



National Flood Insurance Program

Final Nationwide Programmatic Environmental Impact Statement

EXECUTIVE SUMMARY

Action Agency:

Federal Emergency Management Agency

Cooperating Agency:

U.S. Environmental Protection Agency

September 2017



Page Intentionally Left Blank.

National Flood Insurance Program
Final Nationwide Programmatic
Environmental Impact Statement



Action Agency:
Federal Emergency Management Agency

Cooperating Agency:
U.S. Environmental Protection Agency

September 2017

Page Intentionally Left Blank.

Table of Contents

List of Tables	ES-iii
EXECUTIVE SUMMARY	ES-1
ES.1 Introduction and Background	ES-1
ES.2 Purpose of and Need for Action	ES-1
ES.3 The National Flood Insurance Program	ES-2
ES.3.1 Floodplain Management	ES-2
ES.3.2 Flood Hazard Mapping	ES-3
ES.3.3 Flood Insurance	ES-3
ES.4 Actions Not Included as Part of NFIP Implementation	ES-4
ES.5 Action Area	ES-4
ES.6 Alternatives	ES-4
ES.6.1 Alternative 1 (No Action)	ES-5
ES.6.2 Alternative 2 (Legislatively Required Changes, Floodplain Management Criteria Guidance, and LOMC Clarification) (Preferred Alternative)	ES-5
ES.6.3 Alternative 3 (Legislatively Required Changes, Proposed ESA Regulatory Changes, and LOMC Clarification)	ES-6
ES.6.4 Alternative 4 (Legislatively Required Changes, ESA Guidance, and LOMC Clarification)	ES-7
ES.7 Preferred Alternative	ES-7
ES.8 Effects Analysis	ES-9
ES.9 Cumulative Effects.....	ES-10
References	ES-12

List of Tables

Table ES-1: Alternatives	ES-5
Table ES-2: Summary of Alternatives Analysis.....	ES-10

Page Intentionally Left Blank.

EXECUTIVE SUMMARY

ES.1 INTRODUCTION AND BACKGROUND

The Federal Emergency Management Agency (FEMA), under the Department of Homeland Security (DHS), is preparing this Nationwide Programmatic Environmental Impact Statement (NPEIS) to evaluate proposed modifications to the National Flood Insurance Program (NFIP). This NPEIS includes an evaluation of the potential impacts to the natural and human environment associated with the NFIP at a programmatic level, as well as an evaluation of impacts of alternative proposals to modify the NFIP. Additionally, this NPEIS identifies opportunities to eliminate, reduce, or mitigate any potential direct or indirect environmental impacts that may be associated with implementation of the modifications to the NFIP included in the alternatives. FEMA's Federal Insurance and Mitigation Administration (FIMA) is conducting this analysis under the requirements of the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] § 4321 et seq.).

The NFIP is a Federal program established by Congress to provide access to federally backed¹ flood insurance protection for property owners and to reduce future flood losses nationwide through sound, community-enforced building and zoning ordinances. Congress designed the NFIP to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by flood events (FEMA, 2011).

Flooding continues to be the single greatest source of damage from natural hazards in the United States, causing about 82 deaths and \$8 billion in property damage annually (NOAA NWS, 2015). Today, more than 22,000 communities participate in the NFIP, with more than 5.1 million flood insurance policies in effect, providing over \$1.2 trillion in insurance coverage (FEMA, 2016) (FEMA, 2013). The NFIP serves as the foundation for national efforts to reduce the loss of life and property from flood disaster. In 2011, former FEMA Administrator Craig Fugate reported to the Senate Committee on Banking, Housing, and Urban Affairs that implementation of the NFIP minimum floodplain management requirements is estimated to save the nation about \$1.7 billion annually through avoided flood losses (King, 2013).

ES.2 PURPOSE OF AND NEED FOR ACTION

The purpose for making program modifications to the NFIP is to (a) implement the legislative requirements of the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12) and the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA); and (b) to demonstrate compliance with the Endangered Species Act (ESA). The need to implement the legislative requirements of BW-12 and HFIAA arises from the recent concerns over the fiscal soundness of the NFIP. Flooding has been, and continues to be, a serious risk in the U.S. To address the need, in 1968, Congress established the NFIP as a Federal program. It enabled property owners in participating communities to purchase flood insurance if the community adopted floodplain management ordinances and minimum standards for new construction. However, owners of existing homes and businesses did not have to rebuild to the higher standards, and many received subsidized rates that did not reflect their true risk.

