



FEMA

REGION 9

THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS DISCOVERY ENGAGEMENT REPORT



SAIPAN

Risk Mapping, Assessment, and Planning Program (Risk MAP)

A snapshot of community-identified risks and risk reduction actions

APRIL 2020 - JANUARY 2021

Department of Homeland Security
FEMA Region 9
1111 Broadway Suite 1200
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RiskMAP
Increasing Resilience Together

ACKNOWLEDGMENTS

We would like to thank our local and federal partners in helping the FEMA Region 9 project team complete a successful Risk Mapping, Assessment, and Planning (Risk MAP) Discovery phase in the Commonwealth of the Northern Marianas (CNMI) project area.¹

We could not have done this alone; many local and federal experts brought their unique perspectives and knowledge to the table, including those listed below:

Local Partners

- CNMI Bureau of Environmental and Coastal Quality
- CNMI Department of Public Works
- CNMI Office of Homeland Security & Emergency Management
- CNMI Office of Management and Budget, Hazard Mitigation
- CNMI Office of Planning and Development
- Mariana Islands Nature Alliance
- Northern Marianas Housing Corporation
- Office of the Governor
- Office of the Mayor of Tinian

Federal Partners

- FEMA Long Term Recovery Office Saipan
- National Oceanic and Atmospheric Administration (NOAA), Office for Coastal Management
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers

FEMA Region 9 Project Team and Support Staff

- Chelsea Kahn, Community Outreach Lead (Support Staff)
- Colby Stanton, Director of Readiness, Pacific Area Office
- Eric Simmons, Floodplain Engineer
- Jeanne Johnston, Hazard Mitigation Assistance Grants Specialist
- Jennifer Monroe, Risk Analyst
- JoAnn Scordino, Hazard Mitigation Planner
- Kate Kilduff, Risk Analyst
- Michael Hornick, Floodplain Management Specialist
- Phillip Wang, Hazard Mitigation Assistance Grants Specialist
- Reina Kahn, Service Center Lead (Support Staff)
- Serena Cheung, Floodplain Management Specialist
- Shoshana Cohen, Communications Support (Support Staff)
- Toby Davine, Communications Support (Support Staff)

¹ Please see Appendix A for FEMA project team information (up to date as of October 2020) and local partner information.

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EXECUTIVE SUMMARY

WHY WE WROTE THIS REPORT AND WHAT IT OFFERS YOU

You shared. We listened. Now we are taking action together.

This report summarizes the recent Discovery engagement in the CNMI. Discovery is the first phase of FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program, which is outlined on page 1.

The goal of Risk MAP is to strengthen the CNMI's capacity for resilience by offering more precise flood maps, risk assessment tools and outreach support. These tools can equip you to make more informed decisions about reducing the risk to natural hazards in your communities.

The engagement during Discovery started a conversation between local planning experts, public safety officials, water resource managers and engineers, as well as other community decision-makers, federal agencies and FEMA's mitigation specialists.

This Discovery Report is a snapshot of the CNMI's currently identified risks and hazards, and a collection of potential mitigation actions to address those issues. It documents the methods of the Risk MAP program, describes the territory's environment and geography, and summarizes the needs and requests raised during our multi-year engagement process. It is a tool we hope you can use to reduce your community's risks. Finally, it captures FEMA's ongoing commitment to partner with you in facing your community's natural hazards and building a more resilient future.

During the Discovery Meeting, attendees were asked to provide information on areas of local concern, past risk assessment and mitigation projects and future risk assessment and mitigation needs. The issues raised during these discussions are summarized on the right for consideration. A complete list of findings can be found in **Table 3: Community Mitigation Needs**.

We hope this report will help you and other decision-makers as you:

- Update local plans.
- Communicate risk to colleagues and the public.
- Modify development standards.
- Identify mitigation projects.
- Act to reduce risk.

SUMMARY OF DISCOVERY FINDINGS

MAP UPDATE REQUESTS:

- New FIRMs based on projected future conditions and/or 100 year sea level extremes.
- Updated flood study to re delineate flood zone boundaries and reestablish base flood elevations (BFEs).

FLOOD RISK CONCERNS:

- Increase flood insurance options and policies.
- Address uninsured structures in the Special Flood Hazard Area (SFHA), to help reduce the financial risks of flood damage.

MITIGATION ACTIONS IDENTIFIED:

- Identify mitigation strategy to be included in the Standard State Mitigation Plan (SSMP).
- Improve building inspections and practices to reduce flooding from runoff.
- Improve coastal flood hazard data and modeling to understand risk for planning and flood mitigation and for residents and businesses to access flood insurance.

RISK MAP AND DISCOVERY OVERVIEW

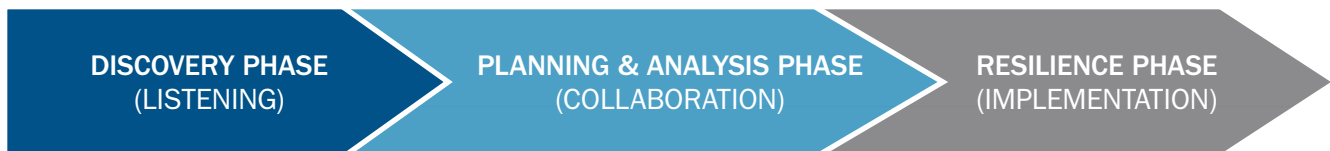
WHAT IS RISK MAP, AND WHAT CAN YOU GAIN FROM IT?

FEMA's Risk MAP program supports local communities by providing the best available data and tools to help them understand their risks to natural hazards, create and maintain plans and take informed action on reducing risks.

The Risk MAP program specializes in providing high-quality flood hazard modeling and is largely driven by the regulatory process of developing and updating Flood Insurance Rate Maps (FIRMs) for communities. Separate from regulatory flood products, FEMA can also support and provide multi-hazard risk products to help your community identify and assess risk from other types of natural hazards. These products can support your local mitigation efforts and future land-use planning decisions. The Risk MAP program in Region 9 addresses these risks over the course of three phases: Discovery, Planning and Analysis, and Resilience.

Each phase has a specific set of goals.

- During **Discovery**, FEMA *listens* as community experts identify top hazards and needs.
- In **Planning and Analysis**, FEMA collaborates with local government staff and community decision-makers to *develop tools* that will contribute to risk reduction, such as new flood risk maps and/or multi-hazard risk assessment data.
- Finally, in **Resilience**, FEMA supports communities as they decide how to *implement* these new tools to make more informed resilience decisions.



WHAT HAPPENS IN THE DISCOVERY PHASE?

The Discovery phase is Risk MAP's first phase. *It helps communities identify flood risk areas and other natural hazards, and it kick-starts conversations about addressing those risks.* An interdisciplinary team from FEMA Region 9's Mitigation Division — made up of a floodplain engineer, a risk analyst, a hazard mitigation planner, a hazard mitigation grants specialist, a floodplain management specialist and a community engagement specialist — works with local staff to plan and conduct the engagement process. More information about FEMA's resources and Programs can be found in **Appendix C**.

During the Discovery phase, the FEMA project team:

- Meets with and/or interviews local experts and community champions² to gather information such as local hazards and risks, history of past damages, development and program priorities and hazard management activities.
- Dives deeply into mitigation plans to understand the local mitigation capabilities, hazard risk assessments and mitigation activities. Communities use their Hazard Mitigation Plan (HMP) to express their top risks and identify a five-year mitigation strategy. HMPs are the baseline for FEMA to comprehend the community's risks, needs and priorities.
- Collaborates with local experts and government staff to determine potential hazard mapping, risk assessment, or mitigation planning assistance projects and to work toward a resilient future.

² Who is a "Community Champion"? Also referred to as "local experts" and "local decision-makers" throughout this report, community champions include floodplain managers, planning staff, city managers, public safety officials, and more – the consistent thread being deep involvement and hazard mitigation expertise. "Champions" help FEMA navigate the Discovery phase by sharing local understanding and their professional network.

DISCOVERY PROJECT AREA: THE NORTHERN MARIANAS AT A GLANCE

Each watershed is unique. Its people, natural environment, history and culture help make the area what it is today. Understanding the nature of a watershed lays the foundation for reducing risk. Documenting the CNMI's distinctive characteristics will provide key context for building resilience.

Effective planning to reduce risks begins with understanding the CNMI's people, economy and infrastructure. The following pages provide a snapshot of the territory, prepared through engagement during Discovery.

The snapshot includes information on the following topics:

- **COMMUNITY AND BACKGROUND IN FOCUS.** What is the project area? Who makes up the community?
- **LOCAL HAZARDS.** What risks are a priority to the CNMI?
- **MITIGATION IN ACTION.** How has the CNMI already increased its resilience? What has been done to reduce risk?



