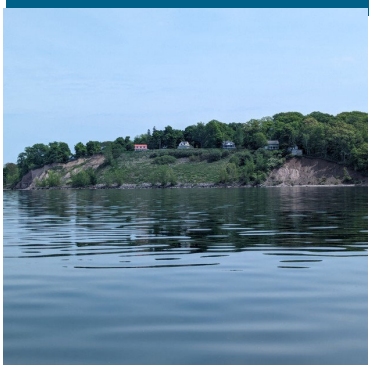
LOCAL FLOODPLAIN MANAGEMENT PROGRAMS IN REVIEW

a summary report

2024



Association Of State Floodplain Managers

Foreword

The Association of State Floodplain Managers is pleased to present the "Local Floodplain Management Programs in Review 2024: A Summary Report." This is the second report on the state of local floodplain management programs throughout our nation, following the original study in 2016. This report also complements previously published reports issued in 1989, 1992, 1995, 2003, 2010, and 2017 that were primarily focused on floodplain management programs at the state level. We hope that the material contained in this report will be a useful reference for those in the floodplain management community interested in local programs throughout the United States.

Continuing the format of the 2016 study, this report is a summary or snapshot of what local programs are doing in the floodplain management arena. It attempts to provide insight on who the local floodplain managers are and highlights floodplain management programs' practices, capacity, and challenges. It is our hope that by sharing this information, all can benefit and continue to build strong and sustainable floodplain management programs. Our many thanks to all those local jurisdictions who took the time to share their insights to make this document possible. Effective floodplain management demands that local jurisdictions be creative in their approaches, efficient in their performance, and comprehensive in their efforts. We hope that this publication can help provide insight to achieve that goal.

Acknowledgements

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The ASFPM project team consisted of Chad Berginnis, Bill Brown, Jason Hochschild, Jacob Jett, Beth Klusinske, Jenna Moran, and Jeff Stone of the ASFPM Executive Office. The University of Wisconsin—Survey Center developed, conducted, and summarized the data from a web questionnaire based upon a series of questions developed by the ASFPM project team.

ASFPM is deeply grateful for the time and effort contributed by all of the local jurisdiction personnel who provided responses to this assessment. The report would not have been possible without the input from everyone involved with the local floodplain management programs.

ASSOCIATION OF STATE FLOODPLAIN MANAGERS

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Acronyms

For reference, the following is a list of acronyms used throughout this document. Each acronym's definition will be introduced the first time in the text of the document, with the acronym used thereafter.

ASFPM	Association of State Floodplain Managers
CAC	Community Assistance Contacts
CAP	Community Assistance Program
CAP-SSSE	Community Assistance Program – State Support Services Element
CAV	Community Assistance Visits
CEC	Continuing Education Credit
CFM	Certified Floodplain Manager
CID	Community Identification Number
CTP Program	Cooperating Technical Partners Program
DEM	Digital Elevation Model
DFIRM	Digital Flood Insurance Rate Map
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMA Program	Flood Mitigation Assistance Program
FPM	Floodplain Management
FTE	Full-Time Employee
GIS	Geographic Information System
H&H models	Hydrologic and Hydraulic Models
HAZUS-MH	Hazards U.S. Multi-Hazard
HMA Program	Hazard Mitigation Assistance Program
HMGP	Hazard Mitigation Grant Program
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
MMMS	Map Modernization Maintenance Support
NAI	No Adverse Impact
NFIP	National Flood Insurance Program
OHWM	Ordinary High Water Mark. The point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic.
PDM Program	Pre-Disaster Mitigation Program
RFC Program	Repetitive Flood Claims Program
SHMO	State Hazard Mitigation Officer

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Introduction

The extent to which flood-prone areas are occupied by people and the infrastructure that supports our society is directly proportional to the amount of damage that can occur when flooding takes place. Flooding is a universal occurrence. Every state and territory in the United States has been impacted by this natural, recurring event. Consequently, federal, state, and local governments have a long history of undertaking activities that are designed to reduce flood impacts.

That said, floodplain management is not only about reducing flood losses. It is also about the prudent management of floodplain resources that are interwoven to make floodplains one of the Earth's most valuable ecosystems. In other words, floodplain management is about managing natural resources as well as reducing impacts of flooding.

Natural floodplains, whether along the coast or in riverine, lake, or pluvial areas, improve quality of life by virtue of their role in maintaining overall environmental health. These areas are complex ecosystems that are part of larger systems. They filter air and water; provide habitat for wildlife; store floodwaters; recharge aquifers; and buffer noise, wind, waves, and storms. Communities that preserve these functions are improving the quality their citizens' lives and natural resources. Consequently, floodplain management is also about preserving and restoring natural floodplain functions.

A Brief Overview of Floodplain Management

Floodplain management can be regarded as a continuous decision-making process that aims to achieve the wise use of the nation's floodplains. The process typically includes the issuance of permits for development as well as the use of more comprehensive tools, such as land use planning, conservation of natural floodplain functions, and traditional structural flood control projects. It may also include providing flood risk identification and management, as well as providing technical or flood insurance assistance to citizens and businesses.

The National Flood Insurance Program Terminology Index defines floodplain management as:

> "*a. The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to, emergency preparedness plans, flood-control works and floodplain management regulations.*

> *b. Floodplain management is a decision-making process that aims to achieve the wise use of the nation's floodplains. "Wise use" means both reduced flood losses and protection of the natural resources and function of floodplains.*" (From https://www.fema.gov/flood-insurance/terminology-index accessed June 12, 2024).

Historically, the NFIP has focused on identification of flood hazard areas, implementation of regulations that recognize those flood hazards in the development process, and administration of flood insurance.

All levels of government and the public have a role in reducing flood risk. The community's role is to become a Participating community by joining the NFIP. FEMA states that:

> "… joining the National Flood Insurance Program (NFIP) is an important step toward reducing a community's risk of flooding and making a speedier, more sustained recovery should flooding occur. It also allows property owners within a participating community to purchase NFIP flood insurance and receive disaster assistance for flood-related damage. Participation is voluntary and more than 22,000 communities have already agreed to adopt and enforce floodplain management ordinances that provide flood-loss reduction building standards for new and existing development" (from https://www.fema.gov/floodplain-management-information-communities accessed June 6, 2016).

FEMA has minimum floodplain management standards for communities participating in the NFIP. They encourage communities to adopt and enforce higher standards that will lead to safer, stronger, more resilient communities.

It has become clear over the years that there is no one "perfect" model for a local floodplain management program. Every local program has its own unique characteristics that shape its approach to managing flood risks and floodplain resources. The geologic and geographic variability of floodplains and their respective risks can vary significantly. In conjunction with these geographic and geologic differences, the constitutionally established relationships between states and local jurisdictions also differ considerably from state to state. Furthermore, program components that work well in one state, county, or community may not be acceptable in another.

When a community becomes a participating community, the community takes its first step toward decreasing its flood risk and facilitating a more sustained recovery should flooding occur. It allows property owners within a Participating community to purchase NFIP flood insurance and receive disaster assistance for flood-related damage. While participation is voluntary, more than 22,700 communities have joined, adopted, and enforced floodplain management ordinances that provide flood-loss reduction building standards for new and existing development. The one consistent factor for all communities participating in the NFIP is the designation of a local floodplain manager. The floodplain manager's work is fundamental to the effective management of floodplain resources and flood mitigation. Responsibilities may include oversight of the community's floodplain maps, floodplain regulatory standards, participation in the Community Rating System, identification of mitigation opportunities, policy or planning, as well as other responsibilities that may or may not be related to floodplain management.

Purpose of this Report

This document is a summary of responses to the Local Programs Assessment undertaken by the Association of State Floodplain Managers in the spring of 2024. This study details what communities are doing in the floodplain management arena nationally. The questionnaire itself consisted of approximately 50 primary questions, with several including sub-questions. A majority of the questions were multiple choice or "yes/no." Some open-ended questions in which respondents could provide a specific response were also included. The full questionnaire can be found in Appendix A of this report. This report summarizes participants' responses to the multiple choice and "yes/no" questions and gives generalized summaries to the open-ended questions. Due to the number and variability of responses to the open-ended questions, it was impractical to fully describe them in this report. Appendix B contains the responses to the open-ended questions, with names and locations redacted to preserve confidentiality.

The data collected through this questionnaire can be used to evaluate the current state of local floodplain management programs and allow for comparison to the previous local programs study and future studies. The questionnaire was developed to obtain information from municipal and county floodplain managers to better understand the successes, needs, and challenges associated with local-level programs. More specifically, the goal of this project was to collect data, using an internet questionnaire, from local floodplain managers randomly selected from all 50 states. This report is a follow-up to the 2016 Local Floodplain Management Programs in Review and builds on the information that was collected then. Much of the report will provide a comparative analysis between the two reports, providing insight on what has changed and what has not.

Data Methods and Results

This questionnaire was developed in conjunction with and conducted by the University of Wisconsin–Madison Survey Center. The questionnaire's target respondent was the floodplain manager or person in charge of floodplain management activities in NFIP Participating Communities. The communities were similar to those selected in the 2016 study. The basis for the selection was a stratified random sample, with the strata being states. In order to ensure that these data were representative at the national and state levels, states with 15 or fewer NFIP communities were oversampled to increase the likelihood that a sufficient sample size would be attained.

Sampled communities were contacted by postal mail and invited to complete the online questionnaire. Sampled individuals were then sent an email inviting them to take the questionnaire, which included a link to the questionnaire itself. The questionnaire was sent via email to 3,007 communities on March 21, 2024. Subsequent reminder emails were sent on March 28, April 9, and April 18 to sampled communities to encourage them to participate in the questionnaire. The beginning and ending dates of the data collection were March 14, 2024 and May 6, 2024, respectively.

Following the initial email, 412 emails "bounced," with an error message stating that the email address was invalid. These were investigated individually, and 394 corrected emails were identified and utilized in the subsequent email notifications. The remaining 18 communities were contacted solely with postal mail.

Responses were received from 472 communities and counties — this is an approximate response rate of 15.6%. Unfortunately, 24 of these respondents were not the correct point of contact. While some provided updated point-of-contact information, no subsequent responses were received from these communities or counties.

Fully or partially completed responses were received from 448 communities and counties, which represents an approximate 14.9% response rate to this questionnaire. As indicated, not all respondents provided answers to every question. In order to provide consistency for data interpretation, responses to each question are presented in this document as percentages of the total number of responses to the pertinent question.

Before discussing who the floodplain managers are, it is important to understand the communities they represent. The U.S. Census Bureau estimates that there are more than 19,500 incorporated places in the United States, saying that "About 76% of the approximately 19,500 incorporated places had fewer than 5,000 people. Of those, almost 42% had fewer than 500 people."

Incorporated places are generally defined as cities, towns, boroughs, villages, and other lesser-known identifiers. While there are specific state exceptions to this definition, these descriptions were used to distinguish incorporated places from counties. Using FEMA's Community Identification Number (CID) information for a community, if the community's name ended with County, it was assumed not to be an incorporated place.

