

CHAPTER 8:

Plan Maintenance Procedures

8.0 Importance of Maintaining and Updating the Mitigation and Resilience Plan

Kaua'i County's Multi-Hazard Mitigation & Resilience Plan Update 2015 was written within a resilience framework, insofar as it looks beyond mitigation of risk, and towards identifying and supporting county and community efforts to foster resilience. A resilience framework supports comprehensive identification of gaps in risk reduction, to reduce hazard exposure, improve preparedness, response and recovery capacities, and improve linkages between risk reduction measures, development plans, planning policies, and climate change adaptation measures. The Update considers multiple hazard exposure types and intensities, and various perspectives of vulnerability to those hazards, including local infrastructural, governmental and socioeconomic factors. Finally, the plan tracks progress and attention to risk reduction and resilience measures to address gaps in governmental and societal capacities.

For the 2015 update, the plan identifies gaps that have been realized with recent hazards and declared disasters. As many of the products and tools that will improve analyses become available, these can be integrated into the plan, just as the GIS decision support tools for flood and tsunami analysis have become available as they have been since the first approved plan was developed in 2003.

This 2015 updated plan for the County of Kaua'i will inform the update required for the State Multi-Hazard Mitigation Plan in 2015. This plan will be adopted by reference under the State's Executive Order as an essential part of the State's plan. There are other cross-cutting plans that have been analyzed (Chapter 6) and considered in development of this plan update.

8.1 Monitoring, Evaluating, and Updating the Plan

The mitigation plan was developed as a living document, and as such will be continuously updated. The format of the document was considered when preparing the plan to make it easy for review and update. The three-ring binder was chosen rather than binding to keep the document dynamic and to enable easy use once Federal Emergency Management Agency approval has been obtained.

Even though this document has been formally approved, the County of Kaua'i recognizes that this was the best available information by the targeted deadlines to meet requirements. The plan will be revised and updated as new information becomes available. This plan has tried to summarize and build on a number of important hazard documents.

8.1.1 County of Kaua'i Executive Order

The Executive Order to Sustain the County of Kaua'i as a Disaster Resilient Community (EO) provides a framework for implementing the policies and actions identified in this document.

The Disaster Mitigation Committee will continue to oversee and ensure implementation of the County's hazard mitigation efforts and advise the county on mitigation actions and measures through Kaua'i Civil Defense. The inclusion of government agencies and the private sector in the committee enables hazard mitigation policies to be supported at all levels in the county.

The EO supports the hazard mitigation planning process outlined throughout this document, including periodic updates. Even though the communities in the island of Kaua'i were consulted during the risk and vulnerability assessment and mitigation planning process, they have not developed mitigation plans for each community. The EO will provide assistance for communities to further engage in mitigation planning.

The EO encourages the continued development of partnerships. Several of the best practices described in the Chapter 6 Appendix involve the ongoing relationships among public agencies, private businesses, and community organizations. These collaborations have demonstrated that partnerships help to maximize limited resources and build awareness throughout all sectors of the community-at-large. The EO establishes a process that enables the sustainability of these partnerships and further advances the Mayor's vision of sustainability and balance in managing Kaua'i's resources.

To address hazards that cause greatest risk to the County of Kaua'i, the EO supports enforcement and improvement of building codes and standards and promotion of hazard considerations in land use decisions.

The EO supports the maintenance of all emergency response, recovery, and mitigation plans, including technical assistance in towns and communities to develop local plans.

The mitigation projects and actions identified in chapter six demonstrate the ongoing support of the County in securing critical facilities and infrastructure, including governmental facilities and privately owned lifelines. This includes improving shelters and hardening facilities where vulnerable populations exist.

Kaua'i Civil Defense and the Disaster Mitigation Committee have supported the development of public awareness and risk reduction programs, initially through Project Impact and then ongoing since the approval of the first plan in 2003. The EO further supports training opportunities in hazard mitigation for planners, developers, architects, and county personnel, including those involved with information systems and mapping technologies. The County benefits from training and education initiatives promoted by the disaster advisory committees and the State of Hawai'i Hazard Mitigation Forum, in which Kaua'i County is represented.

8.1.2 Kaua'i Disaster Management Committee

The Kaua'i County Disaster Management Committee (DMC) will be responsible for overseeing implementation of this Plan with coordination from KCDA. The DMC will review proposed projects for funding, and consider eligibility for the Pre-Disaster Mitigation Grant (PDM) cycle and Hazard Mitigation Grant Program (HMGP) project funding. The DMC can review with the

Table 7-2 that presents numerous agencies and funding opportunities for risk reduction and resilience. The DMC will consider other funding resources and determine a grant schedule for potential funding to implement the projects proposed in this updated plan. Full updates of the risk and vulnerability assessment and mitigation strategy should occur every five years, with constant updates to the GIS databases as new data and information become available and as actions are completed, just as Kaua'i County has done the past five years.

