



# NHMA

Natural Hazard Mitigation Association

2020-2025 Strategic Plan





# **Table of Contents**

Introduction	1
Purpose and Focus of the 2020-2025 Strategic Plan	1
NHMA Vision	2
NHMA Mission Statement	2
Goals and Objectives	3
Conclusion	11

# **Introduction to the Natural Hazards Mitigation Association (NHMA)**

The Natural Hazard Mitigation Association is a non-profit volunteer organization dedicated to reducing the impacts of natural hazards that become disasters and supporting safe and sustainable infrastructure and community resilience. We provide practical advice, assistance, and resources to those involved in Disaster Risk Reduction (DRR) and community resilience strategies. NHMA serves as a respected voice in hazard mitigation, recovery, resilience, and climate adaptation policy both in the United States and worldwide. The NHMA promotes a unified approach to reduce disaster losses from the perspective of those who will be afflicted by failure to design, construct, plan for, and respond to natural hazards. We consider the interests and contributions/roles of communities, governments, the research community, the insurance industry, and engineering, social sciences, emergency response, water resources, planning, and many other mitigation related fields.

Over the past 10 + years, since its founding in 2008, NHMA has established the Resilient Neighbors Network (RNN), the Disaster Risk Reduction Ambassador (DRR-A) Curriculum, numerous significant DRR related publications, and established an array of partnerships with Federal, State and Local entities and non-Governmental organizations working to achieve similar goals.

- The RNN was originally established with 10 communities which are still participating along with 4 additional communities. The RNN represents communities across the nation with diverse demographics and diverse natural hazard threats and risks.
- The DRR Curriculum currently includes 24 complete modules. These modules have been presented in numerous lectures, publications and workshops across the Nation. Many of the presentations have been simulcast via webinars and recorded. To date, NHMA volunteers have made appearances in 46 of our 50 states.

# Purpose and Focus of the 2020-2025 Strategic Plan

This five-year Strategic Plan is intended to establish a clear planning framework that NHMA can use to engage the *Whole Community* in achieving mutual desired outcomes for disaster risk reduction. At this time in our nation's history, a push for physical, social, and economic resilience is essential and is central to NHMA's stated mission.

In the past NHMA has relied on word of mouth accolades from annual workshops and production of handouts to market and deliver the DRR curriculum. This strategic plan recognizes the need for a more concerted professional marketing initiative to:

- Establish the value and benefits of NHMA expertise and programs,
- Develop more effective partnerships,
- Create demand for the DRR Curriculum and associated professional credentials, and
- To realize the significant return on investment of volunteer hours by national experts, the NHMA has ventured into collaborative enterprises with a significantly greater potential for expanding NHMA's mission.

While disasters bring disruption and suffering to an entire community, at-risk and historically marginalized populations that already confront by poverty, economic disinvestment, and government and societal neglect

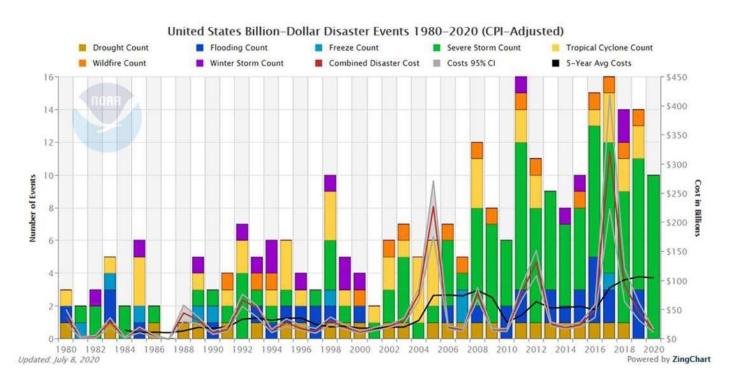
are often damaged more profoundly, with far reaching negative consequences. NHMA is determined to bring a message of inclusion that will increase resilience throughout the community because the community as a whole is enhanced when all segments experience justice, equity, and environmental sustainability.

Disaster Risk Reduction can serve as a key enabler for achieving community resilience. This plan addresses comprehensive planning activity that addresses the community's families, governments, industries, organizations, and the built environment. The identification and selection of cost-effective strategies leading to short-term and long-term solutions must involve a multi-disciplinary approach. Every sector of society must be involved in its planning and execution.

The clear and urgent need to resolve societal inequities and actively support vulnerable underserved communities, coupled with the complexities of managing the impact of a worldwide COVID-19 pandemic add to the challenges to implement resilient community efforts that address the risks posed by hurricane, earthquake, wildfires or other natural hazards. Any (or all) of these hazards could play havoc with our response and recovery capability as a nation in "normal" times.

Figure 1 provides a snapshot of the increasing national risk associated with Natural Disasters that provides further emphasis to the importance of achieving these *Whole of Community* based Disaster Risk Reduction goals.

