Privacy Impact Assessment

FEMA Hazard Mitigation Planning and Flood Mapping Products and Services Support Systems

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Abstract

The Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Federal Insurance and Mitigation Administration (FIMA) provides various flood mapping products and services to the public as required under the National Flood Insurance Act of 1968, as amended (NFIA) (42 U.S.C. § 4001 *et seq*.). The Risk Management Directorate (RMD) manages FIMA's various flood mapping products and services. This includes the Map Service Center (MSC) and the Mapping Information Platform (MIP) Information Technology (IT) support systems. FEMA is updating and replacing the previously published DHS/FEMA/PIA-007 FEMA NFIP MSC and DHS/FEMA/PIA-028 MIP, originally published April 30, 2013, to provide more detail about the MIP process, describing additional collections, use of financial information, the sharing of information with the Department of Treasury (Treasury), and the development of the online Letter of Map Change (LOMC) application within MIP.

Overview

Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP). The NFIP aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention of general risk insurance, but also specifically through the use of flood insurance. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by the Disaster Mitigation Act of 2000, provides the legal basis for FEMA and other government agencies to undertake a risk-based approach to reducing losses from natural hazards through mitigation planning. Federal Insurance and Mitigation Administration's (FIMA) Mitigation Planning Program oversees and provides guidance to state, tribal, and local governments that are required to develop a FEMA-approved, risk-based hazard mitigation plan. This plan is a pre-condition for receiving non-emergency disaster assistance from the Federal Government, including funding for flood hazard mitigation projects. FEMA tracks governments' implementation of their hazard mitigation plans to help communities identify new mitigation strategies, improve planned mitigation actions, and advance planned actions.

The National Flood Insurance Act of 1968, as amended (NFIA)[1] establishes that FEMA will provide flood insurance in communities that adopt and enforce floodplain management

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[1] 42 U.S.C. § 4001 *et seq.*

ordinances that meet the minimum NFIP requirements. The law requires FEMA to provide and maintain flood maps to support floodplain management and insurance activities. FEMA's regulations implementing the NFIA, including the flood mapping program, are found in 44 C.F.R. §§ 59-72.[2]

The NFIA requires insurance companies that write flood insurance policies on behalf of the NFIP to use FEMA flood maps to determine insurance rates. Members of the public can purchase and review these FEMA maps and related products to understand a property's flood risk. In addition, community officials must use these maps to manage development in flood-prone areas. FEMA performs the following tasks in support of flood map productions:

1) Tracks requests for updates from community officials;

2) Schedules and tracks floodplain studies' progress and quality;

3) Conducts community outreach and coordinates with communities and the public on the floodplain study process;

4) Collects information from communities and organizations such as levee owners;

5) Provides public review of the proposed flood hazard data resulting from studies;

6) Adjudicates administrative appeals to the studies; and

7) Coordinates and tracks the request and processing of flood map revisions and updates.

The NFIA requires communities to adopt these maps as the basis of their land use regulations and subsequently requires FEMA to provide due process to affected communities and property holders. This process includes making available to the public the relevant data documenting the scientific and technical basis of the maps, as well as documenting the community and public coordination processes associated with the map development and publication.

FEMA flood maps are subject to revision through the Letters of Map Change (LOMC) administrative process. LOMC are documents issued by FEMA that revise or amend the flood hazard information shown on the Flood Insurance Rate Map (FIRM). LOMC include two types of map changes: Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR). A LOMA is a flood map change based only on the placement of the floodplain boundary relative to existing ground elevations, usually for small areas. A LOMR is a change that often covers a larger area based on improved scientific or technical data or changes to the floodplain, and may require a flood map revision. For the purposes of this privacy impact assessment (PIA), FEMA uses the term LOMC to mean all types of map amendments and revisions.

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[2] *Available at* https://www.gpo.gov/fdsys/pkg/CFR-2011-title44-vol1/pdf/CFR-2011-title44-vol1-chapI-subchapB-subjectgroup-id467.pdf.

The Risk Management Directorate (RMD) provides high-quality flood maps, information, and tools to better assess flood risk, and provides planning and outreach support to communities to help them take action to reduce or mitigate this risk. RMD operates two major information technology (IT) systems to support these functions: the Map Service Center (MSC) and the Mapping Information Platform (MIP). These systems support the identification of hazards, assess vulnerabilities, and develop strategies to manage the risks associated with natural hazards. The MSC and MIP support the following RMD functions: 1) risk-based hazard mitigation planning; and 2) public map and data distribution and customer service. The remainder of this overview summarizes each IT system's contribution to the RMD functions listed above, including typical transactions that interface with these systems or their applications. These descriptions explain the sensitive and personally identifiable information (PII) FEMA collects in the process of fulfilling its statutory and regulatory responsibilities, and describes how FEMA compiles, stores, protects, uses, and shares this data.

Risk-based Hazard Mitigation Planning

Mitigation planning identifies policies and actions that, when implemented over the long-term, reduce risk and future losses. The planning process creates a framework for risk-based decision making to reduce damages to lives, property, and the economy. Hazard mitigation plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle that triggers disaster damage, reconstruction, and repetitive damage.

Through outreach, technical assistance, guidance, and training, RMD assists state, tribal, and local governments in: (1) identifying the natural hazards that affect them; (2) determining the actions and activities to reduce any losses from those hazards; and (3) establishing a coordinated process to create and implement a plan to address and mitigate those hazards.

Identifying Mitigation Strategies and Improving Planned Mitigation Actions

To support the identification of mitigation strategies and to improve planned mitigation actions, FEMA tracks the status of state, tribal, and local hazard mitigation plans and reviews them to ensure compliance with 44 CFR Part 201[3]. FEMA uses the Mitigation Planning Portal (MPP), which is an application of the MIP system, to document the status of a Hazard Mitigation Plan and the progress of its review. MPP's data collection and storage is largely statistical (*e.g.*, Date Review Started, Days in Review, Reviewer Name, Plan Status, Percent of Population Covered by the Plan). All MPP users are FEMA personnel or contractors or state mitigation planners who must log-in to use the MPP. State mitigation planners have read-only access through their regional

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[3] This regulation governs FEMA pre and post disaster hazard mitigation programs and activities. *See* 44 CFR Part 201, *available at* https://www.gpo.gov/fdsys/pkg/CFR-2011-title44-vol1/pdf/CFR-2011-title44-vol1-part201.pdf

mitigation planner. In the future, the MPP may be used to archive copies of FEMA-approved state, tribal, and local Hazard Mitigation Plans.

FEMA also contributes to planned mitigation actions by encouraging the use of its multi-hazard modeling software, Hazards US – Multi Hazard (HAZUS-MH), which is available for download on www.FEMA.gov. HAZUS-MH software uses geographic information systems (GIS) technology to estimate physical, economic, and social impacts of disasters as a critical input to Hazard Mitigation Plans. The MSC hosts a SharePoint collaborative portal that supports the HAZUS-MH user community. The SharePoint portal is available to all members of the public. In order to access the SharePoint portal, prospective users send an account request by email to spadmin@riskmapcds.com. In the email, prospective users of the SharePoint collaborative portal must provide a username, phone number, and email address for FEMA to create the user account. FEMA uses the SharePoint application primarily to facilitate the dissemination and exchange of information among authorized users. The SharePoint portal contains general information areas open to all users and specific subject matter areas open to select users. There are dedicated document libraries for both general information and specific subject-matter areas that offer collaboration tools such as member directories, message boards, and shared spaces allowing members to post comments, links, and documents relevant to the development of flood map products. Username is the only PII visible to other members of the SharePoint portal.

Advance Planned Actions

MIP also hosts the Mitigation Action Tracker (MAT). MAT is a web-based tool for RMD providers and state, local, and regional mitigation planners to document and report local mitigation actions influenced by floodplain management processes. This data supports the measurement of RMD action metric performance while also providing stakeholders valuable mitigation information that affects future planning or other risk reduction efforts. The MAT is a valuable tool for communities and counties, serving as a single source to capture and organize mitigation actions at any stage from proposed actions to funded projects.

Community and county officials, such as the floodplain administrator, public works director, utility director, land use planning director, and other community and county staff are encouraged to register for access to MAT, record areas of mitigation concern, and identify mitigation projects. Users can add new actions, remove old actions, or update the status of an action as it changes over time. Examples of actions include local plans and regulations, community-identified programs, or structure and infrastructure projects. Users identify both new and existing actions for improvement through collaboration between communities, counties, the state, and FEMA. In addition, users can identify funding and collaboration opportunities to implement mitigation actions.

Public Map, Data Distribution, and Customer Service

The Risk Management Directorate provides flood maps, information, and tools to better assess the risk from flooding, and provides planning and outreach support to communities to help them take action to reduce or mitigate flood risk. The MSC operates a public-facing website for viewing and downloading flood maps and related products, assists the public by phone and online chat via a call center, distributes flood maps and related materials to community officials, and performs other functions related to public access to information about flood mapping. The MSC website provides immediate access to flood map information for any area in the country and to any individual needing this information. A system user may freely view the entire map online or download the data.