Table 1.A

County Population Distribution	
Range	**%**
< 10,000	16.8%
10,001-25,000	27.4%
25,001-50,000	22.1%
50,000-100,000	7.4%
100,001-250,000	16.8%
250,001-1M	7.4%
>1M	2.1%

Table 1.B – Incorporated Place Population Distribution

Community Population Distribution	
Range	**%**
<250	4.5%
251-500	6.2%
501-750	6.2%
751-1,000	6.2%
1,001-1,500	8.5%
1,501-2,000	7.4%
2,001-3,000	5.4%
3,001-5,000	9.3%
5,001-7,500	9.1%
7,501-10,000	6.5%
10,001-15,000	5.7%
15,001-25,000	8.5%
25,001-50,000	8.5%
50,001-100,000	5.4%
100,001-250,000	1.7%
>250,000	0.8%

Of the responding communities, 21.2% were identified as counties and 78.8% were identified as incorporated places. This distribution was comparable to the 2016 Local Programs Study, where the distribution was 19.2% county to 80.2% incorporated places. It should be noted that the population information for the counties may include some incorporated areas in those counties. In 2023, The U.S. Census indicated the median incorporated place population was 1,139. In this study, the median population of the responding incorporated places was 4,077. As the data in Table 1.A and 1.B show, the population distribution for respondents is well-distributed. Looking specifically at Table 1.B, the cumulative percentage of responding communities with a population of 5,000 or fewer is approximately 53.8%. This is below the U.S. Census estimate for incorporated places of 76%. The U.S. Census estimates that approximately 4% of incorporated places had a population of 50,000 or more. The responding communities with a population of 50,000 or more account for 7.9% of the responses. While the smaller communities may be underrepresented and the larger cities overrepresented, the overall

distribution of responses appears to be well-distributed. It should be noted that the population distribution in the 2024 study is nearly identical to the distribution in the 2016 Local Programs Study. A comparison table of the population distributions for this study and the 2016 Local Programs Study can be found in Appendix C.

When considering the results of the 2016 Local Programs Study, it was shown that in smaller communities, the floodplain administrator had other primary duties and may not have been inclined to respond to the questionnaire. That trend continues with this study and may account for the reduced response from smaller communities. It should be noted that there were responses from many small communities and there appears to be representative responses for communities and counties of all sizes.

As part of the 2024 ASFPM Local Programs Questionnaire, data regarding floodplain managers' responsibilities, experience, training, certifications, and compensation was collected. As previously noted, responses were received from 472 communities and counties. A preliminary question inquired whether the recipient was the correct person to receive the questionnaire. If they identified that they were not, they were then asked to provide contact information for the correct recipient in the community and a questionnaire was sent to the identified person. The final data were received from 448 NFIP Participating Communities in 47 states and the District of Columbia and used to develop this report. No communities from the states of Maryland, Louisiana, or Hawaii responded to the questionnaire. The number of responding states is down slightly from the 2016 Local Programs Study, in which communities from 49 states and the District of Columbia responded to the Questionnaire. A summary of responses by FEMA Region is shown in Table 2.

Table 2.
Community Response Rate by FEMA Region

FEMA Region	%		FEMA Region	%
1	13.8%		6	12.8%
2	14.2%		7	18.8%
3	7.2%		8	19.4%
4	12.1%		9	9.7%
5	17.6%		10	19.7%

Who are the Nation's Floodplain Managers?

FEMA indicates that "the work of floodplain managers is fundamental to the effective management of floodplain resources and flood mitigation" (from https://www.fema.gov/floodplain-management, accessed June 6, 2016). While FEMA does not provide a definition for a floodplain manager or administrator, Chapter 7 of FEMA's "Managing Floodplain Development Through the National Flood Insurance Program" provides a good guide to the duties, qualifications, training, and responsibilities of a floodplain manager.

In addition to this document, the ASFPM Certification Board of Regents created a "Model Job Description for a Community Floodplain Manager." It indicates the "floodplain manager is the principal community administrator in the daily implementation of (give community name) flood loss reduction activities including enforcing the community's flood damage prevention ordinance, updating flood maps, plans, and policies of the community, and any of the activities related to administration of the National Flood Insurance Program (NFIP)" (www.floods.org/ace-iles/documentlibrary/CFM/FPM_Model_Job_Description_2010.pdf accessed June 7, 2016). Regular duties of the floodplain manager include managing floodplain development permitting, floodplain mapping updates or revisions, and flood mitigation activities.

Job Titles

The first question asked the respondent "which best describes your current job title?" The response rate to this question was 99.6%. The respondents were given eleven choices of a job title or asked to provide their job title if it was different from those on this list. Table 3 summarizes the results. Upon investigation of the "other" job title descriptions, it appears the titles listed above were interpreted literally by respondents. For example, the title "civil engineer" was identified by 5.2% of the respondents, yet upon review of the "other" category, several respondents identified their titles as "town engineer," "county engineer," "city engineer," and other various titles that are synonymous with "civil engineer." Similar results were observed with the "municipal planner" job title. Based upon the review of all responses, general job titles or disciplines were identified and consolidated into Table 4. This resulted in a significant number of the "other" job titles being placed into one of these general discipline groupings. It should be noted that several respondents reported multiple titles that could have been applied to multiple general discipline groupings. In those cases, they are identified in the Table as having Multiple Titles and account for 3.8% of the responses.

Table 3. Reported Job Titles

Which best describes your current job title.	Percent
Zoning, Code or Building Official	22.4%
Other title, please tell us:	14.6%
Floodplain Administrator	12.6%
City Manager or Administrator	10.3%
City or County Clerk	8.7%
City Planner	6.5%
Community Development Director or Staff Member	5.8%
Civil Engineer	5.2%
Public Works Director	4.9%
Elected Official	3.6%
Emergency Management Official	2.9%
Stormwater Manager	2.5%
Question Response Rate: 99.6%	

Table 4. General Job Disciplines

Which best describes your current job title.	Percent
Zoning, Code or Building Official	24.4%
Floodplain Administrator	12.8%
City Manager or Administrator	10.5%
City or County Clerk	9.4%
Civil Engineer	7.2%
City Planner	7.2%
Community Development Director or Staff Member	5.8%
Public Works Director	5.6%
Other Title	4.3%
Multiple Titles	3.8%
Elected Official	3.6%
Emergency Management Official	2.9%
Stormwater Manager	2.5%

In total, just 4.3% of respondents had unique job titles that were not correlated with the groupings in Table 4. These responses imply that a range of job titles and general disciplines are

administrating local floodplain management programs. Zoning, Code or Building Officials was also the leading job discipline in the 2016 Local Programs Study, but the percentage of respondents was down from 33.2% to 24.4%. In the 2016 Study, the initial question asked if the respondents title was Floodplain Administrator and was not included in the list of job disciplines. Floodplain Administrator was the second most common job discipline in this 2024 study. For comparative purposes, only 3.7% of the 2016 study respondents identified as Floodplain Administrator. The second and third most common job disciplines in the 2016 study were City Planner (11.6%) and City Engineer (11.3%), but in this study they held the sixth and fifth most common job disciplines respectively. The third and fourth job disciplines in this study were City Manager or Administrator and City or County Clerk, but were in the fifth (7.5%) and fourth (8.2%) positions in the 2016 Local Programs Study. The remainder of job disciplines were typically within one percentage point when comparing their 2024 to 2016 study responses. A full listing of the respondents' unique and combined job titles can be found in Appendix B, Question 2, Other Job Titles and a comparison of the General Job Disciplines from the 2024 and 2016 studies can be found in Appendix C.

Hours Spent on Floodplain Management Activities

The questionnaire inquired about the average number of hours the respondents spent on floodplain management activities each month. Respondents were asked to choose from the following ranges of hours per month: zero hours per month, one to five hours per month, six to 10 hours per month, 11 to 15 hours per month, 16 to 20 hours per month, 21 to 40 hours per month, 41 to 60 hours per month, 61 to 80 hours per month, and more than 80 hours per month. The general assumption is that 40 hours per month would constitute approximately one quarter of the employee's time and 80 hours would constitute approximately half of an employee's time being spent on this work function. Table 5 summarizes the responses.

Nearly 20% of respondents indicated that in a typical month, they spend no time on floodplain management activities. More than two-thirds of respondents spend five hours or fewer per month on floodplain management activities, while approximately 2% spend more than half of their time on these activities. Given the variety in the job titles of the floodplain managers, the time spent working on floodplain management issues may not be surprising. To assess this, the Percent of Time spent of Floodplain Management Activities per month was evaluated across three population ranges: communities with populations less than 5,000, communities with populations between 5,000 and 50,000, and communities with populations more than 50,000.

Table 5. Percent of Time on Floodplain Management

Percent of Time spent on Floodplain Management Activities per Month	Percent of Respondents
0 hours a month	19.1%
1 to 5 hours a month	47.8%
6 to 10 hours a month	11.9%
11 to 15 hours a month	7.2%
16 to 20 hours a month	5.2%
21 to 40 hours a month	4.5%
41 to 60 hours a month	1.3%
61 to 80 hours a month	1.1%
More than 80 hours a month	2.0%
Question Response Rate: 99.6%	

Table 6. Percent of Time on Floodplain Management Activities Across Population Ranges

	Population Range		
Hr/Mo FPM Activities	**5,000 or fewer**	**5,001 to 50,000**	**More than 50,000**
0 hours a month	36.3%	6.7%	3.3%
1 to 5 hours a month	49.7%	52.3%	26.7%
6 to 10 hours a month	6.2%	17.1%	13.3%
11 to 15 hours a month	2.6%	10.4%	11.7%
16 to 20 hours a month	2.6%	6.2%	10.0%
21 to 40 hours a month	2.1%	4.7%	11.7%
41 to 60 hours a month	0.5%	0.5%	6.7%
61 to 80 hours a month	0.0%	1.0%	5.0%
> 80 hours a month	0.0%	1.0%	11.7%

Table 6 implies smaller communities generally spend less time on floodplain management activities compared to their larger peers. A further analysis of the data looked at the job disciplines of the respondents. For communities with populations of 5,000 or fewer, the top three job disciplines were:

- City or County Clerk (23%),
- Zoning, Code or Building Official (22%), and
- City Manager or Administrator (21%).

Given the day-to-day responsibilities for two of these three positions, it is likely that in many of these communities, floodplain management activities may not be a priority and is one of the many responsibilities placed on these positions.

Looking at communities with a population between 5,000 and 50,000, more time is spent in floodplain management activities. The top three job disciplines for these communities were:

- Zoning, Code or Building Official (31%),
- Floodplain Administrator (13%), and
- Community Development Director or Staff Member (10%).

As the information in Table 6 shows, the final population range of large communities with more than 50,000 generally appear to spend the most time on floodplain management activities. Many large urban areas have urban flood issues and given the likelihood that these communities are likely subject to EPA Stormwater Regulations, there may be crossover between their stormwater and floodplain management activities. Unlike the previous two population ranges, this final range had 4 job disciplines that each had a double-digit percentage response. The top job disciplines for these communities were:

- Floodplain Administrator (33%),
- Zoning, Code or Building Official (17%),
- City Planner (12%), and
- Civil Engineer (11%).

Comparing the Percent of Time on Floodplain Management results to the 2016 Local Programs Study was difficult. The 2016 study asked to indicated the annual percent of time spent compared to typical hours per month asked in the 2024 study. The initial range in the 2016 study was 0-10%, which would roughly equate to 0-15 hours per month. Aggregating the zero through 15-hour numbers from the 2024 study totals 86.0%, which is noticeably larger than the 69.6% reported for the 0-10% range in the 2016 study. As noted in Tables 5 and 6 and in 2016 Local Programs Study, there are a significant number of communities that appear to engage in little to no floodplain management activities on a monthly or annual basis. This data implies there is a need for floodplain management recognition and acknowledgement in many communities. A Table comparing the 2024 and 2016 Percent of Time Spent on Floodplain Management Activities can be found in Appendix C.

