Santa Barbara Unified School District

LOCAL HAZARD MITIGATION PLAN 2026

Santa Barbara Unified
Every child, every chance, every day.



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Adoption Records

The Santa Barbara Unified School District Board has officially adopted this Plan via Resolution 2026-2026-36 on June 19th, 2026 in compliance with DMA 2000. The adoption recognizes the District's commitment to reducing the impacts of natural hazards to students, staff and district owned infrastructure. Adoption records and FEMA approval letter are included on the following pages.

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Contents

Adoption Records iii
Section 1. Introduction 1-11
1.1 Purpose of the Plan 1-11
1.2 Authority 1-13
1.2.1 Plan Adoption & Points of Contact 1-13
1.3 District Profile 1-14
1.3.1 Governance 1-14
1.3.2 Employees 1-15
1.3.3 Physical Setting 1-17
1.3.4 Geography & Climate 1-17
1.3.5 Historical Overview 1-20
1.3.6 Facilities Overview 1-21
1.3.7 Facilities Development and Age Profile 1-23
1.3.8 Community and Student Demographics 1-24
1.3.9 Past & Future Development 1-27
1.4 What's New 1-28
1.4.1 Background: 2009 vs. 2026 1-28
1.4.2 Mitigation Activities 1-29
1.4.3 New Tools & Risk Assessment Methodology 1-34
Section 2. Planning Process 2-1
STEP 1: Organize Resources 2-3
STEP 2: Assess the Risk 2-3
STEP 3: Develop a Mitigation Strategy 2-4
STEP 4: Adopt & Implement the Plan 2-4
2.1 Organizing Resources 2-5
2.1.1 People & Expertise 2-5
2.1.2 Stakeholder Involvement/Outreach 2-11
2.1.3 Planning Process Library 2-14
2.2 Assess the Hazard Risk 2-18
2.2.1 RAMP (Risk Assessment Mapping Platform) 2-19
2.2.2 Vulnerability Assessment Methodology 2-20
2.3 Developing a Mitigation Strategy 2-26
2.3.1 Identify the Problem 2-26

2.3.2 Identify Mitigation Goals 2-27
2.3.3 Assess Capabilities & Opportunities 2-27
2.3.4 Identify Mitigation Actions 2-28
2.3.5 MAST (Mitigation Action Support Tool) 2-33
2.4 Adopting & Implementing the Plan 2-34
2.4.1 Adoption Proceedings 2-34
2.4.2 Monitoring, Evaluating & Updating 2-35
2.4.3 Plan Integration 2-38
Section 3. Risk Assessment 3-1
3.1 Hazard Identification & Screening 3-1
3.1.1 Potential Hazards 3-3
3.1.2 Hazard Prioritization 3-4
3.1.3 Priority Hazards 3-11
3.2 Vulnerability Assessment 3-12
3.2.1 Earthquake Hazard Profile 3-13
3.2.2 Wildfire Hazard Profile 3-43
3.2.3 Flood Hazard Profile 3-58
3.2.4 Slope Failure Hazard Profile 3-74
3.2.5 Extreme Weather Hazard Profile 3-88
3.2.6 Drought Hazard Profile 3-100
3.2.7 Climate Change Hazard Profile 3-110
Section 4. Mitigation Strategy 4-1
4.1 Mitigation Goals & Objectives 4-1
4.2 Capabilities & Opportunities Assessment 4-2
4.2.1 Funding Opportunities 4-8
4.3 Translating Strategy to Action 4-11
4.4 Mitigation Action Plan 4-13
Section 5. Works Cited 5-1
Appendix A. Analysis Methodology A-1
A.1. Natural Hazard Exposure A-1
A.2. Analysis Data A-2
A.2.1. Assets, Value, and Occupancy A-2
A.2.2. Natural Hazard Data A-2
A.2.3. Methodology Overview A-6

Data Dictionary A-7
Appendix B. Planning Process Documentation B-1

List of Tables

Table 1-1: Santa Barbara Unified School District Regional Climate Statistics 1-20
Table 1-2: Facility Age Profile by Location 1-24
Table 1-3: Review Table of 2009 Mitigation Actions 1-31
Table 2-1: Meeting Summary 2-7
Table 2-2: Members of Steering Group and All Planning Teams 2-9
Table 2-3: Key Stakeholders 2-10
Table 2-4: HMP Consultant Team 2-11
Table 2-5: Planning Process Library 2-17
Table 2-6: List of Profiled Hazards by Spatial Delineation of Hazards with Geographic Extents 2-23
Table 3-1: Document Review Crosswalk 3-3
Table 3-2: Disaster Declarations in Santa Barbara County 1969 to Present (FEMA, 2024) 3-6
Table 3-3: Climate Change Impacts on Hazards 3-9
Table 3-4: Hazard Priority Summary 3-11
Table 3-5: Moment Magnitude (Mw) Scale 3-14
Table 3-6: Mercalli Scale and Peak Ground Acceleration (PGA) 3-15
Table 3-7: Modified Mercalli intensity level descriptions 3-16
Table 3-8: NEHRP Soil Classification System 3-17
Table 3-9: Field Act vs. UBC Administrative Requirements 3-19
Table 3-10: Milestone Seismic Events and Building Code Updates 3-20
Table 3-11: Earthquakes 4.0 Magnitude or Higher in or near Santa Barbara County Since 2000 3-23
Table 3-12: FEMA / AB300 Building Types 3-30
Table 3-13: Building Types by Seismic Vulnerability Category* (Seismic-Safety Inventory of California Public Schools**) 3-30
Table 3-14: SBUSD Category 2 Building Inventory from AB300 Report 3-31
Table 3-15: EQ Exposure to M6.9 Mission Ridge-Arroyo Paride Santa Ana Scenario 3-34
Table 3-16: EQ Exposure to M7.2 Santa Ynez East Scenario 3-37
Table 3-17 Earthquake Problem Statements 3-41
Table 3-18: SBUSD Wildfire Threat Exposure (in $Millions) 3-55
Table 3-19 Wildfire Problem Statements 3-56
Table 3-20: Extreme Weather Events Leading to Flooding 2005-2025 3-61
Table 3-21: Flood Exposure to FEMA 100-YR Flood Hazard 3-69
Table 3-22 Flood Hazard Problem Statements 3-72
Table 3-23: Slope Failure Events in Santa Barbara County, 2010-2025 3-78
Table 3-24: Landslide Exposure Summary Table 3-86
Table 3-25 Slope failure Problem Statements 3-87
Table 3-26: Classes of Wind Power 3-89
Figure 3-26: Annual Average Wind Speed 3-90
Table 3-27: Extreme Weather Events in City of Santa Barbara, 2017-2025 3-92

Table 3-28 Extreme Weather Hazard Problem Statements 3-99
Table 3-29: Drought Classifications and Impacts for California 3-100
Table 3-30 Drought Hazard Problem Statements 3-109
Table 3-31 Climate Change Hazard Problem Statements 3-118
Table 4-1: Capabilities and Opportunities Assessment 4-4
Table 4-2: Federal and State Funding Opportunities 4-8
Table 4-3: SBUSD Mitigation Action Plan 4-15

List of Figures

Figure 1-1: SBUSD Location Map 1-17
Figure 1-2: District Map 1-19
Figure 1-3 SBUSD Elementary School Locations 1-21
Figure 1-4 SBUSD Middle/High School Locations 1-22
Figure 1-5 SBUSD District/Other Facility Locations 1-22
Figure 2-1: Planning Process Breakdown 2-2
Figure 2-2: Members of the County-Wide HMPT Engaged in Mitigation Strategy Development 2-3
Figure 2-3: Overview of Public and Stakeholder Engagement Schedule 2-13
Figure 2-4: Online Public Survey Advertisement in Spanish 2-14
Figure 2-5: Risk Assessment Exercise from HMPT Meeting #2 2-15
Figure 2-6: RAMP User Interface 2-20
Figure 2-7: Hazard Exposure Explanation Graphic 2-23
Figure 2-8: Data Source and Methodology 2-25
Figure 2-9: HMGP Timeline 2-37
Figure 3-1: Disaster Declarations in Santa Barabara County by Hazard Type Since 1969 (FEMA, 2024) 3-5
Figure 3-2: Hazard Prioritization Risk Matrix 3-10
Figure 3-3: Earthquake Faults near SBUSD 3-25
Figure 3-4: SBUSD Region Earthquake Probability 3-27
Figure 3-5: M6.9 Mission Ridge-Arroyo Parida-Santa Ana 3-39
Figure 3-6: M7.2 Santa Ynez East 3-40
Figure 3-7: Cal Fire FRAP Fire Perimeters 2006-19 Greater than 10 Acres 3-48
Figure 3-8: Wildfire Severity Zones 3-49
Figure 3-9: 100 and 500- Year Flood Zones in SBUSD 3-64
Figure 3-10: Campus Level Flood Risk Santa Barbara Junior High 3-71
Figure 3-11: Landslide Exposure Map 3-80
Figure 3-12: Projected Precipitation, Evaporation, and Water Deficit Through 2099 3-102
Figure 4-1: Mitigation Alternatives 4-12
Figure 4-3: Mitigation Strategy Key 4-14

Section 1. Introduction



Natural and human-caused disasters can cause injury and loss of life while also inflicting extensive damage on our communities, schools, public infrastructure, and natural surroundings. These events often force the displacement of students, residents and result in massive expenditures for emergency response, recovery efforts, and the eventual restoration of community services. In response, the Santa Barbara Unified School District (SBUSD) has developed a Hazard Mitigation Plan designed to reduce the impacts of both natural and human-caused hazards. This plan is intended to help the community recover more quickly and with fewer adverse effects on both people and infrastructure.

The process of hazard mitigation planning involves identifying potential hazards, assessing their likely impacts, and establishing clear mitigation goals. It further entails determining, prioritizing, and implementing specific mitigation actions; ranging from planning initiatives to tangible projects. Although it is impossible to completely prevent natural and human-caused disasters, a strategic approach involving public education, preparedness activities, and proactive mitigation measures can significantly lessen their effects.

Often, post-disaster recovery efforts focus on returning a community to its pre-disaster state. While this approach may hasten the return to normalcy, it also risks perpetuating a cycle of recurrent damage and reconstruction. In contrast, this SBUSD Hazard Mitigation Plan is structured to break this cycle by ensuring that post-disaster repairs and rebuilding efforts enhance the overall resilience of our community.

Recognizing that conditions and information change over time, the Hazard Mitigation Plan is a "living document" that undergoes regular review, monitoring, and updates. To remain compliant with Federal regulations and meet the requirements of Federal mitigation grants, the plan is revised every five years.

1.1 Purpose of the Plan

Hazard mitigation is the process of taking proactive steps to reduce or eliminate the long-term risk to people and property from natural hazards. The Federal Emergency Management Agency (FEMA) defines hazard mitigation as “any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards.” A natural hazard is an event or condition with the potential to cause fatalities, injuries, property damage, infrastructure disruption, environmental impacts, or other significant losses. This Plan focuses exclusively on natural hazards and does not address technological or human-caused threats.

