



SECTION 7. PLAN MAINTENANCE

2018 HMP UPDATE CHANGES

- ❖ For the 2018 HMP Update, changes to this section are based on an evaluation of the operational feedback regarding the effectiveness of the plan maintenance procedures outlined in the 2013 HMP (formerly Chapter 21).

The development of a plan maintenance process ensures that the HMP remains a “living” document that is intended to be changed and updated throughout its performance period. Maintaining momentum in mitigation strategy implementation can lead to significant long-term changes and overall risk reduction. As such, a formal process is required to ensure that the HMP will remain an active and relevant document. The HI-EMA is the responsible agency for the preparation and maintenance of the HMP; and the SHMO is the individual responsible for overseeing the coordination, implementation, maintenance of the plan collaboratively across the State.

This section evaluates the challenges and successes of the 2013 HMP maintenance procedures and outlines an updated strategy to maintain the 2018 HMP Update to ensure it remains current and reflects changes to the statewide mitigation program over time.

44 CFR 201.4 (c)(5): [The Standard Plan Maintenance Process includes:]

- (i) An established method and schedule for monitoring, evaluating and updating the plan.
- (ii) A system for monitoring implementation of mitigation measures and project closeouts.
- (iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategies.

7.1 Review of the 2013 HMP Maintenance Procedures

It is the State’s intent to ensure this plan remains a “living” document and will be updated and revised as appropriate and as new information becomes available. In recognition of the need for establishing and implementing a formal maintenance process, the HI-EMA, the lead to update and maintain the HMP, conducted an analysis of whether the previously approved plan’s method and schedule for monitoring, evaluating and updating the plan was appropriate and successful. Further, it determined what elements or processes should be changed so that this plan remains current based on HI-EMA’s current and evolving capabilities.

The previously approved 2013 HMP dated October 3, 2013, discussed monitoring, evaluating, and updating the plan in Chapter 21. Chapter 21 called for the update of the HMP following the actions or events listed below:

- Ongoing mitigation actions within the State and counties.
- Development of new mitigation recommendations.
- Updates on the benefit-cost performance of current mitigation options.
- Changes necessary because of federal, state, or county legislative acts, appropriations, mandates and recommendations.
- Public involvement in mitigation and other existing planning activities.



- Scientific and other technical data update recommendations based on new data, analysis, or scientific and GIS modeling capabilities.
- Events or new information on environmental conditions that indicate new mitigation needs or requirements.
- Incorporation of hazard identification in other plans that have impact on land use, zoning, etc.

In the process of updating the earlier versions of the HMP, it became apparent that mitigation processes, although well-intentioned, have been interrupted. This planning cycle was no exception. The HI-EMA recognizes that the HI-EMA Mitigation Section is limited in staffing capacity as discussed further in Section 5 (Capability Assessment) and that Forum support since the adoption of the 2013 HMP has been sporadic. In addition, the frequency of hazard events and the State’s necessity to redirect attention to disaster response and recovery diverted attention and resources away from the outlined 2013 HMP maintenance process.

Since the adoption of the 2013 HMP, the HI-EMA experienced several staffing changes. From December 2014 to December 2016, the State did not have a SHMO. During this time there was only one mitigation program support member to cover all mitigation duties for the State. In January 2017, the current SHMO joined the HI-EMA and in March 2018 there was a change in the HI-EMA Director. In terms of Forum support, from 2014 to 2015, Forum activities included supporting the review of proposed projects under FEMA DR-4194 (Tropical Storm Iselle) and FEMA DR-4201 (Pu’u ‘O’o Volcanic Eruption and Lava Flow). The Forum meetings lapsed during the end of 2015 and throughout 2016; however the Forum was re-energized in the spring of 2017. In addition, the State experienced five federal disaster declarations, two of which occurred back-to-back, in April and May 2018, during the 2018 HMP Update. Without enough capacity to dedicate to mitigation, there were increased challenges executing the 2013 HMP plan maintenance procedures. These events forced HI-EMA to re-evaluate the process for monitoring, evaluating and updating the plan.

Unfortunately, the monitoring, evaluation and update process outlined in the 2013 HMP was not fully actualized (refer to Table 7-1). During the 2013 plan performance period, the HI-EMA tracked progress on FEMA HMA-funded plans and projects and their implementation progress. In addition, the Forum met periodically to discuss the prioritization of projects to be submitted for FEMA HMA funding as well as special topics of interest. In 2016, the tsunami hazard chapter of the 2013 HMP (Chapter 6) was updated to reflect more current information and data available for the state.