BIRD ISLAND, SAIPAN

COMMUNITY AND LOCAL BACKGROUND IN FOCUS

Located in the northwestern Pacific Ocean, the Commonwealth of the Northern Mariana Islands is made up of the Mariana Archipelago's 14 northernmost islands. About 54,000 people live across the CNMI's five inhabited islands. The 176.5-square-mile island chain has a tropical marine climate, with year-round warm weather, and wet and dry seasons. The archipelago's southern islands are primarily limestone surrounded by fringing coral reefs; the northern islands are considered volcanic, with active volcanoes on several islands.

Project Area

Developed areas in the Northern Mariana Islands are referred to as villages or communities and none are incorporated as cities. Each of the islands of Saipan, Tinian and Rota are separate municipalities. This Discovery project includes the inhabited islands of Rota, Saipan and Tinian, shown below.

MAP 1: The CNMI Project Area

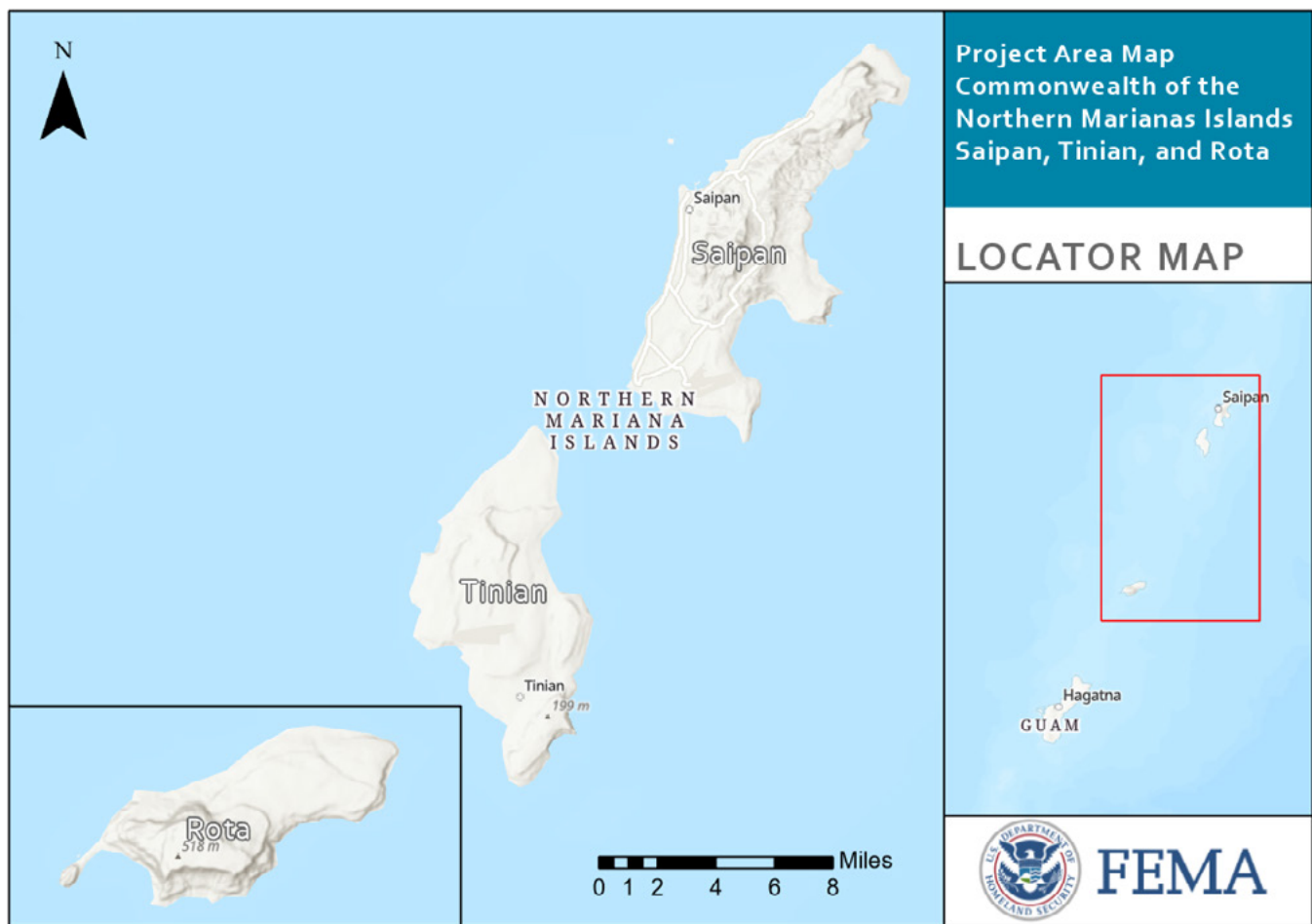


TABLE 1: CNMI Population and Demographic Statistics

<p>6% OF POPULATION 65+</p>	<p>TOTAL POPULATION (2018): 53,883 POPULATION GROWTH SINCE 2000: > -1.0%</p>	<p>82.9% SPEAK A LANGUAGE OTHER THAN ENGLISH, AGE 5 AND OLDER</p>	<p>36% HOUSING UNITS OWNER OCCUPIED</p>
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LOCAL HAZARDS: RISKS, PAST EVENTS AND HAZARD MITIGATION PLANNING

Hazard Mitigation Plans (HMP) are designed to be mitigation tools. They detail community backgrounds and identify and analyze natural hazards that affect the people and property of the community. The 2018 Commonwealth of the Northern Mariana Islands Standard State Mitigation Plan summarizes and prioritizes the hazards that affect the CNMI; information on previous impacts from natural hazards is detailed below.

HMP APPROVED
THROUGH
**AUG
2023**

Local Hazard Profile: Understanding Local Risks and Concerns

The CNMI included eight different natural hazards in their HMP, ranging in locations, impacts and future probabilities. The following figure details the most recent impacts of natural hazards, and a summary of each hazard type is provided.

FIGURE 1: CNMI Hazard Timeline - Past Events



Sources: FEMA's Disaster Declarations by state/tribal government database and CNMI Standard State Hazard Mitigation Plan

TABLE 2: CNMI Natural Hazard Summaries

HAZARD	PAST EVENTS
 DROUGHT	<p>The CNMI periodically experiences droughts following El Niño cycles. The 1997-1998 El Niño produced an extensive drought that resulted in widespread water rationing, only to be heightened by repeated tropical storms. Extended droughts can have an impact on agriculture, freshwater resources, fish stocks and coral reefs, sedimentation processes, and air quality.</p>
 EARTHQUAKE	<p>The epicenters of most earthquakes are on the Pacific Ocean floor and generally diminish before reaching the CNMI. Two major earthquake events affecting Saipan have occurred since 1800. In April 1990, an underwater earthquake reaching a 7.5 magnitude caused a small tsunami, which did not exceed 24 cm on Saipan.</p>
 FLOODING	<p>Flooding is considered a major concern for the islands; the CNMI is vulnerable to coastal and inland flooding, storm surge, and flash flooding. On Saipan, Kanat Tabla, the San Roque Village, areas around Tanapag, and the Chalan Kanoa-Lake Susupe area, among others, are prone to flooding. No perennial streams flow on Tinian and there is no record of streamflow or flood runoff.</p>
 TSUNAMI	<p>There is no recent record of tsunamis in the CNMI; potential tsunami activity is associated with seismic activity within the Pacific Ocean, particularly near Japan and Hawaii. Overall, risk remains low but low-lying coastal areas could be severely impacted by surge flooding and inundation.</p>
 TYPHOON	<p>Typhoons and tropical storms have been a common occurrence throughout the history of the CNMI, most frequently from August through December. Hazards resulting from Typhoon Pongsona, Chata'an, and other storms were related to high winds, heavy rain, and extreme storm surge. Storms have cause structural damage to buildings, utilities, roads, ports, and crops.</p>
 VOLCANIC ERUPTION	<p>Within the CNMI, the islands of Anatahan, Pagan, Alamagan, and Agrigan are considered the most active volcano areas. An eruption on Anatahan in 2003 caused a large plume of volcanic ash that rose to 40,000 feet. Most active volcanoes are on distant and remote islands, but normal wind patterns could pose a threat to island populations when ash falls. Overall, risk remains low.</p>
 WILDFIRE	<p>Brushfires are common during the dry season throughout the CNMI and can threaten populated areas and at-risk environments. The entire CNMI is considered susceptible to wildfires, especially during spells of drought and high winds. Between 2015 and 2017, 120 events were categorized as wildland/brush fires. Dryland grasses, weeds, and vines serve as natural fuel, but the primary cause of fires is incendiary acts.</p>
 CLIMATE CHANGE	<p>Based on the most recent climate models and projections, the CNMI (Saipan in particular) is expected to see climate change implications related to economy, infrastructure, and natural heritage. Climate variables such as temperature, precipitation, sea level, and ocean acidity, among others, are projected to change. The CNMI expects rising sea levels, in combination with extreme events, to have damaging and widespread effects.</p>

Sources: FEMA's Disaster Declarations by state/tribal government database and CNMI Standard State Hazard Mitigation Plan

MITIGATION IN ACTION: PROJECTS, PLANS AND INVESTMENTS DRIVING RESILIENCE

Mitigation Grants and Projects: Investing in Risk Reduction Strategies

Since 2010, most of the projects that have received FEMA mitigation grant funding have implemented storm mitigation for the Northern Marianas Housing Corporation, Hazard Mitigation Plan updates, flood control and drainage projects and infrastructure updates for key government buildings.³

Funded efforts on Tinian included shutter projects for the island's Aging Center and Youth Center, and a storm readiness project for the Tinian Health Center. Projects in Rota included shutter projects for critical facilities, structural hardening of the Health Center, and storm readiness for a Rota guesthouse. In Saipan, work focused on a storm readiness project for the Saipan Office on Aging and storm mitigation projects for the local community center, a memorial building, and a power generation system.