The purpose of this Hazard Mitigation Plan (HMP) is to identify and assess natural hazard risks affecting Santa Barbara Unified School District (SBUSD) facilities and to develop strategies that reduce or eliminate potential losses. Through a structured planning process, the District evaluates its vulnerability to natural hazards and establishes goals, policies, and actions that strengthen the safety, resilience, and continuity of educational operations. By proactively planning for natural hazard events, SBUSD seeks to safeguard students, staff, facilities, and community assets while supporting long-term disaster resilience.

Mitigation is one of the primary phases of emergency management specifically dedicated to breaking the cycle of damage. Hazard mitigation is distinguished from other disaster management functions, as mitigation measures make the district more disaster resilient *before* events occur. Mitigation generally involves the alteration of physical environments, significantly reducing risks and vulnerability to hazards by altering the built environment so that life and property losses can be avoided or reduced.

Mitigation also makes it easier and less expensive to respond to and recover from disasters. With an approved and adopted HMP, the SBUSD will be eligible for FEMA Hazard Mitigation Assistance (HMA) funds aimed to reduce or eliminate risk before and after disaster occurs.

The overall purpose of the district's HMP is to reduce the impacts of future natural and manmade hazard disasters on K–12 school facilities within the district. It will be the second FEMA-approved mitigation plan for the district, specifically focused on district facilities. Completely eliminating risk to K–12 schools in the district from future natural disasters is neither technologically nor economically feasible. However, substantially reducing the negative impacts of future disasters is achievable with ongoing implementation of risk reduction measures.



A local government entity applying for a FEMA mitigation grant must have a FEMA-approved hazard mitigation plan. A school district can meet this FEMA requirement in two ways: 1) having a FEMA-approved district mitigation plan or 2) participating in the development of a local mitigation plan by a city or county. There are several advantages in a school district having its own FEMA-approved hazard mitigation plan:

- A mitigation planning process that assesses hazards that pose risk to district facilities and identifies the campuses or buildings with the highest risk. This helps a district to focus on mitigation measures that will reduce future damages, losses and casualties to the greatest extent. That is, it will prioritize mitigation measures in the most effective manner.

- More detailed, district-specific hazard and risk information that will be able to support a district's FEMA grant application much more effectively than the broader, less-focused information in a city or county hazard mitigation plan.

- The ability for a district with its own FEMA-approved hazard mitigation plan to apply directly to FEMA for funding, rather than having to compete with other possible mitigation projects in a city or county.

- A district-specific HMP will assist the Safety / Emergency Management Office in gathering the data necessary to compete successfully for future FEMA mitigation project funding. FEMA requires that all FEMA-funded hazard mitigation projects are "cost-effective" (i.e., the benefits of a project must exceed the costs). Therefore, benefit-cost analysis is an important component of hazard mitigation planning, not only to meet FEMA requirements but also to help evaluate and prioritize potential hazard mitigation projects. This is true whether funding is from FEMA, state or local government, or private sources.

1.2 Authority

In 2000, Congress amended the Stafford Disaster Relief and Emergency Assistance Act with the Disaster Mitigation Act of 2000, which included new requirements linking hazard mitigation planning and funding of hazard mitigation projects. Section 322 requires local governments to have a Hazard Mitigation Plan (HMP) as a condition of receiving federal disaster mitigation funds. The HMP should describe the process for assessing hazards, risks, and vulnerabilities, identify and prioritize mitigation actions, and solicit input from the community, key stakeholders, and adjacent jurisdictions. 42 U.S.C. § 5165(a) (2019). For additional information on the hazard mitigation regulatory environment, see Section 2.

1.2.1 Plan Adoption & Points of Contact

Adoption by Local Governing Body

The Santa Barbara Unified School District Board is responsible for the review, approval, and adoption of the Hazard Mitigation Plan (HMP). It is also the intent of the District Staff to take appropriate actions to ensure the HMP remains as a part of the normal business operations. A Board Resolution adopting the Hazard Mitigation Plan, as required by the Disaster Mitigation Act of 2000, was enacted on June 19th, 2026. The resolution is located in the forward of this document.

Promulgation Authority

The Promulgating Authority for the adoption of the Hazard Mitigation Plan by the Santa Barbara Unified School District is:

Organization: Santa Barbara Unified School District Board of Education

Board Members:

William Banning, President

Rose Muñoz, Vice President

Sunita Beall, Clerk

Gabe Escobedo, Board Member

Celeste Kafri, Board Member

Erick Gonzalez Ramirez, Student Board Member

Primary Point of Contact

The Point of Contact for information regarding this HMP is:

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Santa Barbara Unified School District
Director of Facilities and Modernization
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Santa Barbara, CA 93101
805.963.4338 x6291

1.3 District Profile

Santa Barbara Unified School District (SBUSD) is a public school district serving the City of Santa Barbara and the surrounding communities, including Goleta. The district provides elementary instruction within the City of Santa Barbara, while secondary instruction extends to surrounding areas, reflecting its broader regional service area. SBUSD serves approximately 13,000 students across a diverse portfolio of educational programs, including traditional elementary schools, junior high schools, comprehensive high schools, continuation and alternative high schools, charter schools, and early childhood centers.

In total, the District operates 25 sites comprising approximately 461 buildings. These facilities include elementary campuses; junior high and senior high schools; alternative and continuation programs; children's centers, including PARMA and Las Flores; charter campuses; the District Office; the Armory; and operational support facilities such as the Maintenance and Warehouse complex. This extensive physical infrastructure represents a significant public investment and underscores the importance of coordinated planning to protect District assets and ensure continuity of educational services.

1.3.1 Governance

Santa Barbara Unified School District (SBUSD) is governed by a single Board of Education that oversees both the primary and secondary school districts. Pursuant to the California Education Code, the Board operates as an independent public entity, separate from city and county governments. The Board consists of five elected representatives serving four-year terms. All regular and special meetings of the Board are conducted in accordance with the California Brown Act and are open to the public, ensuring transparency and community engagement in District decision-making.

The Superintendent serves as the chief executive officer of the district and reports directly to the Board of Education. The Superintendent is responsible for the overall administration and operation of the district, including implementation of Board policies, execution of strategic priorities, fiscal oversight, personnel management, and ensuring compliance with state and federal regulations.

The governance and administrative structure of SBUSD provides centralized leadership and accountability, which is critical for coordinated emergency management, hazard mitigation planning, and continuity of operations across all District facilities.

1.3.1.1 Facility Construction and Modernization

All school facility construction, modernization, and major renovation projects undertaken by SBUSD are subject to oversight by the California Division of the State Architect (DSA), a division of the California Department of General Services (DGS). DSA provides plan review, approval, and construction oversight for public K–12 school facilities to ensure compliance with applicable provisions of the California Building Code, including structural safety, fire and life safety, and accessibility requirements under the Americans with Disabilities Act (ADA).

Prior to construction, plans and specifications must be reviewed and approved by DSA. During construction, certified inspectors and DSA field engineers monitor work to ensure compliance with approved documents and applicable codes. Upon completion, DSA certification verifies that the project meets required safety and accessibility standards before occupancy.

This state-level oversight ensures that District facilities are designed and constructed to rigorous seismic, structural, fire, and accessibility standards—an important component of long-term hazard mitigation and life-safety protection. Compliance with DSA requirements strengthens the District's resilience to natural hazards, particularly earthquakes, and supports the overall objectives of the Hazard Mitigation Plan.

1.3.2 Employees

SBUSD employs approximately 1,330 full-time equivalent (FTE) staff members, including about 650 classroom teachers (FTE) and roughly 680 additional support and administrative staff (FTE). Instructional staff include approximately 305 elementary teachers and 300 secondary teachers, supporting both primary and secondary educational programs across the District.

The District's broader workforce includes instructional aides, counselors, school psychologists, librarians, site and district administrators, student support services personnel, and operational support staff who maintain facilities and daily operations. SBUSD serves approximately 13,000 students, resulting in a student-to-teacher ratio of about 19:1.

In addition to its core FTE staffing, the District employs a substantial number of hourly and part-time personnel annually, including substitute teachers, coaches, and other instructional and operational staff. Collectively, this workforce supports the educational, operational, safety, and emergency preparedness needs of students across the District's 25 sites.

1.3.2.1 Facilities and Modernization

The Facilities and Operations Department at Santa Barbara Unified School District is responsible for the planning, construction, modernization, maintenance, and sustainability of District facilities across the

majority of SBUSD school sites and support properties. Its mission is to design, build, and maintain safe, sustainable, and innovative learning environments that support academic excellence, equity, and long-term stewardship of public assets.

The Department oversees facilities work across nearly 2.5 million square feet of educational space, representing the bulk of the District's property portfolio. It implements capital improvement projects, manages routine and preventative maintenance, and conducts condition assessments to inform investment priorities and lifecycle maintenance needs. A recent major milestone includes Board approval of a Five-Year Facilities Master Plan, grounded in a comprehensive internal Facilities Condition Assessment to guide prioritized improvements and long-range planning.

Organizational Functions

Key operational functions within Facilities and Operations include:

- Facilities Planning and Modernization: Oversees planning and execution of modernization and new construction projects, aligning with district goals and compliance requirements.
- Maintenance and Operations: Provides repairs, routine maintenance, grounds upkeep, and safety-focused work order responses across all District properties. Maintenance personnel specialize in trades including plumbing, HVAC, electrical, carpentry, and custodial services. Formal tracking systems are used to organize, assign, and complete work efficiently.
- Sustainability and Energy Management: Leads energy efficiency and sustainability initiatives such as solar installations and LED retrofits, contributing to environmental goals and operational cost savings.
- Capital Projects and Contract Administration: Manages larger construction and rehabilitation projects, including schools' capital upgrades, structural improvements, and major systems replacements, in coordination with governing oversight and code compliance.

These functions work in coordination with Business Services and other central departments to ensure that facilities not only support instructional programs but also comply with safety, accessibility, and regulatory requirements.

Staffing and Support

Facilities and Operations is staffed by a team of skilled professionals including planners, project managers, trades technicians, custodial staff, and administrative personnel. While precise counts vary annually, this group comprises a significant portion of the District's classified and support workforce. Staff responsibilities range from routine site maintenance to technical project implementation and contribute directly to the safety, accessibility, and continuity of operations across all school sites and support facilities.

By maintaining and improving District properties, the Facilities and Operations Department plays a central role in hazard mitigation and resilience planning — ensuring that critical educational infrastructure remains safe, operational, and compliant with applicable building and safety standards.

1.3.3 Physical Setting

As seen in Figure 1-1, the Santa Barbara Unified School District (SBUSD) is located in Santa Barbara County, within the City of Santa Barbara and surrounding areas, including Goleta and Montecito. The district is bordered by the Pacific Ocean to the south, the Santa Ynez Mountains to the north, the City of Carpinteria to the east, and the City of Goleta to the west. SBUSD encompasses approximately 136 square miles.

