

## Chapter 1. Introduction

The significance of the American Samoa Hazard Mitigation Plan is that it provides American Samoa with a comprehensive mitigation strategy for prioritizing projects, programs, and activities that will save lives and reduce losses from the impacts of natural disasters. This plan defines responsibilities and analyzes local capacities and capabilities to manage mitigation projects. It also fulfills the Federal Emergency Management Agency's (FEMA) requirement for a mitigation planning process that first, ensures federal assistance to the people of American Samoa following future significant disasters and second, allows the American Samoa Government to compete for federal mitigation project assistance annually. This Hazard Mitigation Plan defines risks and vulnerability in a systematic manner and analyzes the vulnerability of critical structures with respect to mapped known natural hazard areas. It also provides a framework for informed decision-making regarding prioritization of mitigation projects that will insure both the protection of life and property and cost-effective use of taxpayers' funds.

American Samoa is required to revise and update its current Hazard Mitigation Plan every five years to be eligible for non-emergency public assistance from FEMA, Pre-Disaster Mitigation project grants, Hazard Mitigation Grant Program funding and Flood Management Assistance Grants. The first plan was approved in 2003. Eligible mitigation projects include emergency debris removal and emergency protective measures and for repair and restoration of roads and bridges, water control facilities, buildings and equipment, utilities, and parks and recreation.



*Figure 1 Storm Shutters on the American Red Cross Building, Funding Received Following DR-4192*

The picture to the right shows storm shutters on the American Red Cross Building. This project was funded following the 2014 Flooding and Landslides disaster declaration. The project had previously been identified in the Hazard Mitigation Plan. This updated plan has identified new mitigation projects to minimize the disruption and damages due to the prevalent identified natural hazards affecting American Samoa. In addition, the 2015 mitigation plan projects were reviewed; some have been completed, and some are no longer a priority. The top ten very high priority projects are listed below.

1. Tualuata Drainage
2. Fagaima Road Flood Mitigation
3. Cost U Less Drainage
4. State Management Costs
5. Vatia Shoreline

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6. Water Wells & Boosters Backup Power Supply
7. Water Tanks Mitigation
8. Runway Shoreline Protection
9. #2 Landslide: Route 6 (Afono, Masefau), Route 1 (Matuu, Gataivai)
10. Ottoville Drainage Flood Mitigation

The American Samoa Territorial Hazard Mitigation Council has been active since the mitigation planning process began in 2003. This Council has worked to assure that the updated plan has met the requirements of FEMA and the American Samoa Government. The plan makes sustainable development a priority, helping to ensure safer future development. The planning process encouraged inter-departmental and inter-agency coordination on the islands regarding mitigation planning and emergency management.

### 1.1 Plan Updates

The updated Hazard Mitigation Plan recognizes the unique qualities and characteristics of American Samoa's environment, economy, and culture. The Plan was updated with cost-effective mitigation recommendations that maintain or enhance the current natural and built environment, maintain or enhance the current quality of life on the American Samoa Islands, foster local resiliency to disasters, and identify and respond to local concerns and issues. The ranked list of mitigation projects was developed by the Hazard Mitigation Council. The Mitigation Strategy chapter also includes a list of potential mitigation actions for the Hazard mitigation Council to consider for 2025. To date, the State Hazard Mitigation Officer (SHMO) and the Hazard Mitigation Council have considered only large infrastructure projects eligible for Federal Emergency Management Agency Hazard Mitigation Grant Program funding. In the future, they will consider other funding sources and a fuller range of projects.

The plan focuses on the previously identified natural hazards including landslides, tsunami, flood, tropical cyclone, earthquake, sea level rise and climate change. A review and update of profile information for all hazards including description, location, previous occurrences, extent, probability and vulnerability (as data permitted). Climate change considerations were included in each hazard profile vulnerability section. New hazards added include Public Health Risks (including infectious disease), Extreme Heat, Sea Level Rise (as a stand-alone hazard), and Subsidence. All critical facilities were reviewed.