However, due to limited staffing and the number of disaster declarations that occurred, the HI-EMA focused its priorities on sustaining those communities most affected by the hazard events, as well as other unanticipated needs. Overall, it is recognized that the plan maintenance and implementation should be redesigned to align with the HI-EMA’s current capabilities and strengthened to ensure proper execution. The HI-EMA has identified tools and outlined procedures in the following sections describing how the updated plan maintenance strategy will be accomplished.

Table 7-1. Implementation Schedule of the 2013 HMP

Date	Implementation Milestone	Status
November 2013 to January 2014	<ul style="list-style-type: none"> • Review current mitigation strategy and ensure that the implementation schedule is followed. 	The HI-EMA Mitigation Section reviewed the mitigation strategy.



Date	Implementation Milestone	Status
	<ul style="list-style-type: none"> Discuss protocols for information and data sharing as part of an ongoing project to improve geographic information systems, data management, and decision-support tools development. Prepare assistance strategy for implementing local mitigation plans. As projects receive funding, set up project timeline and monitoring process. Work with regional hazard mitigation organizations to collaborate and leverage tools and resources. For example, work with the Pacific Risk Management 'Ohana (PRiMO), a hazard mitigation network coordinated by the NOAA Pacific Services Center. 	
<p>February 2014 to September 2014</p>	<ul style="list-style-type: none"> Convene the quarterly meeting of the Forum. Convene advisory committees and task forces to develop partnerships, projects, standards, and recommendations. Set up additional committees as necessary to implement policies identified in the State Hazard Mitigation Plan. Review Risk and Vulnerability Assessment and Mitigation Plan to assess for any gaps or new information that should be incorporated. Look at proposal funding schedules and deadlines, and develop grants. Begin writing proposals for funding. Review proposals through email. Formally develop information sharing protocols within the county, state agencies, federal agencies, and private interests. 	<p>No progress on stated items.</p> <p>FEMA DR-4194 (Tropical Storm Iselle) occurred redirecting the HI-EMA Mitigation Section to assist with disaster response and recovery.</p> <ul style="list-style-type: none"> Incident period: August 7 to 10, 2014 Declared: September 12, 2014
<p>September to October 2014</p>	<ul style="list-style-type: none"> Convene the fourth quarterly meeting of the committee. Discuss findings. Determine process for addressing gaps in hazard mitigation strategy. Review new guidance criteria and requirements by FEMA. Review project status, successes, and update project lists. Update cost-benefit analyses in preparation for grant program requirements. Summarize any necessary risk and vulnerability assessments. 	<p>No progress on stated items.</p> <p>FEMA DR-4201 (Pu'u 'O'ō Volcanic Eruption and Lava Flow) occurred redirecting the HI-EMA Mitigation Section to assist with disaster response and recovery.</p> <ul style="list-style-type: none"> Incident period: September 4, 2014 to March 26, 2015 Declared: November 3, 2014
<p>November 2014</p>	<ul style="list-style-type: none"> Convene the Annual Progress Review by the Hawai'i State Hazard Mitigation Forum. Prepare annual report on progress to the Director and Vice Director of Hawai'i State Civil Defense. Prepare one-page updates on progress to insert into the strategy. Prepare detailed schedule and actions for Year Two. 	<p>No progress on stated items.</p>
<p>Years 2 to 4</p>	<ul style="list-style-type: none"> Continue with quarterly meetings, committee meetings, and additional meetings as needed to ensure implementation of mitigation efforts. Continue to update sections of the plan and ensure implementation. Review new FEMA requirements. Prepare schedule for plan evaluation. 	<p>The HI-EMA Mitigation Section submitted and was awarded a FEMA PDM grant to fund the 2018 HMP update.</p> <p>The Forum supported the review of proposed projects under DR-4194 and DR-4201.</p>
<p>Year 5</p>	<ul style="list-style-type: none"> Continue with quarterly meetings. Continue to update plan and ensure implementation. At the beginning of the third year, a thorough review will be undertaken and an evaluation will be conducted. 	<ul style="list-style-type: none"> The Forum met four times between October 2017 and June 2018.



Date	Implementation Milestone	Status
	<ul style="list-style-type: none"> Prepare updated plan for October 27, 2018, requirement. 	<ul style="list-style-type: none"> The HI-EMA led the 2018 HMP Update.

