



Section 5. Capability Assessment



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¹ Section Cover Photo: Waves crashing on lava cliffs. Photo by Megan Brotherton





SECTION 5. CAPABILITY ASSESSMENT

2023 SHMP Update Changes

- ❖ State and local capabilities have been comprehensively reviewed, updated, and reformatted.
- ❖ Discussion of the processes utilized by the state to support and promote mitigation planning at the County level and processes to help counties obtain funding and technical assistance for mitigation planning have been reviewed and updated to reflect current procedures.
- ❖ State and local capabilities for building codes and standards are summarized.
- ❖ Mitigation capability challenges and barriers to implement mitigation and build resilience were identified in collaboration with plan stakeholders. These challenges and associated opportunities to overcome these barriers are summarized.
- ❖ The state agency/department hazard mitigation capability summaries in Appendix C were expanded to include the following new elements: capability category, effect on future mitigation, equitable outcomes, community lifelines, and 2023 SHMP goal(s) met.
- ❖ An expanded detailed scoring methodology to prioritize planning and project grants was developed in an effort to make the prioritization process easier to understand for the subapplicants and reviewers.

This section provides a comprehensive review and evaluation of state and local capabilities used to support and facilitate mitigation activities and describes the process utilized by the State of Hawai'i to support, promote, and coordinate mitigation planning at the County level.

5.1 ADMINISTRATION OF HAZARD MITIGATION PROGRAMS IN THE STATE

The Governor has the overall responsibility for emergency management activities in the State of Hawai'i. Emergency management functions at the state level are coordinated by the HI-EMA and its five branches: Preparedness, Operations, Telecommunications, Logistics, and Finance Administration. HI-EMA is located within the Department of Defense, and the Adjunct General serves as its Director. A civilian Administrator is appointed by the Director and maintains the day-to-day operations of the agency. HRS §127-A (Emergency Management) was revised in June 2014 updating the state's emergency management statutes, moving from an outdated civil defense framework to the current emergency management structure. The revisions led to a number of changes intended to ensure coordination of the state and its counties to the maximum extent possible with the comparable functions of the federal government.





HI-EMA serves as the coordinating agency for the four County emergency management agencies and as State Warning Point. HI-EMA administers the state’s hazard mitigation program with the State Hazard Mitigation Officer (SHMO) serving as the official point of contact.

5.2 IDENTIFICATION AND EVALUATION OF STATE PRE- AND POST-DISASTER CAPABILITIES

Element S8 and 44 CFR § 201.4(c)(3)(ii): The state plan must include a discussion of the evaluation of the state’s hazard management policies, programs, capabilities, and funding sources to mitigate the hazards identified in the risk assessment. This includes an evaluation of state laws, regulations, policies, and programs related to hazard mitigation; state funding capabilities for mitigation actions and projects; and obstacles, challenges, and proposed solutions.

This section identifies and evaluates the state pre- and post-disaster capabilities including legal, regulatory, and programmatic capabilities, participation in national programs, and funding capabilities. County capabilities are discussed in Section 5.3 (Summary of Effectiveness of Local Mitigation Capabilities).

Key Term

Mitigation Capabilities provide the means to accomplish desired mitigation outcomes. Capabilities include laws, regulations, policies, programs, administrative and technical staffing and resources, funding, and people-powered capabilities, such as volunteer groups.

5.2.1 LEGAL, REGULATORY, PLANNING, AND PROGRAMMATIC CAPABILITIES

State departments and agencies, in coordination with the HI-EMA, conducted a thorough review of laws, rules, plans, and programs to identify and evaluate their hazard mitigation-related capabilities, including those related to development in hazard-prone areas. Each identified capability was described, significant changes that occurred during the performance period of the 2018 SHMP were noted, and opportunities or challenges in enhancing capability effectiveness or minimizing conflicts with mitigation goals were discussed. In addition, the hazard(s) of concern that the capability helps to mitigate, the type of hazard management capability (pre- and/or post-disaster), and the effect on loss reduction were identified. While some funding capabilities were identified in this discussion, funding is discussed in more detail in Section 5.2.3. Table 5-1 summarizes the full range of identified capabilities and the hazards which they mitigate. The detailed information evaluating the mitigation capabilities of state laws, regulations, policies, and programs upon which this summary table is based is in Appendix C (Capability Assessment Supplement). Detailed information in the appendix also includes the areas of strength or deficiency of the capabilities for impacting resilience to climate change and supporting vulnerable populations.





Table 5-1. Summary of the State of Hawaii's Hazard Mitigation Capabilities by Hazard of Concern

Capability ^a	Hazards of Concern														
	Climate Change and Sea Level Rise	Cyber Threat	Drought	Earthquake	Flood	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Landslide and Debris Flow	Terrorism	Tsunami	Volcanic Hazards	Wildfire	Windstorm
Aircraft Alert System (HI-EMA)												◆			
Building Code Committee (SEAOH)				◆	◆			◆		◆		◆	◆	◆	◆
Building Code Council (DAGS)				◆	◆			◆		◆		◆	◆	◆	◆
Bridge Inspection Program				◆	◆				◆	◆		◆			
Capital Improvements Budget (DBF)	◆		◆	◆	◆	◆		◆	◆	◆		◆	◆	◆	◆
Clean Water Act Section 401 Water Quality Certifications (DOH EHA)					◆	◆	◆								
Climate 21C (OCCL)	◆				◆				◆						
Coastal Lands Program (OCCL)					◆			◆							
Coastal Zone Management Program (OPSD)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
Commission on Water Resources Management (CWRM)			◆											◆	
Community Development District Program (HCDA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
Critical Infrastructure Security and Resilience Program (OHS)		◆									◆				
Critical Infrastructure Vulnerability Assessment (OHS)		◆									◆				
Critical Systems Vulnerability Assessment (HI-EMA)				◆				◆				◆			
Cybersecurity Program (OHS)		◆									◆				
Dam Safety Program (Engineering)									◆						
Damage Assessments (DAGS)				◆			◆								
Department Emergency Operations Plan Template (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Department of Hawaiian Home Lands Land Trust (DHHL)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Department of Health All-Hazards Training and Exercise Program (DOH HRA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Department Operations Center (HI-EMA) Planning Guidance and Resources (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Disaster Response Committee (SEAOH)				◆	◆			◆	◆	◆		◆	◆	◆	
Energy Assurance Program (HSEO)	◆			◆	◆			◆	◆	◆		◆	◆	◆	◆
Epidemiological Surveillance (DOH HRA)							◆								





Capability ^a	Hazards of Concern														
	Climate Change and Sea Level Rise	Cyber Threat	Drought	Earthquake	Flood	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Landslide and Seismicity	Terrorism	Tsunami	Volcanic Hazards	Wildfire	Windstorm
Fire Program (DOFAW)			◆					◆						◆	
Flood Hazard Assessment Tool (DLNR)					◆				◆			◆			
Forestry Program (DOFAW)	◆		◆		◆			◆		◆		◆		◆	◆
Geography Department (UH)					◆										
Get Ready Website (HI-EMA)				◆	◆			◆				◆	◆		
GoHawai'i Mobile App (HTA)				◆	◆		◆	◆		◆		◆			
Hawai'i Advisory Council on Emergency Management (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Hawai'i Catastrophic Hurricane Plan (HI-EMA)							◆								
Hawai'i Earthquake & Tsunami Advisory Committee (HI-EMA)				◆								◆			
Hawai'i Emergency Planning and Community Right to Know Act (DOH EHA)						◆									
Hawai'i Environmental Policy Act (DOH OEQC)				◆	◆					◆		◆	◆	◆	
Hawai'i Hazards Awareness and Resilience Program (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Hawai'i Homeland Security Strategy and its Implementation Plan (OHS)		◆									◆				
Hawai'i Institute of Geophysics and Planetology (UH)	◆		◆		◆		◆	◆	◆			◆	◆		◆
Hawai'i Invasive Species Council (HISC)	◆		◆		◆		◆	◆						◆	◆
Hawai'i State Legislature Grant-in-Aid Program (HSL)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Hawai'i State Legislature Senate Resolution 35 (HSL)	◆				◆		◆					◆			
Hawai'i State Planning Act (OPSD)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Hawai'i Statewide Geographic Information System Program (OPSD)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Hawai'i Targeted Violence Prevention Strategy (OHS)											◆				
Hawai'i Tree Canopy Viewer (DLNR)	◆		◆		◆			◆						◆	◆
Hazardous Materials Risk Management Program (HDOT)						◆									
Hazardous Waste Section Regulations (DOH EHA)						◆									





Capability ^a	Hazards of Concern														
	Climate Change and Sea Level Rise	Cyber Threat	Drought	Earthquake	Flood	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Landslide and Tsunami	Terrorism	Tsunami	Volcanic Hazards	Wildfire	Windstorm
Hazus Risk Assessment Program (HI-EMA)				◆	◆			◆				◆			
Homeland Security Executive Advisory Council (OHS)		◆									◆				
Homeland Security Grant Program Subcommittee (OHS)		◆									◆				
Hospital Preparedness Program (DOH HRA)							◆								
Immunization Programs (DOH HRA)							◆								
Laboratory Preparedness and Response Program (DOH HRA)						◆	◆								
Land Acquisition Program (DAGS)	◆		◆		◆										
Makani Pahili 2017 Emergency Power Prioritization Workshop Series (HI-EMA)				◆	◆			◆	◆			◆	◆		◆
Mandatory Seller Disclosures in Real Estate Transactions (DCCA)					◆							◆			
Mass Feeding Operations (DOH EHA)							◆								
Medical Countermeasure Points of Distribution (DOH HRA)							◆								
National Disaster Preparedness Training Center (UH)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
National Flood Insurance Program (Engineering)	◆		◆		◆			◆	◆			◆			
Native Ecosystems Protection and Management (DOFAW)	◆		◆		◆			◆							
Natural Disaster Economic Recovery Strategy (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
NPDES Wastewater Discharge Permits (DOH EHA)					◆	◆	◆								
Pacific Disaster Center Technical Capabilities (PDC)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
Pacific RISA (Pacific RISA)	◆		◆												
Polluted Runoff Control Program (DOH EHA)			◆		◆										
Pacific Risk Management 'Ohana (PRiMO)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
Radiation Section - Radiation Assessment Team (DOH EHA)						◆	◆								
Risk MAP (Engineering)				◆	◆			◆				◆			