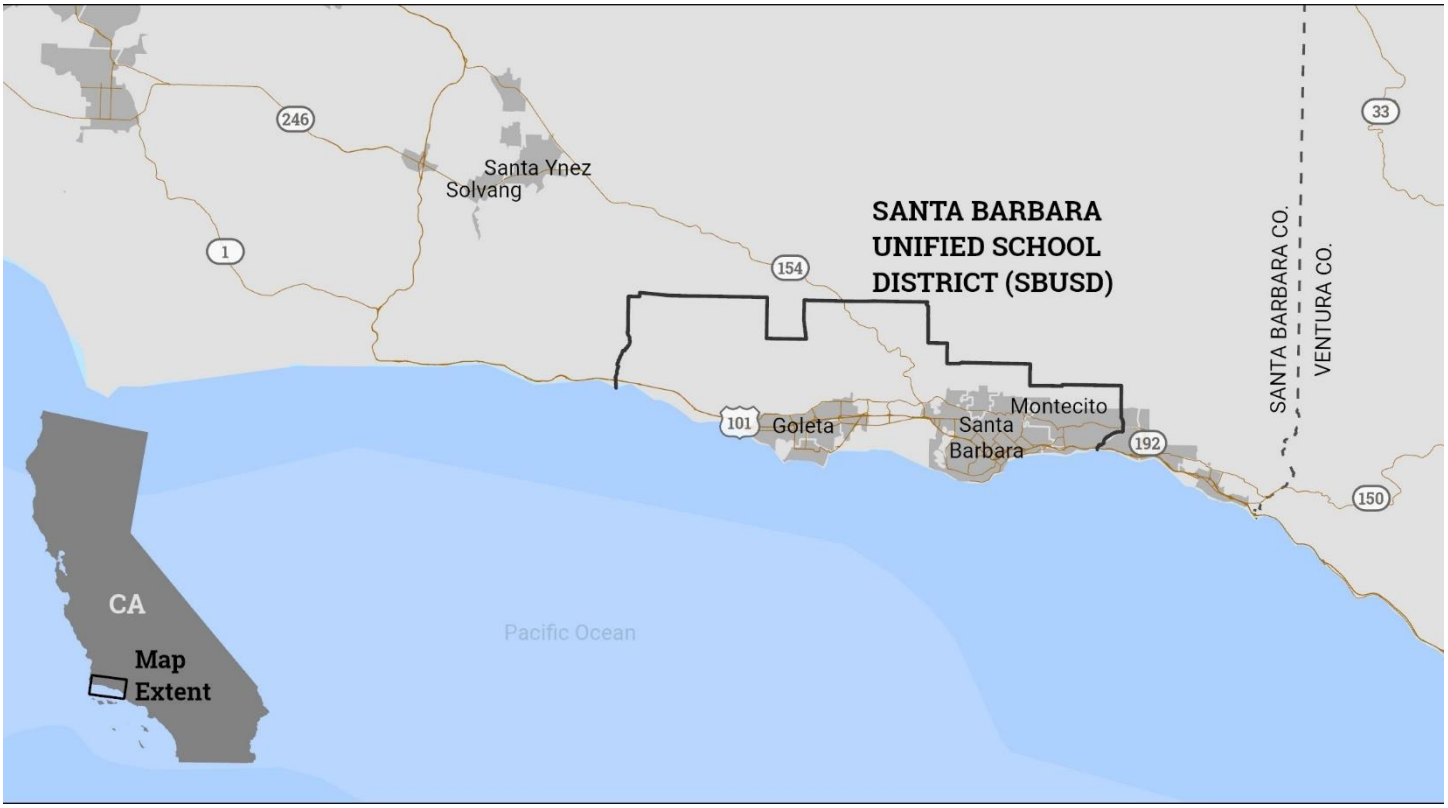


Figure 1-1: SBUSD Location Map

1.3.4 Geography & Climate

The Santa Barbara Unified School District (SBUSD) is located along the central coast of California in Santa Barbara County, approximately 100 miles northwest of Los Angeles. Major geographical features in and around the district include the Santa Ynez Mountains, the Santa Barbara Channel, and several drainages including Mission Creek, Sycamore Creek, and Arroyo Burro Creek. See Figure 1-2: District Map. The region is characterized by a coastal Mediterranean climate, with mild, wet winters and warm, dry summers. The Santa Ynez Mountains form a dramatic backdrop to the city, running parallel to the coastline, while the Pacific Ocean lies to the south, moderating temperatures year-round. Rainfall primarily occurs between

November and April, with the area experiencing occasional atmospheric river events that can lead to heavy precipitation and localized flooding.

Several major geographical features influence the district's landscape and environmental conditions. The Santa Barbara Channel, which lies just offshore, plays a role in shaping the region's marine climate, while the Santa Barbara and Goleta Valleys house much of the population. The area is also subject to natural hazards such as wildfires, landslides, and seismic activity due to its proximity to the San Andreas Fault system.

Hydrologically, the district is within the Santa Barbara Channel Watershed, which includes multiple creeks and drainage basins that flow from the mountains to the ocean. Some key waterways near the district include Mission Creek, Sycamore Creek, and Arroyo Burro Creek, all of which can experience flash flooding during intense rainstorms. Additionally, the region's topography and chaparral vegetation make it susceptible to wildfires, particularly during Santa Ana and Sundowner wind events, which can increase fire risk during the dry season.

These geographical and climatic factors are essential considerations for hazard mitigation planning within the SBUSD, ensuring that schools remain resilient to natural disasters while maintaining a safe learning environment for students and staff. (National Oceanic & Atmospheric Administration).

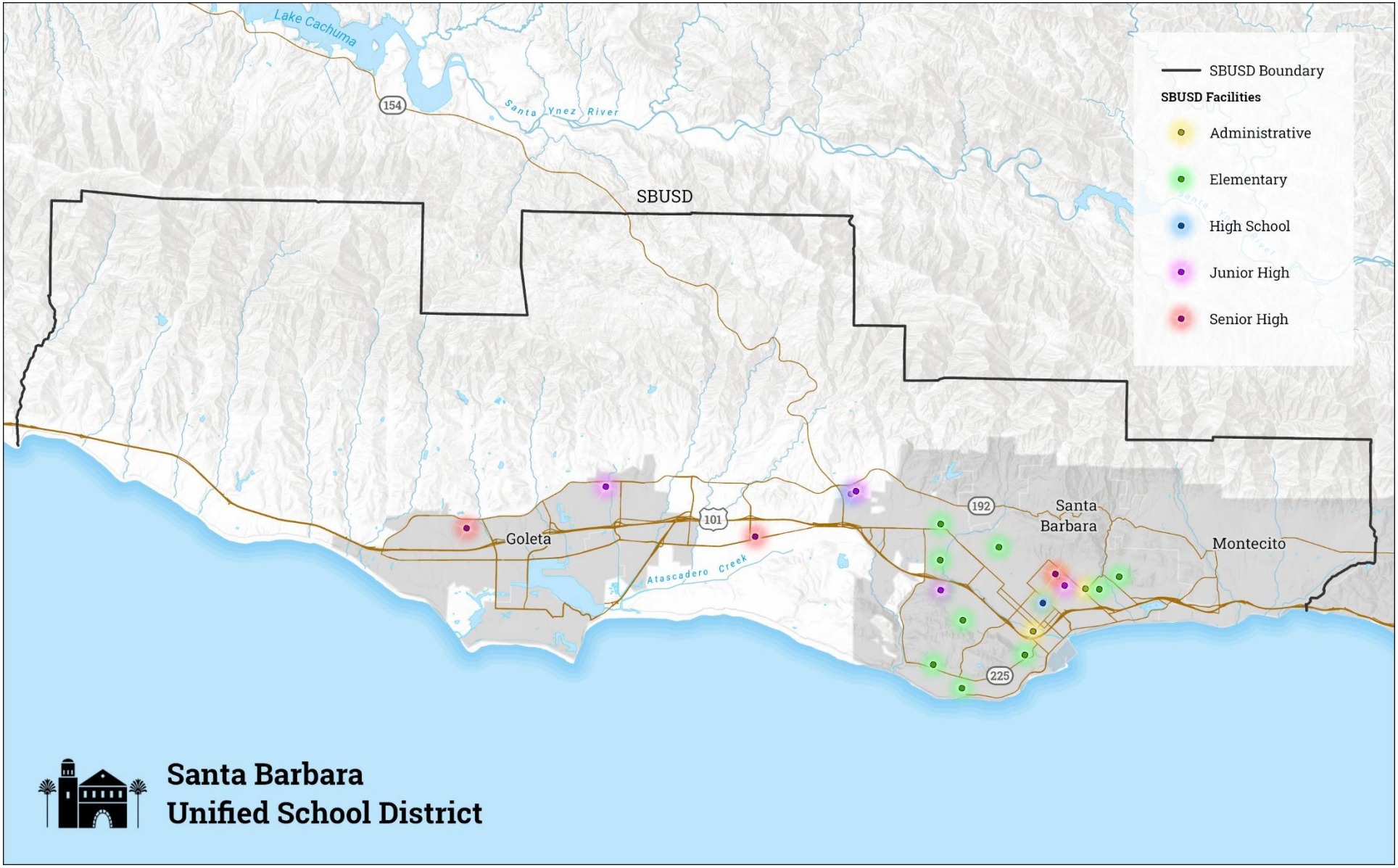


Figure 1-2: District Map

According to data from the National Oceanic and Atmospheric Administration (NOAA), Santa Barbara experiences a Mediterranean climate with mild, wet winters and warm, dry summers. The average annual temperature is approximately 61.8°F (16.6°C). Annual precipitation averages around 18 inches (457 mm), with the majority occurring between November and March. (*Id.)*

Temperature variations throughout the year are moderate. August is typically the warmest month, with average high temperatures around 77°F (25°C) and lows near 43°F (6°C). January is generally the coolest month, with average highs of 64°F (18°C) and lows of 43°F (6°C). (*Id.)*

Table 1-1: Santa Barbara Unified School District Regional Climate Statistics

Description	Avg. Rating
Average Annual high temperature:	77.1°F (August)
Average Annual low temperature:	43.0°F (January)
Average annual precipitation:	17.73 inches

Source: Western Regional Climate Center

1.3.5 Historical Overview

The origins of the Santa Barbara Unified School District trace back to June 6, 1866, when the first Board of Trustees took office. At that time, three school districts operated within Santa Barbara County, and governance of local schools transitioned from county control to direct oversight by the electorate of the City of Santa Barbara. This shift marked the beginning of locally directed public education in the community and established a tradition of civic stewardship that continues today.

In 1887, six civic-minded women formed the Kindergarten Association, earning national recognition for Santa Barbara's early leadership in childhood education. During this period, the district operated five public school buildings serving primary, grammar, and high school students, reflecting a growing commitment to expanding educational opportunities.