13
PRE-DISASTER
MITIGATION GRANTS

9
HAZARD MITIGATION
GRANT PROGRAM
GRANTS*

*SINCE 2010

Source: FEMA Region 9 Hazard Mitigation Assistance Grants Specialist

National Flood Insurance Program (NFIP): Protecting Investments and Building Resilience

9 FLOOD INSURANCE POLICIES IN FORCE	INITIAL FIRM DATE 5/15/1991 EFFECTIVE FIRM DATE 4/3/2006
0 PAID CLAIMS OUTSIDE OF THE EFFECTIVE FLOOD HIGH HAZARD AREA	

The CNMI became an NFIP participating community in 1993. According to the 2018 Guidance Manual for Smart, Safe Growth, which the Commonwealth of the Northern Mariana Islands prepared for FEMA, the NFIP currently has minimal coverage in the CNMI, due mainly to the limited number of mortgages. Expanding the NFIP on a voluntary basis may lead to greater coverage and premium discounts.

Source: FEMA Region 9 Floodplain Management Specialist

³ All mitigation grants are listed in Appendix C.

FINDINGS FROM THE DISCOVERY PHASE

The Discovery phase captures hazards and mitigation needs community experts shared in conversations during Pre-Discovery interviews and the Discovery mapping session. The findings were validated during Post-Discovery discussions.

Table 3 summarizes the priority disaster risks that the community faced at the time of Discovery and reflect the hard work and expertise of countless local experts. This summary captures all types of mitigation needs, from assessment to coordination to structural mitigation projects. FEMA can use the summary to identify ways to partner, and in particular, to employ the Risk MAP program to meet the CNMI’s needs. Local partners can use it to organize around key issues or begin planning for mitigation action. Following the table, on page 9, is a Discovery Meeting Map (**Map 2**), which points out the locations of natural hazards, key assets at risk or opportunities for mitigation action, that were discussed during the Discovery Meeting. A subset needs discussed for new flood hazard data and improved Flood Insurance Rate Maps are displayed in **Map 3. FIRM Mapping Needs**.

To summarize these needs, communities indicated that they were interested in reducing risk from flood, sea level rise, typhoons and storm events.

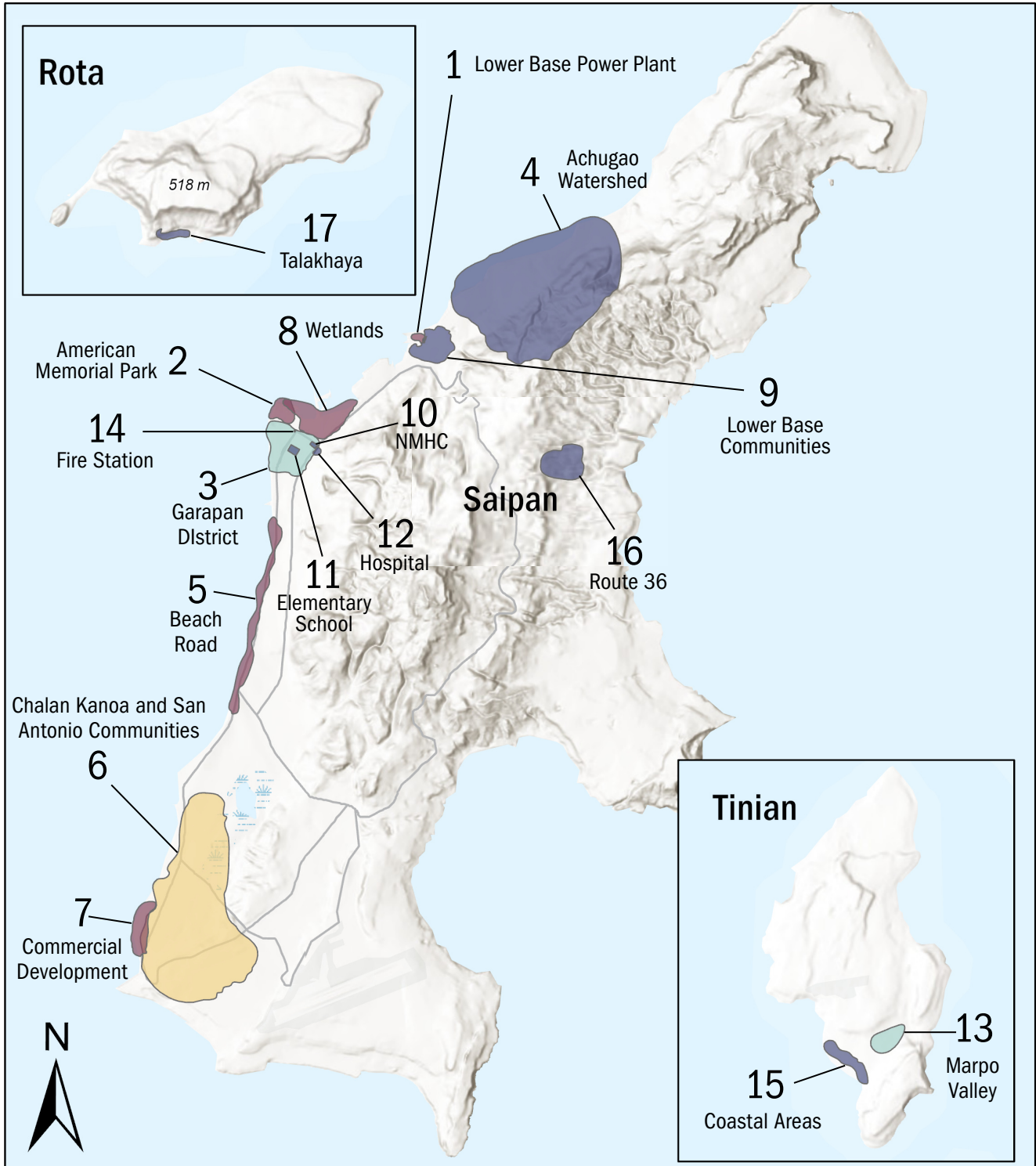
TABLE 3: Community Mitigation Needs – The Commonwealth of the Northern Mariana Islands

ISLAND	HAZARD	MITIGATION NEED
ALL ISLANDS	MULTI-HAZARDS	Train workforce for enforcement of 2018 International Building Code.
ALL ISLANDS	MULTI-HAZARDS	Gain access to technical assistance or training on FEMA programs, including Environmental and Historic Preservation and the NFIP.
ALL ISLANDS	MULTI-HAZARDS	Improve resources for disaster-resilient building, like an update to the Homeowner’s Guide or expanding on the CNMI Bureau of Environmental and Coastal Quality - Division of Coastal Resources Management’s Better Building guidebook on stormwater and typhoon risks.
ALL ISLANDS	MULTI-HAZARDS	Engage with multiple agencies and local governments to identify mitigation strategies and update the Standard State Hazard Mitigation Plan.
ALL ISLANDS	FLOOD	Increase flood insurance options and policies.
ALL ISLANDS	FLOOD	Improve coastal flood hazard data and modeling for all islands to understand risks to flooding and to develop new Flood Insurance Rate Maps for Saipan, Tinian and Rota.
ALL ISLANDS	FLOOD	Improve coastal flood hazard data and modeling that includes hazards presented by wave run-up and sea level rise to be used in planning, development and identifying flood mitigation actions.
ROTA	MULTI-HAZARDS	Identify mitigation strategies to be included in the Standard State Mitigation Plan.
SAIPAN	MULTI-HAZARDS	Improve living conditions and safe housing for vulnerable residents and residents still recovering from or displaced by Hurricane Yutu.