¹ Subsidized by the United States government.

Over the years, the costs and consequences of flooding have continued to increase. For the NFIP to remain sustainable and to increase its fiscal soundness, its premium structure must reflect the true risks and costs of flooding. This is a primary driver for many of the legislatively required changes that are assessed as part of this analysis.

The need to demonstrate compliance with the ESA stems from the many and varying statements from Federal agencies and the public about FEMA's compliance with the ESA, and the perception about the nature of the NFIP and its effects on ESA-listed species and designated critical habitats. FEMA determined that it is currently in compliance with the ESA, but recognizes the need to make program changes that demonstrate and communicate ESA compliance to the public.

ES.3 THE NATIONAL FLOOD INSURANCE PROGRAM

ES.3.1 Floodplain Management

A community's participation in the NFIP is voluntary and participation is based on an agreement between communities and the Federal government. The power to regulate development in the floodplain, including requiring and approving permits, inspecting property, and citing violations requires land use authority. FEMA has no land use authority. The regulation of land use falls under the State's police powers, which the Constitution reserves to the States, and the States delegate this power down to their respective political subdivisions. The NFIP was designed so that floodplain management would be carried out at the State and local levels, where land use authority resides.

FEMA sets certain nationally applicable minimum floodplain management criteria related to reducing flood hazard risk in floodplain areas for all NFIP participating communities. The communities must incorporate these minimum floodplain management criteria into community ordinances and regulations as a condition of participation in the NFIP. Because FEMA has no land use authority, the floodplain management criteria are essentially performance standards. FEMA cannot, either directly through the mechanism of the NFIP or indirectly through the NFIP-participating communities, impose restrictions or prohibitions on the types of floodplain development that are allowed in the floodplain, the amount of development that is allowed in the floodplain, the uses of land that are allowed in the floodplain, or any other general land use restriction that is under State or local land use authority.

FEMA has no direct involvement in the administration of local floodplain management ordinances. The NFIP operates as a Federal-State-local partnership that depends on State statutes and regulations authorizing local governments to regulate floodplain development under the State's police powers to protect the health, safety, and general welfare of its citizens. For the most part, local governments bear the responsibility for protecting residents from flood hazards, working to reduce flood damage, and preserving floodplain functions and resources. FEMA is also not authorized by statute to act as a permitting authority. Therefore, floodplain development is regulated at the community level through the community's floodplain management regulations and floodplain development permitting process. FEMA has no knowledge of any community-issued permits in the Special Flood Hazard Area (SFHA) until subsequent community monitoring efforts occur.

FEMA's role under the NFIP is limited to enrolling communities in the NFIP, setting minimum floodplain management criteria, providing programmatic monitoring and oversight, providing technical assistance to ensure that communities are complying with the NFIP program requirements, and enforcing the program requirements when there are issues of programmatic non-compliance by a participating community.

ES.3.2 Flood Hazard Mapping

Through its Flood Hazard Mapping Program, FEMA identifies flood hazards, assesses flood risks, and collaborates with States and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. The National Flood Insurance Act of 1968 (NFIA) requires that FEMA identify flood-prone areas and subdivide them into flood risk zones to provide the data necessary for FEMA to determine the appropriate minimum floodplain management criteria and to rate flood insurance policies. While a variety of flood zones are mapped on Flood Insurance Rate Maps (FIRM), the 100-year flood (or 1-percent-annual-chance flood) is the standard used for implementation of the NFIP. Mapping of flood hazards promotes public awareness of the degree of hazard within such areas and provides for the expeditious identification and dissemination of flood hazard information. FEMA maintains and updates data through flood insurance studies (FISs) and resultant FIRMs and FIS reports.

ES.3.3 Flood Insurance

Since its enactment in 1968, the NFIA has made flood insurance available to property owners or lessees in communities that participate in the NFIP. Through the NFIP, property owners in participating communities are able to insure their property against future flood losses. The risk zones shown on the FIRMs are the basis for the establishment of premium rates for flood coverage offered through the NFIP.

