## Chapter 1. Introduction

The Federal Emergency Management Agency (FEMA) defines mitigation as "the effort to reduce loss of life and property by lessening the impact of disasters. Mitigation is taking actions now – before the next disaster – to reduce human and financial consequences later (analyzing risk, reducing risk, insuring against risk.)"<sup>1</sup>

"The purpose of mitigation planning is to identify policies and actions that can be implemented over the long term to reduce risk and future losses. Mitigation plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. The planning process is as important as the plan itself. It creates a framework for risk-based decision-making to reduce damages to lives, property, and the economy from future disasters."<sup>2</sup>

"DMA 2000 (Public Law 106-390) provides the legal basis for FEMA mitigation planning requirements for State, local and Indian Tribal governments as a condition of mitigation grant assistance. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need for State, local, and Indian Tribal entities to closely coordinate mitigation planning and implementation efforts."

The Pala Band of Mission Indians decided to update their Hazard Mitigation Plan for Federal Emergency Management Agency (FEMA) approval. They applied for and received a Pre-Disaster Hazard Mitigation grant from FEMA and hired Jamie Caplan Consulting LLC, to develop the plan.

#### 1.1 Purpose

The purpose of hazard mitigation is to reduce potential losses from future disasters. The intent of mitigation planning, therefore, is to maintain a process that leads to hazard mitigation actions. Tribal mitigation plans identify the natural hazards that affect the tribal government, identify actions to reduce losses from those hazards, and establish a coordinated process to implement the plan (44 CFR § 201.1(b)).

The Pala Band of Mission Indians developed this plan to meet the requirements of the Disaster Mitigation Act of 2000. More importantly, the plan was created to reduce loss of life, land and property due to natural hazards and climate change that affect the Tribe. It is difficult to predict when natural hazards will impact the Tribe, but it is accurate to say that they will. By implementing the mitigation actions listed in this plan, the impact of natural hazards will be lessened.

<sup>&</sup>lt;sup>1</sup> https://www.fema.gov/what-mitigation

<sup>&</sup>lt;sup>2</sup> https://www.fema.gov/media-library-data/1478260600306-

<sup>117</sup>bda8ab179bd301b0b61b52a143485/StateMitigationPlanning MS Bulletin V9 508.pdf

<sup>&</sup>lt;sup>3</sup> https://www.fema.gov/media-library/assets/documents/4596

The Executive Committee and the Pala Environmental Department Advisory Board are dedicated to improving safety and sustainability of the Tribe. The consultants worked closely with these leaders to create this mitigation plan.

### 1.2 Tribal / FEMA Relationship

FEMA's Tribal Policy<sup>4</sup> outlines the commitment by the Agency to enhance its nation-to-nation relationship with federally-recognized Indian tribal governments (tribal governments), and to ensure FEMA works together to build, sustain, and improve every tribal governments' capacity to prepare for, protect against, respond to, recover from, and mitigate against all hazards.

FEMA's Guiding principles for reviewing tribal mitigation plans are as follows:<sup>5</sup>

- Nation to Nation. In compliance with the FEMA Tribal Policy, FEMA commits itself to building a stronger and lasting partnership with tribal governments to assist them in preparing for the hazards they face, to reduce their disaster vulnerabilities, to respond quickly and effectively when disasters strike, and to assist in recovering in their aftermath. FEMA recognizes that the tribal right of self-governance flows from the inherent sovereignty of American Indian and Alaska Native tribal governments, and that federally recognized tribal governments have a unique and direct relationship with the United States government. Tribal governments are not political subdivisions of states but are recognized by the United States as distinct sovereign entities.
- **Foster cooperation and understanding.** FEMA is committed to communicating plan reviews in a constructive and positive manner. Communicating plan reviews in a constructive manner that enhances tribal government capabilities is an important goal of the mitigation planning program and will always be considered by FEMA when communicating with a tribal government.
- Focus on mitigation strategy. Plan reviews will emphasize actions and implementation of the hazard mitigation strategy. All other sections of the plan contribute to and result in the hazard mitigation strategy and specific hazard mitigation actions. For example, a sound hazard identification and risk assessment are an important part of the plan and serves as the basis for the strategy, which is the primary focus of the tribal mitigation plan.
- Consider intent while reviewing the plan. FEMA will review and consider the plan as a whole (Planning Process, Hazard Identification and Risk Assessment, Mitigation Strategy, etc.), as well as the individual requirements. A comprehensive review of the plan helps FEMA validate that the plan meets the overall purpose of mitigation planning.
- **Process is as important as the plan itself.** FEMA will accept the planning process as defined by the tribal government. In mitigation planning, as with most other planning efforts, the actual planning process is as important as the plan itself. One of the most critical elements of a

<sup>&</sup>lt;sup>4</sup> https://www.fema.gov/media-library/assets/documents/25324

<sup>&</sup>lt;sup>5</sup> Tribal Mitigation Plan Review Guide 2017, FEMA, p.2-3.