TABLE 3: Community Mitigation Needs – The Commonwealth of the Northern Mariana Islands (continued)

ISLAND	HAZARD	MITIGATION NEED
SAIPAN	COASTAL EROSION	Mitigate or adapt to erosion of Micro Beach. Coordinate across agencies to look at existing engineering studies or proposed nature-based solutions and determine next steps.
SAIPAN	FLOOD	Secure Lower Base Power Plant and access road from flooding.
SAIPAN	FLOOD	Ensure continued functionality of and access to Commonwealth Health Ceter during flood.
SAIPAN	FLOOD	Improve drainage of Garapan District.
SAIPAN	FLOOD	Protect/stabilize Beach Road from coastal flooding and sea level rise.
SAIPAN	FLOOD, STORM-WATER	Improve building inspection and practices to reduce flooding from runoff. Stormwater improvements for Garapan and Tinian industrial area.
SAIPAN	FLOOD, SEA LEVEL RISE	Protect coral reefs and protective functions, given consideration to expected sea level rise.
SAIPAN	TYPHOON	Remediate debris, derelict, or abandoned buildings that could act as projectiles and exacerbate damages from strong winds.
TINIAN	MULTI-HAZARDS	Identify mitigation strategies to be included in the SSMP.
TINIAN	FLOOD, STORM-WATER	Improve building inspection and practices to reduce flooding from runoff.



Discovery Map

Locations of issues discussed during the Commonwealth of the Northern Mariana Islands Discovery Engagement from April 2020 - December 2020, and primarily documented during the Discovery Meetings held in August 2020. Descriptions and backgrounds of these issues are included in Table 4: Discovery Comments.

Hazard





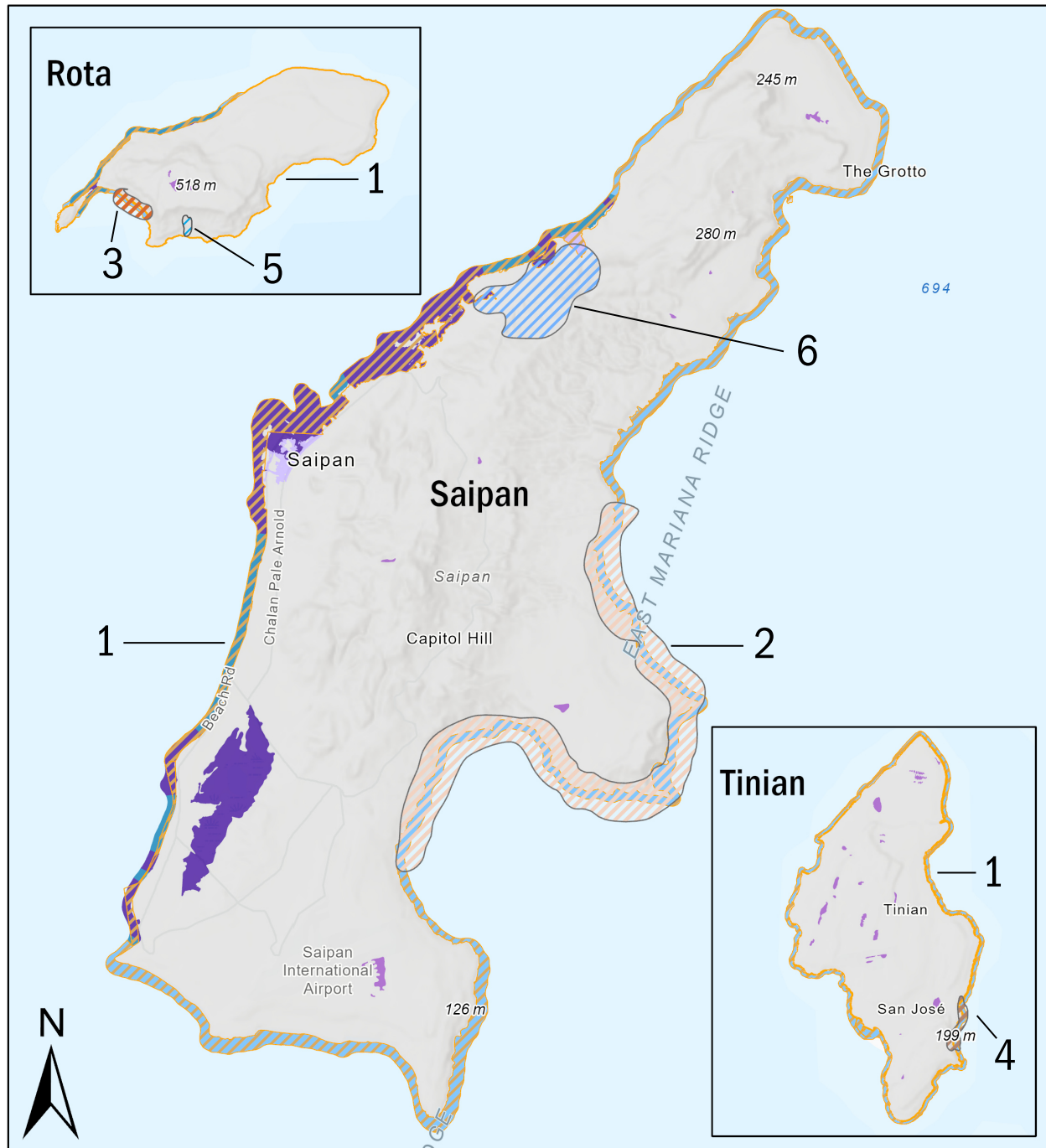
-  Coastal Erosion, Flood
-  Flood
-  Flood, Stormwater
-  Multi-hazard



TABLE 4: Discovery Comments







ID	ISSUE	ADDITIONAL COMMENTS
1	Lower Base Power Plant is critical infrastructure vulnerable to flood, typhoon and coastal erosion. Currently in AE zone, but has no record of flooding.	Looking into shoreline stabilization options; there is an unfunded past project application to design walls.
2	American Memorial Park flood risks are exacerbated by coastal erosion and runoff from the Upper Garapan.	There is an existing past study from USACE and exploring possibilities to use a wall or revetment to lessen impact. Nature-based solutions may reduce runoff and help with erosion control. FEMA funds available for Project Scoping might be applicable.
3	Garapan District is low-lying and subject to flooding, exacerbated by stormwater and urban runoff. This poses commercial and economic risk.	Stormwater study underway and plans to improve and maintain existing drainage system will help, but larger flood mitigation decisions are likely needed.
4	Achugao Watershed streams and stormwater cause flooding of homes, business and roads in the village of San Roque. Sediment plumes from stream and stormwater flooding is also problematic.	This stream is not represented on FEMA maps.
5	Beach Road is at risk to coastal erosion and flooding. Storm surge during typhoons can also cause damage to infrastructure in this area.	National Fish and Wildlife Foundation (NFWF) project for Beach Road stabilization in master planning. This approach may overlap well with ongoing efforts in Comprehensive Sustainable Planning and other nature-based solutions work. There is also past work installing underground conduits to reduce flooding or seeping.
6	Chalan Kanoa and San Antonio residents were most impacted by Super Typhoon Yutu. Residents are vulnerable to future disasters.	This area experiences higher poverty rates and some residents still live in tents and other substandard housing.
7	Commercial development in this area is at risk to coastal erosion and sea level rise.	
8	Wetlands here are critical flood protection for the park and neighboring communities and need to be preserved.	NFWF grant recently awarded to remove invasives and set up native plant nurseries.
9	Lower Base residents and transportation routes are vulnerable to flooding and stormwater impacts.	
10	Northern Marian Housing Corps is within an AE zone.	There are no records of inundation except in the parking area.
11	Elementary School in a floodplain.	This school may not be suitable as an evacuation center in high intensity rainfall events.
12	Hospital is located in a low-lying area and is partially within the FEMA designated floodplain.	Need to ensure continued functionality and access to hospital in case of flood event.
13	Marpo Valley is low-lying and subject to flooding in extreme rainfall events. Tinian's main source of water is at risk and roads are vulnerable to erosion.	Yutu and Hagabis both caused flooding, which lead to roads collapsing and well pump stations losing functionality.
14	Fire station located in high flood hazard area.	
15	Developed areas at risk to storm surge in Tinian.	Flood conditions exacerbated by poor stormwater drainage. Shoreline and stormwater-caused erosion is also a concern.
16	Route 36 experiences flooding, which is a concern for ingress/egress and long-term viability of this infrastructure.	This stream is not represented on FEMA maps.
17	Road flooding is Talakhaya is concern for residents, in particular ingress and egress in case of disaster, and long-term viability of the infrastructure.	The road could be improved given intermittent stream flooding events. This stream is not represented on FEMA maps.











Discovery Map - FIRM Mapping Needs

FIRM issues discussed during the Commonwealth of the Northern Mariana Islands Discovery Engagement from April 2020 - December 2020.