As originally established, the NFIA authorized FEMA to provide subsidized flood insurance for existing buildings or buildings built prior to the community's first FIRM (generally referred to as "pre-FIRM buildings"). Notably, flood insurance for new development has never been subsidized by the NFIP (subject to the very limited, short-term exceptions established in 42 U.S.C. §§ 4014(e)-(f)).

However, subject to the very limited, short-term statutory exceptions referenced above, FEMA must apply actuarial rates to all buildings constructed, or substantially damaged or improved, on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is later (generally referred to as "post-FIRM buildings") (42 U.S.C. §§ 4014(a)(1), 4015(b)).

As discussed above, with the passage of the BW-12 and HFIAA, FEMA is required to phase out the subsidies on pre-FIRM properties. Some subsidies must be phased out immediately, some will be phased out at a rate of 25 percent premium rate increases per year, and the rest will be phased out at a rate of 5 percent to 15 percent premium rate increases per year. Accordingly, when this phase out is completed, FEMA will not offer subsidized flood insurance for either new or existing floodplain development (subject to certain limited, short-term statutory exceptions).

ES.4 ACTIONS NOT INCLUDED AS PART OF NFIP IMPLEMENTATION

Floodplain development is not an action under the NFIP. Floodplain development is not authorized, funded, or carried out by FEMA pursuant to the NFIP, nor does the NFIP encourage such floodplain development to occur. FEMA has no role in the issuance, denial, or enforcement of individual permits, nor does it have the land use authority necessary to prescribe the types of development that may take place in the floodplain. As discussed above, the NFIP was designed so that floodplain management would be carried out at the State and local levels, where land use authority resides. The community regulates floodplain development through locally issued floodplain development permits. The community has the authority to issue or deny floodplain development permits. Likewise, the community monitors compliance and enforcement of individual permits. Therefore, private floodplain development and the issuance, denial, and enforcement of individual permits are not actions taken under the NFIP.

ES.5 ACTION AREA

The Action Area for this NPEIS is the limit of the jurisdictional boundaries of the NFIP participating communities, including those areas in the United States and its territories designated as SFHA on a FIRM under the NFIP. The FEMA-mapped SFHA is the area where the NFIP's floodplain management regulations must be enforced in participating communities (FEMA, 2011). The SFHA is defined as "the land within the floodplain subject to a 1 percent or greater chance of flooding in any given year," often referred to as the 100-year floodplain (44 Code of Federal Regulations [C.F.R.] § 59.1).

ES.6 ALTERNATIVES

Table ES-1 identifies the Alternatives analyzed in this NPEIS. This section provides descriptions of the No Action Alternative (Section ES.6.4.1) and all modifications to the NFIP (Sections ES-6.2 to ES-6.4). A more detailed discussion of the proposed modifications included as part of each alternative may be found in Section 2.4.

Table ES-1: Alternatives

		Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
Category		Section 2.4.1	Section 2.4.2	Section 2.4.3	Section 2.4.4
No Action	No Action	X			
Legislatively Required Changes	Phase out of subsidies on certain pre-FIRM properties (non-primary, etc.)		X	X	X
	Phase out of subsidies on all other pre-FIRM properties		X	X	X
	Implementation of a monthly installment plan for non-escrowed policies		X	X	X
Letter of Map Change (LOMC) Clarification	Clarification of ESA documentation requirements for LOMCs		X	X	X
ESA-related Changes	Proposed ESA Regulatory Changes (New 44 C.F.R. § 60.3 Performance Standard; Probation Surcharge increase; Clarification on the exception to the no-rise performance standard in the floodway)			X	
	Implementation of ESA-related performance standard through guidance				X
	Floodplain Management Criteria Guidance		X		

ES.6.1 Alternative 1 (No Action)

The No Action Alternative refers to the current implementation of the NFIP as described in Section ES.2. The No Action Alternative is prescribed by Council on Environmental Quality (CEQ) regulations (40 C.F.R. § 1502.14(d)) and serves as a benchmark against which impacts of the alternatives can be evaluated.