Capability ^a	Hazards of Concern														
	Climate Change and Sea Level Rise	Cyber Threat	Drought	Earthquake	Flood	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Landslide and Seismicity	Terrorism	Tsunami	Volcanic Hazards	Wildfire	Windstorm
Roadside Fuel Reduction Program (HDOT)														◆	
Safe Drinking Water Emergency FAQs (DOH EHA)							◆								
School of Ocean and Earth Science Technology (UH)	◆		◆		◆			◆					◆		◆
Shelter Upgrade Program (DAGS)							◆								
Shoreline Certification (Land Division)	◆				◆										
Silver Jackets (Engineering)	◆				◆			◆	◆			◆			
State and Local Cybersecurity Grant Program Subcommittee (OHS)		◆													
State Board of Land and Natural Resources (BLNR)	◆		◆		◆										
State Cyber Disruption Response Plan (OHS)		◆													
State Fire Council (SFC)														◆	
State Land Use Law (OPSD)	◆		◆	◆	◆			◆	◆	◆		◆	◆	◆	◆
State Mitigation Forum (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
State of Hawai'i Emergency Operations Plan (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
State-owned Building Insurance (DAGS)				◆	◆			◆	◆	◆		◆	◆	◆	◆
State Preparedness Report (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Statewide Highway Shoreline Protection Study (HDOT)	◆				◆			◆							
Strategic Plan (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆		◆
Terrorism and Targeted Violence Incident Annex (OHS)											◆				
Terrorism and Targeted Violence Program (OHS)											◆				
The Center for the Study of Active Volcanoes (UH)				◆	◆			◆				◆	◆		
Threat Hazard Identification and Risk Assessment (HI-EMA)				◆	◆		◆	◆				◆	◆		
Training & Exercise Plan (HI-EMA)	◆		◆	◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆
Transportation Asset Climate Change Risk Assessment Project (O'ahu MPO)	◆														
Underground Storage Tank Section Regulations (DOH EHA)			◆		◆										
Vector Control Program (DOH EHA)							◆								





Capability ^a	Hazards of Concern														
	Climate Change and Sea Level Rise	Cyber Threat	Drought	Earthquake	Flood	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Landslide and	Terrorism	Tsunami	Volcanic Hazards	Wildfire	Windstorm
Weatherization Assistance Program (OCS)			◆												
Western States Seismic Policy Council (HI-EMA)				◆								◆			

a. Acronym in parenthesis refers to the state department detail table under which the capability is discussed (see Appendix C [Capability Assessment Supplement]). Listing under a particular department or agency should not be construed to imply that the department is the sole administrator of the capability. Additionally, in some instances the capability is associated with the duties of the department but the department does not have administrative authority over the capability.

In order to support program and plan integration, each capability was also assessed to determine the mitigation mission area core capability that each supports. Core capabilities are identified in the National Preparedness Goal and are used in other emergency management programs, including the THIRA and State Preparedness Report. The mitigation mission includes seven core capabilities: (1) Threats and Hazards Identification, (2) Risk and Disaster Resilient Assessment, (3) Planning, (4) Community Resilience, (5) Public Information and Warning, (6) Long-Term Vulnerability Reduction, and (7) Operational Coordination. These core capabilities and the results of the assessment are available in Appendix C (Capability Assessment Supplement).

PLANNING AND REGULATORY CHALLENGES AND OPPORTUNITIES

Throughout the stakeholder engagement process for the 2023 SHMP Update, stakeholders noted gaps and challenges in existing state capabilities to implement hazard mitigation actions and build resilience. Outcomes of the capability workshops held in February 2023 acknowledged the following:

- There is a need to coordinate economic development planning and hazard mitigation planning. As a result of this discussion, new mitigation actions that tie priorities established by the economic sector more closely with emergency management were included in the mitigation strategy (Action 2023-004).
- There is a lack of coordination between government agencies and community-based organizations which will be addressed when implementing numerous mitigation actions that align with the new objective in the SHMP to “establish and maintain public-private partnerships among all levels of government, community groups, the private sector, and institutions of higher learning ...” (i.e., Actions 2023-013, 2023-16).
- Legal challenges hinder managed retreat efforts to mitigate the sea level rise hazard (Action 2023-14).
- To address challenges related to protecting coastal areas including natural and cultural resources, the “Hawai’i Digital Coastal Atlas” is being developed by OPSD for planning and permitting purposes (Action 2023-15).





LAND USE

The Hawai'i State Planning Act was adopted in 1978 and sets policy for all activities, programs, and decisions made by local and state agencies. Current priorities are planning for climate change impacts, ensuring the sustainable and economic use of ocean and coastal resources, and supporting scientific and cultural knowledge to better manage natural resources (OPSD 2022). All lands in the state are classified into four categories as required by HRS 205; the four categories are urban, rural, agricultural, and conservation. The classification of lands is required to be reviewed every five years in accordance with HRS 205-18.ag

In 2021, land use and environmental policy functions of different agencies were consolidated to form the Office of Planning and Sustainable Development. The Office is responsible for the following activities:

- Comprehensive planning and program coordination
- Strategic planning
- Planning coordination and cooperation
- Statewide planning and GIS
- Land use planning
- Coastal and ocean policy management
- Regional planning studies
- Regional, national, and international planning

The [Hawai'i State Plan](#) establishes overall themes, goals, objectives, and policies for the state. The State Plan is composed of a statewide planning system, which includes County general plans that align with the State Plan. In addition to the State Plan, OPSD also develops the Hawai'i Sustainability Plan and Ocean Resource Management Plan.

STATE BUILDING CODE

The State Building Code Council (SBCC), housed within the Department of Accounting and General Services, is responsible for establishing a State Building Code through timely adaption of national building codes; the SBCC must include the latest fire code as adopted by the State Fire Council, the latest edition of the International Building Code, the latest edition of the Uniform Plumbing Code, and Hawai'i design standards to implement Act 5, Special Session Laws, 2005 as applicable to emergency shelters and essential government facilities (State Building Code Council 2022).

On April 20, 2021, Hawai'i adopted the 2018 International Building Code with amendments and Wind Topographic Factor Maps for use with the State Building Code. Each County is required to amend and adopt the code by April 20, 2023, in accordance with HRS 107-28(a). Additionally, all design of state building construction must comply with the code by April 20, 2022, in accordance with HRS 107-27.

In addition to the Hawai'i State Building Code, the state also adopts an Energy Conservation Code.

State Building-Code Related Challenges and Opportunities

Feedback during the Building Codes and Standards Focus Group meeting in September 2022 and the capabilities workshops in February 2023 included the following:

- There is a lack of funding for the State Building Code Council. The State Building Code Council members serve on a voluntary basis. There are ongoing discussions to build capacity with paid staff support.





- The state has not adopted the most current IBC. The delay exists due to the lack of funding and capacity as noted above. As a result, the state is not competitive on a national level when applying for FEMA BRIC funding.
- The coordination between building code departments and floodplain managers at the county level needs to increase. The counties may include mitigation actions to address this need in future local HMP updates.
- There is a need to promote the importance of building codes among the general population. Soliciting their support would require targeted outreach and education.

5.2.2 PARTICIPATION IN NATIONAL MITIGATION-RELATED PROGRAMS

There are several national programs that incentivize or support mitigation activities including the National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk Mapping Assessment and Planning (Risk MAP), and the National Incident Management System (NIMS). These programs are a key component of state hazard mitigation capabilities. The following sections discuss the administration and application of these programs in the State of Hawai'i.

NATIONAL FLOOD INSURANCE PROGRAM AND COMMUNITY RATING SYSTEM

The NFIP is a federal program established to allow property owners in participating communities to purchase insurance protections against losses from flooding. Participation in the NFIP is based on an agreement between local communities and the federal government that states if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction and substantial improvements in Special Flood Hazard Areas (SFHAs), the federal government will make flood insurance available within the community (DLNR 2022).

The NFIP is administered by the Federal Insurance and Mitigation Administration (FIMA) and the Mitigation Directorate, components of FEMA. The DLNR has been designated as the State Coordinating Agency responsible for assisting the coordination of the program between the federal and County agencies in the State of Hawai'i. All four of the counties are participating communities in the NFIP, and each community has a representative County floodplain manager (see Table 5.3-2 in Section 5.3.2 for information on County floodplain management programs). According to FEMA records, as of September 30, 2022, there are 55,797 flood insurance policies in force within the state totaling more than \$14.4 billion in insurance and more than \$38.5 million in annual premiums.

The CRS is a voluntary program within the NFIP that encourages floodplain management activities that exceed the minimum NFIP requirements. For participating communities, flood insurance premium rates are discounted in increments of 5%. For example, a Class 1 community would receive a 45% premium discount, and a Class 9 community would receive a 5% discount. Class 10 communities are those that do not participate in the CRS; they receive no discount. CRS activities can help to save lives and reduce property damage. More information on their participation is available in Section 5.3.2.





Key Capability

Community Rating System—Hawai‘i is the first state in the nation in which all the counties participate in the CRS program.

- **Kaua‘i County**—Class 8
- **City and County of Honolulu**—Class 8
- **Maui County**—Class 7
- **Hawai‘i County**—Class 7

NFIP Staffing, Resources, and General Administration of Program

The state NFIP Coordinator sits in the Engineering Division of DLNR. There are three employees that generally administer the program, including the state NFIP Coordinator, State General Flood Control Plan Administrator, and an Engineering Technician. Although resources are adequate, staff resources would be improved by the addition of staff with a focus on grant management and information technology skills, such as GIS and website development.

Although the State of Hawai‘i no longer participates in FEMA’s Community Assistance Program State Support Services Element (CAP-SSSE) program, DLNR still serves as the State Coordinating Agency for the NFIP with emphasis on providing technical assistance to NFIP stakeholders across the state and to periodically conduct audits of each County’s floodplain management program administration and enforcement. Activities include:

- **Attending National and Regional NFIP Related Conferences**—State floodplain management staff host an annual conference for floodplain managers, and staff can travel to Flood Mitigation Association (FMA) or Association of State Floodplain Manager (ASFPM) conferences.
- **Providing Technical Assistance to Community Officials and the Public**—Technical assistance is provided by reviewing CRS standing/feasibility with counties; attending CRS/NFIP audit and compliance meetings with FEMA or contractor staff, meeting with the Building Code Council, and providing other technical assistance as requested.