The plan meets the requirements of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). The Stafford Act requires states and territories to develop and adopt FEMA-approved hazard mitigation plans to receive certain non-emergency disaster assistance. The plan follows the guidelines provided by Title 44 Code of Federal Regulations (CFR) §201.4 and the FEMA's State Mitigation Plan Review Guide which became effective on March 6, 2016.

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## 1.2 2020 Mitigation Strategy

The hazard mitigation strategy is the culmination of work presented in the planning area profile, risk assessment and capability assessment. It is also the result of multiple meetings and public outreach. The Hazard Mitigation Council reviewed the goal and objectives from the 2015 plan. They deemed they should remain consistent for this updated plan. The Goal of the 2020 American Samoa Hazard Mitigation Plan, endorsed by the Territorial Hazard Mitigation Council, is to:

***Reduce the risk of all natural hazards (identified and unidentified) to the Territory, thus, alleviating loss of life and property to insure the well-being of the people of American Samoa.***

### 1.2.1 The Objectives of the Plan

1. Promote effective land use planning and regulation, as well as public awareness, in order to reduce damage from natural hazards.
2. Improve infrastructure development standards with special attention to mitigating the increasing flood hazard.
3. Develop and implement hazard mitigation projects aimed at reducing the risk of damage and destruction of existing assets and infrastructure from the full range of natural disasters threatening the Territory.
4. Improve building codes and standards, as well as training programs, in order to reduce disaster damage from strong winds, earthquakes and tsunamis.
5. Develop public information and education programs in order to reduce disaster damage from strong winds, earthquakes and tsunamis.
6. Fund related planning projects to strengthen mitigation standards, research, education, and outreach efforts.

## 1.3 Changes Since 2015

The planning process for this 2020 mitigation plan update was expedited due to time constraints and the Covid-19 pandemic. The planning team was led by Lima Fiatoa, State Hazard Mitigation Officer and the Jamie Caplan Consulting team. The Hazard Mitigation Council led by the GAR maintained authority to call for projects and rank them in order of priority.

*S7. Was the risk assessment revised to reflect changes in development? [44 CFR §201.4(d)]*

For the 2020 plan update, given the expedited timeframe, changes in development were discussed with the State Hazard Mitigation Officer (SHMO). The SHMO noted no new major developments across the island since the previous plan was completed. (This is further evidenced by a limited population change since the previous plan was developed. The population has declined from 55,791 persons in 2014 to

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55,212 persons in 2020.) However, several structures are currently being repaired or reconstructed as a result of Tropical Storm Gita impacts. New critical facilities constructed since the previous plan were also reviewed. The SHMO noted 17 new facilities on the island including 12 schools, a fire station/public safety building, Legislative Administrative Building, museum, shipyard office, and COVID-19-related testing/quarantine facility as listed in Appendix C. The 2025 plan will be updated to reflect changes in the parcel information and building footprints, data permitting.

*S11. Was the plan updated to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities? [44 CFR §201.4(d)]*

The 2020 plan update includes the progress made in statewide mitigation efforts. Many mitigation actions named in the 2015 plan have been funded and implemented. In addition, based on review by the Territory Hazard Mitigation Council the list of mitigation actions has shifted since 2015. The Council revised the list in 2017 and again in 2018. The most current list of mitigation actions is included in Chapter 6 Mitigation Strategy. In addition, the SHMO developed an excel spreadsheet to track the implementation of projects from 2015. This spreadsheet has been transformed into a Mitigation Action Tracker that will further facilitate the tracking of implementation and priorities. Details regarding the Mitigation Action Tracker may also be found in Chapter 6.

### 1.3.1 FEMA Recommendations

The list below details some of the recommendations from FEMA recorded on the Standard State Hazard Mitigation Plan Review Crosswalk, May 21, 2015. Some of the recommendations were incorporated for this plan update and some will be incorporated for the 2025 update. The Hazard Mitigation Council and the State Hazard Mitigation Officer strive to improve the plan and its implementation every five years, as they recognize the enormous benefit of the plan.