FIGURE 1: NOAA BILLION DOLLAR DISASTER EVENTS, 1980-2020



Note: per NOAA, 2019 was the fifth consecutive year (2015-2019) in which 10 or more billion-dollar weather and climate disaster events have impacted the United States. Over the last 40 years (1980-2019), the years with 10 or more separate billion-dollar disaster events include 1998, 2008, 2011-2012, and 2015-2019

The NHMA Disaster Risk Reduction Curriculum is ideally suited to provide an educational tool to help advance a fair, equitable, and safe future for our nation. The curriculum accords special attention to the

most underrepresented elements of society including communities of color, low-income populations, and persons with disabilities.

#### **NHMA Vision**

Working together as a thoughtful and unified voice NHMA and RNN work to empower and achieve equitable, safe, and sustainable communities through disaster risk reduction.

#### **NHMA Mission Statement**

The NHMA promotes natural hazards risk reduction and climate adaptation through planning, adaptation, and mitigation. This is accomplished by creating a forum to:

- Promote steps to reduce the risk and consequences of natural hazards with an emphasis on the
  most vulnerable populations and communities that often bear greater environmental burdens and
  suffer disproportionate harm in disasters.
- Share ideas and experiences across a wide range of mitigation practitioners and populations at risk.
- Develop a thoughtful and unified voice that resonates with community leaders, decision-makers, and populations at risk.
- Promote greater awareness of the social, economic, and environmental components of safe and resilient development.
- Develop strategies that address a lifecycle approach to multi-hazard community resilience including critical infrastructure/lifelines.
- Create more equitable and sustainable hazard mitigation programs and projects so that that
  foreseeable and increasing natural hazards and exposures do not become disasters and
  impact community sustainability.
- Encourage, challenge, and incentivize communities to incorporate mitigation into governmental and political leadership dialogue.

## **Goals and Objectives**

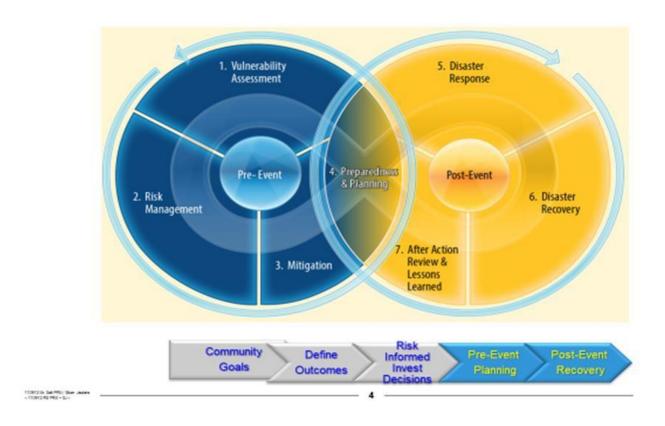
Our overall vision, mission, goals, objectives, and program/planning strategy will be implemented by creating a dynamic, highly interactive forum to:

- Share ideas and experiences across a wide range of populations at risk.
- Develop a thoughtful and unified voice designed to promote grass-roots efforts to achieve actionable and measurable risk reduction from natural hazards.
- Promote greater awareness of the social, economic, and environmental and political components of safe and resilient development.
- Advocate for more equitable, safe and sustainable hazard mitigation and community resilience programs and policies.
- Advocate for racial equity and marginalized populations as NHMA executes this strategic plan and the annual operations plans.

- Align NHMA performance measures with desired outcomes at the state and local level we will work
  with our partners to define baseline conditions from which we can establish specific performance
  measures for each goal.
- Assist in the communication of local needs and desires to FEMA (Federal emergency Management Agency) and others.

The goals for this five-year strategic plan were carefully crafted to ensure alignment with the overall organizational vision. The goals are not presented in a priority order – they each carry equal importance in shaping NHMA operational activities and initiatives/actions. Figure 2 below provides an overview of how NHMA goals and objectives inform a lifecycle approach to community resilience that can converge with specific disaster event cycles to enable achievement of short- and longer-term risk reduction and resilience outcomes. This demonstrates the inter-operable DRR/Resilience relationship between pre-event and postevent actions

FIGURE 2: "LIFECYCLE" INTER-OPERABILITY BETWEEN PRE-EVENT COMMUNITY RESILIENCE AND SPECIFIC DISASTER EVENT PLANNING, OPERATIONS AND RISK MANAGEMENT



Goal 1: Establish a national and international forum for comprehensive *Disaster Risk Reduction* information sharing and collaboration by 2024

**Objective 1**: Support development of a "Practical Community Resilience" (PCR) Initiative that enables NHMA to work with partners to assist states and communities with the process of translating national programs/policies/initiatives to reflect effective disaster resilience strategies and actions that comport with community vision and goals.