NFIP and CRS Implementation Challenges and Opportunities

The following NFIP and CRS implementation challenges and opportunities gathered during the planning process are summarized below.

- Each County has island-specific challenges in administering their floodplain management regulations. Coordination between the counties and state agencies is challenging, especially regarding data availability and sharing. Higher resolution imagery data would allow state and county floodplain managers to produce more useable and practical data to support flood modeling (i.e., Actions 2023-005, 2023-2018-007)
- Funding and resource availability is a challenge at the County level. The state is interested in ways to increase collaboration on CRS by creating a statewide Hawai‘i CRS user group. This effort would focus on





creating tools and opportunities for each County to leverage to maintain CRS eligibility and improve class rating and premium discounts.

- Drainage and other flood control facilities are frequently located on privately-owned lands. This complicates access and identification of funding to support flood control and drainage maintenance. Efforts to address these and other issues are ongoing at the local level.

RISK MAPPING, ASSESSMENT, AND PLANNING PROGRAM

FEMA works with federal, state, tribal, and local partners across the nation to identify flood risk and promote informed planning and development practices to help reduce that risk through the Risk MAP program. Risk MAP provides high quality flood maps and information, tools to better assess the risk from flooding and planning and outreach support to communities to help them take action to reduce (or mitigate) flood risk. Each Risk MAP flood risk project is tailored to the needs of each community and may involve different products and services.

According to the Risk MAP Progress interactive map available online, at the time of this plan update there no active projects in the state. FEMA coordinates and works directly with County floodplain managers during the Risk MAP project process. The state NFIP Coordinator is kept apprised of project activities and consults as needed. The state (DLNR and HI-EMA) continues to be involved in mitigation planning and hazard identification but does not currently have the resources to lead mapping projects under the Cooperating Technical Partner program; however, DLNR is a Cooperating Technical Partner and is undertaking special projects.

DLNR maintains the Flood Hazard Assessment Tool (FHAT), an informational mapping viewer that displays flood zone information from FEMA's Digital Flood Insurance Rate Maps (FIRMs). The FHAT can be used to inform mitigation planning and strategies and community planning decisions across state and local partners.

NATIONAL RISK MANAGEMENT SYSTEM

The National Incident Management System (NIMS) guides all levels of government, nongovernmental organizations and the private sector to work together to prevent, protect against, mitigate, respond to and recover from incidents. NIMS defines operational systems that guide how personnel work together during incidents. Hawai'i strives to maintain NIMS compliance with the state's Emergency Operations Plan.

5.2.3 PRE- AND POST-DISASTER FUNDING CAPABILITIES

Element S11 and 44 CFR § 201.4(c)(3)(iv): The state plan must identify current and potential sources of funding to implement mitigation actions and activities, including the identification of current and/or potential sources of federal, state, local, or private funding for implementation. At a minimum, the plan must identify FEMA mitigation funding sources.

For the 2023 SHMP Update, the federal and state programs that provide funding were reviewed and updated. This section discusses FEMA and other federal funding sources available to support mitigation, and evaluates the state's funding capabilities, including a summary of funding resources that the state has access to or is eligible to use, a description of how the state has used its own funding for hazard mitigation, and how FEMA funds have been used.





FEMA FUNDING FOR MITIGATION ACTIVITIES

FEMA's hazard mitigation assistance provides funding for eligible mitigation measures that reduce disaster losses. Table 5-2 summarizes these FEMA grant funding programs, their purpose, and applicability of pre- or post-disaster requirements.

Table 5-2. Summary of FEMA Mitigation Funding

Hazard Mitigation Grant Program (HMGP)
Purpose: To provide funds to states, territories, Indian tribal governments, and local communities to significantly reduce or permanently eliminate future risk to lives and property from natural hazards. HMGP funds projects in accordance with priorities identified in state or local hazard mitigation plans and enables mitigation measures to be implemented during the recovery from a disaster.
Availability: Post-Disaster. When authorized under a Presidential major disaster declaration in areas of the state requested by the Governor.
Building Resilient Infrastructure and Communities (BRIC)
Purpose: To provide funds to states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.
Availability: Pre-Disaster
Pre-Disaster Mitigation (PDM)
Purpose: Makes federal funds available to state, local, tribal, and territorial governments to plan for and implement sustainable cost-effective measures. These mitigation efforts are designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters. This funding is offered in addition to funds provided through other FEMA grant programs for projects that will support growing mitigation needs nationwide.
Availability: Pre-Disaster
Flood Mitigation Assistance (FMA)
Purpose: To implement cost-effective measures that reduce or eliminate the long-term risk of flood damages to buildings, manufactured homes and other structures insured under the National Flood Insurance Program (NFIP). As noted, the FMA combines the previous Repetitive Flood Claims and Severe Repetitive Loss grants into one grant program.
Availability: Pre-Disaster
HMGP Post-Disaster Fire Assistance
Purpose: Provides assistant to help communities implement hazard mitigation measures after wildfire disasters.
Availability: Post-Disaster
HHPD
Purpose: Provides technical, planning, design and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams.
Availability: Pre- and Post-Disaster
Public Assistance
Purpose: Provides federal assistance to government organizations and certain private non-profit organizations following a Presidential Disaster Declaration so that communities can quickly respond to and recover from major disasters or emergencies. Provides assistance to supplement federal disaster grants for debris removal, life-saving emergency protective measures, and the repair, replacement, or restoration of disaster-damaged publicly owned facilities and the facilities of certain private non-profit organizations. Supports local communities with opportunities to strengthen infrastructure that has been proven to fail under disaster conditions.
Availability: Post-Disaster

Source: (FEMA 2023)

FEMA’s Safeguarding Tomorrow Revolving Loan Fund Program provides hazard mitigation assistance to reduce risks from natural hazards and disasters. Hawai’i has not yet used this funding program but may in the future.





In 2022, the Community Disaster Resilience Zones Act was signed that amends the Robert T. Stafford Act and applies FEMA’s National Risk Index to identify communities most vulnerable to natural hazards. Designated zones will receive targeted federal support for FEMA grant programs. Hawai’i is currently working on identifying Community Disaster Resilience Zones (CDRZ) to support disadvantaged communities that are most at risk to natural hazards.

LEVERAGING FEMA FUNDING FOR MITIGATION ACTIVITIES

The state has historically utilized HMGP and pre-disaster funding to the greatest degree. The HMGP funds are typically used for project implementation, while BRIC funding is typically used to support mitigation planning activities at the state and county level.

It is important to note that HMGP funding is determined as a percentage of the funds spent on public and individual assistance for a Presidentially declared disaster. The State of Hawai’i has historically received less than \$1 million in HMGP funds following declared disasters. The BRIC monies are determined by congressional allocation and fluctuate from year-to-year. The FMA and Section 406 funding has historically been underutilized by the state. No FMA or Section 406 funds were used for mitigation activities during the performance period of the 2018 SHMP.

Table 5-3 summarizes key information on the location and the types of FEMA-funded mitigation projects during the performance period of the 2018 SHMP. In total, 60 projects were identified, 13 are closed, 27 are ongoing, and 20 have been submitted for grant funding consideration.

Table 5-3. FEMA-Funded Mitigation Projects During Performance Period of 2018 SHMP

Criterion		Project Costs
Project Costs by FEMA Grant Program	Hazard Mitigation Grant Program (HMGP)	\$14,977,604.88
	HMGP Management Costs	\$1,817,712
	Pre-Disaster Mitigation (PDM)	\$13,181,667
	PDM Management Costs	\$626,616.04
	BRIC FY 2020	\$600,000
	Flood Mitigation Assistance (FMA)	\$0
	Public Assistance (PA) Category C-G (Section 406 funds)	\$0
Project Costs by Location	Statewide	\$1,988,970
	County of Kaua’i	\$35,000
	City & County of Honolulu	\$5,133,084
	County of Maui	\$1,273,375
	County of Hawai’i	\$7,325,952.88
Project Costs by Activity Type	Hardening/Retrofit	\$1,811,164.88
	Management Costs	\$1,817,712
	Local Mitigation Planning (Including 5% Initiative)	\$1,973,271
	State Mitigation Planning (Including 7% planning grant)	\$1,408,738

Source: Data provided by HI-EMA as of December 2022

These funds were used to reduce risk and increase resilience across the state in a variety of ways:

- **Critical Facility Hardening**—Critical facilities were hardened, including the Waikiki Fire Station in the City and County of Honolulu and the Maui County Highways Division Base Yard.





- **Backup Power**—Several projects were completed to provide emergency backup power to community lifelines, including an emergency standby power connection generator for the Department of Water Supply in the County of Hawai'i, an emergency generator at the Maui Food Bank in Maui County, and generators at Wilcox Memorial Center in the County of Kaua'i.
- **Focus on Planning**—Planning efforts were supported by FEMA grant funds, including updates to all four County HMPs.

STATE FUNDING FOR MITIGATION ACTIVITIES

The state uses its own funding for a variety of mitigation activities. This use of funds includes earmarking resources for mitigation projects, providing grant monies to the counties and non-governmental organizations, supporting ongoing programs that further mitigation goals, and using state monies or in-kind contributions as matching funds for federal grants. The programmatic and regulatory programs summarized in Table 5.2-1 and outlined in detail in Appendix C (Capability Assessment Supplement) are supported, at least in part, by state general funds and the operating budgets of the various state departments and agencies. The detailed state capability tables for each agency in Appendix C include a column that indicates if the agency provides funding for mitigation. The following lists the state funding sources as specified by each contributing agency/department in Appendix C:

- Department of Accounting and General Services Capabilities
 - Land Acquisition Program
 - Shelter Upgrade Program
- Department of Budget and Finance
 - Capital Improvements Budgets
- Department of Health
 - Department of Health All-Hazards Training and Exercise Program
 - Hospital Preparedness Program
- Department of Land and Natural Resources
 - Fire Management Program
 - Legacy Lands Conservation Program
 - Watershed Partnership Program
 - Natural Area Partnership Program
 - Natural Area Reserves System
- Hawai'i Emergency Management Agency
 - Western States Seismic Policy Council
- Hawai'i State Legislature
 - Hawai'i State Legislature Grant-in-Aid (GIA) Program
 - Hawai'i Revised Statutes for Hazard Mitigation Funding





The progress update on the actions identified in the 2018 SHMP is included in Appendix G (Mitigation Strategy Supplement). It includes a list of activities that the state undertook during the performance period of the plan and indicates those actions that were accomplished using state funds. In total, 11 of the 16 actions (69%) identified as completed during the performance period of the 2018 SHMP used state funds (exclusively or in part) to support the completion of the action.