Notes: FEMA Federal Emergency Management Agency
 HI-EMA Hawai'i Emergency Management Agency
 HMP Hazard Mitigation Plan
 NOAA National Oceanic and Atmospheric Administration

Note from the 2013 HMP regarding schedule contingency: State Civil Defense will pursue the previous schedule as outlined; in the event of a disaster during the planning cycle, the schedule is subject to change. The Forum will be directed to meet as needed to guide in response and recovery efforts and respond to Hazard Mitigation Grant Program and Pre-Disaster Mitigation program requirements. The schedule may also be adjusted to accommodate changes in federal, state, and local administrations during this cycle.

The outlined schedule will be reviewed, revised, and updated periodically to best serve the State of Hawaii's needs in implementing hazard mitigation practices and actions. The schedule will be shared in the secure server to ensure that the state hazard committees are coordinated and organized.

7.2 Monitoring, Evaluating and Updating

As discussed in Section 2, the 2018 HMP Update was led by the HI-EMA overseen by the SHMO, with the guidance and input from other state departments, the Forum, stakeholders and public. The 2018 HMP Update will be maintained on the HI-EMA website at <http://dod.hawaii.gov/hiema/ser-resources/hazard-mitigation/>. The SHMO will continue to lead the HMP maintenance throughout the plan's performance period (2018 to 2023).

Through the coordination of the SHMO and/or Chair of the Forum, the Forum will continue to meet quarterly, as per their bylaws updated in August 2017 (Appendix X), throughout the 2018 HMP Update performance period to support implementation of, and discuss amendments to the SHMP. In addition to these meetings, the SHMO and Forum Chair may request the Forum meet following disaster events, to assure that procedures and resources are appropriate for plan maintenance and implementation. The SHMO may continue to invite additional stakeholders that were invited to Forum meetings during the 2018 HMP Update to ensure continuity of involvement and subject-matter expertise. The continuous review and evaluation of the HMP will help determine its overall effectiveness and ensure its ongoing relevance to the State's mitigation needs.

At a minimum of one Forum meeting per year, the SHMO will lead the HMP update discussion to evaluate the content of the plan. The framework and questions listed below will be asked. At the conclusion of these Forum meetings, the HI-EMA will capture the changes and progress discussed, and combine into an annual review report. The annual review report will be structured to align with the main sections of the 2018 HMP Update and be included in Appendix X. This will facilitate the incorporation of changes and progress made in the 2023 HMP Update. The SHMO will continue to host the current version of the 2018 HMP Update on the HI-EMA website and ensure the annual review reports are included in Appendix X and uploaded to the site.

- Planning Process
 - What milestones in plan integration have been made (e.g., updated State Strategic Plan and THIRA)?
 - Are there any changes needed to the Forum membership to ensure broad participation across all sectors?
- State Profile



- Have there been any significant changes to the State in terms of demographics, development, state assets or other?
- **Capability Assessment**
 - What changes in programs and policies have occurred at the local, state and federal levels?
 - As local HMPs are updated, integrate their updated local capabilities into the State capability assessment.
- **Risk Assessment**
 - Have the nature and magnitude of hazard risks and/or development changed?
 - Is there any updated climate science data to integrate into the plan?
 - Document new disaster declarations and impacts incurred.
- **Mitigation Strategy**
 - What progress has been made toward the HMP's goals?
 - Do the goals still address current and expected conditions?
 - Discuss any change in state priorities.
 - Report mitigation action implementation progress (discussed further below).
 - Review existing mitigation action items to determine appropriateness of funding.
 - Discuss changes in available funding sources, programs and their priorities.
 - Re-prioritize state-level potential mitigation projects, if needed, using the methodology described in the plan.

In addition to the annual review report on the HMP, a summary of the FEMA annual consultation will be included in the appendix as well. The 2017 FEMA annual consultation documentation has been included in Appendix X because it was completed as the HI-EMA commenced the 2018 HMP Update.

Table 7-2 outlines the updated plan maintenance strategy that the HI-EMA will implement over the next five years.