• Strategy 1: Based on a concept initially developed by representatives from Clemson University, United States Army Corps of Engineers (USACE), and Department of Energy (DOE), and supported by NHMA, PCR represents a strategy to help disadvantaged communities develop resiliency plans by leveraging existing successful programs. When implemented, this concept is designed to improve the disaster resilience of economically disadvantaged communities by best practice methodologies to inventory, assess, manage, and reduce long term risk. This approach uses a low-cost execution model for determining the current resilience of community economic, social, environmental and lifeline systems and creates operational resilience by engaging all four sectors—public, private, citizens, and insurance.



• Strategy 2: Develop partnerships with NGOs, government agencies and academia to leverage DRR initiatives that support desired national results by assisting states with planning, training/education and advising Federal agencies on effective DRR implementation through active engagement of an NHMA cadre of DRR professionals and academic leaders. NHMA's access to a wide range of technical, scientific, legal and practical political expertise at the local government and social activist levels affords an opportunity to jump-start community discussions about the economic and fiscal, legal, social and political benefits of a consistent commitment to mitigation, and thus resilience. Our membership has a wide breadth of professional expertise, and diverse representation from many disciplines in the public and private sectors. This strategy will stimulate engagement of NHMA members and partners to assist communities to identify and address known natural hazards that if not mitigated, could pose extremely serious social and economic consequences.

Goal 2: Operationalize the Disaster Risk Reduction Curriculum by 2022

achieving desired DRR outcomes. Addressing and mitigating known hazards in advance limits the extent of the recovery from a natural disaster that is necessary. NHMA is committed to this fundamental principle of disaster mitigation. Mitigation is the ultimate public safety objective because what can be anticipated can be mitigated; what does not break need not be repaired.

- Strategy 1: NHMA will operationalize the DRR Curriculum by 2022. This includes updating the current 24 modules, identifying new modules required, and developing an implementation plan that effectively makes available this curriculum nationally in collaboration with academic institutions, Federal agencies, and other NGOs working in the DRR space. This will include a strategy to operationalize the curriculum in context with community and infrastructure resilience and mitigation programs and projects, with particular emphasis on under-served and economically challenged communities.
- Strategy 2: NHMA will create a learning environment that emphasizes service and project-based learning. This will include use of an established and tested learning management system (LMS) to align with DRR training and education objectives of State and Local Agencies and facilitate access to tools that are available (e.g –Open FEMA Tool)<sup>1</sup> and others.
- Strategy 3: NHMA and partners will establish a certification/recertification criteria and gateway for curriculum instructors to include establishing standards for instructors and the learning environment, i.e. in- person training session, online training or blended. This will include establishing required course work for basic and advanced instructor/ambassador designation.

**Objective 2:** Develop a National Standard for DRR and Community Resilience Performance based on the DRR Curriculum and National goals and establish a recognized credential for mitigation professionals that are certified to achieve those standards.

- Strategy 1: Leverage all applicable grants to enable NHMA support to the implementation of the National Mitigation Strategy (NMS) and other National Plans/Strategies at State/Local levels by enabling disadvantaged and underserved Communities to both develop and effectively manage available grants that leverage resources to achieve DRR results.
- Strategy 2: Engage Natural Hazard Centers and other academic institutions and consortia to identify and prioritize research needs and capability gaps driven by program requirements and improve future infrastructure and community resilience.
- Strategy 3: Develop tools and methods to fill capability gaps by leveraging resources and maximizing collaboration and communication with other partners.

Goal 3: Improve the nation's ability to reduce and mitigate risk from natural hazards especially with an emphasis on addressing the risk of multiple and cascading hazard scenarios.

**Objective 1** Engage states and communities to identify and address natural hazard risk management challenges, including the effects of cascading hazard events that may also include technological hazards resulting from damage to industrial and chemical plants. This could include supporting development of all hazard mapping tools.

Objective 2: Engage national-level interagency partners to identify natural hazard risk management

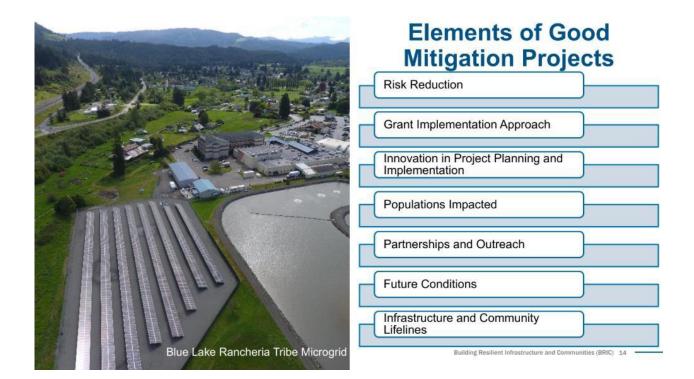
challenges and develop collaborative solutions.