To find flood maps and products for a geographic location, users can enter any address into the MSC application. MSC sends the full address to the Environmental Systems Research Institute, Inc. (ESRI) ArcGIS database.[4] The ESRI converts the address to latitude and longitude, and ESRI sends the latitude and longitude points to MSC, which uses the points to locate the address within a FEMA map. The MSC does not retain the address from the user and it does not store latitude and longitude information from ESRI.

The MSC distributes digital flood map products and limited paper products without charge to local governments affected by map changes. Individuals can choose to either search the MSC product catalog, as described above, or create a user account and register for an email subscription. The user provides an email address and password to create a profile to subscribe to email subscriptions. The subscription feature enables individuals to create and manage automated notifications that alert them when certain products become available for download. Subscriptions are free of charge and users can create, edit, or discontinue the email subscription.

The MSC also operates the FEMA Information Exchange's (FMIX) online chat service. The FMIX chat feature allows individuals to interact with a mapping specialist online and receive assistance locating and acquiring flood map products. The FMIX maintains a record of this interaction and stores the records on FEMA-managed servers. FMIX does not use a third-party service provider. The record includes name, city, state, and chat subject from the chat user.

In addition to distributing paper and digital copies of flood map products to local government officials, FEMA uses the MSC system to host a website (www.floodmaps.fema.gov) upon which it posts Flood Hazard Determination Notices. FEMA publishes these notices in the

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[4] FEMA RMD makes extensive use of ESRI ArcGIS software. ESRI is the primary vendor for geospatial activities. These include desktop uses such as spatial data management and spatial analysis, and server-side technologies based on ArcGIS Server that power the web services used in geospatial applications. Additional information is accessible at http://www.esri.com/software/arcgis.

Federal Register. Flood Hazard Determinations Notices may include projections of flood elevations (i.e., the addition or modification of any Base Flood Elevation (BFE) or Base Flood Depths (BFD)) or designations of areas having special flood hazard areas (e.g., Special Flood Hazard Area (SFHA)[5] boundary or zone designation or regulatory floodway) on a community's FIRM. These notices contain the name and business contact information of an affected community government's executive. FEMA manually copies community officials' contact information from the NFIP Community Information System (CIS)[6] and inserts it into the public notice of a Flood Hazard Determination. In addition to this notice, FEMA notifies the local government and publishes notification of flood elevation determinations and designations of areas having special flood hazard areas in a prominent local newspaper at least twice. After the second newspaper publication, a 90-day statutory appeal period begins. During the 90-day statutory appeal period, any owner or lessee of real property within the community who believes that FEMA's determination has an adverse effect on his or her property rights may appeal such determination to the local government. This program does not handle or store local government appeals. The public may view notices for communities currently within the 90-day statutory appeal period and notices that expired within the past three months. FEMA automatically removes notices from www.floodmaps.fema.gov after 180 days.

Typical Map Product Request Transaction

On the MSC site, public users can find and download all maps, data, and other flood mapping products without providing PII. Customers can choose to create email subscriptions on the website to receive notifications of updates in flood mapping product categories and locations. The user creates an account using his or her email address, supplying a password, and registering for an email subscription. Subscriptions are free of charge and may be created, edited, or discontinued at any time. Users must also provide an email address and create a password in order to create a subscription account.

Typical Product Distribution to Local Government

After FEMA creates and approves the flood maps and related products for distribution, it uses the NFIP CIS to identify community officials impacted by a FEMA flood map change. These community officials will automatically receive copies of products distributed by the MSC related to their jurisdiction or area of responsibility. A FEMA analyst logs into CIS and manually inserts the current community official's name and address on a digital FEMA letterhead. The FEMA

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[5] The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on FIRMs. The SFHA is the area where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The SFHA includes Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V.

[6] The CIS system is included in DHS/FEMA/PIA-011 National Flood Insurance Program Information Technology Systems (NFIP ITS), *available at* www.dhs.gov/privacy.

analyst then stores the copies of products distribution in the MIP. The analyst downloads or prints a copy of the letter and appends the letter to the paper and digital copies of flood mapping products for distribution to community officials. The MIP stores the official letterhead, and the MSC maintains a copy for the purposes of distribution of the product(s) to community officials. The MIP and MSC retain a copy of the digital letterhead files in soft-copy format. In addition, FEMA retains a record of which products were sent to which officials and when.

Typical Call Center and Help Desk Chat Transaction

An individual may contact the FMIX for assistance with the MSC by dialing the FMIX toll-free telephone number or initiating an online chat session. A FEMA Map Specialist will greet the individual and ask for the individual's name, location, and reason for the inquiry. The Map Specialist may request additional information about the call topic and products of interest to meet the individual's needs. The Map Specialist enters the following user-provided information into a customer support application called PhaseWare: first name; last name; city; state; phone number; email address; caller type (*e.g*., property owner, realtor); request type; and any additional information pertinent to the call. The MSC hosts the PhaseWare application. If the individual chooses to initiate an online chat session, FMIX prompts individuals to enter the same information into an online form, which is part of the PhaseWare application. Once the individual completes the form, a chat window will opens and the Map Specialist greets the individual who initiated the chat session, and proceeds to address the individual's needs.

The Map Specialist then guides the individual to resources that may help address his or her needs either by phone or online chat. This may include providing website information (*e.g*., URL and navigation features), mailing requested information, and providing other industry resources and phone numbers, including the NFIP call center's contact information. The Map Specialist verifies with the individual that his or her needs are satisfied and determines whether a callback is necessary. If the Map Specialist cannot address the individual's needs because of the technical nature of the request, the Map Specialist escalates the issue within the PhaseWare application to other FEMA staff tasked with resolving MSC- and MIP-related customer issues. FMIX does not record telephone conversations; however, FMIX maintains transcriptions of online chat sessions. These chat sessions are available to the individual participating in the chat at the end of the session. FEMA stores chat session transcriptions on FEMA secure servers.

Typical Flood Hazard Determination Notice Transaction

Typically, an individual goes to www.floodmaps.fema.gov and selects a state of interest from a drop-down menu. The website presents a list of communities with an active or recently expired Flood Hazard Determination Notice. The system user selects a community and can view a list of Flood Hazard Determination Notices, the associated case number, the start and end date for the appeal period, and a link to an electronic copy of the notice.

FEMA Flood Studies, Map Revisions, and Public Documentation

FEMA uses the Coordinated Needs Management System (CNMS), an MSC application, to track flood map update needs including needs submitted by state and local officials. This system includes the officials' names for the purposes of controlling access to the system and tracking who submitted the requirements.

The MIP is a workflow-based system and web portal that contains a variety of information (including both PII and non-PII) and tools used for the management, production, extraction, and sharing of flood hazard data and supporting information.

FEMA processes LOMCs through both electronic-based and paper-based processes. The online process uses two applications within the MIP to process LOMCs: (a) electronic Letter of Map Amendment (eLOMA); and (2) Online LOMC. Only a certifier[7] can initiate the eLOMA process. An individual property owner or other representative of the property owner can initiate the Online LOMC process. The paper-based process allows individuals to submit hard copy LOMC applications to FEMA. Either a property owner or someone else working on his or her behalf can initiate the paper-based process. Appendix A of this PIA lists the forms associated with this process. These forms request PII of both the property owner and professional certifier.

The Online LOMC application integrates with the Department of Treasury's (Treasury) online payment system, Pay.gov,[8] to allow users to pay fees and make electronic payments. FEMA's fee schedule for processing requests for map changes, flood insurance study backup data, and NFIP map and insurance products[9] governs all fees collected within the MIP. These fees are associated with specific types of requests and orders for specific products. FEMA's Online LOMC application does not store the financial transaction information; rather, an end-to-end encrypted channel directs the request to Pay.gov, which processes the payment on FEMA's behalf. The MIP's Online LOMC application only stores the last four digits of the account number for credit card and electronic check (eCheck) transactions. FEMA maintains the last four digits of the account number as historical confirmation information for the transaction and for auditing purposes. Pay.gov returns the payment approval or denial information and the Transaction ID to the Online LOMC application over an encrypted web connection. FEMA sends a confirmation email to the user's email address with the result of the transaction.

Communities and members of the public may submit administrative appeals to proposed map changes. To ensure review and response to these appeals, FEMA uses a SharePoint instance

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[7] A certifier may be a Registered Professional Engineer, Licensed Land Surveyor, or Certified Professional through the National Flood Determination Association (NFDA) who is acting on behalf of a property owner.

[8] *See* U.S. Department of Treasury Financial Management Services Pay.Gov Privacy Impact Assessment 2.0 (July 1, 2011), *available at* http://fms.treas.gov/pia/paygov_pia%20.pdf.

[9] The schedule of flood map-related fees is accessible at http://www.fema.gov/forms-documents-and-software/flood-map-related-fees#1.

known as the RMD portal, hosted on the MSC system, to track appeals. This system maintains name and address to track information about the submitter of the appeal, certifiers providing data in support of an appeal, and community officials involved in the appeal. Access to this tool is role-based and uses FEMA's instance of Active Directory.