Experience

The questionnaire asked respondents how many years they had been working in the floodplain management field and as the floodplain manager. There were some responses in excess of 40 years of experience for both questions. As shown in Figure 1, the median number of years that

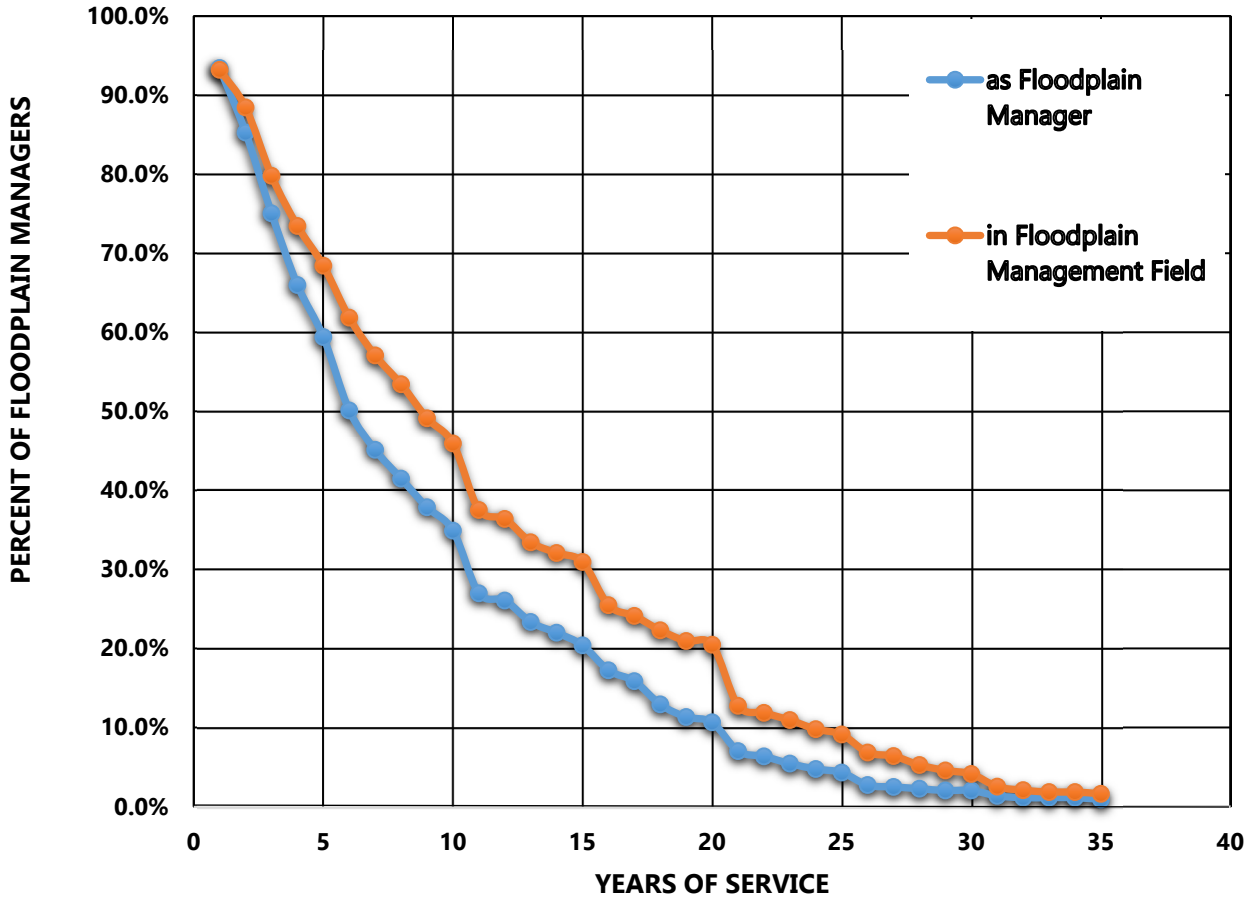

Figure 1. Floodplain Management Experience

respondents reported working in the floodplain management field is approximately nine years, down from 10 years in the 2016 Local Program Study. Table 6.A on the following page summarizes the respondents' years of experience in the field of floodplain management. As the Table indicates, 6.8% of the respondents are in their first year working in floodplain management and 38.2% have five or fewer years of experience in the field. The 2016 Local Program Study identified 3.1% in their first year and 33% with at least five years of floodplain management experience. This indicates there were younger or inexperienced respondents in 2024 in the first five years of their floodplain management career compared to the respondents in 2016. The trend over the next ranges up to 30 years were relatively unchanged with a maximum difference of 1.5% between 2024 and 2016. The numbers are summarized in the **Comparison of Years Working in Floodplain Management Between the 2024 and 2016 Studies Table** in Appendix C.

Table 6.A Floodplain Management Experience

Years Working in Floodplain Management	Percent of Respondents
0-5 years	38.2%
6-10 years	24.3%
11-15 years	13.4%
16-20 years	12.7%
21-25 years	5.9%
26-30 years	4.3%
>30 years	4.5%
Question Response Rate: 98.4%	

Years Working in Floodplain Management	Percent of Respondents
< 1 year	6.8%
1 year	4.8%
2 years	8.6%
3 years	6.4%
4 years	5.0%
5 years	6.6%

Similarly, Figure 1 indicates the median number of years the respondents reported working as the floodplain manager is approximately six years, down from seven years in the 2016 Local Programs Study. Approximately 6.6% of the respondents indicated zero years of experience as the floodplain manager, indicating that it was their first year working as the floodplain manager. This estimate represents the turnover rate for this position and is up from the 3.6% reported in the 2016 Local Study. While this could be interpreted as a significant increase, variance is to be expected from year to year. Given that there is minimal long-term data currently available, no inference as to the annual turnover can be made.

Table 6.B Floodplain Manager Experience

Years Working as the Floodplain Manager	Percent of Respondents
0-5 years	49.9%
6-10 years	23.1%
11-15 years	9.8%
16-20 years	10.2%
21-25 years	4.3%
26-30 years	1.4%
>30 years	2.0%
Question Response Rate: 98.4%	

Years Working as the Floodplain Manager	Percent of Respondents
< 1 year	6.6%
1 year	8.2%
2 years	10.2%
3 years	9.1%
4 years	6.6%
5 years	9.3%

It would generally be assumed that the respondents would have fewer years of experience working as a floodplain manager. The assumption would be that they gain experience in floodplain management before becoming the floodplain manager, but given the number of

communities where floodplain management staffing is only one person, this assumption fails. Overall, the changes in the years working as the Floodplain Manager showed a steady decline as years progressed (i.e., 0-5, 6-10, 11-15, etc.). The data from 2024 and 2016 show some volatility from year to year in the first five years, but the data appears to stabilize with similar responses as the number of years progress. For further review, the numbers are summarized in the **Comparison of Years Working as a Floodplain Manager Between the 2024 and 2016 Studies Table** in Appendix C.

Education

Questionnaire respondents were asked to describe their highest level of education. As summarized in Table 7, approximately two-thirds (66.6%) of the respondents indicated that they have a technical/associate degree or higher. More than half of the respondents (54.6%) have a four-year or bachelor's degree, with 19.1% of those respondents holding a master's, doctorate or professional degree. These numbers are about five percent higher than the numbers reported in the 2016 Local Programs Study. A table comparing the Highest Year of School Completed from 2016 to 2014 can be found in Appendix C.

Table 7. Floodplain Manager Education

Highest year of school completed	Percent of Respondents
Some high school	0.2%
Completed high school or GED	10.0%
Some college, technical or trade school	23.2%
Associate degree or a 2-year college degree	12.0%
Bachelor's degree or a 4-year college degree	35.5%
Master's degree	16.6%
Advanced degree such as a Ph.D., a law degree, or a medical degree	2.5%
Question Response Rate: 98.2%	

The respondents holding a four'-year degree were asked to provide information on their degree; these results are summarized in Table 8. As with the job title/discipline question, the responses were quite varied. Many of the degrees generally align with the respondents' primary job titles. More than one-quarter of the respondents who have a bachelor's or higher degree held an engineering degree. Planners were similarly represented to engineers in job titles, but were somewhat lower in representative degrees. A possible explanation for this is that some sampled individuals earned degrees outside of the planning field, but work in planning capacities in local governments. Similarly, some sampled individuals earned an engineering degree and their job title may not directly correspond to civil engineer. Public Administration degrees appear to correlate well to those with City Manager or Administrator job titles.

Table 8. Floodplain Manager Degrees

Degree	Percentage
Engineering	25.2%
Planning	11.5%
Public Administration	9.9%
Science (Biology, Chemistry, etc.)	6.1%
Environmental	6.1%
Business Administration	5.3%
Business	3.8%
Geography	2.3%
Political Science	2.3%
Advanced Degree (PhD, MD, JD)	2.3%
Other	25.2%
Question Response Rate: 56.2% of Bachelors or higher degreed respondents.	

The "other" degree category equaled the engineering degree percentage. There were numerous degrees identified in the responses, but their cumulative numbers fell below 2%. As with many of the responses to the open-ended questions in the questionnaire, it was impractical to provide a full listing of all identified degrees. In lieu of listing all degrees in the project report, Appendix B, Question 6, Degrees Received, contains a full list of respondents' degrees. It should also be noted that only 56.2% of the respondents who identified that they hold a bachelor's or higher degree provided information on their degree.

Salary

The questionnaire also inquired about respondents' salaries. Given the wide range of job titles, experiences, and educational backgrounds, respondents' salaries were quite variable but were uniformly distributed over a wide range. As shown in Table 9, approximately 32% of the respondents were in the salary range of $55,000 or less, approximately 32% were in the $55,001 to $85,000 range, and the remaining balance were in the range of $85,001 or higher.

The average salary was estimated to be approximately $75,000, but the upper quartile salary range is significantly higher than the salaries indicated in the 2016 Local Programs Study. Nearly one-quarter of the respondents indicated a salary in excess of $100,000 compared to the $75,000 or more in 2016 Study. (Note that in 2016, the highest salary bracket queried was $75,001 or more; the response options were expanded based on the 2016 response to provide more insight into salary ranges.) It should also be noted that these salaries may reflect

compensation for primary job duties beyond floodplain administrator. A table comparing the Floodplain Manager Salaries from the 2024 and 2016 Studies can be found in Appendix C.