Enrollment steadily increased through the late nineteenth century. By 1891, more than 1,200 students were served by 24 teachers. In 1900, the Board of Education published its first formal Rules and Regulations, outlining the responsibilities of principals, teachers, and students and establishing governance standards that helped shape the district's educational framework. By the turn of the century, the district operated four elementary schools and three kindergartens, demonstrating both population growth and an expanding focus on early learning.

Over more than a century and a half, the district has evolved from a small, locally governed system into a comprehensive unified school district serving thousands of students across numerous campuses and support facilities. This long-standing tradition of community leadership, educational excellence, and

institutional stability continues to guide the District's planning, operations, and long-term stewardship of its educational mission.

1.3.6 Facilities Overview

The Santa Barbara Unified School District (SBUSD) maintains approximately 461 buildings across 25 formal sites, including Elementary, Middle, and High Schools, as well as the District Office and other administrative buildings. The district also operates additional facilities that support educational programs, administration, and specialized student services.

SBUSD facilities are dispersed the coastal region. Figure 1-3 displays SBUSD elementary school locations, Figure 1-4 displays middle/high school locations, and Figure 1-5 displays locations of other SBUSD facilities that are not schools.

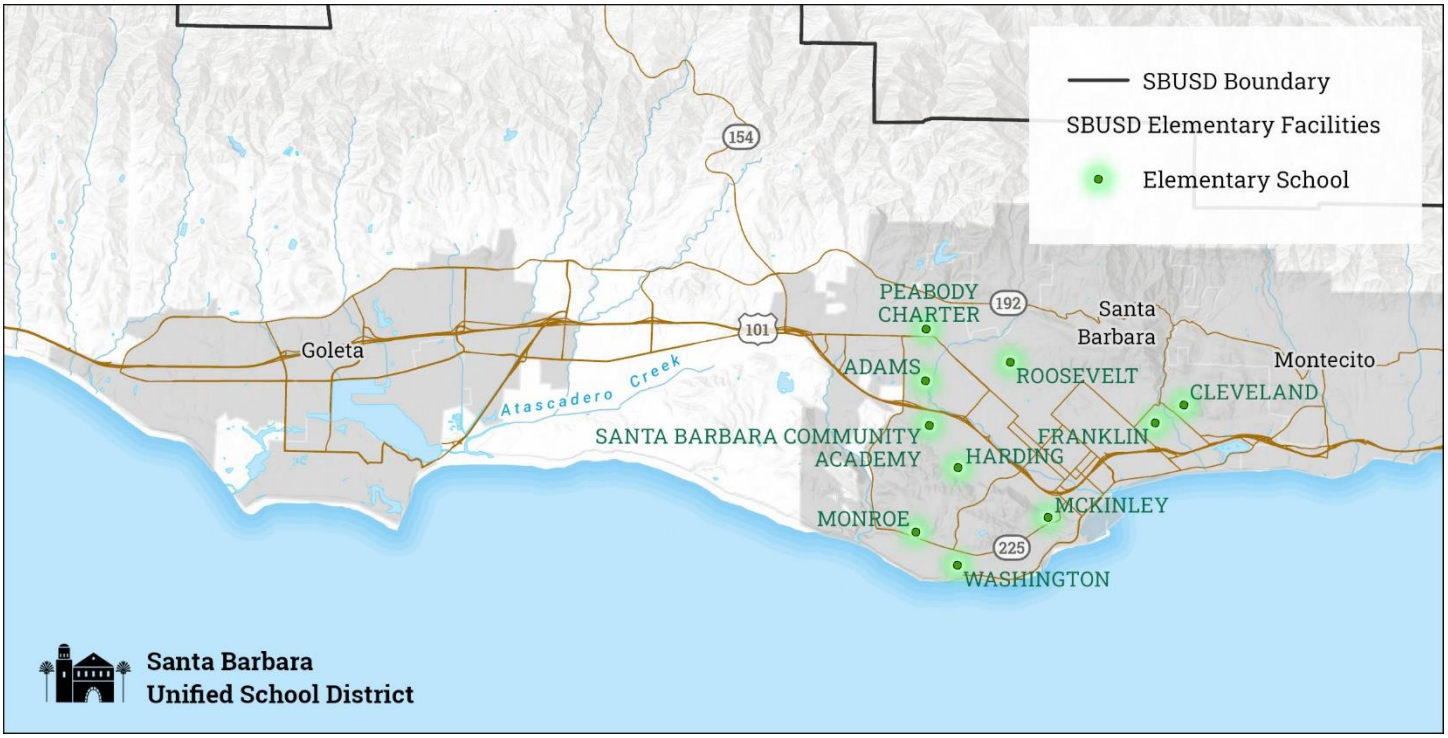


Figure 1-3 SBUSD Elementary School Locations

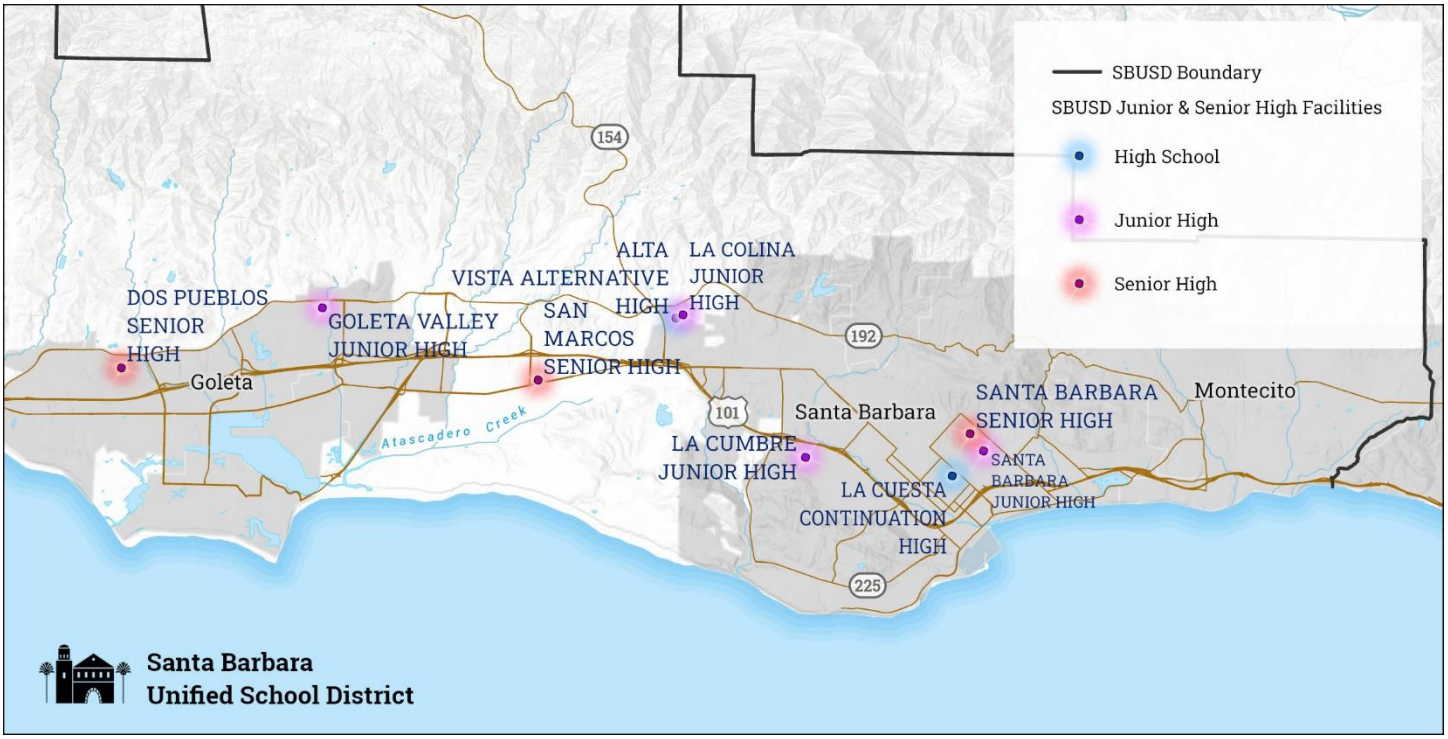


Figure 1-4 SBUSD Middle/High School Locations

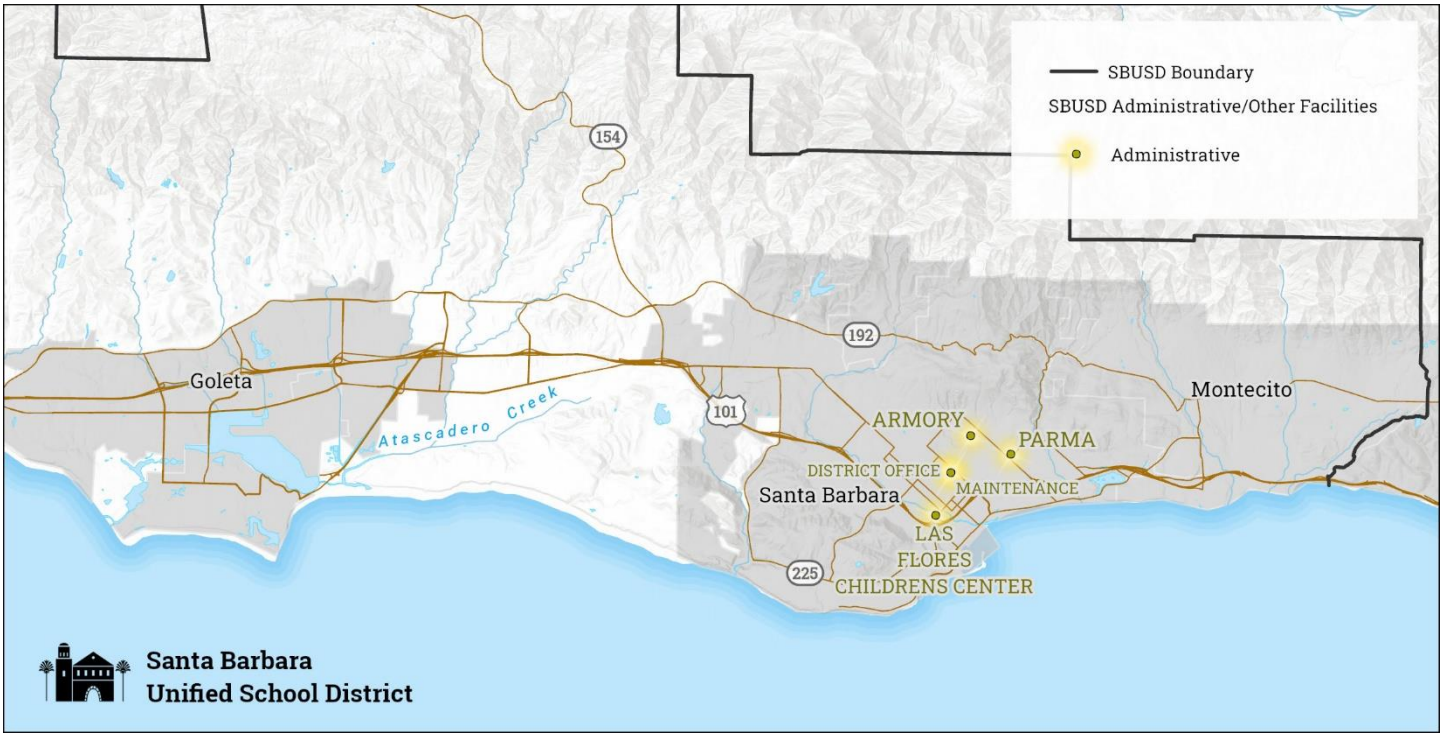


Figure 1-5 SBUSD District/Other Facility Locations

1.3.7 Facilities Development and Age Profile

Santa Barbara Unified School District's facilities have been developed over more than a century, reflecting the community's growth, changing educational needs, and evolving building standards. The District's oldest campus, Roosevelt Elementary School, was originally constructed in 1923, while the most recently developed sites—such as the District Office, Maintenance/Warehouse complex, and Alta Vista Alternative High School—include facilities constructed around 2000, with ongoing modernization and replacement projects continuing into the present decade.