FEMA accepts applications from levee owners and communities seeking Zone AR designations, Zone A99[10] designations, and recognition of accredited levee systems on FIRMs.[11] FEMA uses the RMD (SharePoint) Portal hosted at MSC to review and respond to these applications and to track the accreditation status of levee systems and mapping levees, including designating AR and A99 Zones. This system may contain limited PII identifying the levee owner, operator, or community contact.

To support a mapping project, levee owners and communities are responsible for providing documentation that a levee system meets the requirements of 44 CFR 65.10 to have the levee system shown as accredited (provide protection from the 1-percent-annual-chance flood), or meets the mapping procedure(s) for non-accredited levee systems. FEMA uses the RMD SharePoint portal to track the accreditation status of levee systems and mapping levees. The MSC hosts the RMD SharePoint portal. SharePoint may contain limited PII identifying the levee owner, operator, or community contact.

The MIP manages the supporting scientific and technical data developed during the mapping study process and submitted through the LOMC processes. The law[12] requires FEMA to make this supporting scientific and technical data, and associated records of community and public coordination during the mapping process, available to the public. The Flood Risk Study Engineering Library application on the MIP provides the public with access to this information. The data FEMA distributes includes limited PII primarily in the form of names and contact information for certifiers, public officials, and others involved in the mapping update or revision process, or for those who develop scientific and technical data.

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[10] Zone AR is the base floodplain that results from the decertification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection. Zone A99 are areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction federal flood protection system such as dikes, dams, and levees. These are areas of special flood hazard where enough progress has been made on the construction of a protection system to consider it complete for insurance rating purposes. Zone A99 may only be used when the flood protection system has reached specified statutory progress toward completion. No Base Flood Elevations (BFE) or depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.

[11] Additional information on FIRM zones is accessible at https://www.fema.gov/media-library-data/20130726-1535-20490-4172/unit3.pdf

[12] *See* 44 C.F.R. part 66.3.

Typical CNMS Transaction

Flood map updates may be necessary because of changes to the physical environment, climatological data, or scientific methodologies, as well as other factors. Any public user may identify these necessary updates at any time, even if FEMA is not performing a floodplain study. Users would go to the CNMS application to notify FEMA of a suggestion for an update to a map. All CNMS users must authenticate and submit the following information: first name, last name, phone number, email address, role in CNMS workflow, FEMA region, and company/entity. Users can then log in to the CNMS system and enter information about the issue. CNMS maintains a record of the logged issue and the contact information of the submitter.

Typical Transaction for Planning and Tracking the Status of Mapping Study Projects

FEMA initiates a large volume of projects that produce flood mapping products and services. The project planning process begins with the definition of work packages or tasks, which FEMA purchases and funds over a multi-year period. FEMA staff enter data about these work packages (*e.g*., preliminary project scope, anticipated costs) into an application called Project Planning and Purchasing Portal (P4), which the MSC system hosts. The P4 helps FEMA sequence work effectively and determine which combination of work packages and tasks best advance the program's mission given a limited amount of funds.

Once FEMA has established project funding, FEMA staff documents each project's planned scope, schedule, and cost in the MIP, and enters information into the system to track progress against the plan. Select FEMA personnel have user accounts for the P4 and the MIP. To use these systems, FEMA personnel must log-in. These user accounts gather limited demographic information, as well as name, email address, and risk mapping role. FEMA assigns system permissions based on the individual's roles and responsibilities.

Typical RMD SharePoint Program Management Portal Transaction

FEMA uses the RMD SharePoint portal, hosted by the MSC, to manage the production of flood mapping products and services. The RMD SharePoint Portal, unlike the HAZUS-MH SharePoint Portal, is only available to FEMA employees, FEMA contractors, and Cooperating Technical Partners (CTP); other federal, state, tribal, and local entities also have access. A person seeking to become a member of a FIMA-supported flood mapping SharePoint portal enters limited PII into a SharePoint account creation request form, which he or she emails to the site administrator. This PII includes first name, last name, phone number, email address, company/organization/agency affiliation, and FEMA region affiliation. The SharePoint site administrator forwards the request form to a FEMA reviewer who grants the person permission to join the SharePoint portal. Once FEMA confirms the applicant's membership eligibility, the site administrator sends the new user a system-generated confirmation with his or her username and a separate email containing a temporary password. The site users may then voluntarily exchange

information and collaborate with other users using the tools provided by the SharePoint application. Portal administrators may remove any inappropriate postings. Additionally, every six months the portal administrator reviews member accounts for activity and disables user accounts that have been inactive for more than two years.

Typical Letter of Map Change (LOMC) Transactions

The amendments and revisions workflow applications, hosted by the MIP, accomplishes the paper-based process for producing a LOMC. Paper application forms (MT-1, MT-2, or MT-EZ), which include PII such as name, address, and contact information, are voluntarily completed by homeowners, lessees, or registered professional engineers or land surveyors and submitted directly to FEMA for entry into the MIP. FEMA uses this information if it becomes necessary to contact the homeowners, registered professional engineers, or land surveyors to obtain clarification on engineering and other data, or to mail correspondence. The homeowner, lessee, or certifier may also provide additional information that may contain limited PII, such as engineering data (*e.g.*, topographic and flood elevations), tax assessors' maps, and letters from the community, among other items. The public has access to this data as documentation of the basis for the flood maps. Additionally, FEMA shares this PII (name and address) with the Microsoft Azure LOMA-LOGIC tool that FEMA uses to process simple LOMC, which maximizes efficiencies through the automation of historically manual tasks, using an all-digital process and incorporating spatial cloud-based data.

FEMA employees or contractors, such as Mapping Review Partners (MRP), enter all paper-based LOMC into the MIP (see Appendix B for a listing of FEMA's MRPs).[13] FEMA then reviews the engineering data and other information to determine whether it warrants an amendment or revision to a flood map. If warranted, FEMA issues a LOMC. The MIP generates the LOMC determination document, and FEMA mails it to the LOMC requester. If the situation does not warrant a LOMC, the MIP generates a letter stating the situation does not warrant a LOMC, and FEMA mails the letter to the LOMC requester. FEMA performs random audits of these records to verify the results and to ensure adherence to applicable FEMA and other federal standards and requirements.

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[13] FEMA allows qualifying state and local governments to act on FEMA's behalf to perform the engineering review on data submitted by certifiers and property owners in support of LOMCs. These entities are MRPs. Each year MRPs sign agreements with FEMA to allow them to continue to serve in this capacity on behalf of FEMA (see Appendix B for a listing of FEMA's MRPs). MRPs have the same access to the MIP granted to FEMA staff to conduct the engineering review of the LOMC request. This information includes the paper LOMC application forms (*i.e.*, FEMA MT-1, MT-2, and/or MT-EZ) and engineering and other supporting data (*e.g.*, topographic information, tax assessors' map). The MRPs only complete LOMC requests for areas located within their governmental jurisdictions. FEMA grants access to MIP via a secure web interface requiring user authentication. MRPs also have access to scanned images of paper data submitted in support of the request.

An individual is required to register online for the Online LOMC application. The registration process collects the individual user's name and email address. Once the user submits his or her registration information, the Online LOMC application sends an activation code to the email address provided. The user can then sign in to the Online LOMC application using the activation code. The user then enters the same information as mentioned above for the paper process and uploads all required artifacts (*e.g.*, property deeds, maps) online. This Online LOMC application is only accessible through Hyper Text Transfer Protocol Secure (HTTPS) encrypted connection.

The certifier initiates the electronic application process through the eLOMA application hosted on the MIP. The certifier provides his or her PII either through a paper process or the eLOMA Helpdesk. To register, all certifiers must provide a licensed engineer certification number or a licensed surveyor certification number, which establishes their credentials to update flood maps. FEMA then creates an account for the certifier and provides the certifier with login information. Once registered, the certifier may enter engineering data and other information, such as information from FEMA's MT-EZ or MT-1 paper application forms, which may be necessary to support a LOMC request.[14] FEMA or an MRP reviews the engineering data and other information (*e.g.*, a copy of the recorded deed or plat for the property or structure) as entered and makes the determination as to whether or not to issue a LOMC. If FEMA or a MRP warrants a LOMC, the MIP generates the final LOMC determination, and FEMA mails it to the LOMC requester. If FEMA or a MRP does not warrant a LOMC, the MIP generates a letter stating such, and FEMA mails it to the LOMC requester.

The certifier is responsible for distributing the LOMC determination or letter to the property owner. If a certifier determines not to issue a LOMC, there is no change to his or her specific area within FEMA's flood maps. FEMA performs random audits of these records to verify the results and to ensure adherence to applicable FEMA and other federal standards and requirements.