Table 7-2. Plan Maintenance Strategy for the 2018 HMP Update

Year	Implementation Milestone
October 2018	<ul style="list-style-type: none"> • FEMA-approval and State adoption of the 2018 HMP Update
2019 (Year 1)	<ul style="list-style-type: none"> • Continue Forum meetings • In August 2019, solicit Forum and stakeholder assistance to document mitigation action implementation progress to date using the BAToolSM • Evaluate the 2018 HMP Update utilizing the framework above • Develop the annual review report by the end of September 2019, include in Appendix X of the 2018 HMP Update, and update the HI-EMA website with the new information
2020 (Year 2)	<ul style="list-style-type: none"> • Continue Forum meetings • In August 2020, solicit Forum and stakeholder assistance to document mitigation action implementation progress over the past year using the BAToolSM • Evaluate the 2018 HMP Update using the framework above • Develop the annual review report by the end of September 2020, include in Appendix X and update the HI-EMA website with the new information
2021 (Year 3)	<ul style="list-style-type: none"> • Continue Forum Meetings • Apply for FEMA PDM planning grant to develop the 2023 HMP Update • In August 2021, solicit Forum and stakeholder assistance to document mitigation action implementation progress over the past year using the BAToolSM • Evaluate the 2018 HMP Update using the framework above



Year	Implementation Milestone
	<ul style="list-style-type: none"> Develop annual review report by September 2021, include in Appendix X and update the HI-EMA website with the new information
2022 (Year 4)	<ul style="list-style-type: none"> Continue Forum Meetings Commence 2023 HMP Update Request mitigation action progress by July 2022 Develop annual review report by September 2022, include in Appendix X, and update the HI-EMA website with the new information
2023 (Year 5)	<ul style="list-style-type: none"> Continue Forum Meetings Continue preparation of the 2023 HMP Update Submit updated HMP to FEMA by August 2023

Notes: *BAToolSM* Baseline Assessment Tool
FEMA Federal Emergency Management Agency
HI-EMA Hawai'i Emergency Management Agency
HMP Hazard Mitigation Plan
PDM Pre-Disaster Mitigation

7.3 Tracking Progress

Tracking progress on state-level mitigation activities shall continue to be led by HI-EMA. To standardize and facilitate collection of progress data and information on the specific mitigation actions in the HMP, HI-EMA will utilize the *BAToolSM* plan review module, an on-line plan review service that will allow Forum members and other state agencies and stakeholders to login to a secure site and provide a status update to their mitigation actions. The service will be established and populated with HMP mitigation actions within the first six months of FEMA-approval of this plan. Once ready, the link, instructions and login credentials will be distributed prior to the next scheduled Forum meeting and a training session on the *BAToolSM* will be provided. The HI-EMA envisions collecting progress on an annual basis, and reporting progress in the annual review report appended to this plan to facilitate integration into the 2023 HMP Update. While tracking progress on documented actions, this will be an opportunity for the HI-EMA, Forum and stakeholders to identify modifications to existing actions, and add new mitigation actions to the State mitigation strategy; all of which can be accomplished in the *BAToolSM*.

Local mitigation projects funded by FEMA are administered through the HI-EMA and are tracked from initiation. Counties that receive project grant awards are required to submit progress reports on the status of their project(s). Currently, the HI-EMA is tracking the one HMGP award under DR-4201 and two PDM 2016 awards on their internal Access database. When FEMA awards the five projects under DR-4282, the HI-EMA will initially track on the same Access database, but will convert to the new *BAToolSM* once it is installed.

7.4 Documenting and Supporting Local Hazard Mitigation Plans

As each county's expiration date on their current hazard mitigation plan approaches, the SHMO notifies each county regarding their status and advises to submit a FEMA HMA planning grant application to FEMA. The HI-EMA Mitigation Section provides technical assistance, when requested, to the four counties during their local mitigation plan development and update. Due to limited staffing at the HI-EMA Mitigation Section, technical assistance has been somewhat limited over the past five years. As the HI-EMA Mitigation Section capacity increases so will the technical assistance it can provide to the counties. A final plan review is made by the HI-EMA



to ensure all requirements of the program have been met before forwarding the updated plan to FEMA for final review and approval.

During the period of performance of the 2013 HMP, limited resources were available to provide a linkage between the local plans and the HMP. It is the current SHMO's vision to get all four counties on the same local HMP update cycle. The 2018 HMP Update will serve as a trigger for all county HMPs to be updated. The HI-EMA envisions that this will allow for wise use of resources and better coordination of risk assessment and mitigation strategies among the counties and with the State. In addition, it is the intention of the HI-EMA to develop a standard operating procedure for state technical assistance program for local county hazard mitigation plans and mitigation activities, implement an annual review coordinated with and through the annual mitigation program consultation with FEMA Region IX. This is included as a new mitigation action led by the HI-EMA as documented in Section 6 (Mitigation Strategy) and Appendix (Mitigation Strategy). During this consultation methods and progress on linking the 2018 HMP Update and local HMPs will be discussed and evaluated.

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