



TABLE OF CONTENTS

SECTION 1. INTRODUCTION	1-1
1.1 Overview.....	1-1
1.2 Authority, Assurances, and References.....	1-2
1.3 Adoption.....	1-3
1.4 Emergency Management Accreditation Program.....	1-3
1.5 Organization of the Plan.....	1-4
1.6 Overview of Changes from the 2018 SHMP to 2023 SHMP Update.....	1-5
1.6.1 Planning Process.....	1-6
1.6.2 Risk Assessment.....	1-6
1.6.3 Capabilities.....	1-6
1.6.4 Mitigation Strategy.....	1-6
1.6.5 Emergency Management Accreditation Program.....	1-7
SECTION 2. PLANNING PROCESS	2-1
2.1 Description of the Planning Process.....	2-1
2.2 Coordination Among Agencies.....	2-10
2.2.1 State Hazard Mitigation Forum.....	2-10
2.2.2 State Agencies and Stakeholders.....	2-11
2.2.3 Counties.....	2-14
2.2.4 Public.....	2-14
2.3 Program Integration.....	2-16
2.3.1 State Mitigation Programs and Initiatives.....	2-16
SECTION 3. STATE PROFILE	3-1
3.1 Geographic Overview.....	3-1
3.2 Historic Overview.....	3-1
3.3 Political Divisions.....	3-2
3.4 Physical Setting.....	3-2
3.4.1 Geography and Topography.....	3-3
3.4.2 Climate.....	3-4
3.5 Demographics.....	3-9





