. From the beginning, Region II engaged a variety of stakeholders and formed partnerships with state and local government, academic institutions, and Non-Governmental Organizations (NGOs). These partnerships were solidified through newly established groups such as the Technical Advisory Panel and the Coastal Outreach Advisory Team, developed by FEMA Region II to increase awareness of, and obtain stakeholder buy-in for, the coastal flood study. An unprecedented level of participation resulted as stakeholders took a proactive role in understanding the new flood maps and communicating the updates to their constituents and residents. The Region developed a web portal, <u>www.Region2Coastal.com</u>, to efficiently communicate study updates and other relevant information to residents, community officials, and stakeholders.

This engagement and communication approach significantly improved FEMA's ability to respond after Hurricane Sandy impacted the coastal area. The existing partnerships and the Region2Coastal website were leveraged to quickly spread information about disaster recovery activities and educate users about the new Advisory Base Flood Elevation maps and subsequent preliminary Flood Insurance Rate Maps.

The intent of this document is to be a compendium of community engagement work to accompany the Technical Support Data Notebook (TSDN) that contains all the technical data of the coastal flood study. This document demonstrates FEMA's commitment to future proactive outreach and community engagement under the Risk MAP program.





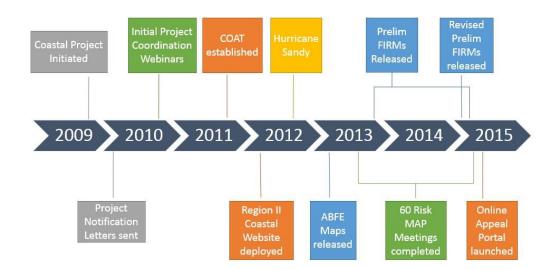


Figure 1. FEMA Region 2 NY/NJ Coastal Study Project Milestones and Achievements

II. Introduction

In November 2009, the FEMA Region II Risk Analysis Branch initiated a large-scale effort to update Flood Insurance Studies (FIS's) for 285 communities along the New Jersey and New York coastline. The project encompassed the entirety of the Atlantic Ocean side of New Jersey (12 counties), the Delaware River and Bay of New Jersey (4 counties), New York City, and Westchester County, New York. The updates were a high priority given the fact that many of the existing Flood Insurance Rate Maps (FIRMs) were over 30 years old, and a significant amount of development had occurred in these areas since then.

For the coastal project, FEMA Region II partnered with the contractor team Risk Assessment, Mapping, and Planning Partners (RAMPP), a joint venture between Dewberry, AECOM (formerly URS), and ESP. RAMPP was one of the three Production and Technical Services (PTS) contractors under the Federal Emergency Management Agency's Risk MAP phase of the National Flood Insurance Program. RAMPP provided comprehensive floodplain mapping, GIS, and hazard risk mitigation services for FEMA Region II, as well as FEMA Region III and VI.

Taking into account 30 additional years of storm data and higher resolution coastal models available, RAMPP, in support of FEMA, performed a new storm surge analysis and overland wave modeling to update the outdated coastal analyses, including storm surge stillwater elevations, within the study area. Mapping was updated using the results of the modeling and new detailed topographic information for the area. A similar study was performed by the U.S. Army Corps of Engineers (USACE) for FEMA Region III along the Delaware River, the results of which were incorporated into the FIS for Cumberland, Salem, Camden, and Gloucester Counties in New Jersey. Figure 2 represents all of the communities impacted by the coastal study in New York and New Jersey, including the USACE study and the RAMPP study.





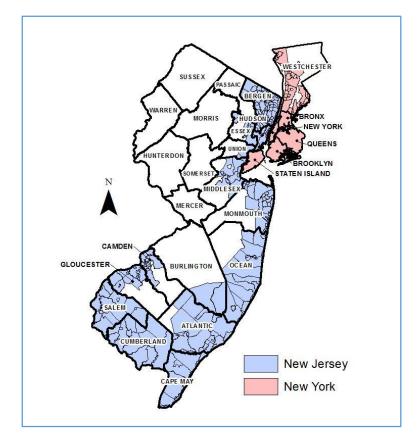


Figure 2. FEMA Region II New York and New Jersey Coastal Study Extent

While not the largest geographic area ever studied by FEMA, the New York/New Jersey coastal study was unprecedented in the size of the affected population, diversity of residents affected, and the value of real estate it impacted. To add to the complexity of the project, at its initiation, FEMA was also undergoing a transition from the Map Modernization program to the Risk MAP program, which resulted in many changes related to study processing, products delivered, and outreach and community engagement activities. These conditions presented FEMA Region II with a number of challenges; particularly how to effectively engage communities and stakeholders throughout the mapping process in alignment with Risk MAP program goals.

FEMA believes in the Whole Community approach to emergency management because it recognizes that federal government-centric emergency management is not enough to meet the challenges posed by a catastrophic incident, nor is it effective at communicating risk to all members of a community. FEMA Region II prioritized this Whole Community approach as being necessary to most effectively engage with all local governments, non-government organizations, and residents within the 285 communities of the coastal study project.