- successful mitigation plan is participation by a wide range of tribal members or other affected parties who play a role in setting mitigation goals and identifying and implementing mitigation actions. Therefore, it is important to have a clear description of *what* and *who* were involved in the planning process and of how the process met the needs of the tribal government.
- This is the Tribe's plan. Plan reviews will recognize the efforts, interests, and cultural beliefs of each tribal government that develops a mitigation plan. For example, FEMA recognizes that some resources vulnerable to hazards, including those having religious and cultural significance (such as sacred sites), may not be identified specifically or shown on maps included in publicly available plans.

#### 1.3 Mitigation Plan Goals

D3. Was the plan revised to reflect changes in priorities? [44 CFR §201.7(d)(3)]

Through several meetings with the Pala Environmental Department Advisory Board (PEDAG), the goals shown below were chosen. The goals in the 2016 Hazard Mitigation Plan were updated to reflect current needs and interests. The goals were not significantly amended except for the addition of climate change and climate adaptation. For the mitigation actions developed to support these goals, see Chapter 6, Mitigation Strategy.

- 1. Mitigate risk to people and property from natural hazards and climate change.
- 2. Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and Tribal facilities due to extreme heat, wildfires, flooding, drought and climate change.
- 3. Proactively plan to mitigate the risks of natural hazards and climate change by integrating mitigation policies and practices into tribal planning for all departments.
- 4. Build capacity for hazard mitigation and climate adaptation through regional collaboration.
- 5. Increase tribal member and tribal employee awareness of natural hazards and climate adaptation by implementing tribal-based education programs.

#### 1.4 Plan Adoption and Assurances

E1. Does the plan include assurances that the tribal government will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, including 2 CFR Parts 200 and 3002, and will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes? [44 CFR § 201.7(c)(6)]

Following the two-week public review process, the Tribe sent the plan to FEMA for their review. Upon FEMA's review and designation that the plan was "Approved-Pending-Adoption," the Tribe scheduled a Tribal Executive Committee meeting to formally adopt the plan. The adoption resolution is included in the first few pages of this document. The adoption resolution demonstrates the Tribe's commitment to fulfilling the hazard mitigation goals outlined in this plan and authorizes the implementation of mitigation actions.

The Pala Band of Mission Indians assures that the Tribal government will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, including 2 CFR Parts 200 and 3002, and will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes.

#### 1.5 Summary of Plan Contents

Below is a summary of the Hazard Mitigation Plan chapters, including appendices. The FEMA guidelines and requirements for each portion of this Plan are included in their respective chapters. The planning process closely adhered to FEMA guidelines and to the intent of those guidelines.

#### **Chapter 2 Planning Area Profile**

The Planning Area Profile chapter describes the Pala Band of Mission Indians, including tribal history and reservation geography and the built environment. Also included is a description of the Tribal government, economy and utilities. The essential facilities for the Tribe are identified in this chapter.

#### **Chapter 3 Planning Process**

The Planning Process chapter documents the methods and approach for developing the hazard mitigation plan. The chapter summarizes the Pala Environmental Department Advisory Group meetings, the public outreach process, and the Public Preparedness Survey. This chapter guides the reader through the process of generating this Plan and reflects the open and inclusive public involvement process.

#### **Chapter 4 Risk Assessment**

The Risk Assessment identifies the natural hazard risk to the Pala Band of Mission Indians and its tribal members and visitors. The risk assessment looks at current as well as future vulnerabilities based on current and future development of structures and infrastructure.

#### **Chapter 5 Capability Assessment**

The Capability Assessment looks at the Tribe's ability to mitigate risk pre- and post-disaster.

#### **Chapter 6 Mitigation Strategy**

This chapter provides a blueprint for reducing losses identified in the Risk Assessment. The chapter presents the overall hazard mitigation goals and then identifies mitigation actions in priority order. Where applicable, funding sources are identified, as are responsible persons or departments.

#### **Chapter 7 Plan Maintenance**

The Plan Maintenance chapter establishes a system and mechanism for periodically monitoring, evaluating, and updating the Hazard Mitigation Plan. It also includes a plan for continued public outreach and monitoring the implementation of the mitigation actions identified.