The following tentative schedule outlines first year activities:

August 2015

- 1) Obtain approval from FEMA for County of Kaua'i Multi-Hazard Mitigation Plan.

September-October 2015

- 1) Review the current mitigation strategy in the DMC meetings and develop an implementation schedule.
- 2) Develop cost-benefit analyses for projects that will be moved forward using FEMA's guidance and software.
- 3) Discuss protocols for information and data sharing as part of an ongoing project to improve geographic information systems, data management, and decision support tools development.
- 4) Convene committees and task forces to develop partnerships, projects, standards, and recommendations. Set up additional committees as necessary to implement policies identified in the updated plan.
- 5) As projects receive funding, set up project timeline and monitoring process.
- 6) Work with regional hazard mitigation organizations to collaborate and leverage tools and resources, such as the work with the Pacific Risk Management 'Ohana (PRiMO), a hazard mitigation network coordinated by the NOAA Pacific Services Center.

November 2015

- 1) Convene the DMC on a quarterly basis to focus on disaster management issues.
- 2) Look at proposal funding schedules and deadlines, and develop grants. Begin writing proposals for funding.
- 3) Formally develop information sharing protocols within the county, state agencies, federal agencies, and private interests.
- 4) Continue to update risk and vulnerability assessment and include new County information in the State's planning update process.
- 5) Contribute to the PRiMO meeting in Honolulu, March 2016.

December – February 2016

- 1) Convene quarterly meeting of the committee. Review subcommittee findings. Review implementation of actions within the government offices.
- 2) Review funding progress. Continue seeking funding sources.
- 3) Continue mitigation projects and monitoring.

March – June 2016

- 1) Convene the fourth quarterly meeting of the committee.
- 2) Discuss subcommittee findings.
- 3) Determine process for addressing gaps in hazard mitigation strategy.
- 4) Review new guidance criteria and requirements by FEMA.
- 5) Review project status, successes, and update project lists. Update cost-benefit analyses in preparation for Pre-Disaster Mitigation Grant Program requirements.
- 6) Begin to revise the Risk and Vulnerability Assessment based on updated HAZUS.

April - July 2016

- 1) Convene the Annual Progress Review by the DMC.
- 2) Prepare updated project lists and prepare for submission to the State for pre-disaster mitigation program funding.
- 3) Prepare one page updates on progress to insert into the plan.
- 4) Prepare detailed schedule and actions for year two.

Year 2:

Continue with Quarterly meetings, Committee meetings, and additional meetings as needed to ensure implementation of mitigation efforts. Continue to update sections of the plan and ensure implementation. Review new FEMA requirements.

Year 3:

Continue with Quarterly meetings. Continue to update plan and ensure implementation.

Year 4:

Continue with Quarterly meetings. Continue to update plan and ensure implementation. Establish course of action for updating the plan.

Year 5:

Continue with Quarterly meetings. Continue to update plan and ensure implementation. At the end of the fifth year, a thorough review will be undertaken, and an updated plan will be drafted.

Schedule Contingency: The Kaua'i County Disaster Management Committee and Kaua'i Civil Defense will pursue the previous schedule as outlined to the best of their ability; however, in the event of a disaster during the planning cycle, it may be impossible to keep this schedule. The DMC will meet as needed to guide in response and recovery efforts and respond to Hazard Mitigation Grant Program, Pre-Disaster Mitigation program, and other federal funding requirements.

Furthermore, there may be changes in federal, state, and local administrations during this cycle, and there may be new requirements, criteria, and responsibilities assigned to the County of Kaua'i that may make this schedule infeasible.

The outlined schedule will be reviewed, revised, and updated periodically to best serve Hawai'i State's needs in implementing hazard mitigation practices and actions.

8.1.3 Mitigation Projects

There are a series of projects identified in the plan addressing critical facilities and infrastructure. These have been prioritized as high and medium, with suggestions receiving low priority excluded from the plan. As appropriate funding sources become available, these projects will be implemented. New projects will need to be developed and prioritized. These will need to be included in future plan updates.

The preliminary projects included in the plan in Chapter 7 Appendix 1 need further development and assessment before submission to potential funders. For the Pre-Disaster Mitigation Grant Program, an engineering analysis and a cost-benefit analysis must be developed. Other potential funding agencies will have specific information needs, which will be identified and met. Kaua'i Civil Defense with assistance from the Disaster Mitigation Committee will develop identified projects and work with experts in the government and private sector to gather information required in proposals.

8.1.4 Monitoring Project Implementation and Closeouts

The Kauai Civil Defense and the DMC will monitor the implementation of projects. The Mitigation Branch of State Civil Defense oversees monitoring and closeouts of mitigation projects funded through the Department of Homeland Security/Federal Emergency Management Agency. The State Hazard Mitigation officer oversees these activities with assistance from the State Hazard Mitigation Forum. For Federal disasters, close consultation and coordination with FEMA's Pacific Area Office will occur.