Across its portfolio of approximately 460 buildings (25 sites), the District's facilities represent a broad range of construction eras. Several elementary campuses—including Harding (1928), Peabody Charter (1928), McKinley (1930), and Parma Children's Center (1931)—date to the early twentieth century. The Armory facility was constructed in 1936. These early campuses reflect traditional construction methods and have undergone multiple phases of modernization to meet current educational, accessibility, and seismic safety standards.

The District experienced substantial expansion during the mid-20th century, particularly in the 1950s and 1960s, as student enrollment increased. Schools such as Adams (1952), Washington (1952), Franklin (1957), Monroe (1958), Cleveland (1958), and Dos Pueblos High School (1967) were developed during this period. This era represents a significant portion of the District's building inventory and includes large comprehensive campuses with multiple permanent and modular structures.

Later growth occurred during the 1980s and 1990s, when additional junior high and high school facilities were constructed or significantly expanded, including Goleta Valley Junior High, San Marcos High School, Santa Barbara Junior High, La Colina Junior High, and Santa Barbara High School improvements. Specialized and alternative campuses, such as La Cuesta Continuation High School and Las Flores Children's Center, were added in the 1990s.

Overall, the average construction year across District buildings is approximately 1991, indicating that while some structures are nearly a century old, a substantial portion of the inventory reflects modernization efforts and phased redevelopment over time. Many campuses contain a mix of original structures and later additions, resulting in varying building ages within a single site. For example, Peabody Charter Elementary includes 30 buildings with an average building age reflecting significant reinvestment since its original 1928 construction, while larger comprehensive campuses such as San Marcos High School (65 buildings) and Dos Pueblos High School (61 buildings) include buildings spanning multiple decades.

This wide range of building ages has important implications for maintenance, modernization planning, seismic retrofitting, mechanical system replacement, energy upgrades, and overall hazard mitigation. Older facilities may require structural upgrades, roofing replacement, plumbing modernization, or accessibility improvements, while newer facilities must be maintained to preserve long-term performance and resilience. The District's Facilities Master Plan and Hazard Mitigation Plan therefore work in coordination to prioritize lifecycle reinvestment and reduce risk across this diverse and aging infrastructure portfolio.

Table 1-2: Facility Age Profile by Location

School or Campus	Count of Buildings	Construction Year (First Building)	Average of Age of Buildings
Adams Elementary School	33	1952	1983
Adalante Charter	1	2002	2002
Alta Vista Alternative High School	2	2000	2000
Armory	4	1936	1936
Children's Center / Parma	2	1931	1953
Cleveland Elementary School	16	1958	1986
District Office	1	2000	2000
Dos Pueblos Senior High School	61	1967	1988
Franklin Elementary School	36	1957	1996
Goleta Valley Junior High School	28	1980	1996
Harding Elementary School	13	1928	1984
La Colina Junior High School	23	1980	1991
La Cuesta Continuation High School	3	1990	1997
La Cumbre Junior High School	10	1980	1987
Las Flores Children's Center	2	1990	2005
Maintenance / Warehouse	1	2000	2000
Mckinley Elementary School	14	1930	1992
Monroe Elementary School	19	1958	1987
Peabody Charter Elementary School	30	1928	1994
Roosevelt Elementary School	7	1923	1991
San Marcos Senior High School	65	1980	1998
Santa Barbara Charter	1	n/a	n/a
Santa Barbara Community Academy	3	1980	1993
Santa Barbara Junior High School	8	1980	2004
Santa Barbara Senior High School	53	1980	1994
Washington Elementary School	26	1952	1986

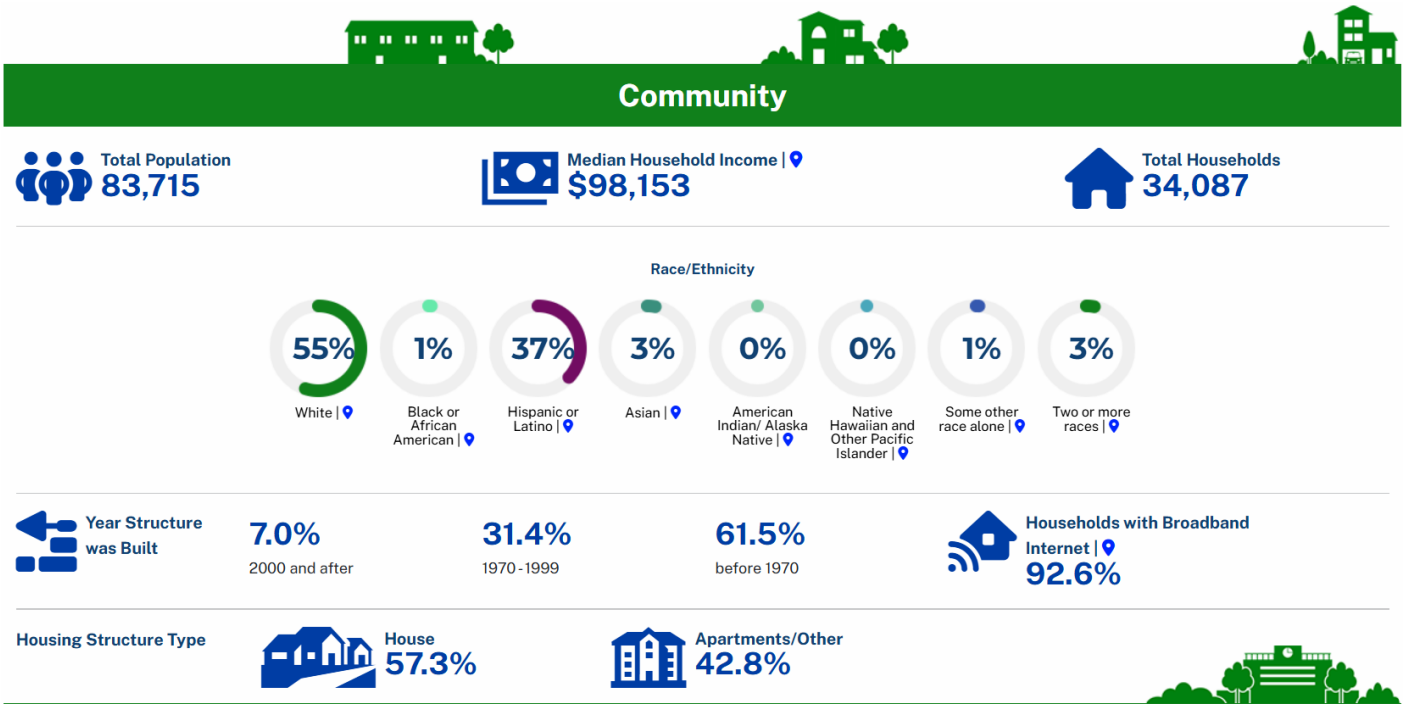
1.3.8 Community and Student Demographics

The district serves a community of approximately 83,700 residents across the City of Santa Barbara and surrounding areas. The community includes roughly 34,000 households, with a median household income of approximately $98,000. Housing characteristics reflect a mature built environment, with approximately 61.5% of housing constructed before 1970, 31.4% built between 1970 and 1999, and only 7% constructed after 2000. Housing types are relatively balanced, with 57.3% single-family homes and 42.8% apartments or other

multi-unit housing. Approximately 92.6% of households have broadband internet access, supporting digital learning and communication.

The community's racial and ethnic composition is diverse: approximately 55% White, 37% Hispanic or Latino, 3% Asian, and smaller percentages representing Black or African American, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and multiracial residents. This diversity is reflected in District enrollment and informs program planning, language services, and outreach strategies.

These demographic characteristics are relevant to hazard mitigation planning, particularly with respect to housing age, renter occupancy levels, language access, broadband availability, and socioeconomic vulnerability.



For the 2024–2025 school year, SBUSD enrolled approximately 12,250 students, including 3,138 charter school students, across elementary, junior high, high school, alternative, and charter campuses.