#### **Appendices**

The Appendices include documentation regarding the planning process, such as Pala Environmental Department Advisory Group sign-in sheets and the Public Preparedness Survey results. In addition, resources supporting the risk assessment are included.

#### 1.6 Plan Updates

D1. Was the plan revised to reflect changes in development? [44 CFR  $\S 201.7(d)(3)$ ]

a. Does the plan describe changes in development that have occurred in hazard prone areas since the last plan was approved?

#### 1.6.1 Changes in Development

The 2020 Hazard Mitigation Plan includes all of the changes in development on the Reservation. These include new infrastructure, the RV Park, and new homes. The Tribe builds to the current California Building Code and avoids building in high hazard areas. The figure below shows the location of new structures, businesses and infrastructure. These areas are described more completely in the following chapter and then analyzed in terms of risk in Chapter 4.

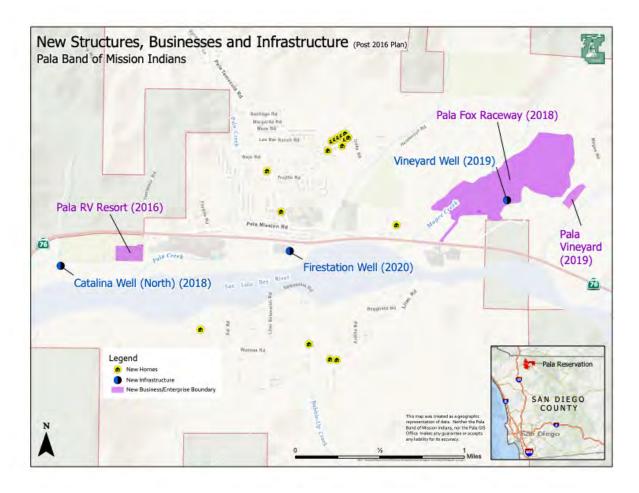


Figure 1. New Structures, Businesses and Infrastructure.

#### 1.6.2 Mitigation Action Status

- D2. Was the plan revised to reflect progress in tribal mitigation efforts? [44 CFR  $\S 201.7(d)(3)$  and 201.7@(4)(iii)]
- a. Does the plan describe the status of each mitigation action and/or project identified in the previous plan?
- b. For those actions not completed, does the plan provide a narrative describing the status (for example, a description of why the action is no longer relevant)?
- c. Does the updated plan describe how the tribal government incorporated the previous mitigation plan into other planning mechanisms, as applicable?

The table below indicates the current status of mitigation actions named in the 2016 Hazard Mitigation Plan. Many of these actions were carried forward, although slightly revised, for implementation between 2020 and 2025.

Table 2. 2016 Mitigation Action Status.

Priority Order	Mitigation Action	Status	Description
1	Hazard Mitigation Plan	Completed + To Be Continued	The current (2016) Hazard Mitigation Plan has been maintained and will be completely updated for readoption in 2020.
2	Water Conservation Outreach	Completed + To Be Continued	Pala Environmental Department currently conducts annual outreach on the importance of water conservation through flyers, Tribal newsletter and PED website articles, social media posts, as well as a variety of workshops/pilot programs on the topic.
3	Water Table and Drought Education	Completed + To Be Continued	Pala Environmental Department currently conducts annual outreach on how drought affects Pala's groundwater levels through flyers, Tribal newsletter and PED website articles, social media posts, as well as a variety of workshops/pilot programs on the topic. Additionally, the Tribe received a FY20 BOR Grant to install smart water meters that will enable residents to finally see how much water they use at home.
4	Wildfire Education	Completed + To Be Continued	Pala Fire Department holds an annual Open House Education Event (October). They also provide educational flyers, updates to Tribal newsletters, and Rez Radio email notices. They do NOT send anything to community member homes.

Priority Order	Mitigation Action	Status	Description
5	Clear Brush Around Homes	Completed + To Be Continued	Tribal members can make request to Chairman Smith for brush removal; he assigns the duty to either Tribal Services or Pala Fire Department.
6	Clear Storm Water Channels	Partially Completed / In Progress	Pala Tribal Services should work with Pala Environmental Department in order to obtain necessary permits BEFORE clearing storm water channels/culverts.
7	Building Codes	Completed + To Be Continued	Pala Housing Department currently uses the building codes set by the California Building Standards for all Tribal construction projects that they oversee.
8	Road Signage	Partially Completed / In Progress	Tribal Services installed the last set of road sign updates and has been working with the Pala GIS Department on the matter as well.
9	Drought Resistant Landscaping	Completed + To Be Continued	If the Tribe installs landscaping at a new housing site, they try to use drought resistant landscaping in order to conserve water.
10	Sycamore Drainage	Partially Completed / In Progress	Pala Tribal Services should work with Pala Environmental Department in order to obtain necessary permits BEFORE clearing storm water channels/culverts.
11	Hazard Data	Partially Completed / In Progress	Pala GIS Department collects fire footprint outlines, and the Pala Environmental Department provides areas with flooding issues as well. This data has been used to make maps, but the tribe should start a natural disaster tracking/database.