All applicants with projects funded by the Hazard Mitigation Grant Program, Pre-Disaster Program, and State programs will be required to submit quarterly reports to State Civil Defense. Also, quarterly reports for projects funded by the Flood Mitigation Assistance Program will be submitted to the Department of Land and Natural Resources.

On an annual basis, the State Hazard Mitigation Forum in conjunction with State agencies and the County governments will review and evaluate the mitigation projects listed in the State and County Plans and hazard unique plans. Projects will be analyzed by the criteria established in Chapter 7. Also, new projects will be solicited from potential applicants. Local evaluation should determine if the mitigation projects are achieving the goals of the County's mitigation strategy, and these results should be forwarded to State Civil Defense through the review mechanism established by the Forum.

8.1.5 Data Improvement

Currently, the Hawai'i Statewide Hazard Mitigation Forum has advised the Counties to assemble the best available data for the development of their mitigation plans. Several programs exist across the state to gather prepare data and information. For example, a

working group through the Hawaii Geographic Information Coordinating Council (<http://www.higicc.org/>) has looked at pooling resources to gather and process LIDAR to improve the Flood Insurance Rate Maps through the FEMA Map Modernization Program and other federal hazard programs. The FIRMs were updated in 2010, and remain the best available flood hazard maps, but all the counties recognize the need to improve this information.

Data usage, storage, and maintenance are unevenly distributed in the counties and in agencies across the state. The County GIS programs, along with Hawai'i State Department of Accounting and General Services (DAGS) and the GIS Program within the Office of Planning will continue to develop infrastructure and data, working in partnership with federal, state, and local agencies to improve resources. The County of Kauai operates its GIS program through the Department of Finance, and has been an essential partner in updating the GIS hazard data for this plan. The position will need continued support in order to maintain data and update future hazard mapping data for the County.

8.2 Implementation through Existing Programs

As described in detail in Chapter 6, the County of Kaua'i has established a number of policies and mechanisms within its day-to-day operations that will ensure implementation of the hazard mitigation plan, regardless of funding and additional resources. The land use system, building codes and standards, and permitting process already consider hazard risks. Actions have been identified for hazards in Chapter 7, Table 7-1, that will enhance risk reduction and that can be implemented without additional funding or resources.

The County ensures comprehensive land use planning and zoning, capital improvements planning, and building codes and standards to guide and control development. The permit process will integrate the risk and vulnerability assessment and maps in the geographic information system to improve decision making for allowing future development. The State will continue to assist the counties in identifying and establishing improved building code standards. The County will pursue building code improvements and improved development decisions, which are included in the County General Plan 2015.

The Federal, State, and Counties are improving hazard assessment and decision-support tools as data is enhanced and maintained. The Kaua'i GIS program updated all available hazard layers in preparation of this Plan. GIS users groups and additional networks have developed to evaluate and update data. As new data becomes available, it is integrated into GIS to improve planning, management decisions, and disaster risk reduction.

A key component to implementing this plan and to updating information in the future will be to increase public involvement in the planning process through existing plans. The public was engaged through Project Impact and public awareness campaigns. Public comment and insight has been incorporated through meetings and plan review (available on the website). Another

method that will be pursued is seeking comment specifically from non-profit organizations, community planning groups, and watershed management councils. Because these groups have already engaged in mitigation activities separately, it will be important to maintain communication and develop a network of these organizations for future planning efforts.

Upon final approval of the plan by FEMA, the plan will be made available through the County website. The Mayor's Office and the County of Kaua'i will issue a press release, as they did for the public meetings notification for this plan update process.

The County of Kaua'i will distribute the copies of the plan to relevant agencies and organizations in the county and state. They will also collect comments and suggestions for review and consideration by the Disaster Management Committee. The County website contains email addresses and phone number to which people can direct their comments or concerns.

8.3 Implementation through Community Resilience Planning

The implementation of disaster risk reduction through community disaster resilience plans will strengthen local capability to reduce disaster risk. These plans coincide with the Mayor's Vision for Kaua'i County and the Holoholo 2020 plan. The development plans and the General Plan update provides added opportunities for community participation in planning that affects their communities.

The development of the Hanalei to Hā'ena Community Disaster Resilience Plan (see Chapter 6 Appendix E) provides a template and resource for guiding similar community efforts. The planning process enables communities to assess core issues and strategies for reducing risk. In the North Shore case, there are numerous visitors on a daily basis, but no provision of resources besides those from long-term residents and community members when disaster strikes. This highlights calls for the County to address disaster awareness among visitors, and implement policies that reduce burdens on local community members.

As these community disaster resilience strategies develop, communities will be aiding the County in addressing the Goals and Objectives for Hazard Mitigation and Resilience, outlined in Chapter 1 Table 1-1. These community plans will strengthen the mitigation activities and can be used as a foundation for future Plan updates.