-  1. Outdated study and new topographic data available
-  2. Misaligned flood zone and shoreline
-  3. Misaligned flood zone and shoreline
-  4. Misaligned flood zone and shoreline
-  5. Unnamed/unstudied streams known to flood developed area
-  6. Unnamed/unstudied streams known to flood developed area

Current Special Flood Hazard Areas

- Flood Zone
-  A
 -  AE
 -  AO
 -  V
 -  VE
 -  AREA NOT INCLUDED
 -  X



WHAT LIES AHEAD

FEMA will continue to work with you and your local and federal partners to build resilience. It is our hope that this report captures the first phase of a multi-year engagement effort, and that future collaborations continue to build on this strong initial effort. Now, we begin to define the data development, analyses and technical assistance projects tailored to your communities and get to work!

If the data and research collected during Discovery support the need for a flood map update and regulatory products, a formal process will be initiated, incorporating steps and touchpoints that allow for collaboration and formal review periods before the delivery of final products. In addition to regulatory flood products, FEMA can support and provide multi-hazard risk products to address other hazard concerns. Throughout the Risk MAP process, FEMA and its partners can direct communities to data, tools and funding opportunities to support local mitigation efforts and risk reduction projects.

The timeline illustrated on the following page (**Figure 2: Your Risk MAP Timeline**) shows the steps for both the flood map update and regulatory products and the non-regulatory, multi-hazard products. While these timelines may occur on different scales, they follow a similar process, as illustrated below.

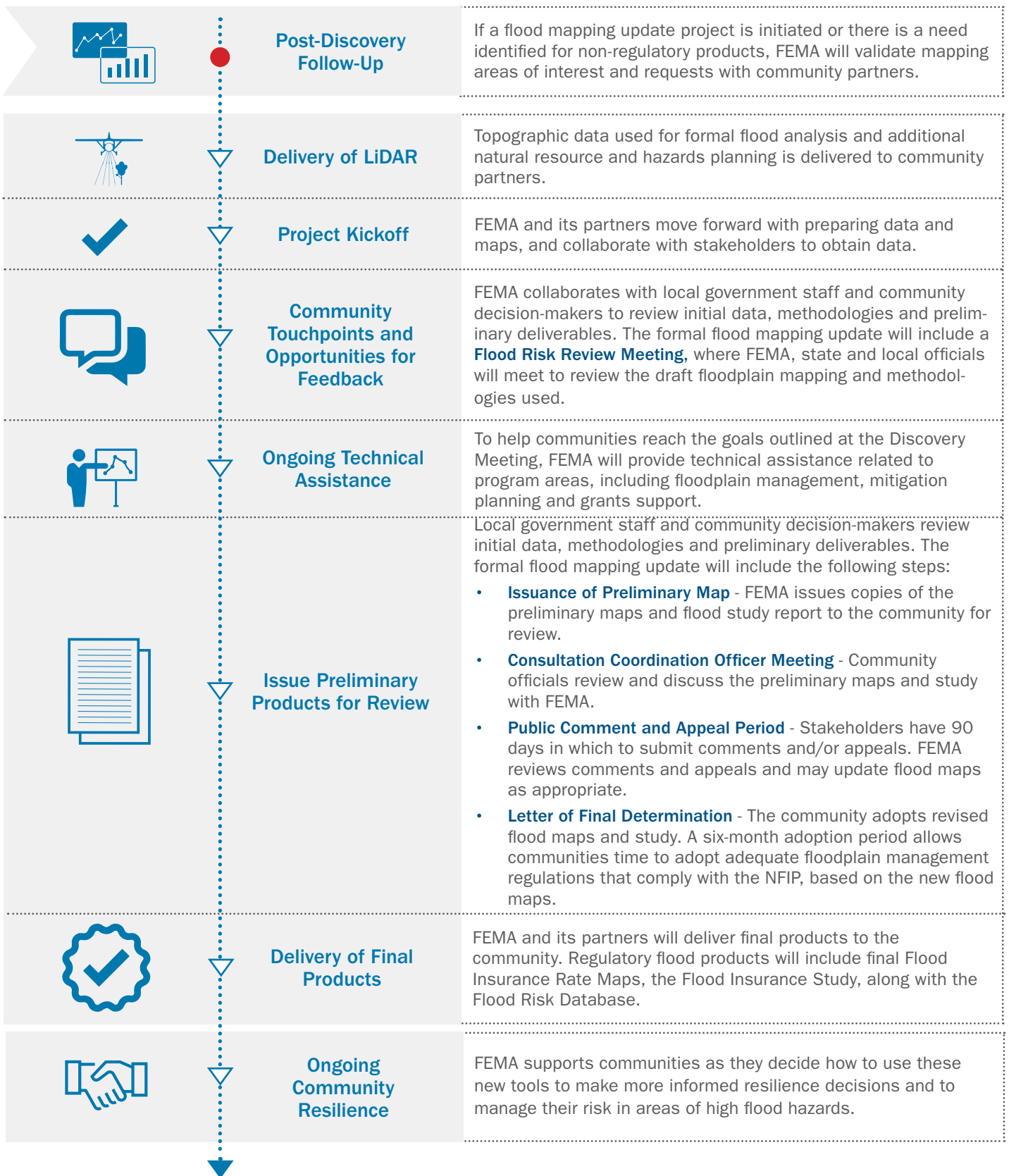


WHAT'S NEXT?

While the FEMA project team is unable to address all needs identified during the Discovery phase, we hope this process enables local practitioners and partners to begin a successful journey of making communities throughout the Commonwealth of the Northern Mariana Islands more resilient to disasters and climate change for years to come.

We look forward to returning to the CNMI and its communities in the next phase of the Risk MAP process. There we will continue to refine the path to resilience, develop data and decision-making tools to inform projects, and begin to implement various projects and plans. Until then, the FEMA project team will continue working with local and federal partners to fund and execute projects to address current and new mitigation needs.

FIGURE 2: Your Flood Risk Mapping Timeline



APPENDIX A: PROJECT TEAM AND STAKEHOLDER LIST

A.1 PROJECT TEAM INFORMATION

FEMA Region 9 Project Team and Support Staff

- Colby Stanton, Director of Readiness, Pacific Area Office
- Eric Simmons, Floodplain Engineer
- Jeanne Johnston, Hazard Mitigation Grants Specialist
- Jennifer Monroe, Risk Analyst
- JoAnn Scordino, Mitigation Community Planner
- Kate Kilduff, Risk Analyst
- Michael Hornick, Floodplain Management Specialist
- Phillip Wang, Hazard Mitigation Assistance Grants Specialist
- Serena Cheung, Floodplain Management Specialist
- Chelsea Kahn, Communications Support (Support Staff)
- Shoshana Cohen, Communications Support (Support Staff)
- Toby Davine, Communications Support (Support Staff)

A.2 STAKEHOLDER INFORMATION

CNMI

- Arthur Charfauros, CNMI Division of Coastal Resources Management, Bureau of Environmental and Coastal Quality (BECQ)
- Benjie Pangelinan, CNMI Office of Management and Budget, Hazard Mitigation Team
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- Elizabeth Balajadia, CNMI Capital Improvement Program, Hazard Mitigation
- Erin Derrington, CNMI Office of Planning and Development
- Fred Camacho, Northern Marianas Housing Corporation
- Ignacio Kiyoshi, Office of the Mayor of Tinian
- Janice Castro, CNMI Division of Coastal Resources Management, BECQ
- Jeff Deleon Guerrero, Northern Marianas Housing Corporation
- Kimo Rosario, Northern Marianas Housing Corporation
- Kodep Ogumoro-Uludong, CNMI Office of Planning and Development
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- Manuel Camacho, CNMI Office of Planning and Development
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- Mel Sablan, Northern Marianas Housing Corporation

CNMI (continued)

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- Roberta Guerrero, Mariana Islands Nature Alliance
- Rodney Camacho, CNMI Division of Coastal Resources Management, BECQ
- Sam Sablan, CNMI Division of Coastal Resources Management, BECQ
- Tiana Reyes, CNMI Office of Management and Budget, Hazard Mitigation Team
- Virginia Villagomez, Office of the Governor, Governor's Authorized Representative

Federal Partners

- Albert Williams, U.S. Army Corps of Engineers
- Benjamin Johanson, FEMA, CNMI Long Term Recovery Office, Saipan
- Kip Meeboer, FEMA, CNMI Long Term Recovery Office, Saipan
- Robbie Green, NOAA Office for Coastal Management

APPENDIX B: DISCOVERY METHODOLOGY

B.1 A COMMUNITY-FIRST APPROACH

The **Discovery Phase** for the Commonwealth of the Northern Mariana Islands, which occurred from March to December 2020, was a three-stage process: Pre-Discovery, the Discovery Meetings and Post-Discovery.