ES.6.2 Alternative 2 (Legislatively Required Changes, Floodplain Management Criteria Guidance, and LOMC Clarification) (Preferred Alternative)

The changes included under Alternative 2 are:

- a) Phase out of subsidies on certain pre-FIRM properties (non-primary residences, business properties, severe repetitive loss properties, substantially damaged or improved properties, and properties for which the cumulative claims payments exceed the fair market value of the property) at a rate of 25 percent premium increases per year.

- b) Phase out of subsidies on all other pre-FIRM properties through annual premium rate increases of an average rate of at least 5 percent, but no more than 15 percent, per risk classification, with no individual policy exceeding an 18 percent premium rate increase.
- c) Implement a monthly installment plan payment option for non-escrowed flood insurance policies.²
- d) Clarify that pursuant to 44 C.F.R. § 60.3(a)(2), a community must obtain and maintain documentation of compliance with the appropriate Federal or State laws, including the ESA, as a condition of issuing floodplain development permits to develop in the floodplain.
- e) Clarify that the issuing of certain Letter of Map Change (LOMC) requests (i.e., map revisions) is contingent on the community, or the project proponent on the community's behalf, submitting documentation of compliance with the ESA.

FEMA's preferred alternative is Alternative 2 to implement the legislatively required changes, floodplain management criteria guidance, and mapping modifications. Implementation of Alternative 2 would meet FEMA's purpose and need, and causes the least environmental impact overall. Alternative 2 is within FEMA's discretion and meets the legislatively required timeframe.

ES.6.3 Alternative 3 (Legislatively Required Changes, Proposed ESA Regulatory Changes, and LOMC Clarification)

The changes included as part of Alternative 3 are:

- a) Phase out of subsidies on certain pre-FIRM properties (non-primary residences, business properties, severe repetitive loss properties, substantially damaged or improved properties, and properties for which the cumulative claims payments exceed the fair market value of the property) at a rate of 25 percent premium increases per year.
- b) Phase out of subsidies on all other pre-FIRM properties through annual premium rate increases of an average rate of at least 5 percent, but no more than 15 percent, per risk classification, with no individual policy exceeding an 18 percent premium rate increase.
- c) Implement a monthly installment plan payment option for non-escrowed flood insurance policies.³
- d) Establish a new ESA-related performance standard in the minimum floodplain management criteria at 44 C.F.R. § 60.3 that would require communities to obtain and maintain documentation that any adverse impacts caused by proposed development, including fill, to ESA-listed species and designated critical habitat will be mitigated to the maximum extent possible.
- e) Clarify that the exception to the no-rise performance standard in the floodway applies only to projects that serve a public purpose or result in the restoration of the natural and beneficial functions of floodplains.

² Although FEMA has not worked out all the details of how this proposed modification would be implemented, use of the installment plan payment option would require the policyholder to pay an installment plan service fee, which is consistent with standard industry practice.

³ Ibid.

- f) Increase the probation surcharge applicable to NFIP communities placed on probation from \$50 to \$100.
- g) Clarify that the issuance of certain LOMC requests (i.e., map revisions) is contingent on the community, or the project proponent on the community's behalf, submitting documentation of compliance with the ESA.

ES.6.4 Alternative 4 (Legislatively Required Changes, ESA Guidance, and LOMC Clarification)

The changes included under Alternative 4 are:

- a) Phase out of subsidies on certain pre-FIRM properties (non-primary residences, business properties, severe repetitive loss properties, substantially damaged or improved properties, and properties for which the cumulative claims payments exceed the fair market value of the property) at a rate of 25 percent premium increases per year.
- b) Phase out of subsidies on all other pre-FIRM properties through annual premium rate increases of an average rate of at least 5 percent, but no more than 15 percent, per risk classification, with no individual policy exceeding an 18 percent premium rate increase.
- c) Implement a monthly installment plan payment option for non-escrowed flood insurance policies.⁴
- d) Utilize the existing performance standard in 44 C.F.R. § 60.3(a)(2) to implement a new policy/procedure requiring communities to ensure that, for any floodplain development for which a permit to develop in the floodplain is sought, the impacts to ESA-listed species and designated critical habitat are identified and assessed and, if there are any potential adverse impacts to such species and habitat as a result of such development, that the community obtain and maintain documentation that the proposed development in the floodplain will be undertaken in compliance with the ESA.
- e) Clarify that the issuance of certain LOMC requests (i.e., map revisions) is contingent on the community, or the project proponent on the community's behalf, submitting documentation of compliance with the ESA.