Table 9. Floodplain Manager Salary

Salary Range	Percent
$25,000 or less	7.5%
$25,001 to $35,000	3.6%
$35,001 to $45,000	10.8%
$45,001 to $55,000	10.1%
$55,001 to $70,000	19.0%
$70,001 to $85,000	13.0%
$85,001 to $100,000	12.5%
$100,001 to $120,000	11.1%
$120,001 to $140,000	6.3%
More than $140,000	6.3%
Response Rate: 92.9%	

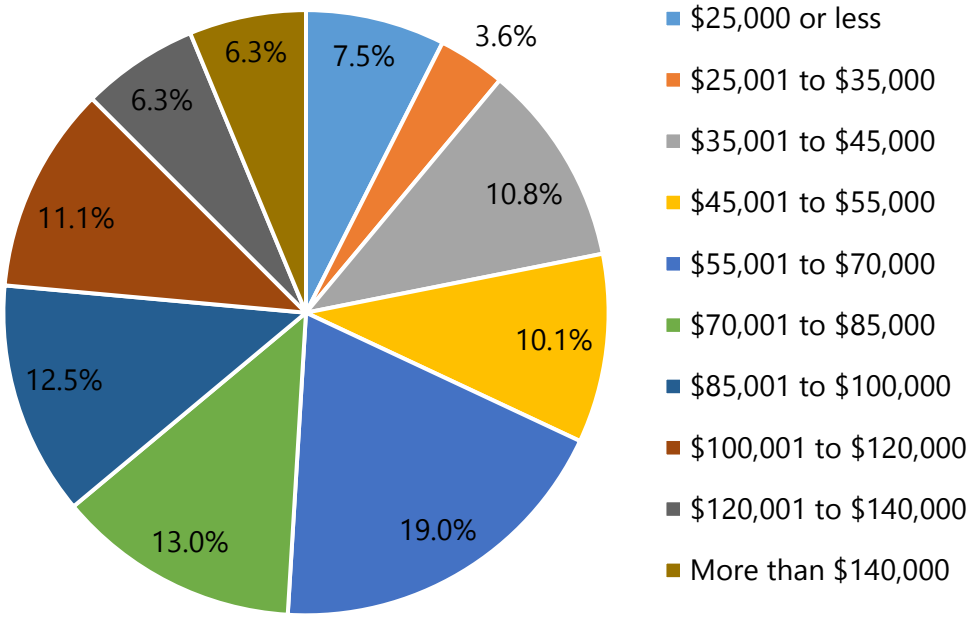

Figure 2. Floodplain Manager Salary Ranges

As was noted earlier, approximately 4.0% of the respondents indicated that they spend more than 25% of their time on floodplain management activities. While this is a small subset of the total number of respondents, the salary distribution and years of floodplain management experience for this subgroup alone was reviewed. The questionnaire responses indicated an estimated average salary of $90,000 and the median years of floodplain management experience was 13.9 years and the average number of years as the Floodplain Manager as 8.25 years. These numbers indicate that they spend more than a quarter of their time working in floodplain management functions, have salaries that are in the upper third of the respondents, and their experience also places them in the upper third for years of floodplain management experience when compared to the overall group.

Certification

Many communities face increasing flood-related disaster losses, emphasize mitigation to alleviate the cycle of damage-rebuild-damage, and recognize the need for professionals to adequately address these issues. ASFPM has established a national certification, called the Certified Floodplain Manager program for floodplain managers, which recognizes qualified professionals and promotes professional development. This results in enhanced knowledge and performance of floodplain management professionals.

Table 10.
Respondents' Certification or Licenses

Certification or License	% Certified or Licensed
CFM	55.7%
PE	28.4%
RPLS	2.7%
AICP	10.4%
AIA	0.5%
Other	26.8%

Questionnaire respondents were asked "Have you heard of the Certified Floodplain Manager (CFM) accreditation?" More than 99% of the participants responded to the question, with 71.7% indicating that they had heard of the CFM accreditation. This is an increase in awareness from the 2016 Local Program Study where 67.9% were aware of the CFM accreditation. The questionnaire then asked if the respondent had any certifications or licensure. Again, more than 99% of the participants responded to the question, with 41.1% indicating that they hold some type of certification or license. Of the subset of questionnaire respondents who responded that

they were certified or licensed, Table 10 shows the percentage that hold these various certifications or licenses.

Of the subset of questionnaire respondents who had knowledge of or were familiar with the CFM certification, 31.0% indicated they were a CFM. This percentage slightly lower than the 2016 Study where 33.7% of those familiar with the CFM Certification program were CFMs.

In reviewing the number of CFMs, the community size appeared to have an impact on the frequency of CFM awareness and certification. For communities fewer than 5,000, 56.2% of the respondents had heard of the CFM Certification, yet only 17.4% of those aware of the certification were CFMs. For communities between 5,000 and 50,000 people, awareness of the CFM certification grew to 79.9% and CFM certification was at 31.6% of those aware of the CFM Certification. In communities with a population greater than 50,000, 91.7% were aware of the CFM Certification, with 56.4% of those who were aware of the program being CFMs.

Table 11. Certification and Salary

Salary Range	CFM Only	CFM & Other Cert	No CFM - Other Cert	No Certs
$25,000 or less	3.0%	3.5%	3.1%	10.2%
$25,001 to $35,000	3.0%	2.3%	1.6%	4.5%
$35,001 to $45,000	10.1%	7.0%	3.1%	13.5%
$45,001 to $55,000	3.0%	3.5%	3.1%	14.8%
$55,001 to $70,000	11.1%	15.1%	20.3%	21.7%
$70,001 to $85,000	14.1%	13.4%	12.5%	12.7%
$85,001 to $100,000	15.2%	16.9%	18.8%	9.4%
$100,001 to $120,000	20.2%	18.0%	15.6%	6.1%
$120,001 to $140,000	12.1%	9.9%	7.8%	3.7%
More than $140,000	8.1%	10.5%	14.1%	3.3%
Estimated Average Salary	**$88,131.31**	**$88,604.65**	**$90,664.06**	**$64,538.93**
Estimated Median Salary Range	**$85,001 to $100,000**	**$85,001 to $100,000**	**$85,001 to $100,000**	**$55,001 to $70,000**

It should be noted that several respondents hold more than one certification and/or license. The certification information was correlated with the salary information to assess salary trends and certification. As Table 11 shows, certification appears to have a significant impact on salary for floodplain managers.

Local Floodplain Management Programs

Local floodplain management programs vary significantly in the level of services offered (responding to floodplain inquiries, permitting, enforcement, etc.), job functions, and responsibilities based upon programmatic staffing, budgets, and political support. That said, a common denominator across all programs is responding to flood events. While the response functions (damage assessments, debris pickup, permit assistance, etc.) vary, many communities have recent experience in dealing with flood impacts in their community.

Past Flood Events

The questionnaire asked respondents the last time their community experienced a flood event (regardless of whether or not it was associated with a federally declared disaster).

Table 12. Years Since the Last Flood

Years since Community Last Impacted by a Flood.	Percentage of Respondents
Less than 1 year ago	19.0%
1-3 years	30.2%
4-6 years	20.7%
7-9 years	6.8%
10 or more years	23.4%
Question Response Rate: 92.2%	

Responses indicated that nearly 70% of the responding communities experienced a flood in the past six years. More than three-quarters of respondents indicated that their communities experienced flooding in the last 10 years. In looking at the results from the 2016 Study, that effort did not include the Less than 1 year ago option and it was assumed to be included in the 1-3 years' choice. The combined responses for flooding within the last three years equates to nearly half of the 2024 respondents experiencing flooding over that period. These responses indicate that questioned communities have a high likelihood of experiencing a flood event; the frequency of flooding and the occurrences in these two studies indicate that flooding is happening regularly. Assuming the questionnaire findings accurately represent the experiences of flood-prone communities across the nation, there is clearly a need for floodplain

management programs to support and protect communities. A table comparing the Years Since the Last Flood from the 2024 and 2016 Local Program Studies can be found in Appendix C.

Responsibilities, Services, and Functions

The questionnaire asked a series of questions related to the staff capacity of communities' floodplain management programs. The guidance for the series of questions inquired about the monthly hours of staff time spent working on floodplain management in the previous year. Specifically, the question asked "In a typical month, about how many hours do you and your staff spend on floodplain management activities?"

Given that previous questionnaire responses indicated that a vast majority of the respondents had non-floodplain management responsibilities, those functions were ignored and the questions focused solely on the typical monthly hours for each of the various tasks. Based upon the trends from Table 13, enforcing regulations/standards, providing technical assistance, and permit and inspection activities appear to be the areas with the greatest staff time allocation. Protecting the natural and beneficial functions of floodplains, education and outreach, and answering flood insurance questions appear to be the next level of support for communities. The areas communities are least engaged in include flood mitigation grants, the Community Rating System, developing flood maps or data, and promoting flood insurance. It should be noted that 10.0% of the respondents in the 2024 Study indicated that they provide 0-hours to all of the listed activities. This is nearly double the percentage of respondents from the 2016 Study, where 5.3% of the respondents indicated they spend no time on the listed activities in that study.

Since the majority of these activities are expected from a community participating in the NFIP, the percentage of responses indicating that many communities may not be spending staff time on these activities is troubling and is consistent with the trends in the 2016 Report. It is acknowledged that a significant portion of the communities that participate in the NFIP and responded to this questionnaire are small communities of 5,000 residents or fewer. Of the responding communities and counties, 194 had populations of less than 5,000 residents. Of this group, 86.0% of the respondents spent five or fewer hours per month on floodplain activities. There are many possible explanations for this lack of engagement, including lack of staff, minimal flood risk, and marginal or no development activity. Review of the position titles of those who spend five or few hours per month, it was noted that 65.7% of the respondents fall into one of three position titles: Clerk (22.9%), Zoning/Code/Building Official (21.7%), and Manager/Administrator (21.1%). No other position title accounted for 10.0% or more. These titles may help explain the limited engagement in floodplain management activities. As community size increases, the percent of respondents who spend five or fewer hours per month

reduces: for populations between 5,000 and 50,000 the percentage was 59.0% and for communities with populations greater than 50,000, the percentage was 30.0%.

Table 13. In a typical month, about how many hours are spent on …

Percent of time spent…	0 Hours	1-5 Hours	6-10 Hours	11-15 Hours	16-20 Hours	21-40 Hours	41-60 Hours	61-80 Hours	More than 80 Hours
…providing general technical assistance such as map interpretation?	25.6%	63.1%	7.2%	1.4%	0.5%	1.6%	0.2%	0.2%	0.2%
…developing flood maps or new flood map data?	83.5%	13.8%	1.4%	0.5%	0.2%	0.2%	0.2%	0.0%	0.2%
…answering questions about flood insurance?	56.2%	39.1%	3.8%	0.2%	0.2%	0.0%	0.5%	0.0%	0.0%
…promoting sale of flood insurance?	87.8%	10.4%	1.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%
…protecting natural floodplain resources and functions?	42.2%	44.9%	7.4%	2.9%	1.1%	0.2%	0.7%	0.2%	0.2%
…educating and training the public, consultants, developers and others?	45.4%	43.3%	5.9%	3.6%	0.5%	0.7%	0.2%	0.2%	0.2%
…enforcing local regulations and standards?	19.0%	55.3%	13.3%	4.3%	2.5%	0.7%	1.8%	0.7%	2.5%
…issuing permits and conducting follow-up inspections?	29.8%	46.0%	12.2%	4.3%	1.8%	2.0%	0.9%	0.9%	2.0%
…participating in or overseeing flood hazard mitigation grant programs?	71.1%	23.5%	3.8%	0.7%	0.2%	0.2%	0.2%	0.0%	0.2%
…managing community's involvement with the Community Rating System?	71.8%	19.2%	4.1%	2.9%	1.4%	0.0%	0.0%	0.0%	0.7%
Question Response Rate: 98.9%									

Many of the written responses to various questionnaire questions (see Table 13) identified flood maps as an issue, but were generally referred to as FEMA maps. While maps represent the flood risk for a community, there appears to be an opinion by many floodplain managers that the flood maps are FEMA's maps. If floodplain managers believe that the maps are the responsibility of FEMA, then they may not be inclined to update flood maps. The first two activities in Table 13 are map related activities. Providing technical assistance is generally considered a basic NFIP Participating community responsibility, yet more than a quarter of respondents indicated they spend no time on this activity. It is understandable that many communities would not be involved in developing flood maps or new flood map data due to their community size and staff resources.

The local floodplain manager is typically the community contact for answering basic flood insurance related questions, yet these responses indicate that more than half of the respondents spend no time on this activity. Similarly, promoting flood insurance is an important activity to help protect residents and businesses in a community, but it is the activity respondents indicated spending the smallest percentage of time on. This implies that many floodplain managers do not view promotion of flood insurance as a priority or responsibility in their community. This inaction by floodplain managers may contribute to flood losses and recovery costs in the future.

