

What is the State Hazard Mitigation Plan?

The State Hazard Mitigation Plan (SHMP or Plan) is California's primary hazard mitigation guidance document. It provides an analysis of the State's historical and current hazards, describes the State's hazard mitigation goals and objectives, and details the State's hazard mitigation strategies and actions. The Plan represents the State's commitment to a comprehensive mitigation strategy to reduce or eliminate potential risks and impacts of disasters, promoting faster disaster post-recovery, reducing loss of life and property, and creating a more resilient California.

The SHMP is updated on a five-year cycle as required by the Robert T. Stafford Disaster Relief and Emergency Assistance Act and allows the State to access critical Federal funding. California published its first SHMP in 2004. Subsequent Plans were released in 2007, 2010, 2013, and 2018. The 2023 SHMP replaces the 2018 SHMP and will expire on August 29, 2028.

At the time of Plan approval, the Federal Emergency Management Agency (FEMA) recognized California as one of 14 states to earn the designation of an ["Enhanced" State](#). "Enhanced" status acknowledges the coordinated and proactive efforts the State is taking to reduce losses from hazards, protect life and property, and create safer and more resilient communities. States that achieve "Enhanced" status also receive an additional five percent in Hazard Mitigation Grant Program (HMGP) funding after a disaster.

Why is the SHMP Important?

In addition to setting the mitigation goals, strategy, and actions for the State to reduce the loss of life, property, and the environment from disasters, the SHMP also serves as a resource for local planners developing their own hazard mitigation plans. The SHMP is a critical starting point for local jurisdictions seeking to understand the risks they face and how to address them.

The SHMP is also essential for making California eligible to receive certain types of federal disaster and hazard mitigation programs:

- [Hazard Mitigation Grant Program \(HMGP\)](#)
- [HMGP Post Fire \(HMGP-PF\)](#)
- [Building Resilient Infrastructure and Communities \(BRIC\) Program](#)
- [Flood Mitigation Assistance \(FMA\) Program](#)
- [Fire Management Assistance Grant \(FMAG\) Program](#)
- [Public Assistance \(PA\), Permanent Work Categories \(Categories C-G\)](#)
- [Rehabilitation of High Hazard Potential Dam \(HHPD\) Grant Program](#)
- [Pre-Disaster Mitigation Congressionally Directed Spending \(LPDM\)](#)

About the Risk Assessment

Fundamental to the SHMP is the hazard risk assessment, which determines what hazards are of concern for the State and assesses the potential impacts of those hazards on California's people, property, and environment. The 2023 SHMP Risk Assessment was conducted using the best available data and science, incorporating future projections and equity considerations.

The 2023 SHMP Risk Assessment identifies:

- The hazards to which the State is susceptible.
- Which areas and populations are most vulnerable to these hazards.
- What these hazards can do to physical, social, environmental, and economic assets.
- The resulting cost of damage or cost that can be avoided through mitigation efforts.

The 2023 SHMP Risk Assessment can serve as a critical resource for local jurisdictions in their own mitigation planning efforts. For example, the Risk Assessment can:

- Provide information on natural hazards known in the State.
- Determine the general location and vulnerability aspects of each hazard that can be bolstered with local data.
- Lay out examples of current and potential mitigation efforts that locals can incorporate into their own mitigation activities or planning.

What has changed in the 2023 SHMP from Previous Plans?

Although the main changes between the 2018 SHMP and 2023 SHMP are outlined below, you can find additional details in the 2023 SHMP Volume 1, Chapter 1.4: "The Updated Plan—What is Different?" and Volume 2, Appendix E: "Differences from Previous Plan and Crosswalk for Plan Reviewers."

Equity and Climate Impacts

FEMA's updated [State Mitigation Planning Policy Guide](#) became effective in 2023. This guide enhances the ways in which equity and climate considerations are incorporated into state mitigation planning. California has always been a leader in incorporating these themes into the SHMP, with climate first being integrated in 2007 and equity first being integrated in 2018. The 2023 SHMP expands upon those efforts in meaningful ways as informed by subject matter experts in the Equity and Climate Impacts Working Groups.

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The 2023 SHMP examines hazard impacts on both the general population and in particular, equity priority communities, as they face additional barriers and challenges that increase vulnerability to hazards. Furthermore, the percentage of the exposed population identified as living in equity priority communities is used as a factor in determining the overall hazard impact rating of each specific hazard. The SHMP Equity Working Group identified the Centers for Disease Control and Prevention's (CDC) 2018 Social Vulnerability Index (SVI) as the most authoritative dataset available at the time the SHMP planning process began. Of note, the CDC SVI considers 15 social factors from publicly available data. The SHMP uses this dataset to identify geographic areas where efforts can be prioritized to ensure equitable outcomes.