ES.7 PREFERRED ALTERNATIVE

CEQ's implementing regulations (40 C.F.R. § 1502.14(c)) instruct Environmental Impact Statement (EIS) preparers to "Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference." At this point in the process, FEMA's preferred alternative is Alternative 2 to implement the legislatively required changes, floodplain management criteria guidance, and mapping modifications (as described in Section **Error! Reference source not found.**). Implementation of this alternative would meet FEMA's purpose and need as described in Section 1.2. In addition, Alternative 2 causes the least environmental impact overall. Alternative 2 is the only alternative within FEMA's discretion that meets the required timeframe.

⁴ Ibid.

Alternatives 3 and 4 would meet the purpose and need, but after an extensive coordination effort with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), collectively referred to as the Services, FEMA has been unable to secure the Services' concurrence on either alternative. Before FEMA can publish a proposed or final rule, it is reviewed by other parts of the Federal government. By executive order, the Office of Management and Budget's (OMB) Office of Information and Regulatory Affairs (OIRA) reviews draft proposed and final rules from executive agencies to ensure that regulations are consistent with applicable law and the President's priorities, and that decisions made by one Agency do not conflict with the policies or actions taken or planned by another. If proposed or final rules are deemed "significant" pursuant to EO 12866, OIRA must review them and coordinate review with other Federal agencies that have an interest in the issue. A "significant regulatory action" means any regulatory action that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this EO.

The interagency review of draft proposed and final regulatory actions is intended to ensure that actions are coordinated with other agencies to avoid inconsistent, incompatible, or duplicative policies. A draft rule must obtain the appropriate clearances before it can proceed to publication, and OIRA may return for further consideration draft rules that are not consistent with other Executive Branch agency regulations or efforts. Under EO 12866, disagreements or conflicts between or among agency heads or between OMB and any Agency that cannot be resolved by the Administrator of OIRA must be resolved by the President, or by the Vice President acting at the request of the President.

The USFWS and the NMFS are the agencies charged with consulting on Federal agency actions, including proposed program changes and regulatory amendments, pursuant to the ESA. Because these agencies have equities in regulatory actions that relate to ESA compliance, FEMA engaged with them early and throughout the regulatory planning and development process.

After an extensive coordination effort with the Services, FEMA has been unable to secure the Services' concurrence on Alternatives 3 or 4 of the NPEIS. In light of this, FEMA will continue to work with the Services to develop proposed changes pursuant to Section 7(a)(1) of the ESA, but any changes involving regulatory action will require a multi-year effort subject to an involved Agency review process. Thus, Alternatives 3 and 4 would not be feasible within the near-term timeframe in which the agency is looking to take action. FEMA would prefer to work in coordination with the Services when undertaking such extensive program changes in furtherance of its ESA Section 7(a)(1) responsibilities. Moreover, FEMA believes that success is more likely if the Services are partners in these efforts. As such, FEMA did not select these alternatives as the preferred alternative. FEMA will continue to work with the Services in their monthly meetings to look for additional opportunities to develop and implement program changes that benefit ESA-listed species and designated critical habitat in compliance with its Section 7(a)(1) responsibilities. The No Action Alternative (Section 2.4.1) would not meet the purpose and need.

ES.8 EFFECTS ANALYSIS

The analysis in this NPEIS presents the potential direct and indirect impacts each alternative would have on the affected environment described in Chapter 3. According to 40 C.F.R. § 1508.8, "(a) Direct effects are caused by the action and occur at the same time and place. (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.

Indirect effects may include growth inducing effects and other effects related to induced changes in land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

Quantitative and qualitative analyses have been used in this Final NPEIS, where possible, in determining the intensity and magnitude of the environmental impact. FEMA determined whether particular impacts were less than significant or significant. Impacts may be both beneficial and adverse as defined in CEQ regulations (40 C.F.R. § 1508.27). The following terms are used in this NPEIS to indicate the relative degree of severity of environmental impacts:

- **No Impact:** No environmental impacts are readily apparent or identified. The resources would not be affected, or changes or benefits would be either non-detectable or, if detected, would have effects that would be minimal⁵ and local. Impacts would be well below regulatory standards, as applicable.
- **Less than Significant:** Indicates that a change to resources would be measurable although the changes would be limited and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures, such as employing best management practices or precautionary measures, would reduce any potential adverse impacts.
- **Significant:** Changes to resources would be measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory standards, if applicable. Mitigation measures to offset the adverse impacts would be required to reduce impacts through long-term changes to the resource.