OTHER FUNDING FOR MITIGATION ACTIVITIES

A wide array of funding is available to support mitigation activities within the State of Hawai'i. Non-state and non-FEMA funding resources that state departments and agencies have indicated that are actively being used or pursued to support mitigation activities include the following:

- America the Beautiful Challenge (ATBC), National Fish and Wildlife Foundation
- Clean Water Act Section 319 Funding, U.S. EPA
- Corps Continuing Authorities (CCA) program, USACE
- State Response Plan Grant Funding, U.S. EPA
- Coastal and Estuarine Land Program, NOAA
- Coastal Resiliency Grant Funding, NOAA
- Coastal Zone Enhancement Program (Section 309) Funding, NOAA
- Community Development Block Grant – Mitigation (CDBG-MIT), HUD
- Community Wildfire Defense Grant, U.S. Forest Service
- Conservation Reserve Enhancement Program, Farm Service Agency
- Economic Development Administration Grants, EDA
- Emergency Management Performance Grant (FEMA Preparedness Grant)
- Forest Legacy Program, U.S. Forest Service
- Forest Stewardship Program, U.S. Forest Service
- Homeland Security Grant Program (prevention, protection, and response)
- Hospital Preparedness Program, U.S. Department of Health & Human Services
- Infrastructure Investment and Jobs Act (IIJA)
- National Coastal Resilience Fund (NCRF), NOAA
- National Earthquake Hazards Reduction Program
- National Tsunami Hazard Mitigation Program, NOAA
- Silver Jackets Interagency Program, U.S. Army Corps of Engineers
- State and Local Cybersecurity Grant Program (prevention, protection, and response)
- State and Private Forestry Branch, U.S. Forest Service
- Weatherization Assistance Program, U.S. Department of Energy
- Wildland Urban Interface Grant Program, U.S. Forest Service

More detailed information on how these funds are being used is available in Appendix C (Capability Assessment Supplement) and Appendix G (Mitigation Strategy Supplement).





Challenges and Opportunities to Access Mitigation Funding

There were several conversations throughout the planning process centered on the challenges to access funding to implement mitigation activities. The following summarizes these the challenges and opportunities to overcome these challenges identified by the Forum and stakeholders participating in the February 2023 workshops.

Local-level challenges and opportunities:

- There is a lengthy time period between grant application submittal and award, leaving people/property/environment at risk.
- Socially vulnerability communities are challenged to meet the ranking criteria for HMA grants and need assistance to develop competitive grant applications.
- Technical assistance is needed from FEMA on how to develop competitive hazard mitigation grants on the national level. This is being addressed in consultations with FEMA.
- Grant writers and administrators need to be hired at the county level to increase capacity. The counties may include this gap in a mitigation action during the next local HMP update.

State-level challenges and opportunities:

- There have been significant changes and reductions in staff at HI-EMA who oversee funding and the application process. HI-EMA is in the process of filling this gap in capacity through hiring and training.
- There was a shift in oversight of FMA funding from DLNR to HI-EMA in 2020. This occurred at a time when capacity at HI-EMA for overseeing funding was already diminished.
- There is a lack of capacity at DLNR to apply for and manage HHPD grants.

5.2.4 SUMMARY OF CHANGES IN STATE CAPABILITIES AND PROGRESS ON INTEGRATION

The State of Hawai'i has strengthened and enhanced its capabilities over the performance period of the 2018 HMP and has continued to make progress on integration. The following sections provide a summary of the detailed information available in Appendix C (Capability Assessment Supplement).

SUMMARY OF CHANGES IN STATE CAPABILITIES

The following are a selection of notable changes that have influenced or impacted state capabilities over the performance period of the 2018 HMP:

- **Public Education and Information**
 - The Ocean Resources Management Plan (ORMP) Dashboard, built on Esri HUB technology, was launched, which provides information on the progress of implementing the ORMP.
 - The Hawai'i Hazards Awareness and Resilience Program (HHARP) was established in 2014 and, as of March 2023, seven communities have reached recognition level in the program. Six additional communities are engaged in HHARP (Hawai'i Emergency Management Agency 2023).





- **Staffing and Technical Resources**
 - The HI-EMA Mitigation Section, who led the state mitigation program, experienced significant challenges to adequately staff all the responsibilities for which they are charged during regular operations. This challenge is exacerbated when staff is deployed for special occurrences, such as disaster events.
- **New and Updated Planning Resources**
 - One (1) Community Wildfire Protection Plan was developed in 2021
 - The HI-EMA Strategic Plan was updated in March 2022
 - The Hazards and Vulnerabilities Overview was developed in 2022
 - The Hawai'i 2050 Sustainability Plan was developed in 2021
 - The Hawai'i Highways Climate Adaptation Action Plan was developed in 2021
 - The County of Hawai'i Volcanic Risk Assessment was developed in 2020
- **New Collaborative Approaches**
 - The Hawai'i Climate Change Mitigation & Adaptation Commission was formed and has adopted the *Hawai'i Sea Level Rise Vulnerability and Adaptation Report*, with an updated report expected in 2023.
 - The Hawai'i Tree Canopy Viewer was developed in 2020, which facilitates awareness of the extent of impervious surfaces to promote clear stormwater runoff and urban heat sensitivity mapping.

PROGRESS ON INTEGRATION INTO STATE PROGRAMS

The state has used the update of the 2023 SHMP Update as an opportunity to further promote integration:

- **Resource for County Local HMPs**—HI-EMA envisions the 2023 HMP Update as a reference for local HMPs to integrate risk assessment results to reduce work and focus on strengthening other areas of plans, including general plans and emergency operations plans.
- **Goal Development**—Goals identified in local HMPs were used to inform the development of goals for the 2023 SHMP Update. County leaders worked with the state in goal development and all aspects of plan development through their involvement on the State Hazard Mitigation Forum.
- **THIRA**—HI-EMA intends to leverage the 2023 SHMP Update for the next THIRA update. The 2023 SHMP Update risk and capability assessments will be integrated into the updated document.
- **Stakeholder Preparedness Review**—HI-EMA will more fully integrate the updated mitigation goals into the next Stakeholder Preparedness Review.
- **Hawai'i Mitigation Program Consultation**—The results of the mitigation program consultation conducted with FEMA Region 9 mitigation staff and HI-EMA were used to identify challenges and opportunities to mitigation within the state and will be used in the future to help monitor progress on addressing challenges and identifying emerging issues.
- **Homeland Security**
 - Hawai'i has established several foundational strategies and plans in the Homeland Security mission space:





- Hawai'i Homeland Security Strategy and its Implementation Plan
 - Hawai'i Targeted Violence Prevention Strategy
 - Cyber Incident Response Plan (for state executive agencies)
 - State Cyber Disruption Response Plan
 - Terrorism and Targeted Violence Incident Annex
- Hawai'i inaugurated its Homeland Security Exercise Program in 2022, completing four large-scale exercises:
 - State Cyber Disruption Response Plan (led)
 - Hawai'i County Election Security (led)
 - Hawai'i State Election Security (led)
 - TSA/USCG Cyber Challenge 22 (support)
 - Homeland Security planning activities underway include:
 - Terrorism and Targeted Violence Incident Annex annual review and incorporation of State Mass Violence Response Plan
 - Targeted Violence Prevention Strategy Implementation Plan
 - Critical Infrastructure Security and Resilience Strategy, Planning Framework, and Implementation Guide
 - Hawai'i is in the process of establishing its Homeland Security Executive Advisory Council, along with two grant program-focused subcommittees (Homeland Security and State and Local Cybersecurity) and relevant working groups.
 - Hawai'i is also in the progress of establishing its Statewide Cybersecurity Program with significant support provided through the State and Local Cybersecurity Grant Program, initially focused on:
 - Statewide Cybersecurity Strategy and Implementation Plan(s)
 - Subrecipient Cyber Incident Response Plans and related exercises
 - Statewide Cyber Workforce Development Strategy and County/Entity-Level Implementation Plans

Additional components of program integration are discussed in Section 2 (Planning Process – Program Integration). Opportunities for additional integration have been identified and are included in the Action Plan in Section 6 (Mitigation Strategy).

5.3 SUMMARY OF EFFECTIVENESS OF LOCAL MITIGATION CAPABILITIES

Disasters are inherently local events; therefore, the assessment of state capabilities would not be complete without an examination of local (County) capabilities. This review and examination was used to inform and influence the state's mitigation priorities as discussed in Section 6 (Mitigation Strategy). The review was conducted by examining the local hazard mitigation plans (local HMPs) of the four counties.





Element S13, HHPD6, and 44 CFR § 201.4(c)(3)(ii): The state plan must include a general description and analysis of the effectiveness of local government mitigation policies, programs, and capabilities. The plan must include a summary of current local government policies, programs, and capabilities. The plan must identify challenges to implementing these mitigation policies, programs, and capabilities; these should include gaps and disparities in serving underserved communities and challenges resulting from the impacts of climate change. If the state is interested in HHPD funding, the plan must generally describe and analyze the effectiveness of local mitigation policies, programs, and capabilities that address high hazard potential dams.

This review focused on the following aspects of the local HMPs:

- **Foundational Capabilities**—A list of foundational capabilities relevant for hazard mitigation in the state was developed, and local HMPs were reviewed to determine if these capabilities were identified and discussed. It should be noted that this list is not intended to be a comprehensive assessment of all capabilities identified in local HMPs.
- **Floodplain Management Capabilities**—The local HMPs were reviewed for discussion of County floodplain management capabilities, including adoption of higher standards; general information on effectiveness and process; and efforts to address repetitive loss and severe repetitive loss properties.
- **Land Use Planning**—The local HMPs were reviewed for discussion on General Plans and Community Plans and for information on integrating hazard mitigation into land use planning (i.e., plan integration).
- **Evaluation and Effectiveness**—The local HMPs were reviewed to determine challenges and opportunities, unique sources of funding, mitigation successes, and determinations on effectiveness of mitigation actions.

