

Grantee: Kauai County, HI

Grant: B-19-UT-15-0002

July 1, 2022 thru September 30, 2022 Performance

Grant Number: B-19-UT-15-0002	Obligation Date:	Award Date:
Grantee Name: Kauai County, HI	Contract End Date: 02/09/2034	Review by HUD: Reviewed and Approved
Grant Award Amount: \$585,000.00	Grant Status: Active	
LOCCS Authorized Amount: \$585,000.00	Estimated PI/RL Funds:	
Total Budget: \$585,000.00		

Disasters:

Declaration Number

FEMA-4365-HI

Narratives

Mitigation Needs Assessment:

The County of Kauai Multi-Hazard Mitigation and Resilience Plan (HMP Kauai) was initially developed in 2005 and updated and approved in May 2021. The Disaster Mitigation Act of 2000 requires that the county plan is updated every five years. The development of local hazard mitigation plans is critical for maintaining eligibility for future Federal Emergency Management Agency (FEMA) mitigation and disaster recovery funding.

The County of Kauai is committed to a long-term strategy for reducing the risks of natural hazards. Kauai has experienced a range of climate and hydrological hazards, geological hazards, and technological hazards that have resulted in great costs to lives, property, and the economy of the County. The hazards identified in the Kauai HMP were chosen for consistency with the State of Hawai'i's planning efforts, and include hurricanes, floods, drought, wildfire, erosion, landslides, climate change, earthquakes, tsunami, dam failure, hazardous materials, homeland security threats, and health-related hazards.

As described in The Main Notice, Grantees that have a FEMA-approved standard State HMP pursuant to 44 CFR 201.4, an enhanced HMP in accordance with 44 CFR 201.5 or other FEMA approved mitigation plan, are required to use those plans and each plan's risk assessment to inform its response to the Action Plan for Disaster Mitigation. The process followed to develop the Kauai HMP 2021 Update had the following primary objectives:

- Form a Core Planning Team to lead the process and write the updated hazard mitigation
 - Define the planning area that will be evaluated in the plan and for which hazard-related risks will be assessed.
 - Establish a Steering Committee to provide community and stakeholder guidance for development of the plan.
 - Coordinate with other agencies on issues of concern for local hazard mitigation planning.
 - Review existing programs that are relevant to the updated plan's development.
 - Engage the public in providing input needed to ensure that the updated plan addresses local priorities.
- The Core Planning Team included staff from Kauai County's Emergency Management Agency and Planning Department, Hawai'i Sea Grant, and consulting firm Tetra Tech. The Steering Committee, consisting of 13 members (plus alternates) from County and State of Hawai'i departments, private businesses, educational institutions, and community organizations met nine times from May through December 2020. Public engagement activities included the following:
- Identify and involve planning area stakeholders.
 - Include members of the public on the Steering Committee.
 - Create a hazard mitigation website to inform the public about the development of this plan update.
 - Invite public participation at virtual public meetings. Two meetings were held in September 2020, with total attendance by 23 members of the public.
 - Use a survey to determine if the public's perception of risk and support of hazard mitigation had changed since the initial planning process. The survey was available through the website. A total of 534 respondents completed the online survey.
 - Attempt to reach as many planning area citizens as possible using multiple media. Press releases were distributed over the course of the plan's development as key milestones were achieved and prior to each public meeting.
- The risks identified throughout the process were quantitatively assessed according to their potential impacts on seven critical service areas, also known as the Community Lifelines, identified in V.A.2.a.(1). of the Main Notice:
1. Safety and Security
 2. Communications
 3. Food, Water, Sheltering
 4. Transportation
 5. Health and Medical

6. Hazardous Material (Management)
7. Energy (Power and Fuel)

The process culminated in an examination of relative risk to the seven critical service areas by hazard type to prioritize mitigation activities most effectively taking into consideration agency coordination and long-term planning of State mitigation funding made available for activities in the Most Impacted and Distressed Area (MID).