Language data indicates that approximately 50.3% of children speak only English at home, while 45.1% speak English very well but also speak another language, and about 4.6% speak English less than very well. These figures highlight the importance of multilingual communication and culturally responsive engagement in both educational programming and emergency preparedness messaging. In terms of health and economic indicators:

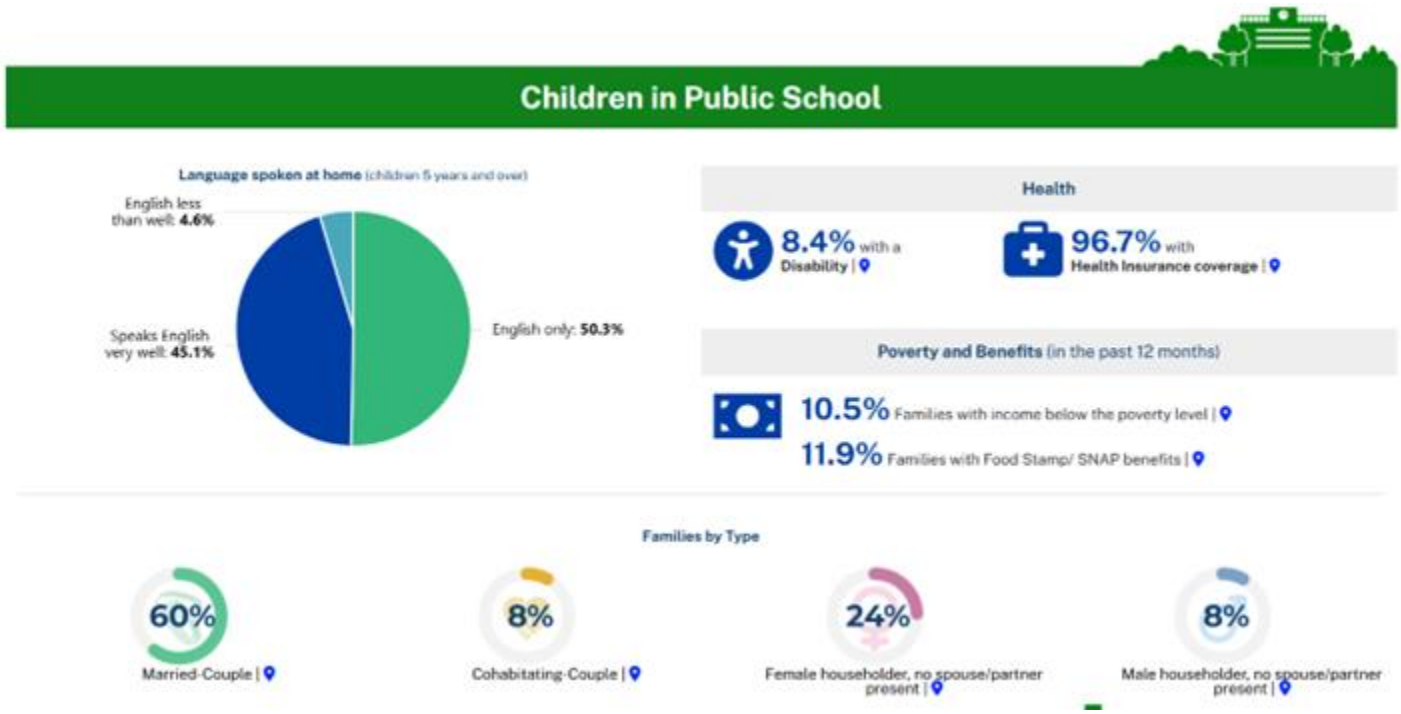
- Approximately 8.4% of children have a disability.
- About 96.7% have health insurance coverage.
- Roughly 10.5% of families have incomes below the poverty level.

- Approximately 11.9% of families receive SNAP/food assistance benefits.

Family structure data shows:

- About 60% of students live in married-couple households.
- Approximately 8% in cohabitating-couple households.
- Around 24% in female-headed households without a spouse present.
- About 8% in male-headed households without a spouse present.

These indicators are important for understanding potential vulnerability during emergencies, evacuation events, school closures, and disaster recovery situations.



Households of children enrolled in public schools have a median income of approximately $95,500, slightly below the broader community median. Housing status indicates that approximately 64.2% of families with children are renter-occupied, while 35.8% are owner-occupied, suggesting a relatively high level of rental housing among families served by the District.

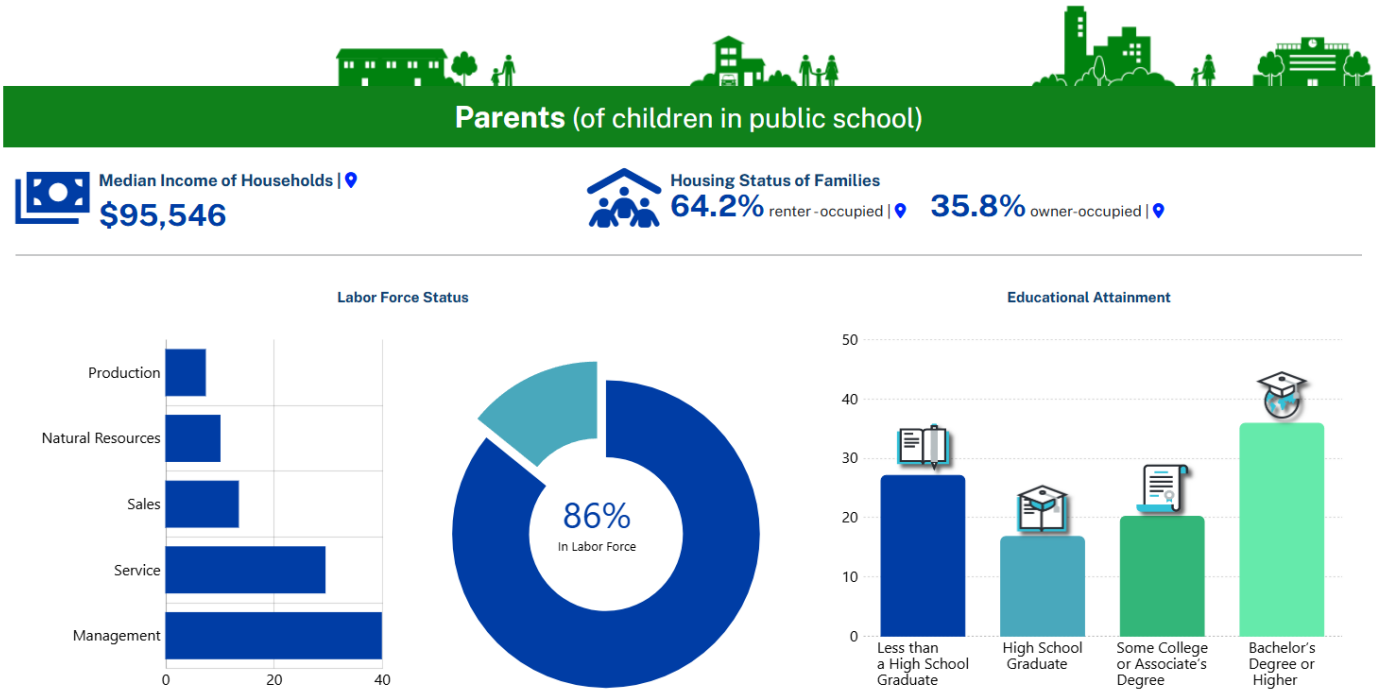
Labor force participation among parents is strong, with approximately 86% participating in the labor force. Employment sectors include management, service industries, sales, natural resources, and production occupations, reflecting the region's economic base.

Educational attainment among parents is mixed:

- Approximately one-quarter have less than a high school diploma.

- Roughly 17% are high school graduates.
- About 20% have some college or an associate's degree.
- Approximately 35% hold a bachelor's degree or higher.

These factors are relevant to communication planning, workforce continuity considerations, emergency childcare implications, and the District's broader role as a community stabilizer during hazard events.



The combination of an aging housing stock, a significant renter population, multilingual households, and a student population with varying levels of economic vulnerability underscores the importance of coordinated hazard mitigation, clear emergency communication strategies, and continuity-of-operations planning. SBUSD serves as both an educational provider and a critical community institution, and its planning efforts must account for the demographic and socioeconomic characteristics of the families it serves.

1.3.9 Past & Future Development

Locating and constructing future school facilities in the SBUSD are guided by numerous State regulations to avoid school sites being located within hazard areas. While growth has occurred in hazard areas in the past, increasing hazard risks to some degree, those risks are also decreased by development standards and

plan requirements that serve to mitigate or avoid those risks. This past development includes some non-wood buildings in the District built prior to 1978. Problematic developments generally occurred many decades ago, and thus much of this HMP focuses on retrofits or replacements from that older construction.

According to Title 5 of the California Code of Regulations, site selection for future SBUSD facilities must 1) consider the public interest, 2) not be located on an active earthquake fault or fault trace, and 3) be based on geologic and soil engineering studies if the future site is located within any special study zones or an area designated as geologically hazardous in the safety element of the local general plan. State funded school districts are required to coordinate with the local planning agency while siting future school sites, including providing written notice to the relevant planning agency and receive a written report on the site's conformity with the adopted General Plan. (Cal. Code Regs tit. 5 § 14011(f)) The General Plan includes descriptions of areas most appropriate for development, including considerations for hazard safety among many factors.

Numerous building and zoning codes at the state and local level apply to the construction of future school district facilities and are focused on mitigating the impact from hazards to the facilities. Construction of future SBUSD facilities is subject to California's Field Act of 1933, which is enforced by the Division of the State Architect (DSA) and updated periodically based on new technology and information. The Field Act, Cal. Education Code § 17280 et seq., created a higher standard for the construction of school facilities to make them resilient to earthquake events. Buildings constructed under the Field Act are among the safest and most resilient buildings to experience an earthquake. Plans for construction of any future SBUSD facilities will be submitted to the DSA to ensure they comply with all the provisions of the Field Act. For further regulatory information see each hazard profile.

1.4 What's New

This section provides an overview of the district's previous hazard mitigation planning efforts and summarizes the updates incorporated into the 2026 Hazard Mitigation Plan (HMP). Mitigation actions identified in the district's 2009 Hazard Mitigation Plan were carefully reviewed, evaluated, and updated to reflect current conditions, facility changes, revised hazard data, and updated District priorities. Only relevant information and accurate data from the earlier plan were incorporated into this updated version.

The following sections describe the comprehensive review and update processes undertaken. The 2026 Santa Barbara Unified School District Hazard Mitigation Plan profiles six primary natural hazards affecting District facilities, consistent with and refined from those identified in the 2009 Plan:

1.4.1 Background: 2009 vs. 2026

In 2009, Santa Barbara Unified School District successfully met all approval requirements outlined in the Disaster Mitigation Act of 2000 (DMA 2000), Title 44 CFR § 201.6, and received FEMA approval of its Hazard Mitigation Plan following adoption by the Board of Education. The 2009 Plan established the District's first FEMA-compliant framework for identifying natural hazards, assessing risk, and prioritizing mitigation actions across District facilities. Although that plan has since expired for FEMA compliance purposes, it

provided a critical foundation for risk awareness, facility planning, and long-term mitigation strategy development.

The 2026 Hazard Mitigation Plan update builds upon the 2009 Plan and incorporates updated facility inventory data, revised hazard information, current regulatory guidance, and alignment with the District's Facilities Master Plan and other long-range planning mechanisms. Guided by input from District leadership, Facilities and Operations staff, and hazard mitigation stakeholders, several improvements were implemented for the 2026 update, including:

- **Enhanced Internal Coordination:** The 2026 update reflects stronger integration among District departments, including Facilities and Operations, Risk Management, Business Services, and executive leadership. This coordinated approach recognizes that hazard mitigation is most effective when embedded within capital planning, maintenance cycles, and operational decision-making.
- **Focused on Priority Natural Hazards:** Consistent with the 2009 Plan, the District continues to prioritize natural hazards that pose the greatest long-term risk to students, staff, and facilities. The 2026 update refines the assessment of earthquake, wildfire, flood, landslide/erosion, coastal surge/tsunami, and dam failure hazards using updated datasets and methodologies. Human-caused hazards are addressed through separate safety and emergency management planning documents.
- **Assessed Mitigation Progress Since 2009:** The 2026 update reviews mitigation actions identified in the 2009 Plan, documenting completed projects, ongoing initiatives, and remaining vulnerabilities. This evaluation ensures continuity between planning cycles and helps identify areas where additional investment or strategy adjustments are warranted.
- **Incorporated Climate Change and Resilience Considerations:** While the 2009 Plan focused primarily on historical hazard conditions, the 2026 update aligns with current FEMA and California Office of Emergency Services (Cal OES) guidance emphasizing the integration of climate variability into hazard mitigation planning. The updated plan evaluates how changing conditions may influence the frequency and intensity of hazards such as wildfire, extreme heat, and heavy precipitation, and it prioritizes adaptation strategies that strengthen long-term facility resilience.
- **Aligned with Current Funding Opportunities:** The 2026 update acknowledges changes in federal and state hazard mitigation funding programs since 2009. Mitigation strategies have been structured to improve eligibility for FEMA Hazard Mitigation Assistance (HMA) programs and relevant state grant opportunities, positioning the district to pursue funding for priority infrastructure improvements.