The local HMPs, like state HMPs, are required by FEMA to be updated every five years. The counties' local HMPs are midway through their performance periods; therefore, the 2023 SHMP Update includes discussion on emerging capabilities that have arisen in the counties during their performance period that are not reflected in those plans. The following sections summarize the results of the review of the local HMPs and emerging capabilities identified during the 2023 SHMP Update.

5.3.1 LOCAL FOUNDATIONAL CAPABILITIES FOR HAZARD MITIGATION

County policies, programs, funding, and other capabilities are used to support and accomplish hazard mitigation goals and objectives. The County local HMPs identify and evaluate County capabilities for implementing hazard mitigation. In order to summarize these capabilities for the 2023 SHMP Update, a list of foundational capabilities for accomplishing hazard mitigation was developed based on FEMA local mitigation planning guidance, professional judgement, and suggestions from the State Hazard Mitigation Forum. This list was not intended to be inclusive of every capability discussed in the local HMPs or every capability that may be used to support hazard mitigation at the County level. Table 5-4 includes a summary of foundational capabilities relevant for hazard mitigation in the state and if these capabilities were identified and discussed in the County local HMPs.





Table 5-4. Foundational Capabilities as Reflected in County Local Hazard Mitigation Plans

Foundational Capabilities	County of Kaua'i	City and County of Honolulu	County of Maui	County of Hawai'i
Building Code ^a	◆	◆	◆	◆
Capital Improvement Program	◆	◆	◆	◆
Climate Action/Resilience Plan ^b	◆	◆	◆	◆
Community Development Plans	◆	◆	◆	◆
Community Wildfire Protection Plan ^c	◆	◆	◆	◆
Emergency Operations Plan	◆	◆	◆	◆
Continuity of Operations Plan	◆			◆
County Owned Building Insurance				
Economic Development Plan	◆		◆	◆
Firewise USA™ ^d		◆	◆	◆
Flood Damage Prevention Ordinance	◆	◆	◆	◆
General Plan	◆	◆	◆	◆
Get Ready Website				
Hawai'i Hazards Awareness and Resilience Program			◆	
Hawai'i State Legislature Grant-in-Aid Program			◆	
Legacy Lands Conservation Program				
Land Acquisition Plan / Willing Seller Program		◆	◆	◆
Post-Disaster Recovery	◆		◆	◆
Public Health Preparedness Plan ^e	◆			◆
Real Estate Disclosure ^f	◆	◆	◆	◆
Rehabilitation of High Hazard Potential Dams (HHPD) ^g				◆
Resilience Officer		◆		
Risk MAP Program				
Sea Level Rise Study/Plan ^h	◆	◆	◆	◆
Shoreline Setbacks	◆	◆	◆	◆
Site Plan Review	◆	◆	◆	◆
Special Management Area Permits ⁱ	◆	◆		◆
State Hazard Mitigation Forum	◆	◆	◆	◆
StormReady®	◆	◆	◆	◆
TsunamiReady®	◆	◆	◆	◆
Stormwater Management / Low Impact Development	◆	◆	◆	◆
Subdivision Requirements	◆	◆	◆	◆
Threat & Hazard Identification & Risk Assessment ^j	◆	◆	◆	◆
Water Management Plan		◆		◆
Zoning Code or Land Use Ordinance ^k	◆	◆	◆	◆

Notes:

- ◆ = Capability discussed in hazard mitigation plan; Information presented in this table reflects information as it is presented in the County hazard mitigation plans unless otherwise noted. Codes, regulations, and/or plans may have been updated since the time of their publication.
- a. The State Building Code is included in HAR §3-180 State Building Code; Counties may make local amendments; At the time of the 2023 SHMP Update, counties had until April 20, 2023, to adopt the current version of the State Building Code.
- b. Progress on the development of Climate Action/Adaptation Plans has occurred since the last updates of the County hazard mitigation plans. One new plan (Maui County Climate Action & Resiliency Plan) was completed in 2022. One plan for Hawai'i County will be completed in June 2023.
- c. Progress on the development of Community Wildfire Protection Plans has occurred since the last updates of the County hazard mitigation plans. One new plan (North Shore O'ahu) was completed in 2021 in the City and County of Honolulu.





- d. As of March 2023 there are 13 Firewise USA recognized sites in County of Hawai'i (9), County of Maui (3), and City and County of Honolulu (1).
- e. There are no County equivalent public health agencies within the state; however, plans have been developed for all counties either directly by the Department of Health (for O'ahu) or via the District Health Offices of the Neighbor Islands (County of Kaua'i, County of Maui, and County of Hawai'i). In addition, the State of Hawai'i Health Risk and Vulnerability Assessment (2014) pertains to the entire state.
- f. Disclosure of hazard risk is required in some real estate transactions by state law (see HRS 508D, Mandatory Seller Disclosures in Real Estate Transactions).
- g. All counties rely solely on DLRN for HHPD policies, programs, and capabilities. Hawai'i County included one HHPD mitigation in the local HMP.
- h. All counties are included in the statewide Hawai'i Sea Level Rise Vulnerability and Adaptation Report.
- i. Special Management Area Permits are part of the State Coastal Zone Management Program and are administered at the County level.
- j. State law includes requirements as part of the Uniform Land Sales Practices Act (HRS Chapter 484)j. County representatives have participated in the development of the state THIRA.
- k. County government have regulatory authority over Urban District lands and shared authority over Agricultural and Rural District Lands. Conservation District lands are reserved for the state.

The text included provides details on how the capability was discussed/addressed in the local plan and does not account for inaccuracies in this discussion. It is important to note that the absence of a capability does not mean that the capability does not exist in the county. It simply means that no discussion was found describing or identifying the capability in the local HMP. This suggests that the capability may not be used to its full potential to support mitigation within the county, or it may suggest that the department or agency responsible for implementing the capability may not have been fully involved in the local HMP planning process.

It is important to note that codes, regulations, and/or plans may have been updated or developed since the time of the local HMP publication (see Table 5-6). Notes are provided below the table on some such updates. In addition, please note that some of the capabilities included are local level capabilities, while others are state programs and/or regulations. A table with more detailed information on the foundational capabilities summarized below can be found in Appendix C (Capability Assessment Supplement). In addition, many aspects of these foundational capabilities and changes that may have occurred over the last several years are discussed in the detailed tables supporting the state capability assessment described above (see Appendix C [Capability Assessment Supplement]).

5.3.2 COUNTY LAND USE PLANNING

As indicated in Table 5.3-1 all Hawai'i counties have general plans, community plans, and zoning ordinances (referred to as the land use ordinance in some counties) and all three of these capabilities are discussed in the four County local HMPs. All of the counties have recognized the importance of land use planning and have identified actions to integrate the local HMPs into these plans. An example of actions included in the local HMPs addressing this integration are as follows:

- **County of Kaua'i**—Integrate community-based disaster resilience plans into future community plan updates.
- **City and County of Honolulu**—Integrate natural hazard policies into the General Plan & Community Development Plans.
- **County of Maui**—Integrate the hazard mitigation plan into other plans, ordinances, and programs that dictate land use decisions in the community, including capital improvement programs, the general plan, recovery plans, and strategic plans.





- **County of Hawai'i**—Integrate the hazard mitigation plan into other plans, ordinances, and programs that dictate land use decisions in the community, including capital improvement programs, the general plan, recovery plans, and strategic plans.

Current and future development trends are discussed in more detail in Section 3 (State Profile) and in Section 4 (Risk Assessment).

5.3.3 COUNTY FLOODPLAIN MANAGEMENT

All counties are in good standing in the NFIP program at the time of this plan update. Each county is responsible to conduct floodplain management within their jurisdiction. The local HMPs were reviewed for discussion of county floodplain management capabilities including, adoption of higher standards; general information on effectiveness and process; and efforts to address repetitive loss and severe repetitive loss properties. Table 5-5 includes a summary of each county’s floodplain management programs.

Table 5-5. County NFIP and CRS Participation

Criterion	County of Kaua'i	City & County of Honolulu	County of Maui	County of Hawai'i
County Department That Is Responsible for Floodplain Management	Department of Public Works, Engineering Division	Department of Planning and Permitting	Department of Planning	Department of Public Works, Engineering Division
Floodplain Administrator	Floodplain Manager	Floodplain Manager	Floodplain Manager	Floodplain Manager
Date of Entry into the NFIP Program ^a	11/04/81	09/03/80	06/01/81	05/03/82
Current Effective FIRM Date	02/26/21	11/05/14	11/04/15	09/29/17
Date That Flood Damage Prevention Ordinance Was Last Modified ^b	2005	2016	2017	2018
Floodplain Management Program Higher Regulatory Standards ^c	Definition and development standards added for repetitive loss structures disallowing grandfathered unsubstantial improvement 10-year cumulative substantial improvement	Not discussed in local HMP	Not discussed in local HMP	3-year cumulative substantial improvements
Most Recent Community Assistance Visit or Community Assistance Contact ^c	2012	2007	2015	2019
Known Outstanding NFIP Compliance Violations That Need to be Addressed ^c	No; Issues identified during 2012 CAV were addressed in 2015	Various issues with administrative and enforcement procedures including improperly completed elevation certificates	No	No





Criterion	County of Kaua'i	City & County of Honolulu	County of Maui	County of Hawai'i
Community Rating System (CRS) Participant	Yes	Yes	Yes	Yes
Date of Entry into the CRS Program	04/01/23	04/01/22	10/1/95	05/1/11
Current CRS Classification	8	8	7	7
Flood Insurance Policies in Force in the County ^d	3,835	38,122	11,787	4,201
Insurance in Force ^d	\$992,835,100	\$9,412,190,700	\$2,836,571,500	\$1,091,948,400
Premium in Force ^d	\$3,396,276	\$23,314,743	\$7,803,520	\$3,476,834
Total Loss Claims Filed in the County ^d	1,454	2,735	598	754
Total Payments for Losses ^d	\$44,614,711	\$55,893,849	\$9,336,888	\$19,756,781
Total Number of Repetitive Loss Properties ^e	46	132	38	46
Severe Repetitive Loss Properties ^e	2	13	6	32
Repetitive Loss Properties That Have Been Mitigated ^e	0	1	3	0
Repetitive Loss Properties That Are NFIP Insured ^e	23	40	14	4
Repetitive Loss Properties Located Outside the Special ^e Flood Hazard Area (SFHA)	12	54	11	10
Total Repetitive Loss Occurrences ^e	96	347	97	163
Total Cumulative Repetitive Loss Property Losses ^e	\$6,906,758	\$11,392,049	\$2,436,353	\$4,100,237
Total Average Repetitive Loss Property Losses ^e	\$71,945	\$32,830	\$25,117	\$25,155

Notes:

- Date indicates entry into the Regular Program.
- There is no state-level model flood damage prevention ordinance.
- As discussed and described in the County's Local Hazard Mitigation Plan.
- According to FEMA statistics as of September 30, 2022.
- Provided by FEMA PIVOT Database, August 31, 2022; See Section 4.6 (Flood) for more information.