For the Kauai HMP, the Steering Committee considered the full range of natural hazards that could impact the planning area and then listed hazards that present the greatest concern. The process incorporated review of state and local hazard planning documents, as well as information on the frequency, magnitude and costs associated with hazards that have impacted or could impact the planning area. Anecdotal information regarding natural hazards and the perceived vulnerability of the planning area's assets to them was also used. Based on the review, the plan addresses 10 identified hazards of concern followed by risk assessments for the hazards of concern in order of risk (highest to lowest). The risk assessments provided data that was used to rank the hazards based on probability of occurrence and potential impacts.

The probability of occurrence of a hazard is indicated by a probability factor based on likelihood of annual occurrence:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- No exposure—There is no probability of occurrence (Probability Factor = 0).

The assessment of hazard frequency is generally based on past hazard events in the area.

There are 9 hazards of concern for Kauai. Tropical Cyclone and High Winds, Wildfire, Climate Change, Inland Flood, High Surf, Coastal Flood, Erosion, and Landslide have a high probability factor. Tsunami has a medium probability factor. Dam Failure and Earthquake have a low probability factor.

Hazard impacts were assessed in three categories: impacts on people, impacts on property, and impacts on the local economy. Numerical impact factors are assigned as follows:

People—Values are assigned based on the percentage of the total population exposed to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. It should be noted that planners could use an element of subjectivity when assigning values for impacts on Impact factors were assigned as follows:

- High—30 percent or more of the population is exposed to a hazard (Impact Factor = 3)
- Medium—15 percent to 29 percent of the population is exposed to a hazard (Impact Factor = 2)
- Low—14 percent or less of the population is exposed to the hazard (Impact Factor = 1)
- No impact—None of the population is exposed to a hazard (Impact Factor = 0)

Tropical Cyclone/High Winds and Wildfire have the highest level hazard impact to people.

Property—Values are assigned based on the percentage of the total property value exposed to the hazard event:

- High—25 percent or more of the total assessed property value is exposed to a hazard (Impact Factor = 3)
- Medium—10 percent to 24 percent of the total assessed property value is exposed to a hazard (Impact Factor = 2)
- Low—9 percent or less of the total assessed property value is exposed to the hazard (Impact Factor = 1)
- No impact—None of the total assessed property value is exposed to a hazard (Impact Factor = 0).

Tropical Cyclone/High Winds, Wildfire, and Climate Change have the highest level of hazard impact to property.

Economy—Values are assigned based on the percentage of the total property value vulnerable to the hazard event. Values represent estimates of the loss from a major event of each hazard in comparison to the total assessed value of the property exposed to the For some hazards, such as wildfire and landslide, vulnerability is considered to be the same as exposure due to the lack of loss estimation tools specific to those hazards. Loss estimates separate from the exposure estimates will be generated for the earthquake, flood hazards, and tropical cyclones using Hazus.

- High—Estimated loss from the hazard is 15 percent or more of the total exposed property value (Impact Factor = 3)
- Medium—Estimated loss from the hazard is 5 percent to 14 percent of the total exposed property value (Impact Factor = 2)
- Low—Estimated loss from the hazard is 4 percent or less of the total exposed property value (Impact Factor = 1)
- No impact—No loss is estimated from the hazard (Impact Factor = 0).

Tropical Cyclone/High Winds, Wildfire, and Climate Change have the highest level of hazard impact to the economy.

The Kauai HMP Risk Assessment starts with a hazard profile to describe each of the 9 hazards of concern for Kauai. Each hazard profile is examined through a scenario which models the potential impact to and vulnerability of people, property, critical facilities, and the environment. The risk assessment takes into consideration development and land use distribution in high-hazard areas. Each hazard profile has unique issues requiring additional analyses as part of the risk assessment including the impacts of climate change, public outreach, and education to augment mitigation practices, suggested studies, data collection, and how local planning and zoning affects risk.