As a participating NFIP Community, the floodplain manager is responsible for ensuring minimum requirements for floodplain related activities are met. This generally includes educating and training the public, yet 45.4% of the respondents indicated they spend no time on this activity. Permitting and enforcement appear to be some of most consistently engaged activities by the respondents, yet 29.8% did no permitting and 19.0% indicated they did no enforcement. Given the number of small communities responding to this study, it is possible that many of these smaller communities have limited development or redevelopment activities necessitating these activities, yet as previously stated, more than three quarters of the responding communities have flooded at least once in the previous 10 years. It is a reasonable assumption that these floods would have necessitated floodplain permits as part of the recovery or enforcement activity.

The competitive nature of the mitigation grant process and limited grant funding may explain the low percentage of respondents who reported spending time on mitigation activities. Given the staffing described by many of the questionnaire respondents, the application process for federal mitigation programs, and the competitive nature or requirement for a disaster declaration, the financial commitment and reporting requirements may limit some communities' interest in these activities.

Overall, the trends between the 2024 and 2016 Studies are consistent. For further review, the table **Comparison of the Time Spent on Various Floodplain Management Functions from the 2024 and 2016 Studies** can be found in Appendix C.

Staffing and Experience

Questionnaire respondents were asked about their community's floodplain management program staffing and combined experience. Based upon their responses, more that 80% of the floodplain management programs are staffed by two or fewer staff members, and nearly half of the floodplain management programs across the nation are staffed by a single person. Approximately 6% of the responding communities indicated that they had no floodplain management staff and all of these communities indicated that they outsource floodplain management to a contractor. Additionally, nearly a third of the responding communities indicated that they utilize contractors to assist or manage floodplain management responsibilities in their community.

Table 14. Number of Floodplain Management Staff

Local Floodplain Management Staff	Percent of Respondents
0	6.0%
1	48.7%
2	25.6%
3-5	15.8%
6-7	1.8%
8-10	1.0%
10+	1.1%
Response Rate: 99.1%	

Table 15. Floodplain Staff Experience

Experience	Floodplain Staff		
	1	2	3-5
Less than 2 years	21.3%	8.1%	7.5%
2 to 5 years	22.3%	18.9%	7.5%
6 to 10 years	21.3%	19.8%	10.4%
11 to 15 years	10.4%	12.6%	11.9%
16 to 25 years	18.5%	19.8%	20.9%
More than 25 years	6.2%	20.7%	43.3%
Response Rate - 87.1%			

The 2016 Local Programs Study did not identify programs with no staff; it was assumed that responding communities would have at least one staff member, with the percentage of respondents with one staff member being 62.5%. The 2024 Study indicated that program with one or fewer staff members were 7.8% lower than the 2016 Study, indicating more programs have shifted to increase their floodplain management staff size. In comparing the numbers between the 2024 and 2016 Studies for staffing of 2-3 and 4-5 staff, both of those groupings increased. The increase was:

- 2-3 staff increased from 30.5% to 35.8%, and
- 4-5 staff increase from 3.8% to 5.6%.

Beyond those staff ranges, the numbers are essentially the same with any difference being less than half a percentage point. A comparison table of the floodplain management staffing between the 2024 and 2016 studies can be found in Appendix C.

Table 15 outlines the combined staff experience for communities with one, two, and three-to-five floodplain management staff members. As would be expected, the programs with fewer staff members tend to be lesser experienced. This is unfortunate, given that a majority of the programs have one or fewer staff members and the responses indicate that 43.6% have less than five years of experience. Similarly, the programs with two staff members have a combined experience five years or less in more than a quarter of the responding programs.

Looking at all respondents, across all staffing levels in the 2024 and 2016 Studies, staff with less than 5 years' experience significantly increased from 23.8% to 33.8%. Looking at respondents with staff experience of 5 to 15 years, the 2024 Study reported 30.3% while the 2016 Study reported 38.7%. This implies more respondents had younger or inexperienced floodplain management staff. For those programs with staff experience greater than 15 years, the percentages were similar in both Studies. A comparison table of the floodplain staff experience between the 2024 and 2016 studies can be found in Appendix C.

Funding

Respondents were asked to identify primary funding sources for their floodplain management office or program. Approximately 65.6% of the questionnaire participants identified one or more of the revenue sources in Table 16 as supporting their floodplain management program, with 30.8% indicating they utilized two or more of the listed sources. Conversely, 30.4% of the respondents responded "No" or "Do not know" to the question, and 4% gave no response to the question.

The two dominant funding mechanisms for floodplain management in communities appears to be through general appropriations and permit fees. General appropriations may provide a consistent and stable funding mechanism. Permit fees may limit the funding mechanism to permit review, compliance, and enforcement, but are dependent on development activities.

The next two funding methods include grants and stormwater utility fees. State and federal grants are useful funding mechanisms, but are generally not guaranteed, and are subject to grant cycles and competition which may limit some communities' ability to continually compete

for the grants. Stormwater fees have increased in popularity and can be a very stable funding mechanism, but it is generally assumed that they are limited to larger communities. While the overall percentage of communities utilizing stormwater fees was 11.2%, the breakdown based upon population ranges was:

- 4.6% for communities with a population of 5,000 or less,
- 11.9% for communities with a population range of 5,000 to 50,000, and
- 25% for communities with a population greater than 50,000.

The communities that identified they rely on stormwater fees ranged in population size from in excess of 500,000 down to fewer than 150 people. The 2024 Study percentages by population were consistent with the distribution in the 2016 Study. A comparison table of the floodplain management funding between the 2024 and 2016 studies can be found in Appendix C.

Table 16. Floodplain Management Funding

Your jurisdiction's current funding sources for your floodplain management office or program are ...			
	YES	**NO**	**Don't Know**
...stormwater fees?	11.2%	72.1%	16.7%
...permit fees?	40.8%	46.2%	13.0%
...general appropriation?	44.7%	37.6%	17.7%
...state or federal grants?	14.4%	63.9%	21.8%
...charitable endowments?	1.0%	80.0%	19.0%
...bonds?	3.1%	76.8%	20.1%
...other funding source?	4.4%	57.3%	38.2%

In addition to the question on funding sources, the questionnaire also inquired whether the floodplain management program had a dedicated budget and asked for information on their annual budget.

Only 7.4% of the respondents indicated that they had a dedicated budget, while the remaining communities indicated they either had no dedicated budget or did not respond to the question. Of those communities providing budget information, the budget ranged from in excess of $10-million annually down to less than $1,000 annually, with a median annual budget of $25,000. The 2016 Local Programs Study did not ask for annual floodplain management program budget information.

Mitigation Assistance Programs

Some communities provide mitigation assistance to residential or commercial property owners for activities that reduce flood losses. Programs include, but are not limited to, grants, low interest loans, tax credits, and technical assistance programs. These mitigation programs are designed to incentivize property owners to improve their properties. The community benefit is the hope that the investment will result in increased property values, and ultimately, additional tax revenue. Questionnaire respondents replied to the question, "Does your community have any of the following programs that are locally funded and administered to support activities that reduce flood losses?"

Table 17. Local Mitigation Assistance Programs

Mitigation Assistance Program Options	Percent of Respondents
Technical assistance programs	8.2%
Grants	10.5%
Low interest loans	1.6%
Tax credit or deduction	1.2%
Question Response Rate: 96.0%	

Table 17 summarizes the responses, which indicate very few communities provide funding/assistance to encourage property owners to voluntarily pursue actions to reduce flood losses. Of those respondents who indicated that they offered these program options, 15.8% of the communities offered one or more of these options, 4.2% of the communities offered at least two of the program options, and less than 1% offered three or more the program options. These percentages are consistent with the responses in the 2016 Local Programs Study, with the exception of the Tax credit or deduction which decreased from 2.1% to 1.2%. A comparison table of the local mitigation assistance programs between the 2024 and 2016 studies can be found in Appendix C.

Obstacles to Implementation

The questionnaire respondents were asked which of the following were common obstacles faced in the day-to-day implementation of their local floodplain management program, and 97.3% of the participants responded to at least one of the questions related to obstacles. Of those responding, 17.9% of the participants chose "Not at all" for all obstacle questions.

Table 18. Floodplain Management Obstacles

How much of an obstacle has it been that your community…					
	Not at all	**A little**	**Somewhat**	**Quite a bit**	**A great deal**
…lacked funding?	34.9%	20.6%	19.0%	12.4%	12.6%
…lacked staff?	29.6%	20.2%	19.7%	13.1%	16.7%
…lacked outreach resources?	43.6%	22.2%	18.8%	6.4%	7.8%
…lacked maps?	62.8%	14.2%	11.5%	5.3%	5.5%
…lacked political support?	54.1%	17.2%	17.2%	3.9%	6.0%
…lacked legal support for enforcing regulations?	56.2%	17.0%	13.1%	6.0%	6.4%
…lacked ability to issue permits?	70.9%	10.6%	8.9%	4.1%	3.9%
Question Response Rate: 97.3%					

Table 18 summarizes the obstacle responses. The greatest variability in responses about obstacles was related to staff and funding. In both of these responses were more evenly distributed across the response choices, with 25% or more of respondents indicating staff or funding was as either "Quite a bit" or "A great deal" of an obstacle. "Lacking the ability to issue permits" was the least identified obstacle by the respondents; followed by lacking maps, legal support for enforcing regulations, and political support. More than half of the respondents indicated "Not at all" for these as obstacles. Overall, the various topics were an obstacle to some degree for approximately 30%-70% of the respondents. There are needs for further support of local floodplain management programs (i.e., increased funding, technical assistance, etc.) around each of these topics. While the 2016 Local Programs Study inquired about each of these obstacles, the question was given as a Yes or No response, thus comparison between the two reports is more subjective. The clearest link may be between Not at All in the 2024 Study and a No response in the 2016 Study. It could be interpreted that all responses except Not at all are essentially a Yes response. Comparing the responses between the 2024 and 2016 Studies finds that respondents indicated that all of these listed obstacles were greater in 2024, with the exception of lacking maps. A Comparison of Floodplain Management Obstacles table between the 2024 and 2016 studies can be found in Appendix C.

In addition to the questions asked in the above Table 18, the respondents were afforded an opportunity to provide written comments regarding other obstacles they faced. Respondents provided approximately 85 comments related to obstacles not addressed in the above list. Many of the obstacles were specific issues that the respondent or their community faced and were similarly themed to the items in Table 19. All of the comments can be found in Appendix B, Question 24, Other Obstacles Comments.

Support Needs

In a follow-up question regarding obstacles, questionnaire participants were asked "How helpful do you think each of the following types of technical assistance would be to your community with your floodplain management program?" Of those responding to this question, 96.6% indicated that at least one of these types of assistance would be helpful to some degree to their community, and approximately 95% identified two or more types of assistance that would be helpful.