These updates reflect a strategic effort to build upon the foundation established in 2009 while modernizing the district's hazard mitigation framework. The 2026 Plan restores FEMA compliance, strengthens alignment with current regulatory guidance, and advances a more data-informed and implementation-focused approach to protecting SBUSD's 25 sites and approximately 460 buildings.

1.4.2 Mitigation Activities

During the 2026 update process, all mitigation actions from the district's 2009 Hazard Mitigation Plan and related planning efforts were systematically reviewed to assess their continued relevance, feasibility, and

alignment with current District priorities and updated hazard data. Each action was evaluated to determine whether it remained an appropriate mitigation measure, required modification, or should be removed.

Many actions were retained and modernized, particularly those focused on structural seismic retrofits, slope stability improvements, drainage upgrades, defensible space, and resilient construction practices. Several actions were revised to reflect updated risk assessments, current building codes, modern technologies, and evolving implementation strategies. Other items were removed because they were administrative in nature, related primarily to preparedness or recovery rather than mitigation, lacked sufficient detail for implementation, or were no longer applicable based on updated hazard mapping (such as tsunami or dam inundation exposure).

This validation and refinement process ensures that the updated mitigation strategy reflects measurable risk conditions, focuses on actionable hazard reduction measures, and aligns with current District operational and capital planning practices

This refinement process strengthens the district's mitigation strategy by focusing on:

- Direct hazard reduction measures
- Structural and non-structural facility improvements
- Defensible space and wildfire hardening
- Drainage and flood risk reduction
- Seismic safety and retrofit priorities

The 2026 Hazard Mitigation Plan is designed to integrate with and inform:

- District Facilities Master Plan and Modernization Programs
- Capital Improvement Planning and Project Prioritization
- Maintenance and Asset Management Programs
- Emergency Operations Planning (EOP)
- Design Standards and Construction Specifications

By aligning mitigation priorities with ongoing capital and operational planning processes, the District ensures that hazard risk reduction is systematically incorporated into future facility investments and campus improvements. This integration approach promotes long-term resilience while maximizing the effectiveness of available funding and modernization efforts.

Adjustments to existing mitigation actions that are ongoing or pending from previous plans and remain pertinent are included alongside newly identified actions in the mitigation action plans, including the District's action plan in Section 4. For the county's previous actions, Table 1-3 contains more specific status updates.

Table 1-3: Review Table of 2009 Mitigation Actions

Hazard	Action ID (Existing ID or "New")	Action Title	Priority	Action for 2009 Mitigation Actions (Retain, Revise, Delete)
All Hazard	GEN-3	Enhance Media Coordination	High	**Delete:** Ongoing public outreach function, not mitigation. Move to capabilities section.
All Hazard	GEN-2	Reverse 911 or Similar for Communication with Parents	High	**Revise:** Reverse 911 systems are now common; revise to focus on redundant, integrated parent communication and alert platforms.
All Hazard	GEN-1	Continuity of Educational Operations Plan	High	**Retain:** Still relevant; continuity of educational operations supports resilience and reduces vulnerability to disruptions. Update to align with current COOP and Continuity of Learning standards.
Flood	FLD-1	Grading Improvement Plan	High	**Retain:** Direct hazard reduction measure; update to reflect current stormwater and climate adaptation standards.
Wildfire	WDF-1	Employ Firewise Techniques at High-Risk Campuses	High	**Delete:** While Firewise approach remains best practice; continue and expand defensible space focus, this lacks detail enough to understand
All Hazard	GEN-15	Assess Accuracy of Asset Valuation	Low	**Delete:** Administrative/risk management task, not mitigation. Move to capability assessment.
Tsunami	TICS-1	Participate with County in Tsunami Emergency Planning	Low	**Delete:** No Campuses are in Tsunami Zones
All Hazard	GEN-14	Evaluate Participation in County Mitigation Plan	Low	**Delete:** This is not a mitigation action rather an administrative decision for next cycle. Integration with County MJHMP aligns with AB 2140 and FEMA coordination.
Earthquake	EQ-3	Liquefaction Risk Analysis	Low	**Revise:** Still valid; update to align with USGS/CGS mapping and current geotechnical data.
All Hazard	GEN-13	County Mitigation Committee Participation	Low	**Delete :** This is plan implementation and not a mitigation action.
All Hazard	GEN-12	Disaster Damage Tracking via GIS	Low	**Delete:** This is recovery not mitigation
Earthquake	EQ-2	Earthquake Safety Program	Low	**Retain:** Nonstructural mitigation remains a FEMA priority; continue volunteer-based program.
All Hazard	GEN-11	Distribute Parent Mailing	Low	**Delete:** Public outreach, not mitigation. Move to capability narrative.

All Hazard	GEN-9	Budgeting Matching Funds for Mitigation Grants	Low	**Delete :** This is plan implementation and not a mitigation action.
All Hazard	GEN-10	Enhance Construction Techniques	Low	**Retain:** Remains valid; update to reflect resilient design and CALGreen/WUI standards.
Flood	FLD-4	Street Drainage Improvements	Low	**Revise:** Valid concept but should be reframed as interagency coordination for flood mitigation.
All Hazard	GEN-5	Develop Local Partnerships	Medium	**Delete:** Partnerships for small-scale mitigation projects remain best practice; expand to include campus hardening.
Wildfire	WDF-3	Install Fire-Resistant Landscaping	Medium	**Retain:** Effective mitigation measure; continue using Fire Safe Council guidelines.
Earthquake	EQ-1	Earthquake Retrofitting	Medium	**Retain:** Structural retrofit remains a priority mitigation action. Verify current compliance and residual risk.
Wildfire	WDF-2	Fire-Resistant Building Techniques	Medium	**Retain:** Maintain as valid; integrate with Chapter 7A and WUI code compliance. Need to update title to be more action oriented.
Flood	FLD-2	Roof Drainage Improvements	Medium	**Retain:** Simple, cost-effective mitigation measure; maintain.
All Hazard	GEN-4	Conduct District-Wide Outreach	Medium	**Revise:** Keep concept but frame as sustained education and outreach program supporting hazard awareness.
All Hazard	GEN-7	Maintenance Staff Training	Medium	**Delete:** This is plan implementation and not a mitigation action.
All Hazard	GEN-8	Emergency Preparedness and Response Planning	Medium	**Delete:** Overlaps with preparedness/response; not distinct mitigation. Move to preparedness coordination.
Flood	FLD-3	Below-Grade Drainage Systems	Medium	**Retain:** Relevant for flood reduction; integrate with routine maintenance.
Landslide	LSD-1/2	Slope Stability Analysis	Medium	**Retain:** Necessary for campus safety; update with modern geotechnical standards.
Wildfire	WDF-4	Vegetation Maintenance and Fuel Breaks	Medium	**Retain:** Strong cost-benefit; maintain and align with PRC 4291 defensible space requirements.
All Hazard	GEN-6	Incorporate Mitigation in Facilities Planning	Medium	**Delete:** Implementation activity, not a mitigation project. Should appear in plan maintenance/capabilities.
Dam Failure	DF-1	Dam Breach Emergency Plans Evaluation, Preparation and Exercises	Medium	**Delete:** No Campuses are in Dam Inundation Zones

1.4.2.1 Successes Since 2009

Facilities Master Plan

Santa Barbara Unified School District's Facilities Master Plan provides a clear, data-driven roadmap for maintaining and modernizing campuses across the district. The plan evaluates facility conditions, enrollment trends, and long-term capital needs to prioritize life-safety improvements, infrastructure upgrades, and modernization projects. By aligning projected investments with operational realities and educational goals, the Master Plan strengthens the district's ability to make informed funding decisions, improve campus environments, and ensure that facilities remain safe, functional, and supportive of student success for years to come.



1.4.2.2 Plan Integration

The District's previous Hazard Mitigation Plan was authored and adopted in 2009. Although that plan has since expired, it served as a guiding document for risk reduction efforts over the past planning cycle. FEMA requires documentation of how the previous plan was incorporated into other planning mechanisms and how mitigation actions were implemented or advanced. This section summarizes how the 2009 HMP informed District planning and operational decisions.

Following adoption, elements of the 2009 plan were integrated into several District planning and capital programs, particularly through facilities modernization, maintenance, and safety initiatives. Structural mitigation measures—such as seismic retrofits, drainage improvements, slope stabilization studies, vegetation management, and construction upgrades—were incorporated into capital improvement projects and modernization efforts as funding became available. While not always tracked under a formal mitigation reporting framework, many of these projects reflect implementation of the prior plan's intent.

In addition, hazard considerations identified in the 2009 plan informed updates to emergency preparedness procedures, campus safety protocols, and facility design standards. The District's Facilities Master Plan processes and capital improvement programming increasingly incorporated life-safety, seismic safety, stormwater management, and wildfire defensible space considerations consistent with the risk reduction goals identified in the prior HMP.

As part of this 2026 update, the 2009 mitigation action list was systematically reviewed to evaluate implementation status, continued relevance, and alignment with current hazard data and regulatory requirements. Actions that represented direct hazard reduction measures were retained and updated where necessary. Actions that were administrative, preparedness-focused, duplicative of routine operations, or no longer applicable based on updated hazard mapping were removed or reclassified within the capabilities assessment.

This validation process demonstrates that the previous plan was actively used to guide District investments and operational practices and that mitigation principles have been increasingly integrated into routine planning and decision-making. The updated 2026 Hazard Mitigation Plan builds upon that foundation, strengthens documentation of implementation, and ensures continued integration of hazard mitigation into facilities planning, capital programming, and long-term resilience efforts.

Section 2.4.3 outlines the district's planning mechanisms that have been and will be integrated with the HMP and the process for such integration in more detail.

1.4.3 New Tools & Risk Assessment Methodology

Santa Barbara Unified School District strengthened this update by utilizing enhanced research methods and advanced web-based information systems. Geographic Information Systems (GIS) mapping and spatial analysis provided the District with improved tools to develop more comprehensive and accurate datasets than those available during the 2009 planning effort. Updated facility inventories, hazard layers, and

exposure analyses allowed for more refined identification of vulnerabilities across the District's 25 sites and approximately 460 buildings.