• Strategy 1: Fully engage with opportunities to support national strategic goals, objectives and programs such as the *NMS* and the Building Resilient Infrastructure and Communities (BRIC) Program, and actively engage multiple other collaborative Federal and Non-Federal programs and Grants such as HUD CDBG, USACE Silver Jackets, and various NGOs. Figures 3 and 4 provide the guiding principles of the BRIC Program and the key elements of good mitigation projects established by FEMA, which align well with NHMA objectives overall. The overall role for NHMA will be to serve as an "ombudsman" for assisting communities in aligning and engaging a broad portfolio of DRR programs and grants with their specific DRR needs based on quality risk assessments and mitigation plans, and to provide useful feedback to Federal agencies and national partners towards improving overall program/policy performance and results.

FIGURE 3: BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES (BRIC) GUIDING PRINCIPLES

### **BRIC's Guiding Principles Guiding Principles** Supports FEMA's Strategic Plan Support Community Capability & Capacity Building Build a Culture of Preparedness Encourage and Enable Innovation Ready the Nation for Promote Partnerships Catastrophic Disasters Enable Large Infrastructure Reduce the Complexity **Projects** of FEMA Maintain Flexibility Provide Consistency Building Resilient Infrastructure and Communities (BRIC) 7

<sup>&</sup>lt;sup>1</sup>https://www.fema.gov/about/openfema/data-sets



**Objective 3:** Work internally to develop an operations strategy that will improve NHMA's ability to provide and refer sources of technical assistance to state, local, and tribal governments to address natural hazard risk management challenges.

- Strategy 1: Continue development of the Resilient Neighbors Network (RNN) to assist communities in developing a means of identifying and minimizing identifiable natural hazards that pose a risk to their physical safety and economic well-being. NHMA and its RNN colleagues focus on helping communities, which know best their values for safety and economic prosperity, to navigate the path to their desired objectives. In terms of future direction, we will review and evaluate the NHMA's RNN program through the lens of FEMA's Building Resilient Infrastructure and Communities (BRIC) and other grant programs and develop a revolutionary approach that will include USACE Silver Jackets, Community and Economic Development including the Clemson Engineers for Developing Countries (CEDC) type of models (student engagements), seek increased support for student and graduate student involvement, the Resilient Nation Partnership Network (RNPN), and also engage NACO, National Association of Counties) NEMA (National Emergency Management Association), NHC (Natural Hazards Center) and ASFPM (Association of State Floodplain Managers) and ASWM (Association of State Wetland Managers), that will evolve into an increasingly coherent national program. This will include:
  - Review of the existing RNN program and proposal of changes and improvements that incorporate these proposed new features/concepts to be pilot tested with selected communities with funding from Federal funding sources, or other sponsors.
  - Develop and provide a DRR/Resilience model and strategy to achieve proof of concept and establishment of a typical Statewide program than can be implemented at the community level

and developed into a program nationwide program including an operational/implementation plan. Pre- and post- event actions work iteratively. After preparations are made and mitigation actions are in place, an event will eventually disrupt the community. The community must respond to the event and undertake recovery actions. Proactive communities use these experiences as educational tools, creating after-action reviews and lessons-learned documents, which then feed back into the pre- event preparedness and planning processes.

- Integrate the Community Assistance Program-State Support Services Element (CAP-SSSE)
   State Tiered Assessment metrics as appropriate. (Source?)
- Strategy 2: Collaborate with partners to address critical community lifelines and use NHMA developed guides such as the NHMA Community Resilience Roadmap and the American Bar Association Community Resilience Handbook (2020), along with the implementing the DRR Curriculum at the community level to advance improvements to sustainable community development. We will work to advocate for implementation of improved building codes both in the pre- and post-disaster phases of these critical risk reduction measures. This includes working with various entities to incentivize and implement improved building codes, encouraging disaster resistant construction and repair/reconstruction, and discouraging development and/or redevelopment in present and future high risk hazard areas.

## **Conclusion**

From emergency management to floodplain management, and land use planning to recovery, the potential to prevent, mitigate, and respond to all risks should be evaluated through a life cycle, comprehensive approach by communities that links to their vision. Altogether avoiding risks associated with natural hazards is impossible, and while disasters are not inevitable, the level of devastation, and short-term and long-term costs they bring can be substantially reduced. The national benefits derived by placing more emphasis on mitigation in context with the life cycle, continuous risk management that addresses disaster risk reduction at the grassroots/community level are evident and supported by research. While our work's benefits may not be immediately noticed or seen, their effects can be felt for years to come. Working together as a thoughtful and unified voice to empower and achieve equitable, safe, and sustainable communities through disaster risk reduction, the expertise of the NHMA, our RNN communities, and partnering organizations uniquely position the organization to become the national resource for hazard mitigation and community resilience.