



**Privacy Impact Assessment Update
for the**

National Flood Insurance Program Information Technology Systems

DHS/FEMA/PIA-011(a)

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Abstract

The Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) Federal Insurance and Mitigation Administration (FIMA) National Flood Insurance Program (NFIP) owns and operates the NFIP Information Technology System (ITS). The NFIP ITS and its subsystems help manage the NFIP by collecting flood insurance data and processing flood insurance policies and claims, specifically, policies and claims from the FEMA Direct Servicing Agent (DSA) contractor on behalf of the NFIP and by Write Your Own Companies (WYO) that sell and service flood insurance policies. FEMA is updating this Privacy Impact Assessment (PIA) to include the NFIP Reinsurance Program and to expand its sharing of NFIP information. On a case-by-case basis, FEMA will share information with domestic and international reinsurance brokers; reinsurance companies; academics; independent risk modeling firms; or insurance industry associations that may not have an affiliation with the DSA or participate in the WYO Program.

Overview

Congress created the NFIP through the National Flood Insurance Act of 1968.¹ The program was established in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods. FIMA manages the NFIP and oversees the insurance, floodplain management, and mapping components of the program.

The NFIP enables individuals and organizations in the participating communities to purchase insurance protection against losses from flooding. The basis for a community's participation in the NFIP is an agreement with FEMA to adopt and enforce sound floodplain management ordinances to mitigate future flood risks to new construction, additions, repairs, and rebuilding within the community's floodplain. The FEMA Community Information System (CIS) collects and maintains communities' flood zone and floodplain information and maintains the official record of a community's NFIP participation status. NFIP then makes flood insurance available to property owners and renters within the community as a means of reducing the risk of flood losses. Areas outside the floodplain of these communities generally have a lower risk of flooding. Properties within those areas are eligible for Preferred Risk Policies (PRP) with a lower premium. Additionally, certain areas within these communities may be part of a Coastal Barrier

¹ 42 U.S.C. §§ 4001-4129.



Resource System (CBRS) area. Properties within the CBRS area require more robust flood management safeguards in order to be eligible for flood insurance.

To help manage the NFIP, FEMA developed the NFIP ITS. The NFIP ITS collects flood insurance data from both the DSA and participating WYOs. WYOs are private insurance companies that sell and service FEMA's Standard Flood Insurance Policy (SFIP) under their own names. NFIP and private sector insurance companies execute an agreement that allows the WYOs to sell and administer flood insurance on behalf of FEMA. For individuals and organizations within NFIP-compliant communities where WYOs are not available, NFIP uses contract support known as the DSA to provide flood insurance policies to the individual or organization through independent agents on behalf of FEMA. Policy and claims information collected from the DSA and WYOs are categorized as transaction data and financial data. Transaction data consist of policy information such as policyholder name and property address. Financial data includes flood insurance premiums collected and claims paid for each property by the DSA and WYOs. NFIP ITS collects, uses, maintains, retrieves, and may share information about policyholders, insurance policy processors, and individuals requesting access to the flood insurance system.

Reason for the PIA Update

Generally, the Federal Government assumes all financial risk for flood insurance. The Biggert-Waters Flood Insurance Reform Act of 2012² and the Homeowners Flood Insurance Affordability Act of 2014³ authorize the NFIP Reinsurance Program, which allows the Federal Government to share this risk with private reinsurance companies and other private sector entities. The NFIP Reinsurance Program buys reinsurance to transfer some of the insurance risk assumed by NFIP. FEMA is updating the NFIP ITS Privacy Impact Assessment (PIA) to describe the NFIP Reinsurance Program and expands its categorization of organizations with which FEMA shares NFIP information.

While reinsurance is a common practice within the insurance industry, flood reinsurance for a program as big as the NFIP requires risk studies and models to assess current and future risk. For instance, reinsurers use models to assess the risk of losses from a large catastrophic flood event and to undertake mitigation so that the losses do not impair the reinsurer's financial capital or create a risk to the reinsurance company's other commitments.

Generally, reinsurance companies will require certain risk models to help interpret the risk to their company and require the insurance company to have a reinsurance broker or modeling

² Pub. L. No. 112-141 § 100232(d) [2012].

³ Pub. L. No. 113-89 § 10 [2014].



company to take data and create general risk models that the reinsurance companies can then use and incorporate into their risk model for their company. One important output of those risk models is an “Exceedance Probability Curve,” which plots the level of expected losses against the probabilities of those losses occurring. Many of the largest reinsurance companies that are more capable of supporting a national program like the NFIP are located outside of the United States; many are headquartered in Europe and Bermuda. Some reinsurance companies based in the United States may have subsidiaries outside of the United States. In addition to the reinsurance models, FEMA plans to request or cooperate on independent flood assessments and feasibility studies from risk modeling firms, academics, and educational institutions.