5.3.4 COUNTY BUILDING CODES

In 2007, the State Legislature created a State Building Code Council, composed of subject matter experts and government agency representatives, with the authority to establish a comprehensive suite of codes applicable to all construction in the State of Hawai'i. The statute governing this process is Hawai'i Revised Statutes Chapter 107 Part II, State Building Code and Design Standards. The State Building Code Council is the technical body with the background expertise to evaluate model building codes and develop amendments necessary to make the codes appropriate for Hawai'i conditions. Under the present statute, once the Council develops and approves a Hawai'i code, it is then legally adopted into the Hawai'i Administrative Rules (HAR) of the Department of Accounting and General Services (DAGS).





Counties have two years from the date of establishment of the HAR State Building Code to adopt the Hawai'i State Building Code as the local County building code, including the addition of any locally approved County amendments. While having any code in effect to govern how structures are constructed considering the impacts from natural hazards is beneficial, this "2-year" lag process for code adoption has created some challenges for the State of Hawai'i as it pertains to meeting FEMA's goals for "consensus-based codes". Consensus-based codes are the latest published editions of codes from nationally recognized authorities such as the International Code Council. FEMA Policy 104-009-11 has established minimum requirements for consensus-based codes for certain eligibilities under its Public Assistance (PA) and BRIC programs. The State of Hawai'i and its counties have not been successful pursuing grant funding under the BRIC program because of this limitation.

FEMA has developed a program to tracking the adoption of consensus-based codes in response to directives from the Disaster Recovery Reform Act of 2018 (Building Code Adoption Tracking Program (BCAT), <https://www.fema.gov/emergency-managers/risk-management/building-science/bcat>). The BCAT program tracks code adoption by each state and then categorizes each state into the following two categories:

- Higher Resistance: State has adopted the hazard-resistant codes of 2018 or later International Building Code (IBC) and International Residential Code (IRC), without weakening of any resilience provisions related to any of the five tracked hazards for which the jurisdiction is at high risk.
- Lower Resistance: State has not adopted hazard-resistant codes as defined under the higher resistance category.

The BCAT program has identified the State of Hawai'i as a lower resistance state based on its failure to adopt consensus-based codes as defined by FEMA.

5.3.5 EVALUATION OF LOCAL HAZARD MITIGATION PLANS

All counties in the state have identified, leveraged, and developed capabilities that are effective in mitigating risk from natural hazards. These capabilities are discussed in their local HMPs and serve as the basis for the implementation of many successful actions. A review of the County local HMPs was conducted to achieve the following:

- Determine how the counties are evaluating the effectiveness of their plans.
- Determine challenges, barriers, and unmet needs the counties had identified in reaching their mitigation goals.
- Identify opportunities to address challenges and leverage existing capabilities.

A review of the County local HMPs reveals that there is limited discussion of the effectiveness of mitigation actions and overall plan effectiveness. A summary of the results of the review are provided in the sections that follow. The results of this assessment were used by the state to develop its mitigation strategy for the 2023 SHMP Update.

REHABILITATION OF HIGH HAZARD POTENTIAL DAMS (HHPD) PROGRAM

The County local HMPs do not include discussions of the HHPD program. Each county relies solely on the policies, programs, and capabilities of DLNR for mitigation of high hazard potential dams. Challenges and opportunities are discussed in the following section.





5.4 CHALLENGES AND OPPORTUNITIES TO EFFECTIVE STATE AND LOCAL HAZARD MITIGATION

5.4.1 CHALLENGES AND BARRIERS

A number of challenges and barriers to implementing effective state and local mitigation actions have been identified during the update process for the 2023 SHMP. A summary of these challenges and barriers follows.

- **Sources of Funding Impact Implementation**—Activities and actions that required outside sources of funding for implementation were less likely to be implemented over the performance period of plans due to economic fluctuations and budget delays.
- **Social Factors Influence Mitigation Strategy Effectiveness**—Effective disaster mitigation goes beyond scientific and technical data. Social factors, such as poverty, social justice, and high costs of living, must be considered in the development and implementation of effective mitigation actions and strategies.
- **Coordination and Collaboration are Needed**—Additional coordination and collaboration among and between state, local and non-government agencies is needed to successfully implement many mitigation activities. An example of this is provided by the need for strong coordination and collaboration as well as clear policies for coordinating information and responses to landslides and rockfalls on critical highway areas and the trifurcation of jurisdiction in coastal areas of the state.
- **High Hazard Potential Dam Program Coordination and Hazard Awareness**—Each county relies solely on the capabilities, programs, and policies of DLNR for dam safety, but has not developed local mitigation capabilities to fully implement the HHPD program. The Hawai'i County HMP is the only local plan that includes a mitigation action to specifically address a high hazard potential dam. DLNR currently has a dam failure awareness program but focuses on dams impacted by storm events. There is a local and state data gap for how climate change, especially increased intense precipitation, may exacerbate dam failure.
- **Floodplain Management Presents Challenges for Counties**—A few counties have experienced challenges with effectively administering floodplain management regulations. In addition, updated FIRMs have resulted in more properties falling within SFHA boundaries and properties that do not conform to current flood damage prevention standards. Older levees are subject to failure or do not meet current building practices for flood protection. Issues with levee accreditation have emerged in the past few years.
- **Data Sharing and Information Management could be Improved**—Data sharing and information management for hazard mitigation has been a challenge and is a priority concern. A sustained effort to gather historical damage data, such as high-water marks on structures and damage reports, would be useful in measuring the cost-effectiveness of future mitigation projects.
- **Funding for Critical Facility and Infrastructure Mitigation is Needed**—Funding is needed to upgrade and retrofit public facilities and shelters as well as communication infrastructure. In addition, detailed assessments on some critical facilities, such as major health care centers, need to be conducted to determine appropriate mitigation measures.
- **Public Awareness of Risk could be Improved**—Increased awareness and better understanding of risks and impacts is needed across stakeholder groups including the general public and decision makers. Isolated population centers especially need information on sheltering in place and instructions on developing a personal emergency plan.





- **Visitors Present Special Challenges**—Visitors present a special challenge for disaster planning activities, especially education and awareness campaigns, warning, and planning for accommodations post-event.
- **Capabilities Could be Enhanced/Updated**—Some county and state plans, such as community plans and drainage plans, have not been updated regularly. Development codes could be improved to better account for hazard risk, such as requiring defensible space in new subdivisions and increasing the design capacity of stormwater systems. Coastal AE zones may be subject to wave action that would cause damage to structures. Current flood damage prevention ordinances in the counties do not include standards that account for this risk. Present building codes and guidelines do not adequately address the impacts of tsunamis on structures, and current tsunami hazard mapping is not appropriate for code enforcement. It should be noted; however, that the State Coastal Zone Management program has identified tsunami mapping in its five-year coastal hazards strategy and initial mapping is underway.
- **Conditions are Changing**—Guidance on effective approaches and time horizons for planning for sea level rise and other climate change considerations are needed. Increases in impervious surfaces due to growth and development are altering historical drainage patterns and amounts. Coastal erosion and beach loss are significant causes of concern and are expected to be exasperated by sea level rise.
- **Pre-Event Planning Could be Improved**—There are a number of planning and administrative activities that can be conducted before a hazard event to reduce post-event recovery times. For example, post-storm debris management is a significant issue on the islands and many counties have not conducted appropriate planning efforts. In addition, redundancy of power supply, especially for critical facilities, is a significant issue of concern.
- **Structures are Vulnerable**—Many structures across the state were constructed before modern building codes were widely adopted and enforced. Mechanisms for bringing these structures into compliance are limited and may be cost prohibitive to owners.
- **Development Pressures Can Increase Risk**—There is continued pressure to convert floodplain compatible uses, such as agricultural lands, to more intensive uses during periods of growth. This pressure may intensify as sea levels rise.

5.4.2 OPPORTUNITIES TO ADDRESS AND LEVERAGE CAPABILITIES

The following are some of the opportunities identified during the update process for the 2023 SHMP and documented in local hazard mitigation plans to address challenges and leverage capabilities:

- **Building Code Effectiveness**—Coordination between the state and counties to adopt building codes within similar timeframes will allow grant applications to become more competitive.
- **Resiliency Efforts Have Gained Momentum**—Community interest and political support for resiliency planning provides an opportunity to engage stakeholders and integrate hazard mitigation into a number of policies and programs.
- **Opportunities for Partnerships are Available**—Forming partnerships with community and non-profit organizations can maximize limited financial resources. Several working groups have formed to determine protocols for data sharing, transfer, and use.
- **Counties are Poised to Capture Funding**—The last round of local hazard planning efforts resulted in risk assessment and modeling efforts that provide enough detail for identification of specific vulnerabilities at





the structure and infrastructure level and support the submission to FEMA grant programs. In addition, the counties have sought and received funding for mitigation activities such as beach warning and tsunami evacuation signage (NOAA, FEMA, and NIST funding).

- **Natural Resources can be Harnessed for Mitigation Goals**—Maintenance, restoration, and management programs can be developed for natural mitigation features, such as coral reefs, wetlands, beaches, and dunes.
- **State Resources and Assistance Support County Efforts**—The state provides technical resources and programs that support the counties in their hazard mitigation activities, including assistance in applying for grant funding opportunities.
- **Coordination with DLNR on the HHPD Program**— Additional coordination between local jurisdiction and DLNR will help effectively implement the HHPD program. Each county has unique needs that may need to be addressed by developing local capabilities, programs, and policies that align with oversight from DLNR. Implementation of mitigation action 2023-003 will allow HI-EMA, DLNR, and local jurisdictions to coordinate outreach and awareness activities. Implementation of mitigation action 2023-005 will increase state and local understanding of the dam risk and assist with identifying and prioritizing future dam failure mitigation actions.