Pre-Discovery laid the foundation for understanding community mitigation needs. FEMA interviewed community champions to understand their unique on-the-ground knowledge and experience, and to more holistically understand the local history, economy, hazards, agencies' roles and opportunities. The process led to customized materials prepared for the Discovery Meetings – uniquely tailored to each community.

At the virtual **Discovery Meetings** in August 2020, a broad group of local stakeholders shared more insights into local hazards and needs and marked up custom work maps so local insights could be documented and recorded in FEMA's project planning systems.

During **Post-Discovery**, the FEMA project team took everything heard at the Discovery Meetings and brought it back to the Region 9 office, where it was synthesized to see how FEMA can best support communities based on community feedback. The FEMA project team assessed what could be offered to address each natural hazard. Following this review, the FEMA project team connected with key community members again, this time to validate and prioritize responses heard at the Discovery Meetings and to ask about their vision for the future.

Moving forward, FEMA plans to use this enhanced understanding of community risks and needs to work with the CNMI to implement hazard mitigation projects and address their top hazards.



B.2 PRE-DISCOVERY STAGE: INITIAL OUTREACH AND ASSESSMENT

Local experts are the backbone of community resilience. To better understand each community's history, economy, natural hazards and needs, the FEMA project team met with key local experts. Based on these interviews, the FEMA project team was able to better prepare for the Discovery Meeting and to integrate this input into the discussion. The following is a summary of Pre-Discovery conversations.

The Commonwealth of the Northern Mariana Islands Hazards: Pre-Discovery Assessment Summary



CNMI program staff are interested in technical assistance or training on FEMA programs, including Environmental and Historic Preservation and the NFIP.



There is a desire to insure structures in the SFHA, to help reduce the financial risks of flood damage. New development and resulting terrain changes warrant a flood study to re-delineate flood zone boundaries and reestablish base flood elevations (BFEs); there are non-SFHA areas that experience flooding that may need to be studied.



The CNMI endured three typhoons between 2015 and 2018, and tin-roofed, wooden-walled, weakly anchored structures were especially hard hit. This, and other factors, prompted the government to adopt the 2018 International Building Codes codes by end of 2020 to mitigate the risk of future damage.



There is a need for new FIRMs based on projected future conditions and/or 100-year sea level extremes based on Saipan Tide Gauge to better manage coastal hazard risks.



Of the three largest inhabited islands, Saipan is at more risk and higher priority for regulating development due to its higher population and widespread development.



There is a need for greater interagency coordination and communication, particularly during disaster recovery.



The CNMI has a reduced coastal protection capacity due to rapidly declining coral reef cover. Given the increasing frequency and severity of tropical storms in the area, the degradation of this natural barrier leaves the islands more vulnerable.



The FEMA project team works with local experts during Pre-Discovery to plan the meeting, address logistical issues, and ensure that experts from each community can attend.

B.3 DISCOVERY MEETINGS: HERE TO LISTEN AND LEARN

FEMA introduced the Risk MAP program to the CNMI for the first time at the virtual Discovery Meetings on August 19 and 20, 2020. This planted the seed for virtual opportunities to collaborate on solutions ranging from funding to updated maps and hazard data to new partnerships.

Meeting participants joined a facilitated group discussion, where they referenced an online map to pinpoint areas with hazards. Following guiding questions, the FEMA facilitator collaborated with community experts in the work map session to produce notes and a map that were later geocoded with comments. During the discussion, attendees were asked about all hazards that affect the islands and about the CNMI's residents, including vulnerable populations.

Discovery Meeting Summary

During the CNMI Discovery Meetings, held in early August 2020, meeting attendees heard about the Risk MAP program and were introduced to FEMA's multidisciplinary team. Attendees from the CNMI were asked to provide information on areas of local concern, past risk assessment and mitigation projects and future analysis and mitigation needs. All Discovery findings discussed below can also be found in **Table 3: Community Mitigation Needs**.

During these initial discussions, attendees shared concerns about flooding throughout the CNMI. Many at the meeting requested updated Flood Insurance Rate Maps (FIRMs) for the CNMI, as well as other flood hazard information, like depth and velocity information for differing flood scenarios. New FIRMs would support upcoming Smart Safe Growth planning and guide coastal development, public access management and permitting for the Coastal Management Program. Natural flooding sources of interest included coastal areas; while some drainage issues were noted, no rivers and stream reaches were considered sources of flooding.

Throughout the discussion, many locations and critical infrastructure were cited as areas of concern, including the transportation routes like Beach Road, the floodprone areas around Garapan, Chalan Kanoa, San Antonio and the Lower Base Power Plant in Saipan, and low-lying areas throughout Marco Valley in Tinian, among other coastal development.

Attendees emphasized the need to consider future conditions, including rising sea levels, to adequately plan to protect people, residences, infrastructure and natural resources in the CNMI.

Other top hazards that are concerns for the CNMI's public include typhoon and erosion and the threats to wastewater, power systems and transportation, particularly in areas of reduced redundancy and in areas with less resilient housing and many blighted/damaged buildings. Attendees expressed interest in multi-agency discussions and collaboration at the local level to reduce risks in these areas, as well as a better understanding of whether FEMA resources could be applied as part of the solution.

Attendees also expressed interest in FEMA grants and National Flood Insurance Program trainings and shared background on past and ongoing efforts to apply for FEMA funding, along with relevant partnerships with the U.S. Army Corps of Engineers, NOAA and the National Fish and Wildlife Foundation.

Meeting Objectives

Objective 1: Build relationships and engage with key stakeholders.

Objective 2: Identify community risks and share local best practices and lessons learned.

Objective 3: Share FEMA's suite of tools and resources and identify the path for collaborating on risk reduction and resilience actions.

B.4 POST-DISCOVERY: VALIDATING COMMUNITY NEEDS

During the Post-Discovery stage, findings from the Discovery Meeting were validated during conversations and through correspondence with community partners. The FEMA project team also developed and disseminated the draft Discovery Report and provided opportunity for community comments and feedback. Suggested edits were integrated into the draft prior to being finalized.

As part of the next steps, the FEMA project team will evaluate which resources are available and can be aligned with the mitigation needs identified during the Discovery process. The FEMA project team will propose a path forward to community partners and will work with these partners to plan and manage future collaboration.

APPENDIX C: FEMA HAZARD MITIGATION RESOURCES

The following information is intended to support resource sharing between local communities and federal agencies. As one of the outcomes of Risk MAP, communities will have updated flood risk information that can inform other efforts, such as reducing the impact of flooding to structures, lowering flood insurance premiums, planning to mitigate risk and reduce losses, understanding flood hazard data, providing training to support staff, seeking grants for hazard mitigation projects and learning more about the information used in this report. These resources were gathered in response to requests from communities during the Discovery process.

C.1 REDUCING YOUR COMMUNITY'S FLOOD INSURANCE PREMIUMS

The National Flood Insurance Program (NFIP) aims to reduce the impact of flooding on private and public structures by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socioeconomic impact of disasters by promoting the purchase and retention of general risk insurance, but also of flood insurance specifically. The information below can help address questions community staff and residents may have about flood insurance.

FEMA's FloodSmart website contains publicly available resources that can help communities better prepare themselves for flood risk. It includes information on:

- How to buy or renew flood insurance.
- Why you need flood insurance.
- How to understand your risk.
- How to reduce your cost.
- How to file a claim.

Visit FEMA's FloodSmart website to learn more about the NFIP at www.FloodSmart.gov. For additional questions, contact your regional Floodplain Management Specialists, Serena Cheung, at Serena.Cheung@fema.dhs.gov, and Michael Hornick, at Michael.Hornick@fema.dhs.gov.

C.2 LOWERING YOUR COMMUNITY'S FLOOD INSURANCE PREMIUMS

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Flood insurance premium rates are discounted to reflect the reduced flood risk resulting from community actions that meet the three goals of the CRS:

1. Reduce flood damage to insurable property;
2. Strengthen and support the insurance aspects of the NFIP; and
3. Encourage a comprehensive approach to floodplain management.

Through the CRS program, participating communities can find success:

- Using stronger regulatory standards.
- Obtaining a heightened awareness and outreach towards flood risk.
- Gaining credibility, recognition and political support.
- Protecting the environment, increasing quality of life and supporting resilience.
- Avoiding flood damage and reducing vulnerability.
- Improving capability and organizing internal programs and operations.
- Broadening flood insurance coverage and achieving more accurate ratings.
- Forging partnerships with federal and other local agencies, businesses, non-profits and elected officials.

While the CNMI does not currently participate in the CRS program, some officials have expressed interest in joining.