FEMA has designed a two phase approach to implement NFIP Reinsurance Program. The Program consists of a risk proposal phase and an implementation phase.

Risk Proposal Phase

During the first phase, FIMA anticipates contractually engaging with reinsurance brokers in order for the reinsurance brokers to model the NFIP risk and to assist in the development of risk proposals. Specifically, FIMA will execute a contract with reinsurance brokers or a risk modeling company that in turn will create risk models, interact with reinsurance companies on behalf of FIMA, and assist in flood reinsurance risk proposals. During this phase, FIMA will create and export a file from the NFIP ITS and share the data extract that will include limited PII, specifically, property address and geographical location information (latitude and longitude) with the reinsurance broker or risk modeling company. Due to inherent inaccuracies with either geographical location information or physical street addresses, FEMA provides both to help ensure a more accurate flood risk model.

Most risk models use a Geographical Information System (GIS) platform to run risk models. The reinsurance company will use the geographical location information from FEMA for its GIS platform. However, if there is an error, the reinsurance broker, reinsurance company, or risk modeling company will use the address provided to verify correct address and generate geographical location information to ensure the correct information is processed for its risk model.

FEMA will not share policy holder name, policy number, or WYO and DSA information with the reinsurance broker, risk modeling companies, or reinsurance companies during this phase. The reinsurance broker or risk modeling company will create a risk model and may subsequently share that information as well as the FEMA NFIP ITS extract information, if FEMA so directs, with reinsurance companies in order to solicit quotes from those reinsurance companies. The reinsurance companies could develop their own risk models as needed to develop their unique risk proposals. The reinsurance broker or risk modeling company executes Non-Disclosure



Agreements (NDA) with all reinsurance companies that will have access to the NFIP ITS extract information. FEMA will maintain copies of these agreements.

Many of the largest and most relevant reinsurance companies, or their affiliates, are off-shore and located outside the United States, such as in Europe and Bermuda. FEMA's reinsurance brokers will market the Reinsurance Program and generate a listing of reinsurance companies that are either based in the United States or internationally-affiliated that have the best ability to support the program. Through a review process that will include FEMA's Office of Chief Counsel, FEMA may decide an internationally-affiliated reinsurance company has the ability and experience to support the program, through a technical proposal. FEMA's decision will be based on technical and financial ability to support the program and then narrowed based on any federal regulations that may limit official business outside of the United States.

Through FEMA's statutory authority, FEMA will enter into an information sharing and access agreement (ISAA) with the reinsurance company. The agreement will contain appropriate information and privacy safeguards language. If FEMA directs, FIMA reinsurance brokers or risk modeling companies may disseminate and allow foreign nationals access to FEMA information based on the agreement between FEMA and the reinsurance company. In this instance, FEMA information may not necessarily remain exclusively on U.S. servers.

Implementation Phase

During the second phase, FEMA will use the results of phase one to solicit flood reinsurance technical and pricing quotes from the reinsurance industry and award contracts to begin reinsuring the NFIP. Under the terms of the reinsurance contracts, FIMA can share NFIP policyholder information from the NFIP ITS for the claims processing as part of the NFIP Reinsurance Program. FEMA may share both aggregate and property-specific policy and claims information to include address; latitude and longitude; policy limits; and claims history. This sharing is required because the reinsurance company is assuming part of the financial burden of NFIP claims and needs to review how the claims are handled by the NFIP.

Sharing with Other Stakeholders

FEMA plans to share policyholder information with additional stakeholders to assess general risk and conduct feasibility studies and models that can help FIMA manage the overall risk of the NFIP and assess potential impact on communities. These additional stakeholders include academics, educational institutions, flood risk modeling companies, and insurance industry associations⁴. When FEMA shares information, it will be pursuant to a contract, NDA, or

⁴ FEMA may provide information to insurance industry associations for the purpose of conducting insurance risk or trend studies related to flood insurance and provide risk assessments and reports to its insurance members. This allows the NFIP to reach a broad audience of insurance organizations to help market the WYO Program or help



ISAA. FEMA will share address, geographical location data (latitude and longitude), and non-PII related policy and claims data. Even after sharing parameters are agreed upon, FEMA sends cover letters to accompany shared policyholder information to remind receiving organizations of their handling and sharing limitations.

Privacy Impact Analysis

In each of the below sections consider how the system has changed and what impact it has on the below fair information principles. In some cases there may be no changes and indicate as such.