Priority Order	Mitigation Action	Status	Description
12	Solar on Buildings	Completed + To Be Continued	Pala Housing Department installs solar panels on new Tribal housing in order to be as efficient with energy as possible.
13	Infrastructure Improvements	Partially Completed / In Progress	Work has been done sporadically. The Tribe would like to develop a plan for future work because improvements are necessary.
14	Recycled Water	Partially Completed / In Progress	The Tribe has installed purple waterline that provides recycled water to the Duker Grove. Plans to bring recycled water to either the Casino or the Pala Administration Grounds have been delayed.
15	GIS Data	Completed + To Be Continued	The Pala GIS Department continues to maintain the Tribe's database, constantly adding new items as they are built on the Pala Reservation.
16	Disaster Training	Completed + To Be Continued	Pala Fire Department conducts educational outreach to the local elementary school during Prevention Month (October), which details how to respond in natural disasters. They also provide educational flyers, updates to Tribal newsletters, and Rez Radio email notices. They do NOT send anything to community member homes.
17	TERT Team	Delayed	Pala Fire Department has NOT YET put a TERT together (although maybe some of the same work is being done by the PEDAG).
18	Address System	Partially Completed / In Progress	Pala's GIS Department has been working with the Pala Fire Department in 2019 and 2020 to update all addresses on the Pala Reservation. They have held two community workshops on the subject.

Priority Order	Mitigation Action	Status	Description
19	Disaster Supply Facility	Delayed	The Tribe has not developed a facility for emergency supplies; however, a makeshift version was developed in response to Covid-19. The Tribe intends to develop this type of facility in the future.
20	Maintain Radio Station	Completed + To Be Continued	The existing radio station is currently being maintained and provides updates on all natural disasters and other emergencies that may affect the reservation.
21	Pala Website	Completed + To Be Continued	Pala Environmental Department contracts with an IT Contractor to update both the Tribe's and the Pala Environmental Department's websites with information on natural disaster related information/actions.
22	Topographical Survey	Partially Completed / In Progress	Pala Environmental Department obtained a FEMA grant (FY20) to begin some of this work, specifically, to look at flooding areas along the Tribe's main river/creeks. The outcome will be a model/map of flood inundation areas (source creeks/river; not covered is overland sheet flow flooding).
23	Soil Data	Cancelled	This is not considered necessary.
24	Pala Temecula Road Flooding	Delayed	This has to be done in coordination with the County. Pala Environmental Department recently discovered that Trujillo Creek jumped out of its banks a couple of years ago, redirecting substantial flow through the shooting range, Oaks neighborhood, and cutting across Pala Temecula Road, causing substantial flooding. Once the banks have been repaired, this should alleviate some (but not all) flooding on Pala Temecula Road).

Priority Order	Mitigation Action	Status	Description
25	Bubble-Up Creek Flooding	Delayed	No work has been done on this, but it will be kept for the 2020 plan update.
26	New Water Tank	Delayed	No work has been done on this, but it will be kept for the 2020 plan update.
27	Pala Lilac Road Flooding	Delayed	No work has been done on this, but it will be kept for the 2020 plan update.
28	Environmental Assessments	Completed + To Be Continued	Pala Environmental Department conducts assessments when permits require
29	Ham Radio	Partially Completed / In Progress	Rez Radio started on this project and held a community meeting to get people interested; they were in the process of recruiting candidates to study for licensing in March. This project has been put on hold for now, due to the coronavirus pandemic.
30	Community Garden	Partially Completed / In Progress	Pala Environmental Department is currently installing a community garden / native plant demonstration area right next to the Pala Administration Building. This garden will be open to the public for vegetable and cultural plantings and used for youth education.
31	Porous Surfaces	Delayed	No work has been done on this, but it will be kept for the 2020 plan update.
32	Trujillo Creek	Delayed	This has to be done in coordination with the County.  Pala Environmental Department is working on developing a flood model of this creek, which can eventually be used to convince the County to correctly resize (or build a bridge)the culverts on Pala Mission Road (Trujillo Creek).