FEMA Region II made it their priority early on to build partnerships with a variety of local traditional and non-traditional stakeholders in New York and New Jersey, such as county and local government officials, non-profit organizations, and academic institutions. The local capacity built by these relationships was then leveraged in order to effectively deliver messaging to local institutions and residents about the map changes in their community. In turn, there were many local champions who went above and





beyond what was required by hosting additional meetings to take ownership of the process and educate their residents about their changing flood risk.

Another priority of FEMA Region II was to increase the transparency of the Risk MAP process for their partners, local government, and the public for the duration of the coastal study. Region II developed a robust set of tools and tactics to disseminate information to a large audience in a timely manner. This transparency increased the amount of information readily available to local officials, empowering them to own the data and share it with residents. By applying these techniques to the unique landscape of the coastal communities, Region II built local partnerships and increased transparency in order to implement a successful outreach campaign.

III. Implementation

Initial Data Sharing and Collection

FEMA Region II used a custom approach for the Discovery phase of the Risk MAP project lifecycle in order to accommodate the large extent of the coastal study and its large variety of communities affected. In place of formal Discovery meetings, letters were sent in January 2010 to all communities affected by the coastal study notifying them of the project. These letters formally requested any and all updated information pertinent to the FIS update be provided to FEMA, including, but not limited to: new and updated municipal boundaries, parcel data, topographic survey data, and beach nourishment records.

In the winter of 2010/2011, all community officials in the coastal study area were invited to participate in an initial project coordination webinar. These webinars established a greater awareness and understanding among community officials of the ongoing efforts to update the communities' FIRMs and FIS reports. During each webinar, the Region shared details about the coastal study and map updates, explained the outcomes and impacts of the study, and reviewed the anticipated schedule, including key milestones.

FEMA Region II held a series of in-person meetings primarily during the summer of 2011 to formally introduce the new Risk MAP process to the communities in the coastal study. The guiding principles and goals of Risk MAP were explained and then put into the context of the coastal study's mapping process. Risk Assessment tools were highlighted, including some of the non-regulatory flood risk products to be produced at a later date (e.g., Hazus risk assessments, Areas of Mitigation Interest). The status of the Hazard Mitigation Plan for the county of interest was reviewed and information about applying for Hazard Mitigation Assistance grants was also shared. This meeting provided community officials with a comprehensive understanding of risk viewed through many different lenses. The presentation also emphasized the importance of risk communication and outreach activities within the Risk MAP project lifecycle in general as well as specifically in relation to the coastal study.

From late 2011 through early 2012, a series of risk assessment meetings were held with community officials to promote local ownership of data, and to promote planning, enhanced communication, and flood risk strategies. At these meetings, non-regulatory flood risk products relevant for coastal areas to be developed for communities affected by the coastal study were introduced to participants. Updates





on the status of the coastal study were also provided during these meetings. A series of regional meetings were held across the coastal flood study area.

Partnerships

Cooperating Technical Partnerships

The Cooperating Technical Partners (CTP) Program is an innovative approach to create partnerships between FEMA and participating National Flood Insurance Program (NFIP) communities, regional agencies, State agencies, Tribes, and universities that have the interest and capability to become more active participants in the FEMA flood hazard mapping program. FEMA Region II leveraged existing CTPs including the New Jersey Department of Environmental Protection (NJDEP), the New York State Department of Environmental Conservation (NYSDEC), and New York City to complete parts of the coastal study mapping and community engagement work. Some of this coastal outreach activity included:

- Supporting and promoting all coastal study Discovery and Risk MAP Meetings
- NJDEP worked with the Nurture Nature Center to promote the Know your Risk, Know your Role, Take Action campaign, producing promotional materials (pens, magnets flash drives, factsheets, posters).
- NJDEP collaborated with the Richard Stockton College in New Jersey and the Jacques Cousteau National Estuarine Research Reserve to provide two comprehensive in person and online webinar presentations for community officials about the NJ/NY coastal flood map revisions and how to make use of the new maps.

Coastal Study Technical Advisory Panel

In the spring of 2011, FEMA Region II established a Technical Advisory Panel (TAP) to engage and obtain buy-in from coastal engineering subject matter experts on the technical methodologies used to develop the coastal storm surge modeling for the project. The TAP participated through a series of in-person and web-based meetings during which the methods and data applicable to the project were reviewed for reasonableness, and any concerns raised were addressed by FEMA Region II and RAMPP. The first TAP meeting was held April 14th, 2011, with five additional technical briefings occurring periodically through November 2012. In addition to FEMA and supporting technical experts from RAMPP, members of the TAP included representatives from:

- Academic institutions, such as Stevens Institute of Technology, Richard Stockton College of New Jersey, and Jacques Cousteau National Estuarine Research Reserve (Rutgers University)
- State and local governments in the Region
- Other Federal agencies, including the U.S. Army Corps of Engineers and NOAA

The TAP engaged a diverse group of stakeholders early on in the coastal project, laying the groundwork for future community engagement work related to the project.