Authorities and Other Requirements

The Biggert-Waters Flood Insurance Reform Act of 2012⁵ and the Homeowners Flood Insurance Affordability Act of 2014⁶ authorize FEMA to secure reinsurance from the private reinsurance and capital markets on terms and conditions determined by the Administrator to be reasonable and appropriate. Prior to the start of phase 2, DHS will update and republish DHS/FEMA-003 National Flood Insurance Program Files System of Records⁷ to include sharing and access of NFIP information with/by flood risk modeling organizations, educational institutions and reinsurance brokers, reinsurance companies with international affiliates, and with other categories of requestors when the sharing of data would be beneficial to FEMA and compatible with the reasons for which FEMA collected the information.

A NFIP ITS System Security Plan (SSP) was approved in May 2015, and an Authority to Operate (ATO) was issued on May 28, 2015. Additionally, the IT systems managed by the reinsurance brokers, reinsurance companies, or the risk modeling companies will have a SSP and an ATO issued for their system.

There are no additional information collections that require coverage by the Paperwork Reduction Act (PRA) within the NFIP ITS.

There are no changes to NFIP ITS's records retention schedule.

insurance companies interested in privately selling flood insurance outside of the NFIP to understand flood insurance trends and risk.

⁵ Pub. L. No. 112-141 § 100232(d) [2012].

⁶ Pub. L. No. 113-89 § 10 [2014].

⁷ 79 Fed. Reg. 28747 (2014).



Characterization of the Information

FEMA will not collect or maintain any additional data elements than those already in the NFIP ITS. FEMA may share the following information with reinsurance brokers, reinsurance companies, and risk modeling companies in support of the Reinsurance Program:

Individual Insured Information:

- Address(es);
- Insurance/Claims Data (i.e., Insurance Rate(s), Claim Amounts);
- Geographical Locations (i.e., latitude, longitude);
- Flood Zone Data;
- Property loss history; and
- City.

FEMA may collect the following information from the reinsurance brokers, reinsurance companies, risk modeling companies, or other stakeholders involved in NFIP Reinsurance Program or feasibility and trend studies:

- Organization Name;
- Point of Contact Full Name;
- Address(es);
- Email Address(es);
- Telephone Number(s); and
- Insurance/Claims Statistical Data.

FEMA may collect, use, or maintain the following user account information for the NFIP ITS and other systems supporting the Reinsurance Program:

- Full Name;
- Address(es);
- Email Address(es);
- Telephone Number;
- User ID; and
- Personal Identification Number (PIN)/ Password(s).



Uses of the Information

Reinsurance brokers, risk modeling firms, reinsurance companies, and other stakeholders use address, geographic location information such as latitude and longitude, and other non-PII related policy and claims information of policyholders to conduct research and create risk models of flood risk for the purpose of assessing national flood risk, creating risk proposals, and the sharing of flood insurance financial risk with reinsurance companies.

There are no changes or updates to the NFIP ITS's use or access of information. The following are additional privacy risk and mitigations in relation to the NFIP ITS.

Privacy Risk: There is a privacy risk that reinsurance brokers, risk modeling companies, reinsurance companies, and other stakeholders may use the NFIP information for other non-NFIP related studies and research or other commercial uses.

Mitigation: This risk is partially mitigated. FEMA ensures that proper information and records safeguards are included within the contracts and other types of arrangements to outline appropriate use of NFIP information and provide guidance on the processes necessary to adequately protect and secure NFIP data, including requiring NDAs to be signed by all individuals that would have access to the granular data. FEMA considers any violation of these binding terms to constitute a breach of contract/agreement. FEMA will evaluate and investigate each of these violations and may terminate the agreement, pursue other legal means to prevent any further violations, and address any impact on individual's privacy resulting from the misuse of FEMA information. However there still is the residual risk of making sure that each and every instance of misuse of information is reported to FEMA, which FEMA cannot fully mitigate.

Notice

FEMA provides notice of the sharing of NFIP information with risk modeling organizations, reinsurance brokers, reinsurance companies, and international affiliates of the reinsurance brokers, reinsurance companies, and other stakeholders, through the publication of this PIA. FEMA provides additional notice of the sharing of information for risk proposals for reinsurance program through the SORN mentioned above. Under the current system, the right to consent or decline occurs when the DSA and WYO inform policyholders of their privacy guidelines and practices and require policyholders to sign FEMA forms that provide acknowledgement during the policy purchase and renewal process. Individuals that are required by law or by a mortgaging institution to have flood insurance on a property do not have the option of opting out of this program. FEMA's sharing of risk and subsequently, NFIP information with reinsurance companies is a statutory requirement. In order to explain new uses and sharing, FEMA will provide additional notice in the DHS/FEMA-003 SORN. FEMA is currently updating this SORN to clarify sharing with international organizations as part of the reinsurance program and sharing of information with other stakeholders for the purpose of assessing flood risk and



affordability studies. Additionally, FEMA's is updating the current Privacy Act statements on its NFIP policy application and claims forms to clarify possible sharing and access of information internationally.

