

ENHANCING RESILIENCE IN COMMUNITY-BASED PLANNING IN HAWAII

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Hawaii's coastal zone is exposed to a diversity of natural hazards. Chronic hazards include coastal erosion, flooding, volcanic activity, and VOG. Hazard events include tsunamis, hurricanes, and earthquakes. Despite comprehensive and multihazard mitigation planning at state and county levels, Hawai'i has experienced three major disaster declarations in the last three years (1575 Severe Storms and Flooding in Mānoa; 1640 Severe Storms, Flooding, Landslides, Mudslides and Dam Failure; 1664 Kīholo Earthquake). These disasters not only proved costly, but seven people lost their lives (Hawaii State Civil 2007).

Community-based planning provides an important opportunity to enhance resilience to natural hazards. The impacts of natural hazards are usually localized in specific coastal areas, watersheds, and communities. Communities that plan for resilience document and address the hazard risks through a collaborative approach engaging multiple sectors and disciplines to develop and implement planned actions. Community development plans are designed to address the triple-bottom line of economic, social, and environmental goals.

This paper examines resilience in planning at the community level in Hawaii. Community-based plans are analyzed for balance in addressing economic, social, and environmental issues and for the degree to which hazard risk knowledge is incorporated into goals and strategic actions. Overall, plans tend to focus on issues of immediate concern. For the most part, community-based plans in Hawaii do not incorporate hazard risk knowledge. Plans that address hazard risk tend to be addressed under a disaster management goal with strategic actions focused on shelters needed for emergency response. While this is of critical importance, broader application of hazard risk knowledge is needed in all elements of the plan and address risks from chronic as well as episodic hazards.

Steps for enhancing resilience in community-based planning are described along with opportunities to plan for resilience at state and county levels. With the impacts of climate change superimposed on Hawaii's existing hazard risk, communities will be exposed to more severe and frequent hazards posing greater risk. Addressing climate change-related impacts are complex and require a collaborative approach, engaging multiple sectors and disciplines to provide the technical and financial resources to develop and implement solutions at the community level. The benefits of planning for resilience will be discussed and incorporating hazard risk knowledge in all elements of community-based

planning and utilizing a collaborative approach to plan for resilience provides a number of benefits including:

- Increases probability that investments made in plan implementation are sustained and not eroded by single hazard events or recurrent hazard conditions
- Reduces risks that planned actions have unintended negative impacts such as siting critical infrastructure in a hazard zones
- Increases the range of technical and financial resources available for implementing planned actions

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