Typical Transactions for Payments Associated with LOMC Fees

If the type of LOMC requested by an applicant requires a fee, the user pays the fee by credit card or eCheck. The Online LOMC application prompts the user to enter either credit card or eCheck information. Once the user clicks the 'Submit' option, Pay.gov receives this information by way of a secure HTTPS-encrypted session. Pay.gov forwards the information to the appropriate financial institution or credit card provider. When Pay.gov finishes processing the payment, it sends a status of either a successful or unsuccessful payment attempt back to the Online LOMC

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[14] The term "Letter of Map Amendment" is a specific type of map change used as a generic term encompassing all types of MT-1 map changes. For the sake of clarity, this PIA uses the term "Letter of Map Change" as the general term covering all types of map amendments and revisions.

application. The HTTPS session then closes and the transaction is complete. For paper-based transactions, property owners provide payment information such as project identifier, type of mapping service, type of fee, payment type, and credit card account information using the *FEMA Payment Information Form* (FEMA Form (FF) 81-107). FEMA submits the financial information provided by the individual to Pay.gov. Once the Department of Treasury processes the transaction, FEMA receives successful or unsuccessful payment confirmation information for the transaction. FEMA then sends a confirmation email to the user with the result of the transaction.

If the payment is successful, the Online LOMC application initiates the LOMC process requested by the user. FEMA conducts the appropriate analysis to determine if the property is in an SFHA. If the payment is unsuccessful, the user has the option of resubmitting his or her financial information to complete the order. The LOMC application file only maintains confirmation of payment and the last four numbers of the credit card or bank account number. FEMA deletes the last four digits of the credit card or bank account number after two years.

Typical Floodplain Study Engineering Library Request

FEMA establishes and maintains a Flood Elevation Determination Docket (FEDD) for all matters pertaining to flood hazard determinations. FEMA establishes and maintains a community case file, with a community elevation study consultation docket to document, among other things: all correspondence, consultations, and meetings with officials in a community; relevant publications; a copy of the completed flood study; and a copy of FEMA's final determination. FEMA maintains the community case file indefinitely. FEMA stores hard copy files at the FEMA Engineering Library and stores electronic copies on the Engineering Library's Secure Area Network (SAN) or within MIP. FEMA makes the reports and other information it uses to establish flood elevations and areas having special flood hazards available for public inspection. FEMA requires contractors and Mapping Review Partners working on floodplain studies or LOMC on FEMA's behalf to provide to FEMA complete documentation of the scientific and technical basis of the map changes and documentation of the community and public coordination. Under the NFIA, as amended, in establishing projected flood elevations and designating areas having special flood hazards, FEMA proposes such determinations and designations by publication for comment in the Federal Register, by direct notification to the Chief Executive Officer of the community, and by publication in a prominent local newspaper. FEMA provides public access to all of the project documentation, which may contain limited PII in the form of names and contact information for professionals who provide or certify scientific and technical data, community officials, state officials, levee owners and operators, or others who participated in the floodplain study or LOMC process. The Engineering Library redacts any PII in documents before submission to the public. If an entity requests a document as part of the Freedom of Information Act (FOIA), the FOIA branch redacts the PII consistent with FOIA standards. Interested members of the public can submit a request by mail or fax to the Engineering Library; in the future they will be able to

access a library search page through an application of the MIP. Based on the requirements specified in the request, the requestor will receive copies of the relevant scientific, technical, and administrative records.

Typical Transaction for Customer Satisfaction and Experience Surveys

FEMA provides the public and other stakeholders with an opportunity to voluntarily provide survey feedback regarding their experience with flood risks and FIMA's Mitigation programs. The purpose of the surveys is to identify areas of improvement within FIMA, and individuals can opt-out or refuse to initiate the survey. Non-participation in a survey, or responses provided in a survey, will not negatively affect an individual's or organization's requests for flood mapping products or services.

Surveys are either paper-based or electronic forms and are generally anonymous. FEMA surveys to community officials may not be anonymous as surveys may be for specific areas or community official's awareness of FEMA flood map products and services as well as his or her experience with FEMA. In such cases, community officials may opt to provide their PII such as names or business addresses in their official capacity for FEMA to conduct educational outreach or address areas of concerns or deficiencies, and such information will remain confidential. FEMA may also use focus groups to conduct the surveys. Such sessions may be video recorded; however FEMA anonymizes video records that contain PII.

FEMA may directly conduct the surveys or use contractors, such as market research companies, to conduct the surveys. Participants in the surveys are the general public, purchasers of FEMA flood mapping products and services, and community officials. These surveys are not directed to flood insurance policy holders. FEMA may contact community officials or purchasers of FEMA flood mapping products and services to access their satisfaction with FEMA's flood mapping products and service programs or how FEMA can provide assistance to state and local communities to program awareness or customer service. In such cases, FEMA is directly conducting the survey and uses contact information from existing FEMA resources such as the NFIP CIS to facilitate and conduct the surveys. FEMA may use a contractor to reach out to the general public or a certain demographic to help access the general public's awareness of FEMA flood mapping products and services. This helps evaluate the effectiveness of FEMA flood mapping programs awareness efforts. If FEMA uses a contractor, FEMA will identify the survey scope and criteria and provide it to the contractors. Typically, this includes FEMA identifying the group of individuals to be contacted based on the purpose and scope of the survey. The contractors will then use their own databases to contact individuals about the surveys. FEMA does not own or direct the collection of information within the contractor databases; individuals within the contractor database have agreements with the contractor to be contacted for various survey purposes. Typically, the contractor will offer incentives to participate in surveys or focus groups.

FEMA or the contractor contacts the participants to complete the survey. FEMA or the contractor provide written or verbal notice to the participants at the time of the survey, informing them of the uses of the responses and information they provide. The participants answer several questions concerning flooding, flood risks, or flood mitigation procedures, with a focus on the respondent's interaction and experiences with FEMA. Responses collected by the contractor are provided to FEMA. FEMA stores responses in a need to know only environment and does not release the responses/records to any unauthorized individuals. FEMA maintains the responses in accordance with the FEMA Records Officer and National Archives and Records Administration's (NARA)-approved records retention schedule.

Section 1.0 Authorities and Other Requirements

1.1 What specific legal authorities and/or agreements permit and define the collection of information by the project in question?

Under the National Flood Insurance Act of 1968, as amended,[15] flood insurance under the NFIP is available only in communities that adopt and enforce adequate floodplain management regulations consistent with the minimum floodplain management criteria in FEMA's regulations.[16] As part of the NFIP, FEMA produces flood maps that may identify flood elevations (the BFE or BFD and areas having SFHA boundaries or zones or regulatory floodways). The MSC and MIP maintain or administer the maps that define the statutory zones discussed above.

Under the NFIA, 42 U.S.C. §§ 4101 and 4020, and FEMA's regulations, 44 C.F.R. Parts 65 and 72, FEMA provides public access and dissemination of all flood insurance rate maps and letters of map revision. Additionally, this regulation requires FEMA to provide administrative procedures for communities or any owner or lessee of real property within the community who believes his or her property has been inadvertently included in a SFHA to appeal the boundaries of the SFHA.

The Disaster Mitigation Act of 2000 (DMA 2000)[17] provides the legal basis for FEMA mitigation planning requirements for state, local and tribal governments as a condition of mitigation grant assistance. DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act[18] by repealing the previous mitigation planning provisions and

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[15] 42 U.S.C. § 4001 *et seq.*
[16] 44 C.F.R. §§ 59-72.
[17] Disaster Mitigation Act of 2000, Pub. L. No 106-390, 114 Stat. 1552 (2000).
[18] Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C. §§ 5121-5207.

replacing them with a new set of requirements that emphasize the need for close coordination amongst state, local, and tribal governments for mitigation planning and implementation efforts.

Department of Homeland Security Appropriations Act of 2009 (Pub. L. 110-329[19]) appropriates funds for FEMA's flood map modernization efforts across fiscal years.

Additionally, 42 U.S.C. § 4020 directs FEMA to take any action needed to make flood insurance information and data available to the public and to any State or local agency or official. FEMA contractors answer questions for citizens concerned about flood risk, flood risk maps, flood insurance, or letters of map changes by way of call center and chat functions.

1.2   What Privacy Act System of Records Notice(s) (SORN(s)) applies to the information?

The DHS/FEMA/NFIP/LOMA-001 National Flood Insurance Program Letter of Map Amendment System of Records Notice (SORN), 71 Fed. Reg. 7,990 (February 15, 2006) covers information provided by members of the public in connection with LOMCs. FEMA is retiring this SORN and replacing it with a new SORN, Flood Mapping Products and Services System of Records, that will reflect changes to NFIP's Flood Insurance Rate Maps and clarify FEMA's collection of credit card information and sharing of payment information with Treasury.

Other applicable SORNs include:

- DHS/FEMA-003 National Flood Insurance Program, 79 Fed. Reg. 28,747 (May 19, 2014) applies to information connected to map services and products.

- DHS/ALL-004 General Information Technology Access Account Records System (GITAARS), 77 Fed. Reg. 70,792 (November 27, 2012) applies to user account creation and access.

- Treasury-009 Financial Management, 75 Fed. Reg. 54,423 (September 7, 2010) applies to payment information an individual provides to Treasury through Pay.gov.

1.3   Has a system security plan been completed for the information system(s) supporting the project?

Yes. The flood mapping products and services support systems have a System Security Plan (SSP). The MSC received an Authority to Operate (ATO) on July 10, 2015. The MSC ATO also covered the previous MSC customer service application with customer and payment information gathering functionality. The MIP received an ATO on August 25, 2015. The LOMA-

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[19] *See* Department of Homeland Security Appropriations Act, 2009, Pub. L. 110-329, 122 Stat. 3652 (2008).