Coastal Outreach Advisory Team

While the TAP focused on the technical aspects of the project, the Coastal Outreach Advisory Team (COAT) was established by FEMA Region II, with the help of NJDEP and RAMPP, to help build support among a variety of stakeholders for the coastal flood study and to empower those stakeholders to support related outreach efforts. The initial COAT meeting was held on December 8th, 2011 with 12 additional meetings held periodically through July 2015. As the team grew increasingly self-reliant, COAT leadership was shifted to the local research institution Jacques Cousteau National Estuarine Research





Reserve – Rutgers University, who assumed primary responsibility to lead and organize meetings. Other COAT members included representatives from State and local governments, other Federal agencies including, NOAA and USACE, academic institutions, such as the Stevens Institute of Technology and Stockton College of New Jersey, and non-profit organizations.

The concept of the COAT is based on the previously mentioned Whole Community Approach as set forth in <u>FEMA's Strategic Plan</u> – the key tenet being that it takes all aspects of a community, and involvement from a wide variety of local stakeholders to effectively prepare for, protect against, respond to, recover from, and mitigate any disaster. COAT members played a key role in providing feedback on how FEMA's communication strategies and tactics were being perceived in the coastal communities. The COAT also provided important feedback on public outreach materials that were developed in support of the coastal flood study. The COAT also helped champion a number of successful community events, including a flood risk exhibit at the Liberty Science Center in New Jersey that opened shortly before Hurricane Sandy struck. Figure 3 shows the exhibit featuring an interactive 3D Flood Simulation Model that allowed students to experiment with variables of flooding severity an urban environment, such as hard-surface water runoff and detention.



Figure 3. Community members observe a flood risk demonstration at the Liberty Science Center in New Jersey.

The FEMA Region II Coastal Outreach Website

Initially deployed in March 2012, the FEMA Region II Coastal outreach website (www.region2coastal.com) was designed to be a central clearinghouse of information about the coastal flood study, flood risk, and mitigation opportunities for community officials and the public. COAT members provided valuable input on the website's initial content and messaging, which included the following:

- The goals and objectives of the coastal study
- An overview of the steps involved in the map update process
- An FAQ on the flood study, map update process, flood insurance, and mitigation
- A glossary of common terms
- An online comment form allowing users to submit questions about the study and other topics
- An outreach video about the coastal study (developed in the fall of 2011)







Figure 4. Region II Coastal website homepage as of September 2015.

The content and design of the website has been periodically refreshed over the course of the study to ensure content remains timely and meets the needs of stakeholders as each study phase is accomplished. Figure 4 shows the design of the Region II Coastal homepage after a major redesign in spring 2015. Since deployment, the website has received over 3.6 million page views, and many of FEMA's partners, including New York City and the state of New Jersey have linked to the website to encourage use among their residents.

IV. Adapting to the Unexpected – Hurricane Sandy

On October 29, 2012, Hurricane Sandy made landfall near Brigantine, New Jersey and caused unprecedented damage up and down the New Jersey and New York coastlines. The storm made landfall during high tide, bringing greater than expected storm surge and extensive coastal flooding. The coastal flood study was brought to a screeching stop immediately following this historic storm, as FEMA Region II assessed the damage and planned the best response to the disaster. As early recovery efforts took shape, it became clear that better flood risk data would be needed to help drive decision making on rebuilding.

Development of Advisory Base Flood Elevation Data

At the time when Hurricane Sandy hit, the analysis for the coastal flood study was only partially complete. The storm surge analysis had been performed, but overland wave modeling and erosion analyses had not been started yet. As FEMA worked quickly to respond to the disaster and the needs of affected communities, it became clear that the new coastal flood study data, while still in draft form, better depicted flood risk in the coastal area than the existing information available on the effective FIRMs. This data would provide State and local governments, and residents with critical information to make smart decisions to build back stronger and safer.

Taking a similar approach as had been done following other major storms, FEMA developed and issued Advisory Base Flood Elevation (ABFE) maps based on the partially completed coastal study. The maps would need to be completed as quickly as possible, as States and communities began to consider rebuilding and recovery options shortly after the storm. Since FEMA, RAMPP, and other partner





resources were completely consumed by recovery efforts, including the production of the ABFE maps, completion of the coastal flood study was temporarily placed on hold, as FEMA disaster response activities took first priority to address the pressing needs of communities and their citizens.

Dissemination of ABFE Maps and Rebuilding Guidance

With States and communities looking to move forward rapidly with rebuilding and recovery efforts, it was of the utmost importance to disseminate the ABFE maps and associated rebuilding information *as soon as possible,* and *as widely as possible,* to stakeholders across the Region, including State and local governments, residents, and other Federal agencies. To accomplish these objectives, multiple methods of distribution were employed, and where possible, existing platforms and resources were leveraged. A summary of the methods used to disseminate the ABFE maps and rebuilding guidance is provided below.

