

State of Hawai‘i Hazard Mitigation Plan

Table of Contents

Executive Order to Establish the State of Hawai‘i as a Disaster Resilient Community	
Executive Summary	ii
Table of Contents	viii
State Mitigation Plan Crosswalk	xi
Chapter 1: Introduction to the Hazard Mitigation Plan	1-1
Chapter 2: Planning Process	2-1
Appendix A: Hazard Mitigation Forum Bylaws	2A - 1
Appendix B: Participation in Hazard Mitigation Planning	2A - 7
Appendix C: Statewide Partners in Hazard Mitigation Planning	2A-13
Appendix D: State Hazard Mitigation Forum Roster	2A-28
Chapter 3: Hazard Risk in the State of Hawai‘i	3-1
Section 1: Introduction	3-1
Section 2: Meteorological and Hydrological Hazards	3-3
Hurricanes and Strong Winds	3- 3
Floods	3-13
Drought	3-41
Wildfires	3-46
Section 3: Geological and Seismological Hazards	3-51
Earthquakes	3-51
Tsunamis	3-57
Volcanoes and Airborne Hazards	3-64
Coastal Erosion	3-73
Landslides	3-84
Section 4: Technological and Human-Induced Hazards	3-93
References	3-97
Appendix A: Earthquake Hazard in Hawaii County	3A- 1
Appendix B: Earthquake Hazard in Maui County for Molokai	3A- 7
Appendix C: Hazard Maps for the State of Hawai‘i	3A-13
Chapter 4: State Assets and Vulnerability Assessment	4 - 1
Section 1: Overview of the State of Hawai‘i	4 - 1
Section 2: Assets of the State of Hawai‘i	4 - 9
Emergency Services Infrastructure	4-9
Vulnerable Populations	4-13
Government Facilities	4-14
Critical Infrastructure	4-15
Economically Important Assets	4-25
Socially, Culturally, and Environmentally Important Assets	4-27
Section 3: Vulnerability Assessment	4-28
Appendix A: List of Hawaii Public Schools	4A - 1
Appendix B: Hazard Shelters for the State and Shelter Needs	4A-19

Chapter 5: Mitigation Actions & Capability in the State of Hawai‘i	5 - 1
Section 1: Introduction to Mitigation	5 - 1
Section 2: Mitigation for Meteorological and Hydrological Hazards	5 - 3
Hurricane and Strong Wind Mitigation Policies and Actions	5 -3
Flood Mitigation Policies and Actions	5 -4
Drought Mitigation Policies and Actions	5 -9
Wildfire Mitigation Policies and Actions	5 -10
Section 3: Mitigation for Geological and Seismological Hazards	5-13
Earthquake Mitigation Policies and Actions	5 -13
Tsunami Mitigation Policies and Actions	5 -14
Coastal Erosion Mitigation Policies and Actions	5 -18
Landslide Mitigation Policies and Actions	5 –22
Section 4: Mitigation for Technological and Human-Induced Hazards	5-24
Mitigation Policies and Actions Related to Dams	5-24
Mitigation Policies and Actions for Hazardous Materials	5-25
Mitigation Policies and Actions for Homeland Security	5-27
Section 5: Mitigation Policies	5-28
Land Use	5-28
Building Codes and Permitting	5-33
Energy Use and Management	5-34
Data and Information Management	5-37
Partnerships	5-37
Public Awareness and Education	5-38
Section 6: Capability Assessment	5-39
References	5-47
Appendix A: Hazard Mitigation Activity & Capability Assessment	5A -1
Appendix B: Worksheet #2: State Mitigation Capability Assessment	5A-13
Chapter 6: Mitigation Strategy for the State of Hawai‘i	6 - 1
Section 1: Introduction to the Hazard Mitigation Strategy	6 - 1
Section 2: Hazard Mitigation Goals and Objectives	6 - 3
Section 3: Mitigation Policy Recommendations	6 -5
Multi-Hazard: Policies to Improve Sheltering	6 - 5
Hurricane and Strong Wind Hazards	6 - 5
Drought Hazard Mitigation	6 - 7
Wildfire Mitigation	6 - 9
Earthquake Mitigation Recommendations	6-10
Lava and Volcanic Hazards Recommended Actions	6-14
Landslide Mitigation Policies and Actions	6-15
Coastal Erosion Mitigation Policies and Actions	6-16
Section 4: Mitigation Project Proposals	6 -17
Project Submission, Prioritization, and Selection	6-17
Proposed State Mitigation Projects	6-24
Table 6-1. Mitigation Actions and Measures in the State of Hawai‘i	6-34
Appendix A: Sample Rating Form Used to Determine Mitigation Projects	6A -1

Chapter 7: Plan Maintenance Procedures	7 - 1
Section 1: Monitoring, Evaluating, and Updating the Plan	7 – 1
State of Hawaii Executive Order	7-1
Hawaii State Hazard Mitigation Forum and Schedule	7-2
Mitigation Projects	7-4
Monitoring Project Implementation and Closeouts	7-5
Local Plan Review and Updates	7-5
Data Improvement	7-6
Section 2: Implementation through Existing Programs	7 – 6
Appendix A: Federal Funding Opportunities	7A -1