LOGIC is utilizing the Federal Risk and Authorization Management Program (FedRAMP) ATO that Microsoft Azure holds.

1.4 Does a records retention schedule approved by the National Archives and Records Administration (NARA) exist?

Yes. The records retention policy in effect for the MIP is records schedule N1-311-86-1 2A2c. The records retention policy in effect for the MSC is records schedule N1-311-86-1, Items 2A3 and 2A4. FEMA is currently working with the FEMA Records Officer and NARA for a more appropriate records retention schedule for financial information stored in the MIP and MSC. Additionally, FEMA is working with the FEMA Office of the Chief Information Officer (OCIO), Records Management Division, and NARA to develop the appropriate records retention schedule(s) for FEMA's records created during online chat sessions. The LOMA-LOGIC aligns to the MIP records retention schedule N1-311-86-1 2A2c.

1.5 If the Paperwork Reduction Act (PRA) covers the information, provide the OMB Control number and the agency number for the collection. If there are multiple forms, include a list in an appendix.

The PRA covers information that FEMA collects and maintains to process FEMA's flood map products and services. Appendix A of this PIA lists the appropriate Office of Management and Budget (OMB) Information Collection and Resource (ICR) numbers and forms.

Section 2.0 Characterization of the Information

2.1 Identify the information the project collects, uses, disseminates, or maintains.

From Certifiers (*e.g.*, Registered Professional Engineers and Licensed Land Surveyors) and MRPs (*e.g.*, state or local government officials with authority over a community's floodplain management activities), FEMA collects:

MIP:

- Full name;
- Position or Title;
- Mailing address;
- Company or Community name;

- Six-Digit NFIP Community Number;

- Telephone number;

- Fax number;

- Professional License Number;

- Professional License expiration date;

- Signature;

- Signature date;

- Fill[20] placement and date;

- Type of construction;

- Elevation data; and

- Base Flood Elevation (BFE) data.

FEMA stopped collecting items marked with an asterisk (*) when enhancements to the MSC were deployed in August 2014. From individuals (*e.g.*, homeowners, investors, and property developers), FEMA collects:

MIP:

- Full name;*

- Mailing address*;

- Email address (for email alerts/notifications);

- Telephone number*;

- Credit card information (entered into Online LOMC and then transmitted to Pay.gov)*:

  o Credit card type*;

  o Credit card number*;

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[20] Earthen fill is sometimes placed in a Special Flood Hazard Area (SFHA) to reduce flood risk to the filled area. The placement of fill is considered development and will require a permit under applicable federal, state, and local laws, ordinances, and regulations. Fill is prohibited within the floodway unless it has been demonstrated that it will not result in any increase in flood levels. A Letter of Map Revision Based on Fill (LOMR-F) is FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway. This Fill Placement and Date is information that is required to process the LOMR. Because a LOMR officially revises the effective NFIP map, it is a public record that the community must maintain. Any LOMR should be noted on the community's master flood map and filed by panel number in an accessible location. See https://www.fema.gov/fill to learn more.

- o Expiration date*; and

- o Billing address*.

- Property address;

- Electronic check and payment information (entered into Online LOMC and then transmitted to Pay.gov):

  - o Bank account type*;

  - o Bank Routing Number*; and

  - o Bank Account Number*.

- Payment Confirmation Number (From the Department of Treasury (Pay.gov))*;

- Fax number;

- Fill placement and date;

- Type of construction;

- Legal property description;

- Signature;

- Date of signature;

- User account creation and access information:

  - o Full name*;

  - o Email address;

  - o Username;

  - o Activation code;

  - o Password;

MSC:

- First name*;

- Last name*;

- Title*;

- Company*;

- Address*;

- City*;

- State*;

- Zip*;

- County*;

- FEMA region*;

- Phone number*;

- Email;

- Live Chat (Help Desk) Information:

    o First name;

    o Last name;

    o City;

    o State;

    o Chat subject; and

    o Chat subject category (created and logged by FEMA staff).

MPP and MAT:

- First name;

- Last name;

- Email; and

- Organization/Agency.

MPP Only:

- MPP role (read/write);

- Challenge question number; and

- Challenge answer.

MAT Only:

- Job title;

- Region; and

- Permission.

LOMA-LOGIC:

- Full name;

- Property address;

- Legal property description;

- Fill placement and date; and

- Six-Digit NFIP Community Number.

Generally, FEMA may collect, use, or maintain the following information from potential participants for customer satisfaction/experience surveys:

- Name;

- Mailing address;

- Telephone numbers;

- Email addresses;

- Yes/no responses to questions; and

- Comments.

2.2 What are the sources of the information and how is the information collected for the project?

The following are the six sources of information within FEMA's flood mapping products and services support systems:

1) LOMC Certifiers (*e.g*., Registered Professional Engineers and Licensed Land Surveyors);

2) State or local government officials with authority over a community's floodplain management activities, including MRPs;

3) Individuals (*e.g*., homeowners, investors, and property developers);

4) FEMA staff and stakeholders registered to use SharePoint information and collaboration portals;

5) The CIS system; and

6) The cloud-based LOMA-LOGIC tool.

LOMC Certifiers enter the PII directly into the eLOMA application. LOMC Certifiers and individual property owners also enter PII directly into the Online LOMC application. FEMA

Analysts and Map Specialists enter community official's information from CIS into the MSC and MIP.

The sources of information for the LOMC paper-based process are: 1) LOMC Certifiers, 2) individuals, and 3) MRPs. These sources voluntarily submit to FEMA via FEMA's MT-EZ, MT-1, MT-2, and FF 81-107 paper application forms to request and support a LOMC request. FEMA staff enter the data from these paper forms directly into the MIP.

Individuals enter payment information directly into the MIP. The source of payment confirmation information in the MIP is from Treasury's Pay.gov system. Pay.gov sends a payment confirmation number and the last four digits of the account number used for payment to the Online LOMC applications. FEMA uses the Trusted Collection Services (TCS) Single Service[21] by opening a secure HTTPS session with Pay.gov. When Pay.gov finishes settlement processing, it sends the results of the collection back to the applications. The HTTPS session is subsequently closed and the transaction is complete.

FEMA receives LOMA-LOGIC information automatically via a secure web application using SSL.

2.3 Does the project use information from commercial sources or publicly available data? If so, explain why and how this information is used.

Yes. FEMA flood map products and services uses latitude and longitude points provided by ESRI when users opt to enter an address into the MSC application to find the flood map for a specific location. FEMA uses this information within GPS software to more accurately locate property or an area to identify the flood zone designation for the address, or any LOMCs affecting the address or area. Additionally, FEMA may use the name and contact information of survey participants from research marketing firms to assist in conducting focused surveys from the public. FEMA will contract with a marketing research company to conduct surveys and focus groups. These market research firms have databases with individuals who have either agreed to or search for opportunities to participate in various surveys. The marketing firms use the information to contact the potential survey participant to participate in a FEMA sponsored survey. FEMA does not maintain the PII or associated response to surveys with individuals.

2.4 Discuss how accuracy of the data is ensured.

FEMA assumes the voluntarily-submitted data is accurate when it is submitted either by the MSC and MIP customer, FMIX chat user or caller, LOMC Certifier, individual property owner,

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[21] Trusted Collection Services (TCS) Single Service allows the Online LOMC application to send a single non-interactive collection to Pay.gov for immediate processing.

state and local officials, CIS, or Treasury. FEMA encourages the entry of correct and up-to-date information by alerting MSC and MIP system users that false statements provided to FEMA may be punishable pursuant to 18 U.S.C. § 1001. Additionally, the LOMC Certifier, individual property owner, or MRP who provides the data to FEMA must sign the MT-1, MT-EZ, or MT-2 paper application forms to attest to the accuracy of the information provided. The signature also acknowledges that false statements provided to FEMA may be punishable pursuant to 18 U.S.C. § 1001. The LOMA-LOGIC relies on the accuracy of the data in the MSC and MIP since those applications service the data to it.

For the paper-based LOMC process, FEMA staff, including MRPs, enter the data into the MIP and perform an engineering review of the data. If FEMA finds errors with the data provided, FEMA staff will contact the LOMC Certifier, individual property owner, or MRP to determine the nature of the error. The LOMC Certifier, individual property owner, or MRP may correct inaccurate information by submitting corrected information to FEMA, along with an explanation as to the cause of the error. FEMA staff also performs periodic audit reviews of MIP data to ensure its accuracy. FEMA staff corrects any data entry errors identified during the audit.

For the eLOMA and Online LOMC processes, FEMA staff perform random audits of the data entered by the user to ensure its accuracy. The audit schedule is a 100 percent review for the first record entered by a new user, then a randomly conducted review after the first successful pass of a FEMA audit review. If FEMA finds errors with the data entered by a user, FEMA will continue to subject that user to a 100 percent record review until he or she can pass a FEMA audit without errors.

In addition, FEMA audits at least 10 percent of all work performed by the MRP to ensure he or she is adhering to FEMA's policies and standards, such as FEMA Policy (FP) No. FP 204-078-1: *Standards for Flood Risk Analysis and Mapping.*[22]

For credit card and electronic check submissions, the individual enters information directly into the Online LOMC application. FEMA assumes this type of voluntary financial information is correct.