- 1. Direct distribution to communities
 - A package of ABFE and rebuilding resources was mailed directly to impacted community officials. Packages included hard copies of the map panels and a DVD containing ABFE information in PDF map panel and GIS shapefile format, a set of fact sheets and guidance on the use of the ABFE maps, and other pertinent rebuilding information.
 - Also mailed to New Jersey communities was a copy of a model ordinance reflecting the adoption of ABFE information, developed by NJDEP.
- 2. The FEMA GeoPlatform
 - The FEMA GeoPlatform (then known as the FEMA Geoportal) was a relatively new and underutilized tool for visualizing geographic data sets online in late 2012. However, it proved to be an optimum method to disseminate ABFE information. The GIS data layers of the advisory information already being developed were easily converted into web-based GIS services and then integrated into a new interactive ABFE map viewer on the GeoPlatform. One important benefit of using the GeoPlatform was the ability to restrict access to maps with password protection. That way, FEMA and RAMPP could first review the information with State, Congressional, and local authorities during meetings with these stakeholders ahead of wider public release of the information.
 - The Geoplatform interface included new tools that increased the usability and readability of the ABFE information. For example, users could zoom to a specific location by typing in their desired address. Pop up text boxes provided detailed information about important elements of the map, including links to PDF map panels and GIS shapefiles. Links to definitions for technical terms and a new ABFE FAQ on the FEMA Region II Coastal outreach website were also included. A tutorial video about using the ABFE GeoPlatform map was also developed as an instructional tool for users.
- 3. FEMA Region II Coastal Outreach Website
 - The FEMA Region II Coastal outreach website, deployed earlier in the year, also served as a critical resource where Sandy-related rebuilding information could be quickly posted online. New content about the ABFE maps and rebuilding/recovery guidance was quickly developed and deployed to the site. Some of the key aspects of the updated site included the following:
 - ABFE information in different formats including the GeoPlatform map, PDF map panels, GIS shapefiles, and web services were prominently featured on the site.





- New outreach fact sheets about the ABFE information and rebuilding guidance, and links to numerous other resources available from FEMA, States, and other organizations were incorporated into the content.
- Two new *Recovery Toolkit* pages for community officials and homeowners were developed to organize the most relevant resources by stakeholder.
- The online form previously developed for general questions about the coastal flood study became the conduit for public inquiries about rebuilding and the ABFEs. Over 2,600 inquiries were received and responded to following Sandy through this form. A weekly report about these incoming inquiries allowed the FEMA outreach team to pinpoint specific areas in the Region where additional community engagement was needed.
- 4. What is My ABFE? Address Lookup Tool
 - Also available through the FEMA Region II Coastal outreach website was a new tool developed by FEMA with the support of RAMPP to help community officials and the public quickly access ABFE and effective FIRM information. The *What is My ABFE?* tool allowed users to enter an address to generate a short report containing the property's Advisory BFE and flood zone information, as well as the equivalent information from the effective FIRM. This tool allowed users to get an accurate picture of their flood risk and important information for making rebuilding decisions with a minimal amount of effort.
 - Once released, the ABFE information was used widely by Federal, State and local authorities. For example, a government-wide flood risk reduction standard was enacted by the Obama Administration for Federally-funded rebuilding undertaken as part of the Sandy recovery, using the best available flood hazard data (the ABFE or effective FIRM information, which ever was more restrictive) plus one additional foot of elevation. The State of New Jersey and New York City also adopted their own rebuilding standards, which incorporated the ABFE information. NJDEP also developed a new model flood damage prevention ordinance for use by New Jersey communities, which reflected the incorporation of the ABFE information. As an added incentive for local communities to adopt the ABFEs, NFIP Community Rating System (CRS) credit was also provided to communities who adopted the ABFE information.

Stakeholder Engagement

Once the ABFE maps were issued, FEMA held numerous meetings with stakeholders across the Region to present the advisory maps, explain their intended uses, provide additional guidance on rebuilding, and answer questions prior to wider public release. These in person meetings and webinars were critical in ensuring all necessary stakeholders were aware of the maps. Attendees included State and local governments, Congressional representatives, and other stakeholders. By deploying the ABFE data online through the GeoPlatform, it made reviewing the information collaboratively in a web-based format easier and more effective.

The COAT also served as an important resource for communicating the ABFE maps and other rebuilding guidance to impacted communities. Several COAT meetings were held in the months following Sandy, to make members aware of FEMA's efforts to assist with rebuilding and recovery in the Region. FEMA demonstrated the ABFE maps and received feedback from COAT members on outreach materials and products such as the *What is my ABFE*? tool.





Other Outreach/Engagement Activities

Besides the activities discussed above, several other special outreach projects were performed intended to help inform community officials and the public about Sandy rebuilding and recovery efforts, and best practices for future mitigation efforts.