Table 19. Floodplain Management Technical Assistance Needs

How helpful would your community find…					
	Not at all	**A little**	**Somewhat**	**Very**	**Extremely**
…regulatory or legal assistance?	15.3%	24.4%	32.9%	19.9%	6.4%
…ideas for higher standards?	24.7%	25.3%	28.5%	14.4%	5.3%
…advice and best practices for code administration?	12.6%	22.4%	29.9%	24.9%	9.4%
…floodplain management planning assistance?	15.3%	21.7%	28.8%	25.1%	8.7%
…guidance on enforcement strategies?	13.0%	23.5%	28.5%	25.1%	8.7%
…guidance on hazard mitigation?	13.0%	24.4%	28.3%	25.1%	8.4%
…assistance with flood-proofing existing at-risk development?	17.4%	25.1%	26.0%	22.6%	7.8%
…flood insurance facts and policy interpretation assistance?	16.7%	29.5%	26.5%	19.9%	6.4%
…training resources?	7.5%	20.8%	28.8%	29.7%	11.9%
Question Response Rate: 97.8%					

There was also an opportunity to identify other areas where assistance was needed. Participants were asked "Are there other kinds of guidance or assistance that could help your community with improving your floodplain management program?" and more than 100 comments were provided. While no comment dominated the responses, the responses were similarly themed, with the choices outlined in Table 19. A complete listing of these comments can be found in Appendix B, Question 26, Other Kinds of Guidance or Assistance Comments. While the 2016 Local Programs Study inquired about Technical Assistance Interests or Needs, the question was given as a Yes or No response, thus, similar to the previous question, comparison between the two reports is more subjective. The clearest link may be between "Not at All" in the 2024 Study and a "No" response in the 2016 Study. Comparing the responses between the 2024 and 2016 Studies finds that respondents indicated that all of the listed Technical Assistance Needs were significantly (between 29.2% and 42.4%) greater in the 2024 Study. A Comparison of Community Assistance Needs table between the 2024 and 2016 studies can be found in Appendix C.

The participants were also asked "What is one tool or resource that you need to improve your floodplain management efforts locally?" and those responses are found in Appendix B, Question 27, One Tool or Resources Comments. Of those comments, the leading response was for resources such as staff, funding, and education/training and is consistent with the responses in Table 18.

Community Rating System

A set of questions related to the communities' experience with the Community Rating System was posed to the participants. The questionnaire asked, "Currently, does your community participate in the CRS?" Approximately 98.9% of the questionnaire participants responded to this question, with 24.8% indicating "Yes," their community participated in the CRS Program; 34.3% were Unsure, and 40.9% indicated "No," they were not participating in the CRS Program.

Those respondents who indicated that their community was participating in the CRS Program were compared to FEMA's list of CRS Eligible Communities, dated October 1, 2023, for verification of participation. Through this review, approximately 57% of the communities who responded "Yes" were determined to actually be participating in the CRS program; thus, approximately 14.2% of the communities who responded to the questionnaire participate in the CRS Program. This ratio is more than double the national percentage of CRS Participating Communities in the NFIP. The class rating distributions for the CRS Participating Communities responding to the questionnaire compared to all CRS Participating Communities in the CRS Program are shown in Table 20. The verified, responding communities' distribution across the various CRS Classes was very similar to those in the 2016 Local Program Study. The largest

differential was in the CRS Class range 3-4, where the 2024 percentage was 4.0% more than in 2016. A Comparison of CRS Topics from the 2024 and 2016 Studies can be found in Appendix C.

Table 20. CRS Rating Distribution

CRS Class	% Verified Respondents	National % (10/2023)
1-2	1.60%	0.5%
3-4	4.80%	0.9%
5-6	28.60%	25.3%
7-8	52.40%	46.6%
9	11.10%	12.7%

Participants who responded that their community did not participate in the CRS Program were asked to identify the main reason why their community does not participate in the CRS Program.

Table 21. Reasons for not Joining CRS

Primary Reason for Not Joining CRS	%
The costs outweigh the benefits of participation	23.5%
Decision-makers are not familiar with the CRS Program	25.1%
Lack of support from elected officials	6.0%
The application process or paperwork is too complicated or difficult	5.5%
Other Reason	32.2%
No Response	6.6%

Table 21 highlights respondents' choices. A significant portion of the respondents chose the "other" response option and were asked to provide a reason. The responses are summarized in Appendix B, Question 30, CRS Reasons Comments. Many appear to indicate resource-related issues as the primary reason for not participating in the CRS Program.

Floodplain Mapping

FEMA's flood hazard mapping program identifies flood hazards, assesses flood risks, and partners with states and communities to provide flood hazard and risk data. Flood hazard mapping is an important part of the NFIP, as it is the basis for its regulations and flood insurance requirements. FEMA maintains and updates data through FIRMs and risk assessments.

While FEMA's intent is to have FIRMs that reflect the current flood risk, many communities have concerns about their accuracy.

Table 22. How accurately do your community flood maps reflect the flood risk?

Response	Percent
Not at all	4%
A little	9%
Somewhat	34%
Very	43%
Extremely	9%
Response Rate: 96.9%	

Table 22 summarizes respondents' assessment of their community's flood maps accuracy in reflecting the flood risk. As shown in Table 22, only 4% indicated clear concern with their maps risk identification. This is much lower than the response in the 2016 Local Programs Study where 32.5% indicated that the believed their maps did not accurately reflect flood risk. It should be noted that the 2016 Study question was posed as a Yes or No response.

Questionnaire participants were asked to provide feedback on a series of questions related to floodplain mapping. Participants were asked, "Do you know about any areas in your community that have flooded in the past, but that have not been identified on the flood maps as a potential flooding hazard?" Approximately 28.2% of the respondents answered "Yes," indicating they were aware of unmapped flood risks. This response was higher than the 2016 Study where 23.5% of respondents indicated they were aware of unmapped flood risks.

Similarly, when asked, "In developing areas within your community, are there potential flood risks that have not been mapped yet?" approximately 25.5% of respondents indicated that there are unmapped flood hazards in developing areas of their communities. Similar to the previous mapping question, this response was higher than the 2016 Study where 22.4% of respondents indicated they were aware of unmapped flood hazards in developing areas.

As a final mapping question, respondents were asked, "Are engineering models behind your flood map data outdated?" Approximately 41.4% of respondents indicated that the engineering models used to develop their community's floodplain maps were outdated. Again, the response was higher than the 2016 Study where 37.2% of respondents indicated they felt the maps were outdated.

Of those respondents who indicated the models were outdated, 71% said this led to the floodplain maps being inaccurate, while 17% said that they did not know, and 13% said the flood maps were not outdated.

Permitting

Communities participating in the NFIP agree to enforce minimum standards for development activities in the Special Flood Hazard Area (SFHA). The questionnaire asked respondents to answer questions about designated flood hazard areas shown on their community's adopted regulatory flood maps. The initial question sought to identify the types of permits granted in the designated flood hazard areas by asking "In the past year, how many of the following kinds of permits were granted in designated flood hazard areas?"

Table 23. Floodplain Permits

How many permits were granted for...	None	1-10	11-20	21-30	31-40	41-50	51-75	76 or more
...building new structures?	49.0%	41.4%	3.2%	2.3%	0.7%	1.1%	0.2%	2.1%
...substantial improvement to existing or substantially damaged structures?	68.7%	26.9%	2.5%	1.1%	0.2%	0.0%	0.5%	0.0%
...fill, grading, or other non-structural activities?	54.1%	39.9%	3.7%	0.5%	0.2%	0.7%	0.2%	0.7%

In analyzing the responses, more than half of the respondents indicated that they had granted at least one of the types of permits identified in Table 23. Upon inspection of the responses, it was noted that approximately 36% of the respondents indicated that they did not issue any floodplain permits in the previous year. These numbers are difficult to compare with the 2016 Local Programs Study. The 2016 Study did not allow for reporting zero permits, the lowest range was 1-10. If you add the zero and 1-10 permit percentages from the 2024 Study, the results are more consistent with the 2016 numbers, but the 2016 Study showed more permits being issued in most ranges beyond the 1-10 range. This would imply that communities 2024 are issuing fewer floodplain permits. Given the early data that showed more frequent flooding, it would have been expected that the number of substantial damage or improvement permits would have increased over the 2016 numbers.

With any permitting standard, there may be requests to grant relief from the terms of the community's floodplain management regulations through a variance. Questionnaire respondents were asked, "In the previous year, were any variances to floodplain management standards in designated flood hazard areas requested?" The vast majority of respondents indicated that no variances were requested. Only 7.9% (35 out of 443 respondents) indicated that a variance was requested. Those who indicated a variance was requested were asked, "Approximately how many variances were requested?" Table 24 summarizes the number of variances requested in the communities who indicated that they had variance requests. Most communities had fewer than five, but some had a double-digit number of requests.

Table 24. Number of Variance Requests/Approvals

Description	1-5	6-10	11-20	21 or More
Approximately how many variances were requested?	31	2	2	0
Approximately how many variances were granted?	31	1	1	0

Of the 35 communities that indicated they had variance requests, 33 provided information on the number of requests granted. It is difficult to compare the ratio of requests to approvals, but of the communities that indicated they had 6-10 variance requests, one indicated that it approved one to five and the other six to 10. Similarly, the communities that indicated 11-20 variance requests approved one to five in one community and 11-20 in the other community.

Some of the NFIP responsibilities a Participating community commits to are issuing or denying floodplain development (or building) permits, inspecting all floodplain development to ensure compliance with the local ordinance, and maintaining records of floodplain development. These responsibilities may lead to the discovery of a violation in a designated flood hazard area. The questionnaire asked, "In the previous year, were any violations discovered in designated flood hazard areas?" Nearly one in four (22.4%) respondents indicated that they had discovered floodplain violations. Of those that indicated they discovered violations, 85.7% indicated that the number of violations ranged from one to five, 8.2% indicated they discovered between six and ten violations, 4.1% identified 11-30 violations, and 2% found more than 31 violations in their community.

Planning & Policy

The NFIP aims to reduce flood impacts on private and public structures. Policy and planning are key program components for achieving this goal. Questionnaire participants were asked about various topics considered in their community's plans and codes.

Note, due to FEMA's funding support of this report, two sections of the questionnaire responses and analysis were removed to bring the report into compliance with Executive Orders issued in 2025. This included Tables 25 and 26.

Floodplain Management/Staff Involvement in Planning

Finally, the questionnaire asked if input from the floodplain management program staff were solicited or provided when the community developed or updated various code or planning documents. Approximately 79.2% of respondents indicated that floodplain management staff were involved in the development or update of one or more of their community's various plans or standards. For purposes of this estimation, those communities that responded "Don't know" were counted as a "No." Of those communities that involved floodplain management staff in the development or update of at least one of their plans or standards, many floodplain management staff indicated that they were involved in the development or update of multiple plans or standards.

Table 27. Floodplain Management Staff Involvement in Plans/Standards

Did floodplain management program staff provide input when developing or updating your…	Yes	No	Don't Know
… comprehensive plan?	67.1%	17.5%	15.4%
… hazard mitigation plan?	65.8%	17.2%	17.0%
… emergency plan?	61.1%	18.6%	20.2%
… zoning ordinances?	65.4%	20.6%	14.1%
… building codes?	49.8%	30.6%	19.7%
… subdivision regulations?	64.7%	19.8%	15.4%
… stormwater regulations?	63.7%	20.8%	15.5%
Response Rate: 97.8%			

The responses, shown in Table 27, have a higher percentage of "Yes" responses for all but the zoning ordinance, a lower percentage of "No" responses, and an increased number of "Don't know" responses compared to the 2016 Report. The degree of the differences varies across the plans.

Questionnaire responses indicate that:

- 76.1% of the respondents included floodplain management staff in the development/update of two or more community plans or standards,
- 72.3% involved floodplain staff in the development/update of three or more plans or standards,
- 63.6% involved floodplain staff in the development/update of four or more plans or standards,
- 54.5% involved staff in the development/update of five or more plans or standards,
- 44.9% involved staff in the development/update of six or more plans or standards, and
- 33.3% involved floodplain management staff in the development/update of all of the identified community plans or standards.

A comparison of floodplain management staff involvement in community plans from the 2024 and 2016 Studies can be found in Appendix C.