For more information about ways to reduce insurance premiums and increase your community's resilience through the CRS program, visit <https://www.fema.gov/national-flood-insurance-program-community-rating-system>. For additional questions, contact your regional Floodplain Management Specialists, Serena Cheung, at Serena.Cheung@fema.dhs.gov, and Michael Hornick, at Michael.Hornick@fema.dhs.gov.

C.3 MITIGATION PLANNING TO REDUCE LOSS OF LIFE AND PROPERTY

Disasters can cause loss of life, damage buildings and infrastructure, and have consequences for a community's economic, social and environmental well-being. Hazard mitigation is the effort to reduce loss of life and property and is most effective when implemented under a comprehensive, long-term plan. Through the Hazard Mitigation Plan process, communities identify risks and vulnerabilities associated with natural disasters, and develop long-term strategies for protecting people and property from future hazard events. Benefits of mitigation planning include:

- Protecting public safety and preventing loss of life and injury.
- Reducing harm to existing and future development.
- Maintaining community continuity and strengthening the social connections that are essential for recovery.
- Preventing damage to a community's unique economic, cultural and environmental assets.
- Minimizing operational downtime and accelerating recovery of governments and businesses after disasters.
- Reducing the costs of disaster response and recovery and the exposure of risk for first responders.
- Helping accomplish other community objectives, such as capital improvements, infrastructure protection, open space preservation and economic resiliency.

The **Community Mitigation Needs table (Table 3)** in this report describes mitigation actions identified by communities during the Discovery effort. This information can be integrated into local hazard mitigation planning efforts and included, if not already present, in the Hazard Mitigation Plan.

FEMA provides more information about hazard mitigation planning, mitigation planning requirements, Hazard Mitigation Plan status, the planning process and mitigation strategy development resources, and contact information to obtain additional guidance and training online at https://www.fema.gov/sites/default/files/2020-06/fema-mitigation-ideas_02-13-2013.pdf.

For the most recent CNMI State Hazard Mitigation Plan, visit <https://opd.gov.mp/library/plans/2018-standard-state-mitigation-plan/>. For more information, contact the Office of Planning and Development at <https://opd.gov.mp/about-us/>.

For additional questions, contact your regional Mitigation Community Planner, JoAnn Scordino, at JoAnn.Scordino@fema.dhs.gov or the Community Planner's general email at fema-R9-mitigation-planning@fema.dhs.gov.

C.4 UNDERSTANDING FLOOD HAZARD DATA

The Flood Insurance Rate Map (FIRM) and geospatial files for your area are available for download at FEMA's Flood Map Service Center at <https://msc.fema.gov/portal/home>. FEMA FIRMs display the modeled extent of flooding for the 1%-annual-chance flood, the flood scenario commonly known as the "100-year flood." While each year this high-risk area has a 1% chance of flooding if conditions remain the same over time, there is also a 26% statistical probability that the "100-year flood" will occur over a 30-year period.

To maintain the validity of flood hazard data over time, FEMA assesses its inventory of FIRMs and flood risk

studies and determines whether conditions on the ground are still adequately represented on the FIRM panels for that area. When the information on the FIRM does not adequately represent actual conditions, it is considered a “flood hazard mapping need,” and a new or updated FEMA flood hazard study for the area may be warranted.

FEMA uses GIS technology and develops policies, requirements and procedures to coordinate the management of flood hazard mapping needs in the Coordinated Needs Management Strategy (CNMS). Through the CNMS, FEMA identifies and tracks the lifecycle of community mapping.

The CNMS can help community officials understand the validity of their existing data to make informed decisions on community planning and flood mitigation. Additionally, the community official can submit a request for FEMA to evaluate the existing flood hazard data in an area through the CNMS if they think a FIRM needs updating. Access the CNMS Data Viewer via <https://msc.fema.gov/cnms/>.

For more information, visit www.fema.gov/flood-maps/tools-resources/risk-map/coordinated-needs-management-strategy or contact your regional Floodplain Engineer, Eric Simmons, at Eric.Simmons@fema.dhs.gov with questions.

C.5 EXPLORING MAPPING AND RISK ANALYSIS PRODUCTS

In addition to the regulatory flood products such as the FIRM, FEMA has broadened its delivery of flood hazard data to include a number of non-regulatory datasets. These non-regulatory resources that supplement the flood hazard information include flood risk maps, flood risk reports and flood risk databases (FRD). They are also available for download on the Map Service Center.

Flood depth grids, which are part of these FRD, can help a community better understand, communicate and assess the variability and severity of flooding at any given location of the study area. The flood depth grids may be produced for a range of flood events and often include flood depths and flood extents for the 10-, 25-, 50-, 100- and 500-year flood. These scenarios can be useful for evaluating impacts and alternatives for flood mitigation, investment, or development. Additionally, flood depth grids can be directly imported into Hazus, a free software that FEMA has developed to allow communities to assess the potential economic and lifeline impacts of disaster events. For more information, visit: <https://www.fema.gov/flood-maps/products-tools> and <https://www.fema.gov/flood-maps/tools-resources/flood-map-products/hazus>.

For additional questions, contact you regional Risk Analyst, Kate Kilduff, at Katherine.Kilduff@fema.dhs.gov.

C.6 TRAINING TO SUPPORT LOCAL MITIGATION EFFORTS

Various federal and local agencies provide training for flood mitigation efforts and hazard mitigation planning. Throughout Discovery, many communities expressed interest in training for staff. The resources below can support those needs.

TRAINING SOURCE	PURPOSE
FEMA	<p>Emergency Management Institute (EMI) The EMI develops and delivers emergency management training to enhance the capabilities of state, local, tribal and territorial government officials to minimize the impact of disasters and emergencies on the public. Particular emphasis is placed on governing doctrine such as the National Response Framework, National Incident Management System, and National Preparedness Guidelines. For more information, visit https://training.fema.gov/</p> <p><i>Highlighted training opportunities:</i></p> <ul style="list-style-type: none"> • Mitigation eGrants for the Subgrant Applicant (IS0030.b) • Mitigation Planning for Local and Tribal Communities (IS0318) • Mitigation Basics for Mitigation Staff (training per hazard type: Tornado-IS0319, Wildfire-IS0320, Hurricane-IS0321, Flood-IS0322, Earthquake-IS0323) • Hazus: Step-by-step self-guided learning and help desk contacts. EMI offers a range of in-person Hazus courses.

TRAINING SOURCE	PURPOSE
ASFPM	<p>Association of State Floodplain Managers (ASFPM) Training The ASFPM provides training, both in-person and online, to support local floodplain management and floodplain managers. For more information, visit https://floods.org/training-education/online-training/asfpm-webinars/ <i>Related resource:</i></p> <ul style="list-style-type: none"> FEMA has developed the National Flood Insurance Program Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials (FEMA 480) to support floodplain managers obtaining their Certified Floodplain Manager (CFM) designation and to assist when implementing local floodplain management ordinances. <p>For more information, visit https://www.fema.gov/media-library-data/1481032638839-48ec3cc10cf62a791ab44ecc0d49006e/FEMA_480_Complete_reduced_v7.pdf</p>

C.7 SEEKING GRANTS AND SUPPORT FOR HAZARD MITIGATION PROJECTS

Various federal and local agencies provide grant funding for mitigation projects, though some have prerequisites, such as receiving a Presidential Major Disaster Declaration or having an active Hazard Mitigation Plan. This list is not intended to be exhaustive and links provided below should be consulted for up-to-date information.

GRANT SOURCE	PURPOSE
FEMA	<p>Hazard Mitigation Assistance Grants FEMA's hazard mitigation assistance provides funding for eligible mitigation measures that reduce disaster losses. It also:</p> <ul style="list-style-type: none"> Reduces vulnerability of communities to disasters and their effects. Promotes individual and community safety and their ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies (resilience). Promotes community vitality after a disaster. Lessens response and recovery resource requirements after a disaster. Results in safer communities that are less reliant on external financial assistance. <p>For more information, visit: https://www.fema.gov/grants/mitigation</p>
FEMA	<p>Hazard Mitigation Grant Program A statewide competitive grant available after a Presidential Major Disaster Declaration for post-disaster All-Hazard Mitigation Plans and projects. These are generally due to the state 12 months after a declaration. For more information, visit: https://www.fema.gov/grants/mitigation/hazard-mitigation</p>
FEMA	<p>Building Resilient Infrastructure and Communities (BRIC) Grant Program A new pre-disaster hazard mitigation program available to all states, local communities, tribes and territories as they undertake hazard mitigation projects. Applications are due to the state/territory about three months after a federal announcement, which typically occurs in the spring. For more information, visit www.fema.gov/bric</p>