2.5   Privacy Impact Analysis: Related to Characterization of the Information

Privacy Risk: There is a risk that FEMA could collect more information than is necessary for processing surveys, LOMCs, or other flood mapping products and service orders.

Mitigation: FEMA mitigates this privacy risk by performing reviews of the data collection requirements for LOMCs at least every other year to ensure FEMA collects only the data necessary

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[22] *Accessible at* https://www.fema.gov/vi/media-library/assets/documents/35313.

to process a LOMC. These reviews result in updates to the MT-1, MT-EZ, and/or MT-2 forms. In addition, FEMA performs regular privacy reviews of flood mapping products and services support systems using the DHS Privacy Threshold Analysis (PTA) development and review process.

For example, a specific concern for FEMA is the collection of payment information. Due to individuals requesting digital maps and the decreased cost to provide these products, FEMA has reduced the amount of information it collects by eliminating payment for MSC orders and no longer collects credit card information within MSC.

Privacy Risk: There is a risk that FEMA flood mapping systems may contain inaccurate or erroneous information about individuals or property.

Mitigation: FEMA mitigation efforts for this privacy risk include collecting information directly from the public when possible, reviewing all data collected, and conducting engineering reviews to ensure the accuracy of provided data. Because some data is provided on behalf of other persons, there is a residual risk of inaccurate information.

Privacy Risk: There is a risk that FEMA's collection of PII from a commercial source for surveys may be unnecessary or excessive.

Mitigation: FEMA partially mitigates this privacy risk by only using PII of individuals who have consented to participating in surveys or focus groups. The PII is only used to distribute surveys or initiate focus groups. FEMA does not share the PII of potential participants nor does FEMA track responses on an individual basis.

Section 3.0 Uses of the Information

3.1 Describe how and why the project uses the information.

FEMA uses PII from individuals who contact the help desk, whether by phone or online chat service to update the PhaseWare application that tracks flood mapping products and services customer service and interaction with the public. FEMA needs this information in order to access maps and send correspondence to individuals contacting FEMA to address their particular need or request.

FEMA uses additional information collected during the chat session such as specific LOMC request information to access account information with MSC or MIP. This information is needed to access specific records and to respond to the customer by searching for and understanding prior customer history, reviewing MT case submittals, reviewing community map status, and other related responses the customer may seek.

FEMA uses name, email, organization/agency information, MPP role (read/write), and security questions to create IT system access account, establish access controls, to authenticate

identity, and to track mitigation plan applications and that plan's status with respect to the plan review cycle. For the MAT, the data displays in a geospatial format and reporting functions use the data.

To process online payments for LOMCs, FEMA transmits credit card or bank account information to Pay.gov. An Agency Participation Agreement (APA) between FEMA and the Treasury Financial Management Service (FMS), which operates the Pay.gov transaction engine, governs these transactions. FEMA needs to use this information to process payments in accordance with federal statutes and regulations.

FEMA uses a community member's name, position/title, and mailing address to create mailings to deliver products to the community officials as new final mapping products become available. FEMA requires this information to ensure community officials are aware of LOMCs that may impact their respective jurisdictions.

FEMA uses name, company name, mailing address, professional license number, professional license expiration date, signature, and date of signature to update eLOMA for system account creation, as well as for access control purposes. FEMA requires this information to establish a licensed professional as a registered user of the eLOMA system, which enables the licensed professional to process a LOMA request in the eLOMA system.

FEMA uses full name, email address, username, activation code, and password to update the Online LOMC application system, and facilitate account creation and access controls. FEMA requires this information to establish an individual as a registered user of the Online LOMC application, which enables property owners to process a LOMC request.

FEMA uses the 6-digit NFIP community number, property address, and legal property description to search and identify property relevant to a LOMC request within a mapping products and service support system. FEMA requires this to determine whether a structure is in the floodplain. In addition, FEMA requires data describing the home, including how it was built (often foundation type information), whether the ground was changed during or after construction (commonly referred to as the placement of fill), and the elevation of the structure. A registered surveyor provides much of this information through the community in which the home is located. FEMA uses the legal property description to associate the LOMC to a specific property/structure(s). LOMA-LOGIC uses the same information to identify the property relevant to an MT-1 request.

FEMA uses name, position or title, company or community name, mailing address, telephone number, email address, and fax number to search flood mapping products and services systems to identify an individual or certifier requesting a LOMC. FEMA requires this to obtain clarification about the request or to send him or her correspondence.

3.2 Does the project use technology to conduct electronic searches, queries, or analyses in an electronic database to discover or locate a predictive pattern or an anomaly? If so, state how DHS plans to use such results.

No. FEMA's mapping products and services support systems do not use technology to conduct electronic searches, queries, or analyses to discover or locate a predictive pattern or an anomaly.

3.3 Are there other components with assigned roles and responsibilities within the system?

No. FEMA does not assign roles and responsibilities to other DHS components within FEMA's mapping product and services support systems. Individual states will have accounts groups, which they can register and use. These accounts are "read only" and individual states have access only to the state's hazard mitigation plans; states are restricted from seeing any other states' plans, even within their respective region.

3.4 <u>Privacy Impact Analysis</u>: Related to the Uses of Information

Privacy Risk: There is a risk that unauthorized users without a need to know the information could access and use information stored in FEMA's mapping product and services support systems for purposes other than mapping products or services support. For instance, another component of DHS or other federal agency may request access to the mapping information for current addresses of individuals within their database.

Mitigation: FEMA mitigates this risk by using access controls. FEMA limits access to MSC and MIP information to FEMA staff with a valid need-to-know. FEMA also mandates annual privacy awareness training for all administrative users, which includes a discussion about PII and the responsibilities that each administrative user bears in protecting and using that data. A log-in banner cautions end users about appropriate use. The MSC collects only the information necessary to deliver newly available mapping products to local officials. The MSC website collects only the information necessary to email subscribers when new products of interest are available. Additionally, the MIP collects only the information necessary to process a map change or amendment and to provide copies of such changes. Prior to using MAT, administrators must approve a potential user's access.

Section 4.0 Notice

4.1 How does the project provide individuals notice prior to the collection of information? If notice is not provided, explain why not.

FEMA provides notice to individuals in several ways prior to collecting their information. Individuals who contact the FMIX, via phone, receive notification that the interaction is subject to monitoring for quality purposes. Individuals who use the online chat service to contact the FMIX have the option of following a link to FEMA's Privacy Policy on www.FEMA.gov before choosing to open a chat window. At the point of collection, individuals accessing the MIP payment screen see a notice that FEMA will send their financial payment information to Treasury's Pay.gov for payment processing. In addition, FEMA posts a link to its Privacy Policy on FEMA's mapping product and services support systems websites, which are available at any time. Additionally, FEMA posts a Privacy Notice online before any of the flood mapping products and services support systems registration processes, and is available from within the application at any time. The Privacy Notice is also included on the paper forms identified in Appendix A. In addition, FEMA provides notice through its privacy compliance documentation for the application, specifically this PIA and the SORN(s) listed in Section 1.2. For information that is collected by the MPP and MAT, users enter their own personal information directly into the data repositories, which indicates personal data collection. Finally, for CIS information, FEMA provides a notice to community officials, as described in the DHS/FEMA/PIA-011 NFIP ITS PIA[23] and the PIA's related SORN, DHS/FEMA-003 National Flood Insurance Program Files[24].

4.2 What opportunities are available for individuals to consent to uses, decline to provide information, or opt out of the project?

Subscribing to MSC website notifications is a voluntary process. The information collected is necessary only for sending email notifications. Community officials can contact FEMA to opt-out from receiving the newly available mapping products from the MSC at any time.

The LOMC process is voluntary; eLOMA, the online LOMC application, and the paper-based LOMC process only use the information collected to fulfill the purposes in Section 3. If the individual chooses not to provide information, he or she cannot request a LOMC.

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[23] *See* DHS/FEMA/PIA-011 National Flood Insurance Program Information Technology Systems (NFIP ITS), *available at* www.dhs.gov/privacy.
[24] DHS/FEMA-003 National Flood Insurance Program Files, 79 FR 28747 (May 19, 2014).

Additionally, individuals that do not consent to FEMA's storing of an electronic copy of an online chat session can chose not to use the FMIX chat function and call the FMIX toll-free number to discuss FEMA flood mapping products and services.

4.3   Privacy Impact Analysis: Related to Notice

Privacy Risk: There is a risk associated with FEMA's flood mapping products and services support systems that individuals may not be aware of FEMA's collection, use, and sharing of their information, specifically financial information.

Mitigation: FEMA mitigates this risk by providing notice to the public via FEMA's Privacy Policy, specific Privacy Notices before system registration, this PIA, and the SORN(s) listed in Section 1.2.