- A sequel to the original coastal study outreach video (deployed in the fall of 2012) was created to provide information about how the communities featured in the first video fared in the storm and what mitigation efforts proved to be effective.
- Prior to Sandy, a pilot program for the Borough of Manasquan was delivered by FEMA and RAMPP to help train the Borough's community officials on how to use social media to effectively communicate about flood risk and preparedness topics with residents. Following that training, the Borough relied heavily on social media to communicate effectively with residents prior to, during, and after Sandy. As a result of this success, expanded series of social media training sessions were held for community officials in several counties in New Jersey including Ocean, Monmouth, and Cape May Counties, to help them communicate effectively with their residents about flood risk, and flood and hurricane preparedness.

V. Map Product Release

Preliminary Work Maps

By the spring of 2013, FEMA and RAMPP were able to continue forward with completing the overland wave modeling and erosion analysis for the coastal study that had been temporarily placed on hold immediately following Hurricane Sandy. In July 2013, FEMA began to issue preliminary work maps to the 14 counties impacted by the updated coastal analyses on a rolling basis through late 2014. The preliminary work maps were an interim product created in the process of developing the preliminary FIRMs and served two purposes: 1) to replace the courser ABFE maps which did not reflect the overland wave modeling and erosion analysis 2) to get updated coastal flood hazard analyses and mapping into community hands for review and comment.

Webinars were held to share the preliminary work maps and provide community officials the opportunity to identify any areas of concern with the flood hazard mapping. The preliminary work maps, as well as tutorials, user guides and other learning resources, were made available through the FEMA Region II Coastal outreach website.

Preliminary FIRMs

Beginning in late 2013, preliminary FIRMs were released on a rolling basis for area communities, kicking off the formal comment period provided for public review of the preliminary coastal study results. FEMA used a variety of methods to widely disseminate the preliminary map products:

- 1. Direct mailing to communities of hardcopy preliminary FIRM panels and FIS reports in addition to a DVD containing the FIRM database and FIRM panels in PDF format.
- 2. Posting preliminary FIRM information on map viewers via the FEMA GeoPlatform
- 3. Integration of the updated flood hazard data into the existing address lookup tool available on the FEMA Region II Coastal outreach website, setting in motion its renaming from the 'What is My ABFE?' Tool to 'What is My BFE?'
- 4. Posting preliminary FIRM panels and FIS report to the FEMA Map Service Center website
- 5. Posting preliminary FIRM panels and FIS reports to the RAMPP-Team.com project website





The FEMA Region II Coastal outreach website was also updated to reflect the availability of the preliminary information and to transition the site content from rebuilding/recovery-centric material to content that was once again, more focused on the coastal study and its goals and timeline.

Webinars were also held with each community and county receiving the preliminary maps in order to present the products and answer any questions that officials had about the mapping process.

Revised Preliminary FIRMs

Revised preliminary FIRMs were issued in early 2015 to address areas in the vicinity of the VE/AE Zone break where building footprints supplied by NJDEP or the New York City Department of Information Technology and Telecommunications, GIS Division prompted a more detailed, site specific analysis than was performed in the original preliminary study. In certain locations, the enhanced analysis resulted in a shift in the VE/AE Zone break. In certain locations, the revised preliminary FIRMs also showed other flood hazard changes resulting from data provided to FEMA on the preliminary mapping from communities and the public (see the Pre-Appeals Correspondence section below). The revised preliminary FIRMs were distributed widely through the same methods as the preliminary FIRMs.

The timing of the release of the revised preliminary FIRMs ensured that as communities entered the statutory 90-day appeal period, the most accurate data known to FEMA was represented in FIRMs and in the FIS report.

VI. Risk MAP Meetings

In an effort to recover from project delays due to Hurricane Sandy, an aggressive community engagement schedule was put in place to complete all Risk MAP meetings for the coastal study before April 2015, when the statutory 90-day appeal period would begin. The Risk MAP meeting timeline for FEMA Region II generally adhered to the progression shown in Figure 5.

FEMA Region II prioritized the need early on to build relationships with the county and community officials participating in the Risk MAP meetings. Starting with the Flood Risk Review meeting, the Region sought out the active participation and feedback of local officials and emphasized the importance of local ownership of the new flood risk products. Strong partnerships were built over the course of the Risk MAP meetings; partnerships that were especially crucial when it came time to engage residents during the Open House meetings during which the preliminary FIRMs would be reviewed. The next few sections will go into greater detail on the FEMA Region II-specific approach to these Risk MAP meetings. To read more about FEMA's meeting goals, please refer <u>here</u>.

