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## CHAPTER 5: Plan Maintenance Procedures

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- I. **Monitoring, Evaluating, and Updating the Plan**
- II. **Plan Implementation through Existing Program**

### Monitoring, Evaluating, and Updating the Plan

The mitigation strategy was developed as an organic document and 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 recognizes that this was the best available information by the targeted deadlines for submission to the State for its Hazard Mitigation Plan and to FEMA for preview by September 15, 2003 in order to be approved by November 1, 2003. The plan will be revised and updated as new information becomes available. The initial strategy has gaps in data because Kauai is still in the process developing its geographic information system and setting up protocol to share information throughout the County and the State. The risk and vulnerability assessment and hazard mitigation strategy will be reviewed and updated next year to address these gaps.

#### **Kauai County Executive Order**

Executive Order to Establish Kauai County as a Disaster Resilient Community (EO) provides a framework for implementation of the policies and actions identified in this document. 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 Kauai 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. Project Impact initiated a process for partnerships to mitigate impacts from natural hazards. Project Impact demonstrated that partnerships help to maximize limited resources and build awareness throughout all sectors of the community. Kauai County Project Impact officially ended March 31, 2003, but the EO establishes a process that enables the sustainability of these partnerships.

To address hazards that cause greatest risk to Kauai County, 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 National Flood Insurance Program will continue to be supported, including the feasibility of participating in the Community Rating System and other programs that would reduce impacts of disasters and enable community members to benefit from the programs.

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

Kauai County has supported the development of public awareness and reduction programs, both at the county level through Project Impact and in the State through the Hawaii Statewide Hazard Mitigation Forum. The civil defense administrator currently serves as co-chair of the Forum's Public Awareness and Education Committee. Chapter two has identified a number of venues and opportunities that have involved improving public awareness about mitigating hazards.

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. Kauai County also promotes continuing education for building officials and contractors.

### **Kauai County Hazard Mitigation Committee**

The Hazard Mitigation Committee, with support from the Kauai Civil Defense Agency, will be responsible for overseeing implementation of this hazard mitigation strategy. The first activity will be to review their responsibilities and formalize their schedule through the preparation of by-laws. The second activity will involve a review of this strategy to organize an implementation schedule for the first year, with defined benchmarks. Once these two activities have been detailed, the committee will consider its needs for ensuring implementation of the plan, including the development of subcommittees. Full updates of the risk and vulnerability assessment and mitigation strategy should occur every three years, with constant updates as new data and information become available and as actions are completed.

The following tentative schedule outlines first year activities:

### ***November 2003***

- 1) Obtain approval from FEMA for hazard mitigation strategy.
- 2) Convene a meeting of all members to elect a chairperson.
- 3) Determine by-laws.
- 4) Formalize committee responsibilities.
- 5) Set up a schedule for next quarterly meeting in February 2004.
- 6) Review current mitigation strategy and develop implementation schedule.
- 7) Ensure that projects that can be funded by Kauai County through agencies meet deadlines for budget consideration.
- 8) Develop cost-benefit analyses using FEMA's guidance and software.
- 9) Discuss protocols for information sharing.

### ***December 2003 and January 2004***

- 1) Use email communication to review draft by-laws.
- 2) Work with the Civil Defense Agency grantwriter (a position that has been set up at Civil Defense but is currently not filled) to identify potential funding sources and develop proposals for projects submitted in the plan.
- 3) Look for funding sources to support a geographic information systems analyst to improve, maintain and update the Kauai GIS system, including the hazard layers and risk and vulnerability assessment.

### ***February 2004***

- 1) Convene the second quarterly meeting of the committee.
- 2) Review Risk and Vulnerability Assessment and critical facilities lying in high risk hazard areas. Review tables from chapter three appendix two to determine whether these facilities need mitigation actions.
- 3) Look at proposal funding schedules and deadlines, and begin developing grants.
- 4) Organize subcommittees to review land use plans, building codes, and the NFIP community rating system. Develop a public awareness and education subcommittee and other subcommittees to support on mitigation strategy implementation.
- 5) Formally determine information sharing protocols within the County.

### ***March 2004 and April 2004***

- 1) Begin writing proposals for funding. Review proposals through email.
- 2) Begin discussions with communities to better address local mitigation needs.
- 3) Continue to update risk and vulnerability assessment.

### ***May 2004***

- 1) Convene the third quarterly meeting of the committee.
- 2) Discuss subcommittee findings.
- 3) Review implementation of actions within the government offices.
- 4) Review funding progress.

### ***June 2004 and July 2004***

- 1) Continue seeking funding sources.

- 2) Use email distribution to continue the review of the risk and vulnerability assessment and gap analysis.

### ***August 2004***

- 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.

### ***September 2004 and October 2004***

- 1) Continue to review potential funding sources.
- 2) Address gaps in hazard mitigation strategy meeting new requirements.