In addition to equity considerations, the hazard impact rating also incorporates the effects of climate change on each hazard. This is important as California is already experiencing shifting climate patterns, resulting in more extreme and variable weather conditions across the State. Taking these impacts into account is crucial to understanding current risk and how it will change in the future.

Hazards of Interest

The 2018 SHMP profiled 30 hazards. Due to legislative mandates, emerging hazards since the development of the 2018 SHMP, and reorganization, the 2023 SHMP profiles 34 hazards. The 2023 SHMP breaks the hazards into two groups:

1. Natural Hazards of Interest

- Organized by the hazard impact rating analysis scores.
- Listed based on a hazard impact rating that factors in both qualitative and quantitative data, with quantitative data weighing more heavily when available for a particular hazard.
- Includes natural hazards for which FEMA will provide Hazard Mitigation Assistance (HMA) grant funding for eligible activities.

2. Other Hazards of Interest

- Organized by the hazard impact rating analysis scores.
- Greater weight was given to the qualitative factors due to less robust quantitative data for some hazards.
- Important hazards to consider but are not eligible for receiving HMA grant funding to mitigate.

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In the 2023 SHMP, Natural Hazards of Interest are ranked in the following order:

1. Earthquake
2. Riverine, Stream, and Alluvial Flooding
3. Extreme Heat
4. Extreme Cold or Freeze
5. Wildfire
6. Severe Wind, Weather, and Storms
7. Sea-Level Rise, Coastal Flooding, and Erosion
8. Landslide, Debris Flow, and Other Mass Movements
9. Drought
10. Tsunami and Seiche
11. Dam Failure
12. Levee Failure
13. Snow Avalanche
14. Subsidence
15. Volcano

In the 2023 SHMP, Other Hazards of Interest are ranked in the following order:

1. Urban Structural Fire
2. Other Potential Causes of Long-Term Electrical Outage
3. Public Safety Power Shutoff (PSPS)
4. Terrorism
5. Air Pollution
6. Energy Shortage
7. Cyber Threats
8. Tree Mortality
9. Invasive and Nuisance Species
10. Epidemic, Pandemic, and Vector-Borne Disease
11. Civil Disorder
12. Natural Gas Pipeline Hazards
13. Hazardous Materials Release
14. Transportation Accidents Resulting in Explosions or Toxic Releases
15. Well Stimulation and Hydraulic Fracturing
16. Oil Spills
17. Electromagnetic Pulse Attack
18. Radiological Accidents
19. Geomagnetic Storm (Space Weather)

Volume 1 and Volume 2:

The SHMP is historically a lengthy document – the 2018 SHMP is just under 1,100 pages, and the 2023 SHMP is almost 2,000 pages. While the SHMP is an important document with wide applications across the State, the length of the Plan and the complex or technical content matter may deter potential stakeholders from utilizing the Plan to support their efforts.

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One key way Cal OES improved the usability of the SHMP was to split the Plan into two volumes. Volume 1 is the Core Plan that provides crucial information utilizing plain language that emphasizes readability and includes terms linked to a glossary located at the end of the Volume. Volume 2 consists of multiple technical appendices and data tables that support and expand upon the information in Volume 1.

How was the 2023 SHMP Updated?

The Cal OES State Mitigation Planning (SMP) Unit coordinated the update of the 2023 SHMP. This work was done in close collaboration with federal, state, Tribal Nation, local, non-governmental partners, and the public. The update process included over 100 coordination meetings with partners, soliciting input from subject matter experts on specific hazards, and a public comment period that received over 1,000 unique comments submitted.

The SMP Unit also oversees the maintenance and implementation of the SHMP. This includes tracking the progress of the action items detailed in the SHMP, recording additional mitigation efforts taken by State partners, and analyzing how this mitigation work helps to achieve the Goals stated in the SHMP. This work informs any modifications necessary to the SHMP between updates and guides future versions of the Plan.

Getting Involved and Additional Resources

The SHMP is only as robust as the input received and the people involved. To be part of the SHMP implementation process or future updates, or for any questions, please contact the SMP Unit at SHMP@CalOES.ca.gov.

For additional resources regarding mitigation planning and funding, the SHMP, and local planning resources, please visit the [Cal OES State Hazard Mitigation Planning](#) webpage.