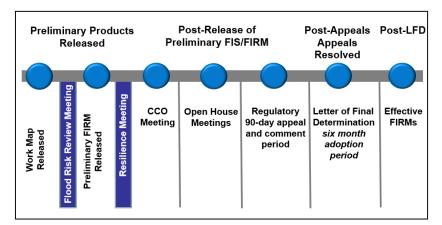






Figure 5.FEMA Region II Risk MAP Meeting Timeline

Flood Risk Review Meetings

FEMA held Flood Risk Review (FRR) meetings with community and county officials to review the preliminary work maps. The FRR meeting provided the forum for officials to identify areas in their community where they believe the risk is inappropriately mapped (understated or overstated) and to share any better data that might be available such as topographic information, building features, land features, etc. By actively engaging local officials early in the mapping process, their review and comment on the maps could be easily incorporated, ultimately saving time and money over the duration of the project.

The Region also reviewed the Hazard Mitigation Planning process with local officials during the FRR meeting and helped them start to think about flood-prone areas in their community that could be added to the Areas of Mitigation Interest non-regulatory flood risk products developed by NJDEP and FEMA. Other flood risk products introduced during the FRR meeting included Changes Since Last FIRM datasets and Coastal 1% Annual Chance Flood Depth Grids, all of which were made available through the FEMA Region II Coastal outreach website for ease of access by community officials and other interested stakeholders. FEMA Region II utilized the FRR meeting as an opportunity to align focus back to the coastal study and Risk MAP project, and away from the post-Sandy disaster response.

Resilience Meetings

Resilience meetings were held following the release of the preliminary FIRMs and FIS reports. The purpose of this meeting was to increase local capacity to implement priority mitigation activities within the community. Discussions during the Resilience meetings focused on understanding flood risk and creating risk reduction strategies to increase community resilience.

FEMA Region II leveraged their strong CTP partnership with NJDEP by involving the State in presenting the remaining non-regulatory flood risk products they produced for New Jersey communities, including Coastal Flood Risk Assessments, Coastal Increased Inundation Areas data sets, and Water Surface Elevation Change Grids. Breakout sessions following the formal presentation were held, where community officials worked with FEMA and State mitigation planners and engineers to use the products to identify local flood prone areas and create constructive mitigation actions for future risk reduction and resiliency. Funding options and incentives to encourage mitigation were also discussed (i.e., availability of grants, joining CRS, etc.).

Consultation Coordination Officers Meetings

Following the Resilience meetings, Consultation Coordination Officer (CCO) meetings were held for community officials in the coastal study area. In order to best accommodate the scope and size of the study area, FEMA Region II chose to hold the CCO meetings separate from the public Open Houses. In most cases, one CCO meeting was held per county, though some counties required two CCO meetings due to large geographic extent and number of participating municipalities, such as Bergen, Ocean, and Monmouth counties.

At the CCO meeting, the preliminary FIRMs and FIS reports were presented and discussed. Certain COAT members with whom FEMA had established a close working relationship during the coastal study and Hurricane Sandy were also invited to participate in the meetings as key stakeholders. State partners from NYSDEC and NJDEP played an important role in explaining the process of adopting the new FIRMs into flood damage prevention ordinances and the required timeline. Details about the upcoming appeal





period were introduced at the meetings to prepare community officials in advance for what to expect. The CCO meeting also served as an important opportunity to engage Regional representatives from FEMA's Floodplain Management and Flood Insurance (FM&I) Branch who educated community officials on recent legislative changes to the NFIP (2012 Biggert-Waters Flood Insurance Reform Act and 2014 Homeowner Flood Insurance Affordability Act).

Open House Meetings

FEMA Region II took a strategic approach to planning public Open Houses for the coastal study, to ensure residents were fully informed about the changing flood risk. In order to optimize limited resources available during the time frame in which the meetings were to be held, the Region provided each New Jersey and New York county with at least one Open House event for their residents.¹ Some counties required two events based on the large geographic size of the affected area and/or large anticipated public turnout based on past outreach events (e.g., Monmouth and Ocean Counties).

Region 2 leveraged their existing local partnerships in order to help garner the commitment of other communities within a county to participate in an Open House planning call. During these planning calls, the Region provided communities with tools and information to help them successfully promote and host an Open House event for their residents. This included the distribution of an Open House Toolkit document containing key messages, sample outreach materials and templates for use by communities. Some community officials took the lead in securing an event location, organizing personnel, and advertising the event to their residents. Other counties required more planning support from the Region. However, FEMA Region II provided personnel (including Regional staff and contractor support) at all events to assist in identifying homeowners' flood risk on the preliminary FIRMs, and help answer questions about the maps, floodplain management, flood mitigation, and flood insurance.

One of the greatest challenges related to outreach for the coastal study was the consolidated timeline during which 13 counties required the completion of the public Open House events. Planning, scheduling, and coordination of all the Open House events for the coastal study (15 events total) needed to be completed within 6 months in order to meet project milestones and ensure that the appeal period start target date was realized. Three additional Open Houses were coordinated during this time for Somerset, Camden, and Gloucester counties, which were undergoing simultaneous map updates.

¹ The exception to this approach was New York City. The City chose to conduct outreach to their residents separately. As a result, FEMA did not hold an Open House event for City residents.