Data Retention by the project

There are no changes to the data retention of the information within the NFIP ITS.

Information Sharing

NFIP ITS may share information with reinsurance brokers, reinsurance companies, and other categories of requestors by way of a reinsurance broker or risk modeling company. FEMA shares information pursuant to an Information Sharing and Access Agreement such as a contract or memorandum of agreement (MOA) with reinsurance companies. FEMA shares the information mentioned is the "Characterization of the Information" section of this update PIA via a file transfer. NFIP shares the file using data encryption and electronic media such as compact disk (CD), digital video disk (DVD), or portable hard drive. This purpose of the information sharing is to conduct market research on the viability and impact of sharing flood insurance financial risk with the reinsurance community in order to implement the NFIP Reinsurance Program. The information sharing enables requestors, such as educational institutions, to conduct flood risk assessments and feasibility studies to assist NFIP in assessing national flood risk and impacts on communities. This sharing is pursuant to DHS/FEMA-003 National Flood Insurance Program Files System of Records.

Routine use H allows FEMA to partner with Write Your Own insurance companies as authorized under 44 CFR § 62.23 to administer flood insurance.

Routine use V allows NFIP to share policy information with reinsurance brokers and reinsurance companies based in the United States. The NFIP Reinsurance Program is compatible with the purpose for original collection of information because NFIP shares flood insurance financial risk information with the insurance community (i.e., private reinsurers, private capital firms, and financial institutions) for the purposes of preparing NFIP assumption of risk proposals.

Prior to initiating sharing, FEMA will update the DHS/FEMA-003 SORN to explicitly cover sharing limited location information with other stakeholders (domestic and international), including educational institutions.

FEMA will limit re-dissemination of information using language within the ISAA, NDA or associated with a letter or notification or Privacy Act sharing limitations that FEMA will initiate with each recipient of NFIP information.



Privacy Risk: There is a privacy risk that FEMA may not be able to control the sharing or re-dissemination of policyholder's PII as it relates to the Reinsurance Program or flood insurance feasibility studies.

Mitigation: FEMA partially mitigates this risk by including privacy safeguards within any ISAA to extend control of FEMA's information while in process by reinsurance brokers, reinsurance companies, or risk modeling companies. These agreements will contain the DHS's cyber hygiene clauses. For flood risk modeling companies and other stakeholders that FEMA may not enter into an ISAA with, FEMA will limit further re-dissemination of NFIP information using language within a FEMA cover letter that references restrictions on re-dissemination placed by the Privacy Act or NDA that will limit sharing of information. FEMA considers any third-party sharing of information without the express consent of FEMA a violation of the terms of agreement. FEMA will investigate any sharing outside of the terms and understandings of any contract or agreement to determine any ill intent or gross neglect and pursue any contractual or legal means to stop any inappropriate sharing of information, such as termination of contract/agreement. DHS/FEMA in partnership with other appropriate federal departments, such as the Department of Justice, will coordinate or consult with the appropriate international law enforcement agency to attempt to retrieve any inappropriately shared information and to ensure any inappropriate sharing of information has cleared and information has been removed from the property of any inappropriate third party recipient(s) of FEMA information. Specifically, DHS/FEMA will seek to recover the PII of NFIP flood policyholders, as practicable. FEMA or the organization that caused the breach of PII information will provide further remediation as needed and appropriate to include notification of individuals that have been affected by the breach. There is a residual risk for reporting each inadvertent or unauthorized release of information to a third party that FEMA is not able to fully mitigate.

Redress

There are no changes to the NFIP ITS redress procedures. Individuals can correct their information by contacting their flood insurance provider (WYO company or DSA), and updating their information. The reinsurance companies are only accepting financial risk and may need to review information to ensure proper payouts and compliance with contract terms with FEMA. The reinsurance companies will not own the insurance policy.

Auditing and Accountability

There are no changes to the NFIP ITS or FEMA's process for system auditing and adherence to FEMA's stated practices within the previously published PIA. The reinsurance brokers, reinsurance companies, risk modeling companies, and other stakeholders will have similar auditing and accountability within their system as documented within the SSP with FEMA's Office



of the Chief Information Officer. Additionally, any approval of Reinsurance Program related ISAAAs will go through the same review process.

Responsible Official

Tammi Hines
Acting Privacy Officer
Federal Emergency Management Agency
Department of Homeland Security

Approval Signature

Original signed copy on file with the DHS Privacy Office.

Jonathan R. Cantor
Acting Chief Privacy Officer
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