The Kauai HMP risk assessment specifically addresses inland flooding, the hazard type related to the CDBG-DR and CDBG-MIT funding, and analyzes the vulnerability to the risk of inland flooding across the MID specifically assessing the impact to people, property, and the environment in each community of the MID. Inland flooding was ranked fourth in the Kauai HMP mitigation needs assessment with a high-risk score of 33.

Proposed Use of Funds:

The Kauai HMP Steering Committee reviewed the catalogs of hazard mitigation alternatives and selected actions to be included in a hazard mitigation action plan. The selection of actions was based on the risk assessment of identified hazards of concern, the defined hazard mitigation goals and objectives, and considerations of equity in project selection and implementation.

Implementing a plan designed by the U.S. Army Corps of Engineers to raise the height of the Waimea and Hanapepe river levees to re-establish the 100-year flood protection are short-term (to be completed within 5 years) recommended actions relating to inland flooding mitigation and meets the following objectives of the Kauai HMP:

- Reduce repetitive property losses due to floods, erosion, high winds, tsunamis, fire, and sea level rise through acquisition, retrofitting, design, and updated construction and land use
- Incorporate mitigation measures into repairs, major alterations, new development, and redevelopment, especially in areas with substantial hazard risk and those known to have repetitive loss.
- Reduce risk to and increase the resilience of vulnerable infrastructure and community

• Prioritize investment and support efforts to improve resilience of community lifelines in socially vulnerable

Additionally, the prioritization of mitigation actions based on a cost/benefit analysis as required by 44 CFR, Section 201.6(c)(3)(iii) resulted in the levee projects being of highest priority for mitigation actions based on the high ratings for cost and benefit of the project. To effectively address risks to indispensable services that enable continuous operations of critical business and government functions and are critical to human health and safety or economic security, KCHA intends to provide CDBG-MIT funds to the U.S. Army Corps of Engineers for planning and/or project costs related to raising the levees including professional service contracts for required environmental reviews and/or engineering and design work.

Overall	This Report Period	To Date
Total Projected Budget from All Sources	\$0.00	\$359,250.00
Total Budget	\$0.00	\$359,250.00
Total Obligated	\$0.00	\$0.00
Total Funds Drawdown	\$0.00	\$0.00
Program Funds Drawdown	\$0.00	\$0.00
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$0.00	\$0.00
HUD Identified Most Impacted and Distressed	\$0.00	\$0.00
Other Funds	\$ 0.00	\$ 0.00
Match Funds	\$ 0.00	\$ 0.00
Non-Match Funds	\$ 0.00	\$ 0.00

Progress Toward Required Numeric Targets

Requirement	Target	Projected	Actual
Overall Benefit Percentage	50.00%	100.00%	.00%
Overall Benefit Amount	\$277,875.00	\$330,000.00	\$.00
Limit on Public Services	\$87,750.00	\$.00	\$.00
Limit on Admin/Planning	\$117,000.00	\$29,250.00	\$.00
Limit on Admin	\$29,250.00	\$29,250.00	\$.00
Most Impacted and Distressed	\$292,500.00	\$359,250.00	\$.00

Overall Progress Narrative:

The progress made for the CDBG-MIT program in the 3rd quarter includes:

1. Tracking status of Waimea and Hanapepe River levees improvement project and engagement with USACE on their involvement.

2. Identifying alternate project priorities stated in the Hazard Mitigation and Resiliency program and discussing grant compliance concerns such as meeting a national objective and the overall income benefit requirement.

Project Summary

Project #, Project Title	This Report	To Date	
	Program Funds Drawdown	Project Funds Budgeted	Program Funds Drawdown
9999, Restricted Balance	\$0.00	\$0.00	\$0.00
KCHA ADMIN, CDBG-MIT Administrative Cost	\$0.00	\$29,250.00	\$0.00
KCHA PLAN, CDBG-MIT Planning Costs	\$0.00	\$87,750.00	\$0.00
RIVER LEVEES, Waimea and Hanapepe River Levee Design	\$0.00	\$468,000.00	\$0.00