3.5.1 Resident Population..... 3-9

3.5.2 Age Distribution 3-10

3.5.3 Race, Place of Birth, and Language..... 3-12

3.5.4 Persons with Disabilities or with Access and Functional Needs..... 3-13

3.5.5 Persons Experiencing Homelessness 3-14

3.5.6 Employment and Industry 3-14

3.5.7 Income 3-15

3.5.8 Tourism 3-16

3.6 State Assets, Community Lifelines, and Critical Facilities..... 3-16

3.6.1 State Buildings 3-16

3.6.2 State Roads..... 3-17

3.6.3 Community Lifelines and Critical Facilities 3-17

3.6.4 Commercial Harbors 3-18

3.7 Land Use and Development 3-19

3.7.1 Changes in Development Over the Performance Period of the 2018 HMP 3-19

3.7.2 Current Land Use and Development 3-21

3.7.3 Projected Changes in Development 3-27

3.8 Cultural Assets 3-29

3.8.1 Hawaiian Home Lands 3-29

3.8.2 Other Cultural Assets..... 3-29

3.9 Natural Resources 3-30

3.9.1 Environmental Resources 3-30

3.9.2 Watershed Partnerships 3-31

SECTION 4. RISK ASSESSMENT 4.1-1

4.1 Overview..... 4.1-1

4.1.1 Identification of Hazards..... 4.1-2

4.1.2 Asset Inventories 4.1-8

4.1.3 Hazard-Specific Data and Methodologies 4.1-18

4.2 Climate Change and Sea Level Rise 4.2-1

4.2.1 Hazard Profile 4.2-1

4.2.2 Vulnerability Assessment..... 4.2-15

4.3 Cyber Threat 4.3-1

4.3.1 Hazard Profile 4.3-1

4.3.2 Vulnerability Assessment..... 4.3-4

4.4 Drought..... 4.4-1

4.4.1 Hazard Profile 4.4-1

4.4.2 Vulnerability Assessment..... 4.4-12

4.5 Earthquake 4.5-1

4.5.1 Hazard Profile 4.5-1

4.5.2 Vulnerability Assessment..... 4.5-20





4.6 Flood 4.6-1

 4.6.1 Hazard Profile 4.6-1

 4.6.2 Vulnerability Assessment..... 4.6-26

4.7 Hazardous Materials..... 4.7-1

 4.7.1 Hazard Profile 4.7-1

 4.7.2 Vulnerability Assessment..... 4.7-9

4.8 Health Risks 4.8-1

 4.8.1 Hazard Profile 4.8-1

 4.8.2 Vulnerability Assessment..... 4.8-9

4.9 Hurricane 4.9-1

 4.9.1 Hazard Profile 4.9-1

 4.9.2 Vulnerability Assessment..... 4.9-11

4.10 Infrastructure Failure..... 4.10-1

 4.10.1 Hazard Profile 4.10-1

 4.10.2 Vulnerability Assessment..... 4.10-5

4.11 Landslide and Rockfall 4.11-1

 4.11.1 Hazard Profile 4.11-1

 4.11.2 Vulnerability Assessment..... 4.11-15

4.12 Terrorism 4.12-1

 4.12.1 Hazard Profile 4.12-1

 4.12.2 Vulnerability Assessment..... 4.12-4

4.13 Tsunami 4.13-1

 4.13.1 Hazard Profile 4.13-1

 4.13.2 Vulnerability Assessment..... 4.13-19

4.14 Volcanic Hazards..... 4.14-1

 4.14.1 Hazard Profile 4.14-1

 4.14.2 Vulnerability Assessment..... 4.14-20

4.15 Wildfire 4.15-1

 4.15.1 Hazard Profile 4.15-1

 4.15.2 Vulnerability Assessment..... 4.15-17

4.16 Windstorm..... 4.16-1

 4.16.1 Hazard Profile 4.16-1

 4.16.2 Vulnerability Assessment..... 4.16-17

4.17 Vulnerability Summary 4.17-1

 4.17.1 2018 State and County Hazard Ranking 4.17-1

 4.17.2 2023 SHMP Update Hazard Ranking..... 4.17-2

SECTION 5. CAPABILITY ASSESSMENT 5-1

5.1 Administration of Hazard Mitigation Programs in the State 5-1





5.2 Identification and Evaluation of State Pre- and Post-Disaster Capabilities..... 5-1

- 5.2.1 Legal, Regulatory, Planning, and Programmatic Capabilities 5-2
- 5.2.2 Participation in National Mitigation-Related Programs 5-7
- 5.2.3 State Pre- and Post-Disaster Funding Capabilities 5-9
- 5.2.4 Summary of Changes in State Capabilities and Progress on Integration 5-12

5.3 Summary of Effectiveness of Local Mitigation Capabilities..... 5-14

- 5.3.1 Local Foundational Capabilities for Hazard Mitigation 5-15
- 5.3.2 County Land Use Planning 5-16
- 5.3.3 County Floodplain Management 5-17
- 5.3.4 County Building Codes 5-19
- 5.3.5 Evaluation of Local Hazard Mitigation Plans 5-20
- 5.3.6 Emerging Local Capabilities 5-22

5.4 State Process for Developing Local Plans, Projects, and Continued Planning..... 5-22

- 5.4.1 County Local Hazard Mitigation Plan Status 5-23
- 5.4.2 Evaluation of Prior Approach to Local Assistance and Coordination 5-23
- 5.4.3 State Support for the Update of Local Hazard Mitigation Plans 5-23
- 5.4.4 State Review, Coordination, and Linkage with Local Plans 5-25

SECTION 6. MITIGATION STRATEGY 6-1

- 6.1 Overview..... 6-1
- 6.2 Mitigation Goals and Objectives 6-1
- 6.3 Review and Evaluation of 2018 SHMP Mitigation Actions..... 6-4

 - 6.3.1 Comprehensive Review and Evaluation of the 2018 SHMP Mitigation Actions..... 6-4

- 6.4 Updated Mitigation Actions 6-5

 - 6.4.1 Identification of Mitigation Actions..... 6-5
 - 6.4.2 State Mitigation Action Plan..... 6-5
 - 6.4.3 Action Plan Prioritization 6-18

- 6.5 Repetitive Loss Strategy 6-21

 - 6.5.1 Repetitive Loss Properties in the State of Hawai‘i..... 6-21
 - 6.5.2 Goals to Address RL and SRL Properties 6-22
 - 6.5.3 Prioritization of RL and SRL Mitigation Actions 6-23
 - 6.5.4 Current and Potential Funding Sources to Implement Repetitive Loss Mitigation Activities 6-23
 - 6.5.5 Support of Local Hazard Mitigation Plans 6-25
 - 6.5.6 State and Local Capabilities for Funding and Implementing RL and SRL Mitigation Actions 6-26

SECTION 7. PLAN MAINTENANCE 7-1

- 7.1 Review of the 2018 SHMP Maintenance Procedures..... 7-1
- 7.2 Monitoring, Evaluating, and Updating 7-3
- 7.3 Tracking Progress..... 7-5