## Planning Process

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### 2015 FEMA Recommendations

- Provide additional documentation of the evaluation and review process for each section of the 2014 updated plan to demonstrate process conducted by planning team, especially during the meetings.
- Discuss the planning integration efforts and opportunities identified in the 2011 Plan and any unforeseen obstacles that emerged since approval of that plan.
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- Page 21 mentions the TAS Comprehensive Economic Development Strategy. Provide additional information on this effort and how, if any, mitigation is incorporated into the Strategy.
- Provide additional information on how TAS is integrating mitigation into the Coastal Zone Management Program, and other regulatory policies, plans, and strategies.
- Include a discussion of what TAS is doing to improve the maintenance of records or data regarding damage during disasters.

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## 2020 Mitigation Plan Response

- To the degree possible, additional information has been included.
- The SHMO and the Hazard Mitigation Council intend to more thoroughly integrate the mitigation plan with the Comprehensive Development Strategy and the Coastal Zone Management Program for the 2025 mitigation plan update. The SHMO continues to expand her understanding of the breadth of mitigation and the opportunity it poses to integrate multiple planning efforts in the Territory.
- The maintenance of records and data during and post disasters has continuously improved. The Territory is seeking funding from FEMA to manage the HMGP Program effectively.

## Risk Assessment

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### 2015 FEMA Recommendations

- The inclusion of a discussion of climate change is very much appreciated. In the future, it may be better to highlight Sea Level Rise as its own hazard and incorporate in a discussion of climate change impacts on each of the other identified hazards.
- The Plan includes pages of tables describing past occurrences for each identified hazard. These tables would be better if included in Appendices so as to make the narrative flow better.
- Describe the methodology to calculate potential loss estimates of identified vulnerable structures.
- Provide a statement that explicitly states that changes in development are considered in the loss estimates listed if this is the case; otherwise, recalculate loss estimates to include changes in development.
- Describe the methodology to calculate potential loss estimates of identified vulnerable structures.

### 2020 Mitigation Plan Response

- The sea level rise hazard for the 2015 was made a standalone hazard. The climate change profile was deleted, and climate change considerations were integrated into each hazard profile's vulnerability section.
- Previous occurrence tables were moved to Appendix C for the following hazards: Flood, High Surf, Landslide, Hurricane and Tsunami.
- Section 4.1.1 Estimating Losses was added to the Risk Assessment Chapter to describe the methodology used to estimate potential losses. Additionally, tailored methods for specific hazards are outlined in each hazards' vulnerability subsection.
- New parcel/footprint/value data could not be obtained in the expedited timeframe based on past experiences with the plan updates.
- Added section 4.1.1 Estimating Losses to better define loss estimation methodology;

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## Mitigation Strategy

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### 2015 FEMA Recommendations

- Address areas in which TAS needs to strengthen its pre-disaster and post-disaster capabilities.
- Discuss existing and emerging TAS policies and programs for both pre- and post-disaster mitigation, including implementation opportunities and problems, opportunities for improving TAS capabilities, conflicts created by public investment policies, and problems created by private development in hazard-prone areas.
- Identify those laws, regulations, and policies that can be amended to integrate mitigation actions or to remove provisions that hinder mitigation actions.
- Include a discussion of the positive aspects of TAS's funding capabilities, as well as problems encountered.
- If the previously approved plan identified laws, regulations, and policies that could be amended to integrate mitigation actions or to remove provisions that hinder mitigation efforts, describe progress in modifying these policies and legislation and identify where opportunities for integration still remain.
- Identify associated current and potential funding with identified mitigation actions in the mitigation strategy.
- Identify successes and challenges encountered in the prioritization approach.
- Criteria should include consideration for communities that are at highest risk, have repetitive loss properties, or are facing intense development pressure.
- Describe how assisting villages/agencies with their mitigation projects will achieve TAS's plan's goals and objectives.
- The Plan mentions that the lack of hazard data collection following major and minor disasters hindered TAS's ability to generate positive BCAs. Include a discussion on how TAS is addressing this issue and what progress, if any, it is making towards rectifying the problem.