Figure 6. Cape May community floodplain administrators explain to a resident the changing flood risk on the new preliminary FIRM.

The Cape May County Open House was a Risk MAP success as it represented Region II's hope for a community-driven event lead by strong local leadership. The Open House was held in the City of Cape May on December 12th, 2015. This Open House was very well attended with over 300 residents from across the County coming through that evening. As seen in Figure 6, this event was covered by local news stations and brought together local floodplain administrators to speak to their residents about the new preliminary FIRMs.

VII. Appeals Process

Pre-Appeal Correspondence

FEMA Region II encouraged communities to proactively submit data and comments pertaining to the preliminary FIRMs prior to the start of the official 90-day appeal period. Through this pre-appeal process, many issues were identified and resolved up front, thereby reducing the volume of submittals received during the actual appeal period. This process also reassured communities that FEMA was fully committed to addressing any and all local concerns with the maps. Information about the pre-appeal submittal process was communicated to community officials during Risk MAP meetings and through the FEMA Region II Coastal outreach website. FEMA closely tracked the receipt of the 78 pre-appeal submittals received and issued appropriate responses back to requesters. Where applicable, changes to flood hazards were incorporated into revised preliminary FIRMs issued in January 2015 before the start of the appeal period in late March/early April 2015.

One Appeal Period

The decision was made by FEMA Region II to coordinate one concurrent statutory appeal period for all 285 communities affected by new or changed flood hazards due to the coastal study. Doing so ensured due process procedures were applied accurately and consistently for all communities, which otherwise could have been challenging given the large number of communities affected. This approach also allowed appeals to be simultaneously addressed and resolved, which was important in the case that an appeal submittal had implications beyond one particular community. Otherwise, a submittal received





for a community with a later appeal period may have caused problems with a previously resolved appeal for another community, should the data have an impact on both communities.

To ensure all due process requirements were performed in full accordance with Part 67 of the NFIP regulations, and to mitigate the risk of the need for a re-start of the appeal period, it was imperative to effectively monitor all prescribed due process steps. This included carefully tracking return receipts for appeal period start correspondence to confirm receipt by the appropriate community officials and coordinating closely with newspapers to ensure timely publication of required public notices. Despite vigilant tracking efforts, the appeal period needed to be restarted for 4% of the communities due to a newspaper publication not occurring within the appropriate time frame.

Online Appeal Portal

Despite the success of the pre-appeal process, the FEMA Region II still anticipated receiving a significant number of submissions during the 90-day appeal period due to the size of the affected population and the vested interest of its stakeholders. Region II collaborated with RAMPP in the development of an online appeal portal (formally titled the 'Preliminary Flood Map Feedback Portal') to more efficiently receive and manage the anticipated high volume of submissions.

The appeal portal improved the management of the appeals process for all stakeholders involved, providing members of the public and community officials with the ability to submit their feedback online and to track the status of their requests in real time through the resolution process. Figure 7 is a screenshot of the online tool's dashboard and capabilities. The appeal portal also provided community officials with the ability to review, track, and comment on all submittals affecting their jurisdiction prior to FEMA's review. Use of the appeal portal was optional for both community officials and the public, and alternatives to its use were made clear in all pertinent outreach materials and external messaging.

FEM	n Feec	minary Fl Iback Por	al Data	adlan	No. of Concession, Name		-	-	Sig
	Submittal ID	Status	Submitter Type	Location of (Concern	Date Last Edr	ted		
	1531	Draft Resolution Letter Being Prepared	Public User	BOROUGH C LAVALLETTE	F ;:OCEAN:NEW JERSE	04/17/15 9:44 Y	i	Ì	
	1546	Resolution Letter Issued	Community Official	TOWNSHIP O BEACH::OCE	OF LONG AN:NEW JERSEY	04/28/15 23:3	9		
	1548	FEMA / RAMPP Review Started	Public User	TOWNSHIP O MAY:NEW JE	OF LOWER::CAPE	04/16/15 12:1	1		
	1557	FEMA / RAMPP Review Started	Public User	CITY OF NEW YORK:NEW Y	VYORK::NEW ORK	04/27/15 11:1	7		
	1559	FEMA / RAMPP Review Started	Public User		ARK:CITY OF ESSEX:NEW JERSEY	04/27/15 14:4	9		
	1563	Resolution	Public User	MONMOUTH	1	04/28/15 16:1	7.	-	
Video							0	CSV	(F. 101
				Search:			Сору		Excel
Submittal ID	Submitter	Submitter Type	Status E	Date Created	Location Type	Location of Conc	ern	Study	Manager
1448		Public User	Rejected by 04 Gatekeeper	4/02/15 13:44	A single property	None		0	
1456		Public User	Community 04 Official Review Underway	4/08/15 9:35	A single property	TOWNSHIP OF MIDDLETOWN;		David F	Rubenst
		Public User		4/13/15 10:31	One or more areas in a single	CITY OF NEW YO	RK;	Robyn	Boyd
1473		Public Oser	Gatekeeper		community				-

Figure 7, User dashboard for the online Preliminary Flood Map Feedback Portal.