Section 5.0 Data Retention by the project

5.1   Explain how long and for what reason the information is retained.

FEMA disposes of customer records in the MSC and the legacy MSC store application in a manner consistent with the Flood Map Products and Services SORN. The day after FEMA inputs personal information into the electronic database, FEMA destroys personal information stored on paper, but keeps community public official/community government representative contact information related to the CIS/Community Rating System (CRS) in accordance with the DHS/FEMA-003 National Flood Insurance Program Files SORN. This information includes updated contact, flood zone, or floodplain information received from communities during the LOMC or map distribution process. The FEMA Information System Security Officer (ISSO) moves and stores records to a secure location.

NARA authority N1-311-86-1, items 2A3 and 2A4 covers FEMA flood mapping products and services. FEMA destroys digital preliminary flood maps five years after FEMA issues a flood elevation determination or insurance rate map. As part of its current digitization effort, FEMA is destroying paper-based preliminary flood maps. Effective FIRMs are permanent records and FEMA currently retains both paper and digital copies, although FEMA may choose to destroy paper records with a digital copy in the future.

FEMA stores FMIX chat session records indefinitely. FIMA is working with the FEMA Office of the Chief Information Officer (OCIO), FEMA Records Management Division, and NARA to develop the appropriate records retention schedule(s) for FEMA's records created during online chat sessions.

FEMA stores LOMC data in an active mode (retained online and accessible through the web interface) for two years after which the information is retired to the Federal Records Center

(FRC). FEMA destroys the information 20 years after its final determination or map revision date, in accordance with NARA authority N1-311-86-1, item 2A2c. FEMA maintains this information to facilitate legal records of the classification of the flooding characteristics of specific parcels of land as both its current and former classification under the NFIP. Changes to those classifications affect the costs of insuring land under the NFIP, which requires that the program have the ability to determine a floodplain classification at any point in the last 20 years to address potential disputes and provide data for forward-looking insurance decisions. FEMA uses the same retention policy regarding any additional copy of the LOMC data within the LOMA-LOGIC tool.

The MIP passes all collected financial payment information to Pay.gov. The screen only retains masked financial information as long as required to facilitate the ordering of the map product. The MIP only stores the last four digits of the credit card or bank account number. For auditing purposes, FEMA only retains the confirmation information from Treasury and the last four digits of the credit card or bank account information. The system deletes the last four digits of the credit card or bank account number after two years.

5.2   Privacy Impact Analysis: Related to Retention

Privacy Risk: There is a risk that FEMA may retain data in the flood mapping products and services support systems for longer than the approved record retention period.

Mitigation: FEMA mitigates this risk by keeping paper records in secure storage in Alexandria, VA, and protecting all electronic records as described in the System Security Plans. Contracted staff at Allegany Ballistics Laboratory (ABL) and the FEMA Engineering Library scan paper records and the FRC receives copies of the scanned records on CD or DVD. The subset of data center staff supporting these FEMA programs and accessing FEMA data are required to complete standard onboarding, security in-processing, and badging processes consistent with all other staff on the program. The facility has undergone formal assessments by the FEMA Chief Information Security Officer (CISO) as part of the initial system authorization and subsequent ATO renewals. FEMA destroys paper records by shredding or other NARA or FEMA-approved method in accordance with FEMA's records retention schedule. Digital records (excluding scanned copies of paper LOMC records) stored on magnetic tape are destroyed by degaussing in accordance with FEMA's records retention schedule. The legacy MSC store system and MIP retains credit card or electronic check information strictly for the time needed to facilitate the ordering of maps. FEMA retains payment confirmation information and the last four digits of the credit card or bank account number for transaction confirmation and auditing purposes. MIP and MSC staff train on FEMA's records retention policies and processes. Refresher training is provided periodically or as deemed necessary by section heads. This risk is not currently mitigated as it relates to FMIX. FEMA does not currently have a retention schedule in place for FMIX records, which means that chat records are retained indefinitely.

Section 6.0 Information Sharing

6.1   Is information shared outside of DHS as part of the normal agency operations? If so, identify the organization(s) and how the information is accessed and how it is to be used.

Yes. FEMA shares information with MRPs (State and local governments) pursuant to signed agreements that allow them to make LOMC determinations on behalf of FEMA. MRPs receive the same access to the MIP granted to FEMA staff to conduct the engineering review of the information submitted in support of a LOMC request. The MRPs complete LOMC requests for areas located within their governmental jurisdictions. Users receive access to the MIP via a secure web interface requiring user authentication.

The Treasury's Pay.gov system receives the MIP's electronic payment information (credit card or eCheck information). For Online LOMC payments, the individual or certifier submitting the payment information never leaves the Online LOMC application or website. Instead, the application opens a HTTPS session with Pay.gov and sends the relevant financial data. Pay.gov then sends the results of the payment process back to the Online LOMC application. The HTTPS session is closed and the transaction is complete. Any additional, external organizations do not receive payment information.

6.2   Describe how the external sharing noted in 6.1 is compatible with the SORN noted in 1.2.

Routine use C of the DHS/FEMA/NFIP/LOMA-001-National Flood Insurance Program Letter of Map Amendment SORN allows FEMA to share information with its MRPs and other contractors that are under agreement with FEMA to perform the engineering review on submitted LOMC data on behalf of FEMA for properties within their respective jurisdictions. Revisions to that SORN will reflect changes to NFIP's Flood Insurance Rate Maps and reflect FEMA's collection of credit card information and its sharing payment information with Treasury. The purpose of the SORN revision is to ensure accurate FIRMs and appropriate flood insurance premiums. For consumers that wish to request changes to FIRMs, FEMA must share payment information with Treasury to process payments to the Federal Government.

6.3   Does the project place limitations on re-dissemination?

Yes. FEMA limits re-dissemination of information within the LOMA-LOGIC tool using an Interconnectivity Service Agreement that restricts sharing of information beyond the purposes of that agreement.

6.4 Describe how the project maintains a record of any disclosures outside of the Department.

Disclosures of electronic records containing PII are stored in the log server for flood mapping products and services support systems. The log includes the name of the individual requesting the records, the purpose for the request, and the records provided.

The FEMA Engineering Library located at 847 South Pickett St., Alexandria, VA, 22034, tracks disclosures of paper records that contain PII. FEMA's Office of Chief Counsel and FEMA Disclosure Office refers such requests for guidance. A tracking spreadsheet logs all requests for such information that contain the name of the individual requesting the record, the date of the request, and requests for that information. The FEMA Engineering Library maintains this log. In addition, the FEMA Disclosure Office tracks Privacy Act and FOIA requests for the agency.

6.5 <u>Privacy Impact Analysis</u>: Related to Information Sharing

Privacy Risk: There is a risk that FEMA could share financial, mapping, or contact information maintained by its flood mapping products and services support systems for a purpose that is incompatible with the purpose for which it is collected.

Mitigation: FEMA mitigates this risk by only sharing information pursuant to the routine uses of the system's applicable SORN. FEMA reviews sharing requests and only shares information that is necessary for the purpose of the sharing. Additionally, Information Sharing and Access Agreements (ISAA) between FEMA and the information recipient limits further dissemination of information beyond the recipient of the data.

Section 7.0 Redress

7.1 What are the procedures that allow individuals to access their information?

Registered users of eLOMA and Online LOMC may access their information by logging into the MIP. Individuals that interact with the FMIX, by chat function, can access a copy of their chat session at the end of the session. FEMA retired the legacy PII management system for MSC in August 2014. Legacy MSC customers can no longer access their information from the application; however, FEMA retains customer data in accordance with FEMA's records retention schedule. Individuals may follow procedures outlined in the Agency's SORNs mentioned in Section 1.2. Requests for personal information must be made in writing, and clearly marked as a "Privacy Act Request" for U.S. Citizens and Lawful Permanent Residents, or as "Freedom of Information Act Request" for all other members of the public. Requests must clearly indicate the name of the requester, the nature of the record sought, and the required verification of identity.

Interested parties should send requests to: FOIA Officer, Office of Records Management, Federal Emergency Management Agency, Department of Homeland Security, 500 C Street SW, Washington, D.C., 20472.

Community officials whose information is stored in the MIP and MSC should follow instructions in the NFIP ITS PIA and related SORN, DHS/FEMA-003 National Flood Insurance Program Marketing Files, to update or correct their information.

Individuals that interact with the FMIX, whether by phone or online chat, can request copies of their information by sending a Privacy Act or FOIA request, per the above paragraph. Additionally, chat session participants can access a copy of their chat session at the end of the session.

Additionally, individual's information collected by Pay.gov is accessible in accordance with the Treasury 009-Financial Management System SORN.
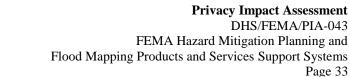
7.2 What procedures are in place to allow the subject individual to correct inaccurate or erroneous information?

eLOMA users can edit their own account within the system or by mailing a written statement to FEMA, identifying the information the individual believes is in error. If the error involves information that requires certification (*e.g*., elevation data), the original certifier must provide a statement that explains the cause of the original error and the steps taken to remediate the error. Individuals may choose to send FEMA other information they deem necessary to substantiate their statement. FEMA evaluates all requests against the original record. If FEMA determines that there is an error, it will create a new LOMC request to correct the error and supersede its previous determination. If no error exists, FEMA will contact the individual to explain why FEMA determined no error exists and take no additional action.