### 2020 Mitigation Plan Response

- This plan update includes a section about possible mitigation actions for the Territory to consider for the 2025 update. For this update, the mitigation actions include represent projects submitted by the Hazard Mitigation Council. Prior to 2025, the Council has focused primarily on projects that may receive FEMA funding. Their scope is expanding and that will be represented in the 2025 plan update.
- The capability assessment was updated to reflect current laws and regulations. It will be further expanded to include more detail in 2025.
- This plan does include mention of laws, regulations and policies that may be amended to include mitigation actions. This can be further defined in future plan updates.
- Funding capabilities are defined.
- Current and potential funding sources are identified with each mitigation action.
- Success and challenges to the prioritization of mitigation actions is included.
- The Project Notification and Review System (PNRS) that is effective in American Samoa works to vet projects based on risk and development pressure.

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- Including the villages and additional agencies in the mitigation plan is something that will be included in the 2025 plan update.
- Collaborative efforts with the Office of Disaster Assistance and Petroleum Management, American Samoa Department of Homeland Security, members of the House of Representatives and other government agencies, worked together to collect data from reported damages to homes and property during a storm or an event which includes information like cost estimate of damages, location, family names and photos.

### Plan Maintenance Process

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#### 2015 FEMA Recommendations

- Include the criteria that will be used to evaluate the plan, such as whether:
  - The goals and objectives still address current and expected conditions.
  - The nature and magnitude of hazard problems and/or development have changed.
  - The current resources are appropriate for implementing the plan.
  - There are implementation problems, such as technical, political, legal, or coordination with other agencies.
  - The outcomes of actions have been as expected.
- The agencies participated as originally proposed.
- Describe any modifications to TAS's system used to track the initiation, status, and completion of mitigation actions/activities.

#### 2020 Mitigation Plan Response

- Additional criteria have been added to the Plan Maintenance Process.
- The addition of the Mitigation Action Tracker will make it much more efficient for the SHMO and the Territory Hazard Mitigation Council to maintain an accurate list of project status and mitigation activities.

### 1.4 Authority and Assurances

*S20. Did the state provide assurances? [44 CFR §201.4(c)(7)]*

American Samoa will continue to comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11c, and will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).<sup>1</sup>

In acknowledgement of all the stakeholders involved in the mitigation planning process, the strengths and accomplishments of the plan development process have been numerous. The American Samoa Government has endorsed the 2020 American Samoa Hazard Mitigation Plan with an Executive Order

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<sup>1</sup> Federal Register 1 Vol. 67, No. 38 /Tuesday, February 26, 2002 / Rules and Regulations §201.4(c)(7).

## Territory of American Samoa Hazard Mitigation Plan

signed by the Governor's Authorized Representative (GAR). The Governor, GAR, State Hazard Mitigation Officer, and the Territorial Hazard Mitigation Council has provided strong leadership and advocacy throughout the Territory, ensuring a continuous mitigation planning process. Adequate funding and technical guidance from the Federal Emergency Management Agency for mitigation planning projects, coupled with annual funding incentives for competitive mitigation grants, have continued to drive the mitigation planning process.

Accomplishments of this planning project include the Territory Hazard Mitigation Council leadership, American Samoa Government agency support and commitment, public participation, hazard and loss estimation research, geographic information system mapping of critical facilities and hazards, project development, and analysis of mitigation issues through the planning process.

And finally, this Hazard Mitigation Plan builds on a growing record of mitigation successes in American Samoa and technical expertise involved in composing the American Samoa Hazard Mitigation Plan 2003, 2008, 2011 and 2015.