Codes and Regulatory Standards

Participating Communities in the NFIP must adopt minimum floodplain standards, which regulate development activities in flood-prone areas. Communities must also enforce more restrictive state requirements. Communities may also exceed the minimum standards by adopting more comprehensive floodplain management regulations. Floodplain management regulations adopted by a state or community that are more restrictive than the criteria set forth in the NFIP are encouraged and recognized by FEMA as taking precedence.

Questionnaire participants were asked if their community had standards that are more stringent than the NFIP minimum.

Table 28. Higher Regulatory Standards

Does your community have standards that are higher than the NFIP minimum for…	**Percent Indicating a Higher Standard**
…freeboard?	32.2%
…floodway surcharge?	7.2%
…cumulative Substantial Damage or Improvement?	12.6%
…subdivision standards?	14.7%
…critical facilities protection	10.2%
…fill standards?	13.3%
…setbacks?	13.3%
…stormwater management?	18.0%
…regulating unmapped flood hazard areas?	9.8%
Response Rate: 96.7%	

Approximately 60.7% of the respondents gave no response or indicated that their community's regulatory standards (listed in the above Table 28) were no more stringent than the minimum NFIP or other permit standards.

Of those responding that their community had a higher standard:

- 39.3% indicated that their community had at least one standard that was stricter than the NFIP minimum,
- 25.7% indicated that their community had more stringent standards in two or more listed areas,

- 18.8% had more stringent standards in three or more the listed areas,
- 14.1% had more stringent standards in four or more listed areas,
- 8.9% had more stringent standards in five or more listed areas,
- 5.8% had more stringent standards in six or more listed areas,
- 4.7% had more stringent standards in seven listed areas,
- 3.6% had more stringent standards in eight or more listed areas, and
- 2.2% of communities indicated that they had more stringent regulatory standards in all nine of the listed areas.

Those who indicated that they exceeded the minimum federal standards were asked to provide details on their higher standards. Table 28 provides the ranges of responses provided. Freeboard, Substantial Improvement, critical facilities, and fill standards percentages were higher compared to the 2016 Study percentages. The remaining standards were plus or minus 1% when compared to the 2016 Study, with the exception to the regulating unmapped flood hazard areas, which was not asked in the 2016 Study. A comparison of higher regulatory standards from the 2024 and 2016 Studies can be found in Appendix C.

Freeboard

Of the communities responding to the freeboard question, 32.2% indicated that they had a higher standard. Table 29.A provides a summary of those responding communities' freeboard standards.

Table 29.A
Reported Freeboard

BFE + Freeboard	Percent	Count
1 foot	34.4%	44
1.5 feet	2.3%	3
2 feet	48.4%	62
2.5 feet	0.8%	1
3 feet	4.7%	6
4 feet	0.8%	1
Variable	4.7%	6
Other	3.9%	5
Response Rate: 28.6%		

Table 29.B
Corrected Freeboard

CORRECTED w/ State Higher Standard		
BFE + Freeboard	**Percent**	**Count**
1 foot	53.3%	152
1.5 feet	2.8%	8
2 feet	41.1%	117
2.5 feet	0.4%	1
3 feet	2.1%	6
4 feet	0.4%	1
Respondents and communities in States with a higher freeboard standard.		

It should be noted that several states have freeboard requirements that exceed the minimum federal standard. These include but are not limited to a 2-foot standard in Indiana, Montana, New York, and Wisconsin; a 1.5-foot standard in the District of Columbia and Pennsylvania; and

a 1-foot standard in Arizona, Colorado, Iowa, Kansas, Maryland, Maine, Michigan, Minnesota, North Dakota, Nebraska, New Jersey, Puerto Rico, and Rhode Island. Approximately 80.0% of the responding communities from those states with higher freeboard standards indicated that they did not exceed the federal minimum standard even though the minimum state standard does exceed it. Table 29.B shows a corrected freeboard distribution, which includes all of the responding communities in the various states with a higher standard. A full summary of the various higher standards for freeboard is in Appendix B, Question 46, Part A.

Floodway Surcharge

Communities that indicated they had a higher floodway standard were asked to describe the higher standard. While approximately 7% of respondents indicated that they had a higher floodway standard, only nine communities provided information regarding their higher floodway standard. Table 30.A summarizes their responses. Again, several states have higher floodway standards that were not reflected in the communities' responses. Presently, eight states that have standards more stringent than the minimum federal 1-foot surcharge criterion include Wisconsin (0.01), Illinois (0.1), Indiana (0.1), Michigan (0.1), New Jersey (0.2), Minnesota (0.5), Montana (0.5) and Colorado (0.5), where the number in parentheses is the increase in flood elevation (in feet) allowed. The first four states listed have adopted floodway standards intended to limit the impact to a measurable amount. The remaining four states have adopted surcharge standards that are more than measurable amounts but less than the minimum federal 1-foot surcharge standard. Table 30.B shows the number of responding communities with a higher floodway surcharge, corrected to include the communities in states with a higher floodway surcharge standard.

Table 30.A
Floodway Standards

Rise (Floodway Surcharge)	Count
0.0 Feet (No Rise)	4
0.1 Feet	2
0.25 Feet	1
0.50 Feet	1
No Floodway	1
Response Rate: 1.9%	

Table 30.B
Corrected Floodway Standards

Rise (Floodway Surcharge)	Count
0.0 Feet	4
0.01 Feet	12
0.1 Feet	65
0.2 Feet	11
0.25 Feet	1
0.50 Feet	19
No Floodway	1
Respondents and communities in states with a higher floodway surcharge standard.	

A full summary of the various higher standards for floodways is listed in Appendix B, Question 46, Part B.

Substantial Damage/Improvement

A structure located in a SFHA that receives damage from any source to the degree that the cost to repair it to bring it back to the pre-damaged condition exceeds 50% of the structure's value prior to damage, is considered to be substantially damaged. If repairs are made to a substantially damaged structure, it must be brought into compliance with the community's effective floodplain regulations. Similarly, if improvements are made to a structure located in a SFHA and the cost of improvement exceeds 50% of the value of the structure prior to the improvement, it is considered to be a Substantial Improvement, and the entire structure must be brought into compliance with the community's effective floodplain standards.

Table 31. Substantial Damage/Improvement Standards

Cumulative Substantial Damage or Improvement	
Standard	**Count**
<50% SD/SI	4
Cumulative over 1 yr.	3
Cumulative over 3 yrs.	3
Cumulative over 5 yrs.	4
Cumulative over 7 yrs.	1
Cumulative over 10 yrs.	13
Over life of the structure	2
Applied to 0.2% SFHA	1
Response Rate: 9.0%	

In many areas where flooding occurs, structures are unlikely to sustain the level of damage required to be classified as substantially damaged based on the NFIP minimum 50% trigger from a single event, yet sustain repetitive losses that may over a period of years, cumulatively exceed the 50% threshold. This standard also applies to structures where non-damage improvements are made to a structure with a known flood risk. Incremental improvements can be undertaken to circumvent the 50% threshold. Some communities have tried to reduce flood losses through adoption of standards that either lower the minimum damage threshold for a Substantial Damage (SD) or Improvement (SI) determinations. Other communities have implemented a standard that requires all improvements and repairs to be tracked over a period of time and counted towards the SI/SD determination. Most of the communities that indicated

they had a higher standard did not provide information or their information did not include enough detail to validate their claim. Of those communities providing information on higher SI/SD determination standards, only 31 communities provided specific information on their standards. Table 31 provides a description of the standards currently utilized by the responding communities. A full summary of the various higher standards for Substantial Damage/Improvement is listed in Appendix B, Question 46, Part C.

Subdivision Standards

Forty-six respondents indicated that their community had higher standards related to subdivisions. The responses to this question were quite varied. While many of the responses were very general, some of them centered on the standard for buildable lots. Some examples include compensatory storage for fill in a Special Flood Hazard Area, detention requirements, no new lots or buildable lots in a floodplain, stream buffers, and several others. A full summary of the various higher standards for subdivisions is listed in Appendix B, Question 46, Part D.

Protection of Critical Facilities

Critical facilities provide services and functions to a community that are essential during and after a disaster. Police stations, fire stations, hospitals, nursing homes, health care facilities, schools, daycare centers, power plants, and drinking water and wastewater treatment plants are examples of critical facilities. It is imperative that they remain operational no matter the circumstances. While these facilities' locations may not be mandated to be outside of a SFHA, many communities have adopted higher standards to minimize disruption of services. There were approximately 306 communities that indicated they had higher standards for protecting critical facilities. Identified standards included a moratorium for placement of critical facilities in a SFHA, and extending the moratorium to the Shaded X zones (0.2% Chance or 500-year Event). Other communities utilize a freeboard standard for critical facilities. A full summary of the individual responses is in Appendix B, Question 46, Part E.

Fill Placement

FEMA has a provision in the NFIP minimum standards that allows for fill to sometimes be placed in a SFHA to reduce flood risk to the filled area. Fill placement is considered development and requires a permit under applicable federal, state, and local laws, ordinances, and regulations. FEMA prohibits fill in the floodway unless it can be demonstrated that it will not result in any increase in flood levels. Filling the floodplain reduces storage and conveyance and may lead to increased flood risk along with environmental harm to water quality, vegetation, and habitat. While fill is allowed, some communities (approximately 13% of respondents) indicated that their community has implemented higher standards to limit the use of fill in the floodplain. Approximately 40 communities described standards for development activities involving fill in

the floodplain. Some communities have a moratorium on fill being placed in the floodplain, while others allow fill to be placed but require compensatory storage to be provided. Respondents indicated compensatory storage rates (creation:fill) ranging from 1:1 and 1.5:1 to 2:1. A full summary of the individual responses is in Appendix B, Question 46, Part F.

Setbacks and Buffers

Setbacks or buffers are a standard identified by approximately 13% of the responding communities as a technique to reduce development's risk from flooding. Setback standards establish the minimum distance that structures must be positioned (or "set back") from a feature such as a stream, river, floodplain, or shoreline. Setbacks can be defined by vertical elevations or horizontal distances and are not included among the NFIP's minimum standards. More than 40 questionnaire respondents indicated that their community had a setback or buffer standard associated with a SFHA. The details regarding their respective setback or buffer elevations/distances were quite varied, ranging from 0-100 feet. Many referenced multiple features, including but not limited to, floodplain limits, floodway limits, creek banks, and the ordinary high-water mark (OHWM). A full summary of responses to this question can be found in Appendix B, Question 46, Part G.

Stormwater

Approximately 18% of questionnaire respondents indicated that they have a higher stormwater standard. Nearly 60 respondents who indicated that they had a higher standard provided a short description of their community's standards. Similar to the questions related to subdivision and setback standards, respondents reported stormwater standards that varied considerably. Most referenced standards associated with their community's National Pollutant Discharge Elimination System Permit requirements, Low Impact Development standards, or regional stormwater standards. Some examples of requirements include the use of NOAA's Atlas 14 for drainage calculations, Best Management Practices, detention requirements, development of stormwater drainage plans, no net increase in runoff from the development site, require 90th percentile storm for detention design, and others. A full summary of responses is in Appendix B, Question 46, Part H.

Unmapped Flood Hazard Areas

The final question regarding higher standards was associated with regulating unmapped flood hazard areas. Communities may have unmapped areas where flood hazards are undetermined by FEMA. While NFIP minimum requirements only apply to mapped areas, these unmapped areas may still be at risk of flooding. When asked if their community regulates unmapped areas, approximately 9.8% of the respondents indicated that their community did regulate these areas in some manner. When asked to briefly describe their community's standard, approximately 30

respondents gave a description. Many of these responses described using best available data, which could include historical or local data. Other examples included locally developed modeling and mapping, utilizing engineering studies that are required as part of a development review, and freeboard requirements for Shaded X Zones. A full summary of responses can be found in Appendix B, Question 46, Part I.