U.S. Citizens and LPRs may use the procedures outlined in the Agency's SORNs mentioned in Section 1.2 or those noted in Section 7.1 of this PIA to correct erroneous information using the DHS/FEMA Privacy Act request process. All other members of the public may request information as stated in Section 7.1; however, individuals who may need correction of erroneous information may go through FIMA RMD. Interested parties should send requests for corrections to: Risk Management Directorate, Federal Emergency Management Agency, Department of Homeland Security, 400 C Street, SW, Washington, D.C., 20472 or make a request using the customer service options mentioned in this PIA.

Community officials who wish to correct their information should follow procedures outlined in Section 7.2 of the NFIP ITS PIA (DHS/FEMA/PIA-011).

Additionally, individuals' information collected by Pay.gov is accessible in accordance with the Treasury 009-Financial Management System SORN.

7.3 How does the project notify individuals about the procedures for correcting their information?

FEMA notifies MIP users about change procedures in the MIP user guide/handbook. All user guides and other documentation for the MIP are located online and are accessible from the application's home page. Additional help is available to users by calling the dedicated helpdesk.

FEMA also provides users of its flood mapping products and services support systems with notice of procedures for correcting their information by way of this PIA and the SORNs outlined in Section 1.2.

7.4 Privacy Impact Analysis: Related to Redress

Privacy Risk: There is a risk that an individual may not have an option to access or correct their information maintain by FEMA's flood mapping products and service programs.

Mitigation: FEMA mitigates this risk by using the existing federal information access framework such as the PA and FOIA to gain access to their records. Additionally, FEMA may allow property owners that may be foreign entities or persons, including undocumented immigrants, a way to access and correct erroneous information about themselves or their property. Such individuals may contact FIMA RMD to correct erroneous information without providing their citizenship status.

Section 8.0 Auditing and Accountability

8.1 How does the project ensure that the information is used in accordance with stated practices in this PIA?

Only FEMA and its contractors have access to information collected in support of LOMC requests and legacy MSC store orders. For electronic records contained within FEMA's flood mapping products and services support systems, user roles define what data a user can access. FEMA constantly monitors audits of account modifications and security operations. Modifying a record logs a security event. Administrators review logs on a monthly basis. Additionally, an Intrusion Detection System/Intrusion Prevention System (IDS/IPS) warns when security operations fail repeatedly. FEMA protects information contained in the application by assigning user roles. Circumventing or attempting to circumvent the role-based user account privileges will cause the IDS/IPS to flag the activity as an intrusion and appropriate actions will be taken by administrative staff to terminate such illicit access. For paper forms/applications, FEMA has a formal inventory of materials to facilitate a phase and control approach to the scanning and digitizing of paper files. FEMA performs Quality Assurance (QA)/Quality Control (QC) reviews prior to destruction. FEMA reviews the records against the FIMA records schedule as mentioned

in Section 5.1 of this PIA to ensure compliance with the Federal Records Management Framework. Finally, in the case of information/collaboration web portals, FEMA has established policies to protect users' privacy. Specifically, FEMA staff periodically review user lists and document libraries to make sure that users' access is warranted and that sensitive PII (SPII) has not been shared accidentally. FEMA provides details in its flood mapping products and services support systems' system security plans (SSP).

8.2 Describe what privacy training is provided to users either generally or specifically relevant to the project.

FEMA provides initial and annual refresher privacy and security training. FEMA requires employee and contractor staff to receive privacy and security training as conditions of obtaining public trust access to FEMA information and facilities. Additionally, FEMA staff are required to complete annual security awareness training, which includes training on privacy and the protection of PII before accessing FEMA's network and information systems. FEMA staff provides privacy and security training to MRPs at least once annually. Refresher training may also be required or provided to MRP staff and FEMA employees and contractors if deemed necessary by FEMA management.

8.3 What procedures are in place to determine which users may access the information and how does the project determine who has access?

Generally, the public can access the publicly-available mapping information by providing their information such as name and email address.

For FEMA Flood Mapping Products and Service SharePoint portals, a requestor enters limited PII into a SharePoint account request form, which they email to the site administrator. The RMD System Owner or designee reviews the request and grants the person permission to join the SharePoint portal.

For MIP, FEMA RMD program management authorizes all access delegations (Mapping Review Partners listed in Appendix B) and user role assignments. The FEMA System Owner or designee reviews requests for access and creates the role-based access to the system based on user responsibilities within FEMA. Each user account has specific privileges based on roles with access controlled on a need-to-know basis, so that only data relevant to the specific user and role is accessible. FEMA defines the user roles available in the SSP on file.

FEMA's instance of LOMA-LOGIC requires users to have a valid MIP account. The requestor provides his or her name, contact information, and supervisor, as well as an acknowledgement of completion of FEMA Security and Privacy Awareness Training. FEMA

management approval allows the LOMA-LOGIC system administrator to create the account with appropriate role-based access.

8.4   How does the project review and approve information sharing agreements, MOUs, new uses of the information, new access to the system by organizations within DHS and outside?

FEMA's Privacy Officer, Office of Chief Counsel (OCC), information security staff, and Office of the Chief Security Officer review all proposed Mapping Activity Statements, Memoranda of Understanding, and Information Sharing Agreements prior to sharing data stored within FEMA's flood mapping products and services support systems.

Responsible Officials

William H. Holzerland
Senior Director for Information Management/Privacy Officer
Federal Emergency Management Agency
U.S. Department of Homeland Security

Approval Signature

Original, signed copy on file with the DHS Privacy Office.

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Jonathan R. Cantor
Acting Chief Privacy Officer
Department of Homeland Security

APPENDIX A: FEMA FORMS

OMB ICR # 1660-0015: FEMA Form MT-1 *"Application Forms for Conditional Letters of Map Amendment (CLOMAs), Final Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), and Conditional Letters of Map Revision Based on Fill (CLOMR-Fs),"* includes:

- FEMA Form 086-0-26, Property Information Form;

- FEMA Form 086-0-26A, Elevation Form; and

- FEMA Form 086-0-26B, Community Acknowledgement of Fill.

OMB #1660-0016: FEMA Form MT-2 *"Application Forms for Conditional Letters of Map Revision (CLOMR) and Letters of Map Revision (LOMRs),"* includes:

- FEMA Form 086-0-27, Overview & Concurrence Form;

- FEMA Form 086-0-27A, Riverine Hydrology & Hydraulics Form;

- FEMA Form 086-0-27B, Riverine Structures Form;

- FEMA Form 086-0-27C, Coastal Analysis Form;

- FEMA Form 086-0-27D, Coastal Structures Form; and

- FEMA Form 086-0-27E, Alluvial Fan Flooding Form.

OMB #1660-0130: *"Flood Risk Awareness Survey,"* which does not use a FEMA form.

APPENDIX B: FEMA Mapping Review Partners

Below is a listing of FEMA's Mapping Review Partners:

- State of Alabama;

- Denver Urban Drainage; Denver, Colorado;

- Harris County, Texas;

- State of Illinois;

- Mecklenburg County, North Carolina; and

- State of North Carolina.

APPENDIX C: Acronyms List

Below is a listing of all acronyms mentioned in this document:

ABL: Allegany Ballistics Laboratory

APA: Agency Participation Agreement

ATO: Authority to Operate

BFE: Base Flood Elevation

BFD: Base Flood Depths

CIS: NFIP Community Information System

CLOMA: Conditional Letters of Map Amendment

CLOMR-F: Conditional Letters of Map Revision Based on Fill

CNMS: Coordinated Needs Management System

DHS: Department of Homeland Security

eCheck: Electronic Check

eLOMA: Electronic Letter of Map Amendment

ESRI: Environment Systems Research Institute, Inc.

FAMIS: Financial Account Management Inventory System

FBFM: Flood Boundary Floodway Maps

FEMA: Federal Emergency Management Agency

FIMA: Federal Insurance and Mitigation Administration

FIRM: Flood Insurance Rate Map

FIS: Flood Insurance Studies

FMIX: FEMA Information Exchange

FMS: Treasury Financial Management Service

FOIA: Freedom of Information Act

HAZUS-MH: Hazards US—Multi Hazard

IDS/IPS: Intrusion Detection System/Intrusion Prevention System

ISSO: Information System Security Office

LDAP: Lightweight Directory Access Protocol

LOMA: Letter of Map Amendment

LOMC: Letter of Map Change

LOMR-F: Letter of Map Revision Based on Fill

LOMR: Letter of Map Revision

MAT: Mitigation Action Tracker

MIP: Mapping Information Platform

MRP: Mapping Review Partners

MOU: Memorandum of Understanding

MPP: Mitigation Planning Portal

MSC: Map Service Center

NARA: National Archives and Records Administration

NFDA: National Flood Determination Association

NFIA: National Flood Insurance Act of 1968

NFIP: National Flood Insurance Program

OCIO: FEMA Office of the Chief Information Officer

PIA: Privacy Impact Assessment

PII: Personally Identifiable Information

RMD: Risk Management Directorate

SFHA: Special Flood Hazard Area

SORN: System of Record Notice

SPII: Sensitive Personally Identifiable Information