Priority Order	Mitigation Action	Status	Description
33	San Luis Rey River Bridge	Delayed	No work has been done on this, but it will be kept for the 2020 plan update.

#### 1.6.3 2016 Incorporation of Mitigation Actions into other Planning Mechanisms

The Pala Environmental Department assumed leadership of the Tribe's Hazard Mitigation Plan which streamlined incorporation of the Plan into multiple planning mechanisms. The Pala Environmental Department actively educates the Tribal community about hazard risks and preparedness and mitigation. They also incorporate hazard mitigation and climate adaptation into their planning documents and work practices. Two good examples of this are the Tribe's Climate Change Adaptation Plan referred to multiple times in this Plan and the Pala Climate Change Preparedness fact sheets included in Appendix C. Additional information regarding incorporation of mitigation actions is reviewed in Chapter 5. Capability Assessment.

#### 1.6.4 Updates Made to the 2016 Plan

The table below indicates where significant content updates were made to the 2016 version of the Plan. It is important to recognize that the entire Plan was updated and revised.

Table 3. Updates Made to the 2016 Plan.

Chapter	Changes Made	
1. Introduction	<ul> <li>Status of 2016 mitigation actions included.</li> <li>Plan updates included in this chapter.</li> </ul>	
2. Reservation Profile	<ul> <li>The Reservation profile was re-organized to show the built environment in terms of Tribal Economy, Tribal Facilities, Tribal First Responder Facilities, and Reservation Utilities and Infrastructure. All of these facilities are included in Chapter 4 and considered for vulnerabilities. New Tribal facilities including businesses and infrastructure are mentioned in the Reservation Profile.</li> </ul>	

Chapter	Changes Made		
	The Bureau of Indian Affairs (BIA) added the Pala Rey Youth Camp to the Pala Reservation boundary, making that a total of four intrust properties.		
3. Planning Process	<ul> <li>A new Planning Process was conducted to develop this Plan with the Pala Environmental Department and the PEDAG leading the planning efforts.</li> </ul>		
4. Risk Assessment	• The 2020 Pala Band of Mission Indians Hazard Mitigation Plan broadened the list of hazards addressed to include: extreme freeze, epidemic/pandemic, air pollution and agricultural pests and diseases. Further, structural fire was added for consideration under the wildfire hazard profile. These additions were made to align with the State Hazard Mitigation Plan. A climate change subsection was also included for each hazard to address future condition impacts across the Pala Reservation. The Tribe also provided updated data for structure specific building locations (e.g., building footprints), increasing the number of building footprints assessed from 614 to 773. Further, building and content replacement values were estimated for these buildings, thereby enhancing the analysis beyond critical facility evaluation. This also permitted a structure-specific Level 2 Hazus analysis which was conducted for both flood and earthquake hazards. In addition, the Tribe added 23 critical facilities for consideration, including non-structural critical facilities such as agricultural holdings. Lastly, several new reports and information from plan development meetings were incorporated within each profile update to reflect current information on probability, location, previous occurrences, extent, and vulnerability.		
5. Capability Assessment	The Capability Assessment was revised to reflect current capacity of the Tribe to mitigate risk and adapt to climate change. The Tribe has shown development in this area. The Pala Environmental Department has assumed responsibility for this Plan and formed the Pala Environmental Department Advisory Group to assist with its development and implementation.		

Chapter	Changes Made	
6. Mitigation Strategy	<ul> <li>The Mitigation Strategy was completely revised to reflect updated mitigation goal statements and new mitigation actions. The goal statements reflect the Tribe's intent to mitigate climate change as well as natural hazards. A Mitigation Action Tracker was developed to assist the Tribe with the implementation of mitigation actions. The Mitigation Action Tracker is an Excel based spreadsheet with automatically populating worksheets.</li> </ul>	
7. Implementation Plan	The most significant change to Plan implementation is the Pala Environmental Department has assumed a leadership role in Plan development and implementation. In addition, they formed and lead the Pala Environmental Department Advisory Group which meets monthly to discuss issues related to the environment, hazards and climate adaptation. These monthly meetings illustrate a commitment by the Tribe to mitigate risk and adapt to change.	

### 1.6.4.1 Projected updates to 2025 plan

When the 2016 Plan was reviewed by FEMA, they used the Tribal Multi-Hazard Mitigation Plan Review Crosswalk which made space for comments but not recommendations. Now that FEMA uses the Plan Review Tool, the Tribe intends to address comments and suggestions made by FEMA in future updates of the Plan.