The appeal portal allowed FEMA Region II and partner staff to efficiently track all submittals received, export reports, and upload final correspondence. It served as a complete repository of all information pertaining to each submittal from start to finish. The appeal portal also generated automated email notifications to submitters, acknowledging receipt of the submittal and providing additional information at other key milestones in the process. This functionality reduced the amount of time needed for correspondence tasks and ensured consistency of messaging.

Ultimately, the appeal portal allowed Region II to save time and resources during the appeal period that would otherwise have been spent managing this complex and critical step in the map update process.

Outreach and Community Engagement

FEMA Region II prioritized the education of community officials about the appeal period and the new appeal portal developed to manage the process. In addition to the standard correspondence to community officials and the public notices required under NFIP regulations prior to start of the appeal period, the following outreach was performed:

- Fact sheets about the appeal portal were included in appeal start correspondence to community officials to make officials aware of the availability of this tool and to encourage its use.
- Several training webinars were held for community officials to instruct them on the availability and use of the appeal portal. A fact sheet about the appeal portal suitable for distribution to residents was also provided to community officials for their use.
- Content of the FEMA Region II Coastal outreach website was refreshed to reflect detailed information about the appeal period, including a new webpage devoted to the appeals process and an appeal period FAQ. New fact sheets, user guides, and a tutorial video about the appeal portal and how to use it were developed and made available through the site.
- The COAT continued to serve as a venue to inform state and local governments and other stakeholders about the appeal period, when it was scheduled to occur, and the development and availability of the appeal portal.

Post-Appeal Period Activities

As a value added service to area stakeholders, the appeal portal was temporarily kept open to submittals following the end of the appeal period. While late submittals could not be considered appeals, FEMA Region II responded to submitters as needed to provide information, options or alternatives to assist with their concerns or comments.

The FEMA Region II team continues to review all submittals received, and is working to draft and issue appropriate resolution correspondence. As needed, Region II staff will meet directly with certain individual communities to facilitate resolution of appeals to ensure local buy-in with the new maps. The appeal portal will ultimately house all original submittals and issued correspondence in order to serve as a complete record of the appeals and comments received for the coastal study.

VIII. Final Map Processing

FEMA Region II set the objective to start the statutory 90-day appeal period for all affected communities concurrently in part to allow appeals to be addressed and resolved at the same time and ensure consistency in data across communities. As FIRMs are finalized and effective dates are set for the coastal FISs, Region II will ensure that consensus is reached between adjacent counties/communities,





and that no study is finalized before it is first certain that appeals in an adjacent county/community will have no effect on the study/studies to be finalized.

In an ideal situation, all of the coastal FISs would become effective at the same time; however, due to the number of communities involved in the project, proceeding in this manner would put a tremendous strain on resources and limit the amount of outreach possible during this critical stage in the Risk MAP process. During this final phase, FEMA has several missions:

- Ensure that communities adopt or amend their floodplain management ordinances based on the new data by the FIRM effective date
- Help educate communities and the general public about Grandfathering rules and the opportunity to lock in lower flood insurance rates, thereby lessening the impact of increases in flood insurance premiums triggered by the map update as a result of recent flood insurance reform legislation
- Explain the effect of new maps on Letters of Map Change (LOMCs) and the LOMC revalidation process (The importance of this activity will vary by community based on LOMC activity)

Effectively executing these missions will require careful workload planning and staging of the FIRM effective dates to ensure that adequate resources are available to ensure success. Support will be needed from a variety of resources including FEMA staff, State coordinators, contractors, and other partners such as the COAT. The key will be to develop a finalization plan by FIRM effective date, establish roles and responsibilities, and obtain commitments well in advance.

IX. Conclusion

It is the intent of this document to provide readers with best practices and lessons learned that will instruct community engagement activity for future Risk MAP projects. The community engagement work performed by FEMA Region II from the beginning of the Risk MAP project cycle laid the foundation on top of which the technical data of the Flood Insurance Study was presented in an understandable manner to a diverse audience. Region II and RAMPP succeeded in working with the Coastal Outreach Advisory Team and other local community officials to garner feedback on the Region II Coastal outreach website and some of the site's innovative tools such as the What's by BFE? Tool and Preliminary Flood Map Feedback Portal. These tools were instrumental in helping to educate a wide audience about their flood risk, potential mitigation solutions, and the value of the revised FISs. Despite the interruptions caused by Hurricane Sandy to the project, the destruction left by the storm provided an opportunity for FEMA Region II to focus their messaging to communities and residents on the vulnerability of coastal areas to flooding. The coastal communities of New York and New Jersey are much better off today because they know what their flood risk is, they understand each individual's role in owning this information, and they have identified actions that can be taken to mitigate their risk of flooding in the future.