GRANT SOURCE	PURPOSE
FEMA	<p>Flood Mitigation Assistance Grant Program</p> <p>A nationally competitive grant available annually for pre-disaster flood hazard funding of plans and projects to reduce flood damage risk to structures with flood insurance coverage. Applications are generally due to the state/territory approximately three months after a federal announcement, which typically occurs in the spring.</p> <p>For more information, visit https://www.fema.gov/grants/mitigation/floods</p>
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)	<p>Various Grant Programs</p> <p>HUD has offered various categories of grant support in the past. The Capacity Building for Community Development and Affordable Housing and Lead-Based Paint Hazard Reduction program are two recent funding opportunities with potential relevance in supporting hazard mitigation.</p> <p>For more information, visit https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo</p>
HUD	<p>Community Development Block Grant (CDBG)</p> <p>HUD provides flexible grants to help cities, counties, territories and states recover from events that have prompted Presidential Major Disaster Declarations. The grants are subject to the availability of supplemental appropriations. Projects must address a disaster-related impact, direct or indirect, in a Presidentially declared county for the covered disaster, be a CDBG eligible activity, and meet a CDBG national objective.</p> <p>For more information, visit https://www.hudexchange.info/programs/cdbg-dr/</p>
U.S. ARMY CORPS OF ENGINEERS	<p>Various Grant Programs</p> <p>Some recent grants from USACE have assisted in management and enhancement of natural resources, research on a variety of environmental topics, environmental issues, nearshore data collection and education and training on environmental maintenance and management.</p> <p>For more information, visit https://www.iwr.usace.army.mil/Missions/Flood-Risk-Management/</p>
U.S. DEPARTMENT OF AGRICULTURE – NATIONAL RESOURCE CONSERVATION SERVICE	<p>Various Grant Programs</p> <p>The National Resource Conservation Service conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat and reduce damage caused by floods and other natural disasters. Some programs, like the Emergency Watershed Protection Program, may only be provided following a natural disaster.</p> <p>For more information, visit https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/</p>
U.S. GEOLOGICAL SURVEY (USGS)	<p>Water Resources National Competitive Grants</p> <p>The USGS, in cooperation with the National Institutes for Water Resources, supports an annual call for proposals to focus on water problems and issues that are of a regional or interstate nature or that relate to a specific program priority identified by the Secretary of the Interior and the Institutes. Projects covered by this program have included evaluation of approaches to water treatment, infrastructure design, retrofitting, maintenance, management and replacement; alternative approaches and governance mechanisms for integrated management of ground and surface waters; and the evaluation and assessment of conservation practices.</p> <p>For more information, visit https://water.usgs.gov/wrri/national-competitive-grants.php</p>

For FEMA grants, use the following resources to apply:

- **How do I apply?** For fiscal year 2021, applications and subapplications to BRIC and FMA must be submitted through the [FEMA GO web portal](#).
- **Where do I go for additional help?** General questions about the BRIC and FMA grant programs can be directed to the appropriate [State Hazard Mitigation Officer \(SHMO\)](#), or you can contact your FEMA Regional Office. The resources below can be used when additional assistance is needed.
 - **FEMA GO Help Desk** - For technical questions, such as error messages or forgotten password, contact femago@fema.dhs.gov, 1-877-611-4700.
 - **HMA Helpline** - For programmatic questions about HMA grant programs, such as eligibility, call 1-866-222-3580.
 - **BCA Helpline** - For assistance using FEMA's Benefit Cost Analysis tool, contact BCHelpline@fema.dhs.gov, 1-855-540-6744.
 - **Feasibility and Effectiveness Helpline** - For assistance, contact FEMA-BuildingScienceHelp@fema.dhs.gov.
 - **Environmental and Historic Preservation Helpline** - To assist applicants and sub-applicants with questions about grant applications and requirements for environmental and historic preservation compliance, contact EHPHelpline@fema.dhs.gov, 1-866-222-3580.

The following is a list of mitigation grants that the CNMI has received since 2010 (as of April 2020).

YEAR	SUB-APPLICANT	SUB-APPLICATION TITLE	SUB-APPLICATION #	ACTIVITY TYPE
2005	CNMI Emergency Management Office	Supply & Installation of Typhoon Shutters at the Tinian International Airport	PDMC-PJ-09-MP-2005-001	PDM
2005	CNMI Emergency Management Office	CNMI Enhanced State Mitigation Plan	PDMC-PL-09-MP-2005-002	PDM
2006	Tinian, Department of Public Safety	Tinian Fire Station Roll Up Doors/Exhaust Vents project	1611-0001	HMGP
2006	CNMI, Office of Homeland Security	CNMI-Office of Homeland Security Shutters project	1611-0002	HMGP
2006	Office of the Public Auditor	Retrofit Office of Public Auditor	1611-0004	HMGP
2006	Division of Customs Services	Office of Custom's Services Shutters project	1611-0005	HMGP
2006	Capital Improvement Program Office	CIP-Harden Generator Shelter	1611-0006	HMGP
2008	CNMI Water Taskforce/ Commonwealth Utilities Corporation	CNMI Water Taskforce: Hardening of Water Well Control Panels	PDMC-PJ-09-MP-2008-007	PDM
2010	Northern Marianas Housing Corporation	NMHC Storm Mitigation Project	LPDM-PJ-09-MP-2010-001	LPDM
2010	Office of the Governor	Rota Guesthouse Storm Readiness Project	LPDM-PJ-09-MP-2010-002	LPDM

YEAR	SUB-APPLICANT	SUB-APPLICATION TITLE	SUB-APPLICATION #	ACTIVITY TYPE
2010	Office of the Governor	Saipan Office on Aging Storm Readiness Project	LPDM-PJ-09-MP-2010-003	LPDM
2014	CNMI OMB	CNMI HSEM Hazard Mitigation Plan Update	PDMC-PL-09-MP-2014-001	PDM
2015	Rota (Municipality)	Rota Office on Aging Storm Shutter Project	4235-0001	HMGP
2015	Dept. of Public Safety	Rota Department of Public Safety Storm Shutter Project	4235-0002	HMGP
2015	CNMI Dept. of Public Works	Kannat Tabla Flood Control and Drainage Project - Phase 1 & 2	4235-0003	HMGP
2015	Capitol Hill	Kagman Community Center Storm Mitigation Project	4235-0005	HMGP
2015	Rota (Municipality)	Rota Mayor's Office - Storm Readiness Project	4235-0006	HMGP
2015	Capitol Hill	Honorable Juan A. Sablan Memorial Building Storm Protection Shutter Project	4235-0007	HMGP
2015	Saipan Municipality, Dept. of Public Safety	CNMI Department of Public Safety Power Generation System	4235-0008	HMGP
2015	Commonwealth Utilities Corporation	Water System Mitigation Project-Generators, Commonwealth Utilities Corp.	4235-0009	HMGP
2016	CNMI - Municipality of Rota	Rota Courthouse - Storm Shutter Project	PDMC-PJ-09-MP-2016-002	PDM
2017	CNMI - Department of Public Safety	Department of Public Safety Storm Shutter Project	PDMC-PJ-09-MP-2017-001	PDM
2017	Commonwealth Healthcare Corporation	Rota Health Center Building Structural Exterior Hardening- Windows and Doors	PDMC-PJ-09-MP-2017-002	PDM
2017	CNMI - Department of Labor	CNMI Department of Labor Storm Shutter Protection Project	PDMC-PJ-09-MP-2017-003	PDM
2017	Office of the Governor - CNMI	Pedro P. Tenorio Multi-Purpose Center Storm Readiness Project	PDMC-PJ-09-MP-2017-004	PDM
2017	Commonwealth Healthcare Corporation	Tinian Health Center Storm Readiness Project	PDMC-PJ-09-MP-2017-005	PDM
2017	Tinian Dept. of Community and Cultural Affairs	Aging Center (Man Amko) Storm Shutter Project	PDMC-PJ-09-MP-2017-006	PDM

Mitigation grants continued.

YEAR	SUB-APPLICANT	SUB-APPLICATION TITLE	SUB-APPLICATION #	ACTIVITY TYPE
2017	Tinian Dept. of Community and Cultural Affairs	Tinian Youth Center Storm Shutter Project	PDMC-PJ-09-MP-2017-007	PDM
2017	Commonwealth Utilities Corporation	Sadog Tasi Wastewater Facility Storm Shutter Project	PDMC-PJ-09-MP-2017-008	PDM
2018	Office of the Governor	Rota Guesthouse Storm Readiness Project-PDM FY18	PDMC-PJ-09-MP-2018-003	PDM
2018	Office of the Governor	Saipan Office on Aging Storm Readiness Project	PDMC-PJ-09-MP-2018-004	PDM
2019	Statewide	CNMI Advance Assistance	4404-0001	HMGF

For additional questions, contact your regional Hazard Mitigation Grants Specialist, Phillip Wang, at Phillip.Wang@fema.dhs.gov or Jeanne Johnston at Jeanne.Johnston@fema.dhs.gov.