Table ES-2 includes a summary of the potential environmental impacts associated with selection of the Alternatives evaluated in this NPEIS.

⁵ Minimal is defined as the least possible measurable amount.

Table ES-2: Summary of Alternatives Analysis

Attribute	Alternative 1 No Action	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
Meets Purpose and Need	No	Yes	Yes	Yes
Air Quality	No impact	No impact	No impact	No impact
Noise	No impact	No impact	No impact	No impact
Geology and Soils	No impact	No impact	No impact	No impact
Aesthetics/Visual Resources	No impact	No impact	No impact	No impact
Hazardous Wastes and Materials	No impact	No impact	No impact	No impact
Climate Change	No impact	No impact	No impact	No impact
Historic and Cultural Resources	No impact	No impact	No impact	No impact
Infrastructure	No impact	No impact	No impact	No impact
Socioeconomic Resources	Less than significant	Less than significant	Less than significant	Less than significant
Land Use	Less than significant	No impact	Less than significant beneficial	Less than significant beneficial
Water Resources	Less than significant beneficial	No impact	Less than significant beneficial	Less than significant beneficial
Biological Resources	Less than significant beneficial	Less than significant beneficial	Less than significant beneficial	Less than significant beneficial

ES.9 CUMULATIVE EFFECTS

In accordance with NEPA (42 U.S.C. § 4321 et seq.), this Final NPEIS considers the overall cumulative impact of the proposed alternatives and other actions that are related in terms of time or proximity. According to CEQ regulations (40 C.F.R. §§ 1500-1508), cumulative impacts represent the "impact on the environment which results from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period (40 C.F.R. § 1508.7). If the alternative does not have direct or indirect effects for a particular resource, there can be no cumulative effects resulting from the project because there would be no impacts to add to past, present, or reasonably foreseeable actions.

Cumulative effects occurring in floodplains could include the indirect effects of the Proposed Action, combined with private floodplain development activities across the nation initiated by State agencies or local jurisdictions, Tribal entities, or private landowners. Activities could range from residential and business development to expansion and construction of new infrastructure, such as buildings, roads,

utilities, or water-related projects (e.g., irrigation withdrawals, bank protection, and general land clearing). These factors may inevitably affect surface waters and terrestrial and aquatic habitats.

The intensity and duration of the cumulative impacts are considered when determining the magnitude of the cumulative impacts to each resource area. Due to the nature of this project and the nationwide scope of the project, specific impacts are difficult if not impossible to quantify. As a result, FEMA prepared a qualitative analysis of cumulative impacts. For the purposes of this NPEIS, the cumulative impact analysis are described for the Preferred Alternative (Section 4.5.3).

REFERENCES

- FEMA. (2011, March). *National Flood Insurance Program: Answers to Questions about the NFIP*. Retrieved from <https://www.fema.gov/media-library/assets/documents/272>
- FEMA. (2013). *Written testimony, FEMA Administrator Craig Fugate, hearing titled "Implementation of the Biggert-Waters Flood Insurance Reform Act of 2012: One Year After Enactment"*. Retrieved January 2015, from Department of Homeland Security News: <http://www.dhs.gov/news/2013/09/18/written-testimony-fema-administrator-craig-fugate-senate-banking-housing-and-urban>
- FEMA. (2016). *Communities Participating in the National Flood Program (Nation)*. Retrieved November 2016, from The National Flood Insurance Program Community Status Book: <https://www.fema.gov/cis/nation.pdf>
- King, R. O. (2013, February 6). *Congressional Research Service, The National Flood Insurance Program: Status and Remaining Issues for Congress*. Retrieved from Congressional Research Service: <http://fas.org/sgp/crs/misc/R42850.pdf>
- NOAA NWS. (2015). *Hydrologic Information Center - Flood Loss Data*. Retrieved April 28, 2015, from <http://www.nws.noaa.gov/hic/index.shtml>

Page Intentionally Left Blank.