Mitigation

Table 16 in the "Funding Section" indicates that 14.4% of respondents' communities relied on state and/or federal grants to support their local floodplain management program. The questionnaire included a question regarding knowledge of federal programs that provide funding and other assistance for flood loss reduction. Respondents were then asked to identify which federal assistance programs they were aware of from a list of commonly used programs. The response rate for this question was 95.3%. This response rate was slightly less than the 2016 Study where the response rate was 97.6%.

Table 32 describes the number of programs the respondents indicated they were familiar with. It appears that the median number of programs that the respondents were familiar with is four programs. Approximately 19.4% of those providing a response in the 2024 Study indicated that they had no familiarity with any of the listed federal grant programs, which is higher than the 2016 Study were 15.6% of respondents indicated they had no familiarity with any of the programs listed in that Questionnaire. Conversely, nearly 5% of the respondents indicated they were familiar with all of the listed federal grant programs.

Table 32. Federal Program Familiarity

Number of Programs	Percent Familiar		Number of Programs	Percent Familiar
None	19.4%		9	4.2%
1	5.9%		10	1.6%
2	9.8%		11	2.3%
3	8.0%		12	2.1%
4	8.9%		13	0.9%
5	8.7%		14	1.4%
6	8.7%		15	0.9%
7	5.6%		16	4.9%
8	6.6%			

The distribution of familiarity with the specific programs is described in Table 33. The 2024 Questionnaire included three additional federal grant/loan programs for consideration. Of those respondents who were aware of the listed federal grant/loan programs, only FEMA's Hazard Mitigation Grant Program and Flood Mitigation Assistance grants, and Housing and Urban Development's Community Development Block Grants exceed a 50% threshold. These were also the only three to exceed the 50% threshold in the 2016 Study.

Table 33. Familiarity with Federal Grant/Loan Programs

Which of the following federal assistance programs do you know about?	Percent Familiar
…Federal Emergency Management Agency Hazard Mitigation Assistance Program (HMGP)?	59.2%
…Federal Emergency Management Agency Pre-Disaster Mitigation (PDM) Grant Program?	39.2%
…Federal Emergency Management Agency Flood Mitigation Assistance (FMA) Grant Program?	55.0%
…Federal Emergency Management Agency Building Resilient Infrastructure and Communities (BRIC) Grant Program?	40.1%
…Federal Emergency Management Agency Public Assistance Program, 406 Mitigation Element?	19.4%
…US Department of Housing and Urban Development Community Development Block Grants (CDBG)?	59.7%
…US Department of Housing and Urban Development Community Development Sustainable Communities Regional Planning Grants?	29.9%
…US Department of Housing and Urban Development Federal Housing Administration 203k Rehabilitation Loan?	13.1%
…US Small Business Administration Disaster Assistance Loan, Mitigation Element?	26.1%
…US Army Corps of Engineers Floodplain Management Services?	43.2%
…US Army Corps of Engineers Silver Jackets?	23.3%
…Natural Resource Conservation Service Watershed and Flood Prevention Operations (WFPO) Program?	16.9%
...Natural Resource Conservation Service Emergency Watershed Protection Program?	20.2%
…Natural Resource Conservation Service Watershed Rehabilitation Grant Program?	18.9%
…Natural Resource Conservation Service Conservation Easements?	20.8%
…Environmental Protection Agency Green Infrastructure Grants?	23.9%
Response Rate: 95.3%	

Table 33.A. Familiarity with Federal Grant/Loan Programs by Population Range

Which of the following federal assistance programs do you know about?	Less than 5,000	5,000 to 50,000	More than 50,000
…FEMA Hazard Mitigation Assistance Program (HMGP)?	51.9%	60.9%	76.3%
…FEMA Pre-Disaster Mitigation (PDM) Grant Program?	26.8%	42.4%	59.3%
…FEMA Flood Mitigation Assistance (FMA) Grant Program?	51.4%	54.3%	66.1%
…FEMA Building Resilient Infrastructure and Communities (BRIC) Grant Program?	27.9%	42.4%	67.8%
…FEMA Public Assistance Program, 406 Mitigation Element?	17.5%	20.7%	20.3%
…HUD Community Development Block Grants (CDBG)?	55.7%	61.4%	62.7%
…HUD Community Development Sustainable Communities Regional Planning Grants?	26.8%	32.6%	28.8%
…HUD Federal Housing Administration 203k Rehabilitation Loan?	13.1%	13.0%	11.9%
…SBA Disaster Assistance Loan, Mitigation Element?	25.7%	25.0%	27.1%
…USACE Floodplain Management Services?	39.3%	44.0%	49.2%
…USACE Silver Jackets?	12.6%	25.0%	47.5%
…NRCS Watershed and Flood Prevention Operations (WFPO) Program?	13.1%	19.0%	18.6%
…NRCS Emergency Watershed Protection Program?	17.5%	20.7%	25.4%
…NRCS Watershed Rehabilitation Grant Program?	17.5%	19.0%	20.3%
…NRCS Conservation Easements?	18.6%	19.0%	30.5%
…EPA Green Infrastructure Grants?	18.0%	25.0%	35.6%

While many grant programs have limited funding, it appears that many floodplain manager's lack familiarities with these programs, which may be an area of concern. These programs offer a potential funding mechanism to address flood risk and could help facilitate flood risk reduction projects. As presented in Table 33.A, awareness generally is lowest for smaller communities and increases with community size. This trend is consistent with the 2016 Study and a comparison of

familiarity of federal grant/loan programs by population range from the 2024 and 2016 Studies can be found in Appendix C.

Even if communities are familiar with these various federal grant programs, preparing a grant application may still present a challenge. In an effort to better understand if communities were applying for grants and who was preparing the grant applications, the questionnaire asked if the respondents' community ever applied for any federal or state grants to address flood risk. Approximately 36.5% responded that they have applied for grants to address flood risks. Those respondents who responded they had applied for grants were asked who was involved in developing the grant application.

Table 34 indicates the distribution of those involved in developing the flood grant applications. As the percentages indicate, in many cases, more than one person was involved in developing the grant applications. Upon review of the responses, approximately 39.9% of the respondents indicated only one of the choices was involved in the grant development, meaning that around 60.1% utilized two or more persons in developing the grant applications. Of those, 35.7% utilized two of the choices, 22.4% utilized three of the choices, and 2.1% utilized all four choices.

Table 34. Flood Grant Preparer

Who was involved in developing the grant application?	
	YES
Floodplain manager	61.9%
Planner	41.9%
External grant writer	34.8%
Someone else	33.5%
Response Rate: 98.1% of those who applied for grants.	

Reviewing the responses identifying the "Someone else" source showed that most were quite diverse, including community administrative leadership positions, emergency management and engineering. A full listing of the responses is in Appendix B, Question 52, Who developed your community's grant application. Of note, in reviewing the data, it appears that approximately 7.7% of the respondents rely solely on an external grant writer for developing flood grant applications.

State Floodplain Management Programs

Each state has a designated NFIP State Coordinator who serves as a point of contact for the National Flood Insurance Program. Many states have adopted floodplain management statutes and regulations and have established and funded their own floodplain management programs. Also, through funding assistance from FEMA, states may provide floodplain management technical assistance to communities.

Respondents were asked the number of times they or their staff were in contact with their state's program staff in the past year. Table 35 provides information on the frequency that the respondents indicated they contacted their respective State Coordinator's Office. The median number of contacts appears to be between one and two times each year.

Table 35.
Contact with State Program

Number of Contacts	Percent of Respondents
0	28.9%
1	14.1%
2	15.1%
3	7.9%
4-5	11.0%
6-10	10.0%
11-20	6.4%
21+	4.3%
Unsure	2.3%
Response Rate: 96.8%	

Questionnaire respondents were asked about their knowledge of and interaction with their state's floodplain management program. Approximately 91.4% of the respondents indicated that they were aware of the existence of their respective state's floodplain management program.

Of those who indicated that they had contact with their state's floodplain management program, respondents were asked to provide their overall impression of their state's floodplain management program. Table 36 summarizes the respondents' impressions. Overall, more that 60% rated their respective state programs as "Good" or "Very good."

Table 36.
Evaluation of State Program

Topic	Very Poor	Poor	Fair	Good	Very Good	Not Applicable	No Response
Knowledge of the staff (such as their ability to answer your questions)	0.5%	0.2%	6.9%	14.9%	52.0%	22.8%	2.7%
Tools provided to help in your (model ordinances, handbooks)	1.0%	1.0%	6.7%	21.5%	39.4%	27.7%	2.7%
Technical assistance provided	1.2%	1.5%	6.7%	18.3%	43.3%	26.0%	3.0%
Timeliness of service	0.7%	4.0%	8.4%	18.1%	41.6%	24.3%	3.0%

Association of State Floodplain Managers, Inc.

Questionnaire respondents were asked about their familiarity with ASFPM and the services they provide in support of local communities. Only 40.8% of questionnaire respondents indicated that they were familiar with ASFPM. Respondents who indicated they were familiar with ASFPM were asked to identify the services they have used. Table 37 summarizes those responses.

Table 37. ASFPM Services Used

Have you used the following services offered by the ASFPM? Have you…	
	YES
…become certified as a floodplain manager?	53.1%
…taken an online self-paced course on the ASFPM Learning Management System?	33.0%
…started or completed the NFIP 101 e-learning course?	34.5%
…participated in ASFPM webinars?	63.1%
…participated in ASFPM sponsored in-person training and workshops?	51.1%
…attended an ASFPM or ASFPM chapter conference?	40.1%
…used the ASFPM Training Calendar on the ASFPM website?	29.5%
…used an ASFPM publication, tool or research report?	33.9%

…read ASFPM national policy information such as summaries and briefings?	34.5%
…subscribed to ASFPM newsletters?	47.2%
…participated in ASFPM social media such as X, Facebook, and LinkedIn?	7.5%

All respondents were asked about which of the variety of services ASFPM offers they would be interested in learning more about.

Table 38. ASFPM Services Interest

Which of the following ASFPM services are you interested in learning more about:	
	YES *
webinars	73.6%
in-person trainings and workshops	61.4%
national or state chapter conferences	39.1%
Flood Science Center resources	49.3%
library resources	54.5%
Certified Floodplain Manager credential	49.0%
Response Rate: 96.2% **Percent of participants responding to the choice.*	

Table 38 summarizes the interests the respondents had in the various services that ASFPM has to offer. Of those responding, the vast majority were interested in one or more of the listed services.

The breakdown of responses is as follows:

- 17.8% were not interested in any of the services,
- 9.5% were interested in a single service,
- 11.1% were interested in two services,
- 14.3% in three services,
- 15.7% in four services,
- 0.6% in five of the services, and
- 20.8% were interested in all of the listed services.

Lastly, participants were asked if they had any final questions or comments. Those comments can be found in Appendix B, Question 64, Other Questions or Comments.

Conclusions and Next Steps

The 2024 Floodplain Management – Local Programs questionnaire was initiated to update the baseline of local floodplain management programs first established in 2016. The questionnaire results provide background information on who the nation's floodplain managers are and the flood loss reduction activities responding jurisdictions are currently undertaking. These activities include enforcing the community's flood damage prevention ordinance; updating the community's flood maps, plans, and policies; and any of the activities related to administration of the NFIP. This is the second of what is expected to be a periodic questionnaire. Future questionnaires will seek to update this study and afford the opportunity to further analyze local floodplain management trends, needs, and obstacles.

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