### ***November 2004***

- 1) Convene the Annual Progress Review of the Hazard Mitigation Committee.
- 2) Prepare Annual report to the Mayor and County Council on progress.
- 3) Prepare one page updates on progress to insert into the strategy.
- 4) Prepare detailed schedule and actions for year two.

### **Year 2:**

Continue with Quarterly meetings. 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. At the end of the third year, a thorough review will be undertaken, and an updated plan will be drafted.

### **Year 4:**

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

### **Year 5:**

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

### **Year 6:**

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

**Schedule Contingency:** The Hazard Mitigation Committee and Kauai County Civil Defense Agency will pursue the previous schedule as outlined to the best of its ability; however, in the event of a disaster during the planning cycle, it may be impossible to keep this schedule. The committee will meet as needed to guide in response and recovery efforts and respond to Hazard Mitigation Grant Program 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 Kauai County that may make this schedule infeasible.

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

### **Mitigation Projects**

There are a series of projects identified in the plan addressing critical facilities and infrastructure. These have been prioritized, and ten have been developed into proposals to seek funding. As these projects and programs are implemented, new projects will need to be developed and prioritized. These will need to be included in future plan updates.

The preliminary proposals included in the strategy need further development and assessment before submission to potential funders. For the Pre-Disaster Mitigation Grant Program, a further 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. The new grantwriter in the Civil Defense Agency will develop identified projects and work with experts in the government and private sector in Kauai County to gather information required in proposals.

### **Data Improvement**

Currently, the Hawaii Statewide Hazard Mitigation Forum and the Multi-Hazard Scientific Advisory Council have advised the counties to assemble the best available data for this first strategy. Several programs exist across the state to gather prepare data and information. For example, a working group has been looking at gathering LIDAR to improve the Flood Insurance Rate Maps through the new FEMA Map Modernization Program. The FIRMs are currently the best available flood hazard maps, but all the counties recognize the need to improve this information.

Kauai County did not have a well-developed geographic information system prior to the onset of the risk and vulnerability assessment. Problems exist in maintaining staff with expertise to manage data systems. Much of the information from agencies had not been updated nor included in a digital format. Some data still exists in paper files and it will be important for Kauai County to create digital files for better information storage. This process is time consuming, and it may take a few years to fully collect and assemble all of the data into one system. An additional complication exists in the types of programs used in the county system. GIS software is not currently compatible with some of the older systems where information for building and land use permits has been stored. It will take some effort and some financial resources to be able to put all of the information into one system that can be shared even among the government agencies. The recent process for the risk and vulnerability assessment was a major step in establishing the GIS system for Kauai County.

Kauai Civil Defense Agency currently stores the data on a computer dedicated to managing GIS information; however, a staff person dedicated to maintaining the data has not yet been identified. The agencies are working toward determining a method for maintaining and updating their data, including identifying strategies to fund personnel with expertise in this area.

## **Implementation through Existing Programs**

As described in detail in chapter four, Kauai County has established a number of mechanisms within its day-to-day operations that will ensure implementation of the hazard mitigation strategy, regardless of funding and additional resources. The land use system, building codes and standards, and permitting process already consider hazard risks. Improvements have been identified for these areas that will enhance the system that can be implemented without additional funding.

Kauai County currently utilizes comprehensive land use planning and zoning, capital improvements planning, and building codes and standards to guide and control development in the County. After the County officially adopts the Hazard Mitigation Plan, these existing mechanisms will have hazard mitigation strategies integrated into them. The permit process will try to integrate the risk and vulnerability assessment and maps in the geographic information system to improve decision making for allowing future development. The Kauai County General Plan already establishes land use policies that will mitigate the impacts of natural and man-made hazards. As described in Chapter Four, the Building Division in the Department of Public Works will undertake a review of the International Building Code and assess the feasibility for implementing and administering the building code.

The State and the Counties are all using the State Hazard Mitigation Forum and hazard mitigation planning process to improve the hazard-related geographic information system. GIS users groups and additional networks have developed to evaluate and update data holding. These efforts will improve the risk and vulnerability assessment.

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 has been engaged through Project Impact and public awareness campaigns. Public comment and insight was incorporated through meetings and plan review (available on the website and at public libraries). 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.

As the subcommittees are formed and public education is improved, the Hazard Mitigation Committee will begin to consider implementation of the elements of the executive order that provide technical assistance in developing plans for local communities and towns in the county. The Committee will pursue a variety of mechanisms, such as public meetings to gather input from the larger community.

Upon final approval of the plan by FEMA, it will be made available at public libraries in the County. Kauai County Civil Defense Agency will distribute the copies of the plan to relevant agencies and organizations in the county. They will also collect comments and suggestions for review and consideration by the Hazard Mitigation Committee. In addition, copies of the plan and any proposed changes will be posted on the State Hazard Mitigation Forum website, [www.mothenature-hawaii.com](http://www.mothenature-hawaii.com), for Kauai County mitigation planning. This site contains an email address and phone number to which people can direct their comments or concerns.