5.4.3 EMERGING LOCAL CAPABILITIES

Appendix C (Capability Assessment Supplement) provides a detailed record of state mitigation capabilities, including those that have emerged over the past five years. The following section (Emerging Local Capabilities) discusses progress on addressing the challenges in the years since the counties' local hazard mitigation plans have been developed. There have been advances in the understanding and development of strategies to address community resilience and climate change. A few emerging capabilities in these areas include:

- **Pre-Disaster Recovery Plan**—At the time of this 2023 SHMP Update, the County of Kaua'i is starting to build on existing County planning efforts to work with County departments, external stakeholders, and community members in vulnerable and underserved communities to plan for expedited recovery after a catastrophic natural disaster.
- **Resiliency Work in the City and County of Honolulu**—In May 2016, the City and County of Honolulu was selected as a member of the 100 Resilient Cities Network. The City & County of Honolulu Office of Climate Change and Resilience was established in the City Charter in 2017, increasing institutional capacity for coordinating actions and policies to improve community resilience to climate change and sea level rise impacts and integrating sustainable and environmental values into City plans, programs, and policies.
- **Resiliency Work in the County of Maui**—The County of Maui established an Office of Climate Change, Resiliency, and Sustainability in 2022 to increase capacity including through the ongoing development of a Climate Action and Resiliency Plan and Resilient Housing Guide.
- **Climate Action Resiliency Plan in the County of Maui**—This is the first climate action plan for Maui County and includes 22 resilience strategies and 84 supporting actions to prepare for, and strengthen resilience to, potential climate threats.
- **County of Maui Beach Parks Vulnerability and Adaptation Study**—In 2020, the County of Maui Department of Parks and Recreation initiated a project to assess the vulnerability of its beach parks to a





variety of coastal threats and to prepare adaptation strategies. It includes an adaptation and mapping tool built on the County’s GIS platform.

These capabilities and others identified during the course of the 2023 SHMP Update performance period will be monitored to determine their effectiveness at achieving hazard mitigation goals.

5.5 STATE PROCESS TO SUPPORT DEVELOPMENT OF LOCAL PLANS, PROJECTS, AND CONTINUED PLANNING

The State of Hawai’i recognizes that reducing the impact of hazards occurs at many levels in many categories, and therefore needs to involve multiple sectors, organizations, government agencies, and communities in mitigation. HI-EMA is the state agency responsible for mitigation throughout the state. HI-EMA works closely with the State Hazard Mitigation Forum, which includes participants from state and county agencies with mitigation responsibilities and public and private interests and serves an important role in local mitigation plan monitoring.

Element S14 and 44 CFR § 201.3(c)(5) and 201.4(c)(4)(i): The state plan must include a discussion of the process to support the development of approvable local government mitigation plans. This includes providing technical assistance, training, and funding. The plan must provide a summary of barriers to developing or updating, adopting, and implementing FEMA-approved local government mitigation plans and steps to remove barriers to help local governments advance mitigation planning.

This section:

- Indicates the current status of County local Hazard Mitigation Plans (local HMPs)
- Evaluates the prior plan’s approach to local assistance and coordination
- Describes the state’s process for supporting the update of local plans
- Describes the process by which the state reviews, coordinates, and links with local mitigation plans.

5.5.1 COUNTY LOCAL HAZARD MITIGATION PLAN STATUS

The four counties in Hawai’i are participating in the hazard mitigation planning program through the development and update of local hazard mitigation plans. Table 5.4-1 lists the status of the local mitigation plans and plan adoption dates.

Table 5-6. Status of the State of Hawai’i Local Hazard Mitigation Plans

County	Approval Date	Expiration Date
County of Kaua’i	04/29/2021	04/28/2026
City and County of Honolulu	02/17/2020	02/16/2025
County of Maui	11/18/2020	11/17/2025
County of Hawai’i	9/14/2020	9/13/2025

Note:

Status as of January 1, 2023





5.5.2 EVALUATION OF PRIOR APPROACH TO LOCAL ASSISTANCE AND COORDINATION

In the 2018 SHMP, HI-EMA identified and prioritized the need for the development of a formalized approach to local assistance. The process was structured so that the plan could be the foundation and resource for the next round of local HMPs. In addition, a new mitigation action was identified to ensure effective assistance and coordination moving forward. HI-EMA, in coordination with the State Hazard Mitigation Forum, worked to start developing and documenting standard operating procedures regarding local assistance for supporting the update of local hazard mitigation plans and their implementation, including documentation of the grants management process, application packets for grants management, and procedures for encouraging counties to update local HMPs following major disasters. Some technical assistance and training sessions were completed in 2022, including training for project and grant application development. Lack of Mitigation Staffing and complications from the COVID-19 pandemic prevented full development and implementation of the standard operating procedures. HI-EMA is coordinating with the FEMA Pacific Area Office on delivering additional training in 2023, and the mitigation action is carried over to the 2023 SHMP Update.

5.5.3 STATE SUPPORT FOR THE UPDATE OF LOCAL HAZARD MITIGATION PLANS

HI-EMA is committed to a comprehensive mitigation program that actively supports local mitigation planning by providing technical assistance such as workshops and training for both planning and post-disaster activities. The following sections describe how the State of Hawai'i supports the development and update of FEMA-approvable local mitigation plans through planning support, funding opportunity education and outreach, training programs, and technical assistance.

PLANNING SUPPORT AND TECHNICAL ASSISTANCE

HI-EMA provides guidance and technical assistance to counties upon request to support the update of their local HMP through the assistance of state planners, as needed and as resources are available. The SHMO or representative from HI-EMA sends an email notification to the Counties with plans expiring within 24 months of upcoming funding cycles. HI-EMA is committed to the continued funding of local HMPs through its state allocation of Building Resilient Communities and Infrastructure (BRIC) monies. Local plan status is also regularly discussed at State Hazard Mitigation Forum meetings held quarterly. Each of the four County mayors, or their designated official representatives, are members of the State Hazard Mitigation Forum, which allows County officials to stay informed about mitigation planning. The type of technical assistance is flexible; it is based on the particular needs and resources available to the County requesting the assistance.

HI-EMA is committed to this close level of support for County plan development and intends to continue to participate in County plan development over the performance period of the 2023 SHMP Update. HI-EMA also intends to coordinate with FEMA Region 9 mitigation staff to encourage their participation in plan development whenever possible.

As discussed in Section 7 (Plan Maintenance), HI-EMA plans to continue meeting the Forum which includes county representatives on a quarterly basis. These meetings will include discussion topics including the sharing of risk assessment data and mitigation actions across the state and local plans. In addition, this SHMP Update included a





robust risk assessment inclusive of not only state-owned and leased assets, but also all buildings statewide. HI-EMA will share this geospatial data with the counties to assist with their future local HMP updates.

FUNDING OPPORTUNITY OUTREACH AND TECHNICAL ASSISTANCE

HI-EMA is committed to educating its counties on grant availability, grant applications, and managing mitigation funds. When funding opportunities become available, HI-EMA places notifications in local newspapers, notifies appropriate state and county agencies via email and other means, and communicates opportunities through networks via word of mouth. In addition, HI-EMA has provided training in groups and/or one-on-one on benefit-cost analysis (BCA), the E-Grants system, the environmental and historic preservation (EHP) review process, the Hazard Mitigation Assistance (HMA) program, and applicant briefings and trainings for the HMGP after declared disasters. Over the performance period of the 2018 SHMP, education related to funding has been focused on the FEMA mitigation grant programs and other programs that provide funds for mitigation activities. Additional information on trainings is provided in the Training Program and Offerings section below.

TRAINING PROGRAM AND OFFERINGS

HI-EMA administers a standard training and exercise program similar to other states, which includes full-scale and tabletop exercises that follow a National Incident Management System (NIMS) protocol. The Training and Exercise Plan (TEP) establishes training, exercise, and planning priorities for the State of Hawai'i. The TEP is updated annually by HI-EMA and is informed by the Training and Exercise Planning Workshop (TEPW), hosted by HI-EMA and attended by stakeholders from all levels of government, non-profit, and private sectors. The TEPW is generally held in the latter half of each year. In general, the exercise program tends to focus on the predominant hazards of concern for the state (e.g., hurricane, tsunami, event-based flood, and volcanic hazards). Given the risk posed to the state by hurricanes, an annual statewide hurricane exercise (Makani Pahili) is conducted. After action reports are developed after each exercise allowing the state and other stakeholders to capture lessons learned on how best to build capabilities.

Table 5-7 outlines the hazard mitigation-related trainings offered over the performance period of the 2018 SHMP. Counties may direct ad hoc requests for trainings not addressed in the TEP to the SHMO, and they will be conducted as time and resources allow. During the performance period of the 2018 SHMP, there have not been any issues with providing trainings that have been requested. Mitigation-related trainings overlap to some extent with trainings offered by the State of Hawai'i Homeland Security Office, and between the two agencies, all mitigation-related requested trainings have been addressed. HI-EMA is committed to continue to offer regular trainings to improve County capabilities for hazard mitigation and will coordinate with the counties through their participation in the State Hazard Mitigation Forum over the performance period of the 2023 SHMP Update to ensure responsiveness to ongoing County training needs and emerging training issues.

Table 5-7. HI-EMA Offered Mitigation-Related Trainings during the 2018 SHMP Performance Period

Training	Comment
Benefit-Cost Analysis	Offered though the FEMA to various counties
Environmental and Historic Preservation	Offered though FEMA to the Hawai'i Emergency Management Agency (HI-EMA)
Extreme Tsunami Evacuation Zone	None provided





Training	Comment
FEMA E-74 Reducing the Risks for Nonstructural Earthquake Damage	None provided
FEMA L-320 Hurricane Preparedness for Decision Makers	None provided
FEMA L-705 Fundamentals of Grants Management	None provided
FEMA P-767 Earthquake Mitigation for Hospitals	None provided
HMA Grants	<ul style="list-style-type: none"> • City and County of Honolulu Board of Water Supply and Honolulu Fire Department • Department of Hawaiian Homelands • County of Hawai'i Civil Defense Agency and Department of Water Supply • Kaua'i Emergency Management Agency • Maui Emergency Management Agency
HURREVAC Training	Offered through the National Hurricane Program, multiple years.
Mitigation Grants Training and Workshop	Offered through FEMA and HI-EMA for various counties
NOAA Storm Surge Modeling (SLOSH)	None provided
Storm Surge Modeling/NOAA National Hurricane Center	None provided
Wind Design Provisions of the Hawai'i State Building Code	None provided

Source: HI-EMA

In addition to the trainings provided by the HI-EMA, several other agencies have reported mitigation-related trainings:

- All-Hazards Training and Exercise Program, Department of Health
- Crisis Response Training Program, Department of Geology and Geophysics, UH
- Dam Safety Program Training Events and Materials, Engineering Division, DLNR
- FEMA Certified Training Courses, NDPTC
- NFIP Community Assistance Program, Engineering Division, DLNR
- Ready Set Go! Wildfire Training, HWMO
- Special Management Area Training, CZM Program OPSD
- Teacher Training Workshops, CSAV, UH
- Training and Exercise Support, PDC.

Additional information on these trainings can be found in the detailed tables in Appendix C (Capability Assessment Supplement).

5.5.4 STATE REVIEW, COORDINATION, AND LINKAGE WITH LOCAL PLANS

Element S16 and 44 CFR § 201.3(c)(6), 201.4(c)(2)(ii), 2014.4(c)(3)(iii), and 201.4(c)(4)(ii): The state plan must include a description of the state process and timeframe to review, coordinate, and link local mitigation plans with the state mitigation plan. If the state is unable to consistently submit approvable plans to FEMA or submit adoption resolutions from participating jurisdictions the plan must describe actions planned to improve





state and local mitigation planning capabilities. The plan must describe the state's process and timeframe to share risk assessment data and mitigation priorities with local governments.

HI-EMA is committed to building its hazard mitigation program to support a coordinated approach to mitigation within the State of Hawai'i. This will occur through coordinated and linked state and county local hazard mitigation plans. The following sections describe the process for County local HMP review and the process to coordinate and link state and county plans, identifies barriers for County local HMP development and suggested solutions, describes the criteria for prioritizing mitigation planning and project grants, and outlines the strategy for continued planning.

PROCESS FOR COUNTY LOCAL HMP PLAN REVIEW AND SUBMISSION TO FEMA

As discussed in Section 5.4.3, HI-EMA works closely with the counties to develop and update the County local hazard mitigation plans and is committed to continuing this close working relationship. This commitment includes early and ongoing technical assistance before and during the plan development process. The state is positioned to provide informal reviews as well as a formal review prior to submittal to FEMA. This level of involvement reduces the uncertainty in the plan review process when local plans are submitted to the state for review and ultimately reduces the number of plan revisions required to achieve approval pending adoption notification from FEMA.

The state has not developed any additional planning requirements for local HMPs, so the FEMA Region 9 Plan Review Tool provides the complete set of plan requirements. Typically, plan reviews are conducted by the state in less than 45 days, and HI-EMA will continue to strive for a shorter review period whenever staffing and resources allow. Occasionally, the state and FEMA reviews are conducted concurrently. It is the preference of HI-EMA that concurrent reviews occur whenever feasible to reduce the amount of time that County plans are undergoing review.

There is currently no defined, formalized process for a plan that does not meet all requirements after state review. This process will be documented as part of the operating procedure documentation discussed in Section 5.4.2. At the time of the 2023 SHMP Update, HI-EMA is committed to developing, documenting and implementing an established protocol, including a local HMP update schedule, to work together with the counties in a coordinated manner. HI-EMA envisions that this protocol will involve:

- A memorandum of understanding with defined roles and responsibilities signed at the beginning of a plan update process.
- Formal transmission of the plan to the state for review.
- In the event that there are any requirements determined to have not been met, HI-EMA will formally transmit the plans back to the County with required changes noted.
- When all requirements are met to the satisfaction of HI-EMA, HI-EMA will transmit the local HMP to FEMA Region 9.

The SHMO serves as the lead plan reviewer at the time of this plan update. The counties and FEMA Region 9 will be notified via writing if the lead plan reviewer changes.





PROCESS TO COORDINATE AND LINK STATE AND LOCAL PLANS

During the performance period of the 2018 SHMP, some coordination and linkage occurred as a result of HI-EMA's participation in local plan updates, the State Hazard Mitigation Forum, and the 2018 SHMP serving as a resource for local plan development. Linkage also occurred during the 2018 SHMP development process through the risk assessment and its methodology. Because the state worked with the four counties in developing their risk and vulnerability assessments for their local HMPs, the counties included the state's critical facilities and lifeline infrastructure in their risk and vulnerability assessments.

The state recognizes the benefits of developing the 2023 SHMP Update and local mitigation plans in a more integrated manner, which ultimately can result in building a more resilient state. The 2018 SHMP Update strives to continue developing a framework upon which local HMPs can build upon their update. HI-EMA has developed the 2023 SHMP Update to be a resource for the development of local HMPs to improve their overall effectiveness. The 2023 SHMP Update coordinates risk assessment and mitigation strategy information as follows:

- Includes an enhanced risk assessment that:
 - Conducted extensive hazard subject matter expert (SME) outreach to ensure best-available data, methodologies, and science were utilized
 - Assessed local vulnerability and conducted local hazard ranking utilizing a holistic approach to prioritize the updated mitigation strategy
- Included enhanced coordination among sectors as part of the planning process to maximize planning efforts and to inspire continued collaboration and implementation beyond the 2023 SHMP Update
- Includes high priority mitigation actions identified at the County level in the state mitigation strategy (see Section 6 [Mitigation Strategy])

The 2023 SHMP Update will serve as a catalyst for all County local HMPs to be updated. HI-EMA envisions that this will allow for wise use of resources and better coordination of risk assessment and mitigation strategies among the counties and with the state. In addition, it is the intention of HI-EMA to continue the annual reviews coordinated with and through the annual mitigation program consultation with FEMA Region 9. During this consultation methods and progress on linking the 2023 SHMP Update and local HMPs will be discussed and evaluated.

CHALLENGES AND OPPORTUNITIES FOR LOCAL PLAN DEVELOPMENT

At the time of this plan update, all four counties have adopted and approved local hazard mitigation plans; therefore, no insurmountable challenges or barriers to local plan development have been identified.

If funding resources currently being used for plan updates are no longer available or are significantly delayed, this may be a challenge for local plan development in the future. HI-EMA is committed to supporting local plan updates via BRIC grant support as long as these funds remain available. The 2018 SHMP stated that it was HI-EMA's goal to align all four County plans on the same planning cycle. However, due to persistent staffing shortages and the overlap of subject matter experts and stakeholders involved in both state and county HMP updates, aligning planning cycles is no longer HI-EMA's goal.





CRITERIA FOR PRIORITIZING PLANNING AND PROJECT GRANTS

Element S15, HHPD7, and 44 CFR § 201.4(c)(4)(iii): The state plan must include criteria for prioritizing jurisdictions to receive planning and project grants under available federal and non-federal programs. A principal criterion for prioritizing grants will be the degree to which benefits are maximized. Areas of coordination should include communities at the highest risk with the highest vulnerability, including underserved communities and socially vulnerable populations; high-risk properties, including repetitive loss and severe repetitive loss; areas under intense development pressures; and areas that may experience increasingly severe impacts from climate change. If the state is interested in HHPD funding, the plan must describe criteria for prioritizing funding for high hazard potential dams.

HI-EMA administers the state’s hazard mitigation program; however, hazard mitigation is a shared responsibility between state agencies; County governments; private companies; and non-governmental groups and organizations within the State of Hawai’i, including local residents. Recognizing this, the State of Hawai’i has formed the Forum with representatives from a broad spectrum of state and county agencies and the non-governmental sector, which serves as an advisory body to HI-EMA on mitigation matters. Two of the most important roles of the Forum are to assist in the development of the SHMP and to make mitigation project recommendations to the HI-EMA Director. The HI-EMA Director makes the ultimate determination on which projects will be submitted for grant funding consideration.

The Hawai’i State Hazard Mitigation Forum reviews, ranks, and prioritizes project proposals submitted by the state and its counties for FEMA grant funding programs. The ranking criteria evolved over the performance period of the 2018 SHMP and varied with each grant program. HI-EMA recognized the need to provide a consistent ranking methodology that would be easily accessible to those who reviewed and ranked the project proposals and to the subapplicants who submitted them. The updated funding prioritization method includes a baseline evaluation and scoring for all subapplications, and additional criteria and associated scoring depending upon the HMA program being applied. A summary of the criteria and scoring are presented in Table 5-8 below and outlined in further detail in Appendix C (Capability Assessment).The consistent ranking criteria that will be used for project prioritization during the performance period of the 2023 SHMP. HI-EMA looks forward to working with the Forum to implement the criteria and to formalize the process to best meet the needs of the state and its subapplicants.

Table 5-8. Summary of Total Potential Scores and Criteria

	BRIC	HMGP	FMA	HHPD
Base Score	<ul style="list-style-type: none"> Capacity to implement Alignment with SHMP objectives Socially vulnerable population impacted Climate change and future conditions 		<ul style="list-style-type: none"> Community engagement and outreach Nature-based solutions Advanced assistance <p>100 points</p>	
Additional Scoring	<ul style="list-style-type: none"> Risk reduction/ resilience effectiveness Community engagement and outreach Leveraging partners <p>20 points</p>	<ul style="list-style-type: none"> Project area benefitting a disaster-impacted region Previous submittal <p>15 points</p>	<ul style="list-style-type: none"> Repetitive loss properties <p>10 points</p>	<ul style="list-style-type: none"> Project benefitting area <ul style="list-style-type: none"> Residential homes Community Lifelines Economic Centers <p>25 points</p>





	BRIC	HMGP	FMA	HHPD
Total Potential Score	120 points	115 points	110 points	125 points

STRATEGY FOR CONTINUED PLANNING

HI-EMA has reviewed and conducted a comprehensive evaluation of the state’s hazard mitigation program and has identified opportunities for a number of enhancements, which have been included as actions in the mitigation strategy (see Section 6 [Mitigation Strategy]) and included in the plan implementation and maintenance strategy (see Section 7 [Plan Maintenance]). HI-EMA, with the help of the Forum, will continue to refine and enhance the program to best meet the needs of the State of Hawai’i over the performance period of the 2023 SHMP Update.