A web-based mapping tool, referred to as the Risk Assessment Mapping Platform (RAMP), was used to support and engage District staff throughout the risk assessment process. RAMP provided an interactive environment for reviewing hazard exposure, analyzing facility-level risk, and visualizing spatial relationships between hazards and District assets. This platform enhanced collaboration and improved the transparency of data-driven decision-making.

In addition, the Mitigation Action Strategy Tool (MAST) was used to document, refine, and track identified vulnerabilities (referred to herein as "problem statements") and to develop associated mitigation actions. MAST serves as a centralized dashboard for organizing mitigation priorities, assigning implementation responsibilities, and tracking progress over time.

Sections 2.2.1 and 2.3.5 for more information about the new tools and methodology used in developing the mitigation plan and strategy, including RAMP and MAST.

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Section 2. Planning Process

This section outlines each stage of the planning process used in the development of the Santa Barbara Unified School District Hazard Mitigation Plan (HMP). The planning process provides the organizational framework for document preparation and follows FEMA's recommended four-step hazard mitigation planning approach: organize resources, assess risks, develop a mitigation strategy, and implement and maintain the plan.



It is important to recognize that the HMP is a dynamic, living document shaped by District-wide collaboration and stakeholder engagement. The participatory planning process is as critical as the final written plan itself, fostering awareness among District leadership, Facilities and Operations staff, risk management personnel, and other stakeholders. This collaborative approach helps ensure that hazard mitigation principles are integrated into capital planning, maintenance programs, operational procedures, and long-term decision-making across the District.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by the Disaster Mitigation Act of 2000 (DMA 2000) (42 USC § 5165), requires local public entities, including school districts, to develop hazard mitigation plans in order to reduce long-term risks from natural hazards. Adoption and FEMA approval of this plan are prerequisites for eligibility for certain non-emergency disaster assistance programs under FEMA's Hazard Mitigation Assistance (HMA) programs, as outlined in 44 CFR § 201.6 et seq. By maintaining a FEMA-compliant plan, SBUSD positions itself to pursue federal and state funding opportunities that support infrastructure resilience, risk reduction, and continuity of educational services.

FEMA outlines the following four major planning steps:

- **Step 1:** Organize Resources
- **Step 2:** Assess Risk
- **Step 3:** Develop a Mitigation Strategy
- **Step 4:** Adopt and Implement the Plan

Santa Barbara Unified School District adhered to FEMA's four-step hazard mitigation planning process in the development of this Hazard Mitigation Plan (HMP) and expanded upon it to better align with District operational and facility planning needs. The resulting six-phase planning process, illustrated in Figure 2-1, was followed for preparation of the 2026 HMP update. These additional phases enhanced internal coordination, refined facility-level risk assessment, and strengthened the linkage between hazard mitigation strategy, capital improvement planning, and maintenance programming.

In conjunction with and supplementary to FEMA's four-step framework, the District incorporated additional analytical and stakeholder engagement components to ensure that mitigation actions were grounded in updated facility data, current hazard science, and implementation feasibility. These enhanced steps are described in greater detail throughout the Risk Assessment (Section 3.0) and Mitigation Strategy (Section 4.0) chapters of this plan.

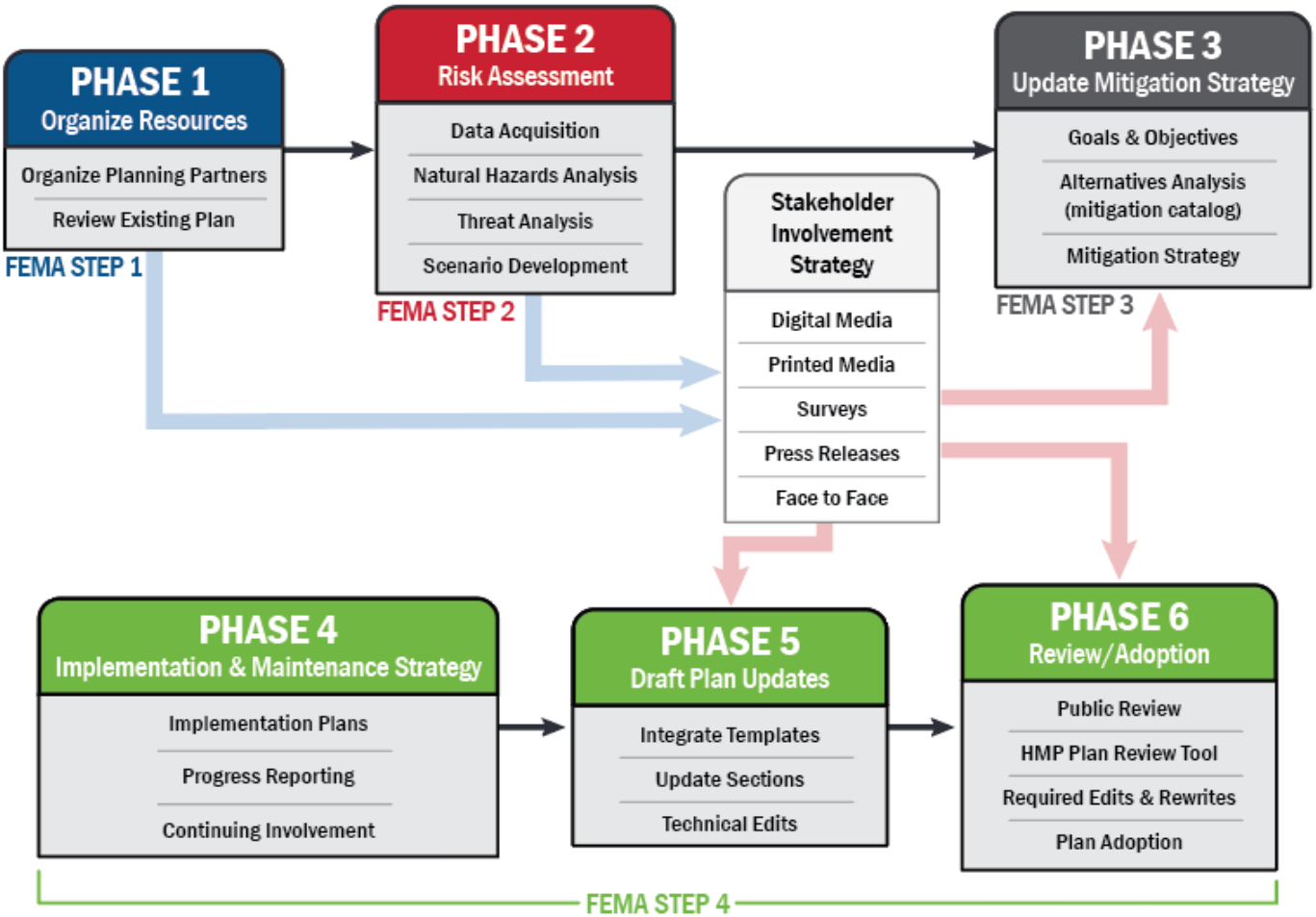


Figure 2-1: Planning Process Breakdown

STEP 1: Organize Resources

The first step of the planning process was organizing resources. This included engaging District leadership and staff with relevant expertise, conducting internal stakeholder coordination, reviewing existing District plans and technical documents, and gathering and organizing current facility and hazard data. Santa Barbara Unified School District, supported by the Consultant Team, employed a collaborative and comprehensive approach to ensure that this HMP is a practical, implementation-oriented document that can evolve with District priorities and changing risk conditions.

By integrating institutional knowledge from Facilities and Operations, Risk Management, Business Services, and administrative leadership, the District established a strong foundation for identifying vulnerabilities and developing realistic mitigation strategies. Maintaining flexibility and institutional ownership of the plan will enhance its effectiveness in reducing natural hazard risk and strengthening overall resilience.

These various resources are summarized and organized in the following sections of the plan:

- **People and Expertise:** Section 2.1.1
- **Public and Stakeholder Engagement:** Section 4 and Appendix B
- **Planning Process Library:** Section 2.1.3

STEP 2: Assess the Risk

In accordance with FEMA requirements, the District Planning Team identified and prioritized the natural hazards affecting Santa Barbara Unified School District and assessed vulnerabilities associated with those hazards. The risk assessment evaluated the potential impacts of identified hazards on District facilities, operations, students, and staff. Results from this assessment informed the subsequent development and prioritization of mitigation actions.



Figure 2-2: Members of the County-Wide HMPT Engaged in Mitigation Strategy Development

The primary findings of the risk assessment are presented in Section 3 of this plan. The methodologies, analytical tools, and supporting documentation used to conduct the assessment are described in the following sections:

- **Priority Hazards:** Section 3.1.2
- **Vulnerabilities to Specific Hazards (Hazard Profiles):** Section 3.2
- **Vulnerability Assessment Methodology:** Section 3.2 and Appendix A
- **RAMP (Risk Assessment Mapping Platform):** Section 2.2.1

STEP 3: Develop a Mitigation Strategy

This Hazard Mitigation Plan was prepared in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) plan update requirements, FEMA's mitigation planning guidance, and applicable California planning guidance. This document provides a clear strategy and framework for reducing the potential losses identified in the risk assessment. The mitigation strategy builds upon existing District authorities, policies, programs, and resources, as well as the district's capacity to enhance and expand these tools over time.

Development of the mitigation strategy included establishing updated goals and objectives, assessing existing capabilities, reviewing mitigation actions identified in the prior plan, and identifying new mitigation actions responsive to current risk conditions and operational priorities. The resulting strategy is designed to be practical, implementation-focused, and aligned with District planning and capital improvement processes.

The mitigation strategy is detailed in Section 4.0 of this plan. The process used to develop the strategy, along with the tools that supported it, are described in the following sections:

- **Hazard Problem Statements:** Sections 2.3.1 and 3.2 (within each Hazard Profile)
- **Mitigation Goals:** Section 4.1.
- **Assessment of Current Capabilities and Future Opportunities:** Section 4.2.
- **Mitigation Action Plan:** Sections 2.3.4 and 4.4

STEP 4: Adopt & Implement the Plan

Once the risk assessment and mitigation strategy were completed, information, data, and associated narratives were compiled into this plan. The following sections describe the finalization, adoption, implementation, and update processes for the plan:

- **Adoption Proceedings:** See Executive Summary
- **Monitoring, Evaluating, and Updating:** Section 2.4.2
- **Plan Integration:** Section 2.4.3

2.1 Organizing Resources

SBUSD staff organized local expertise into a coordinated planning structure and engaged stakeholders throughout the development of this Hazard Mitigation Plan. At the forefront of this effort was the district's core Planning Team, supported by the Consultant Team and subject matter experts from Facilities and Operations, Risk Management, Business Services, and administrative leadership. This structured approach ensured that technical, operational, and policy perspectives were incorporated into the risk assessment and mitigation strategy.

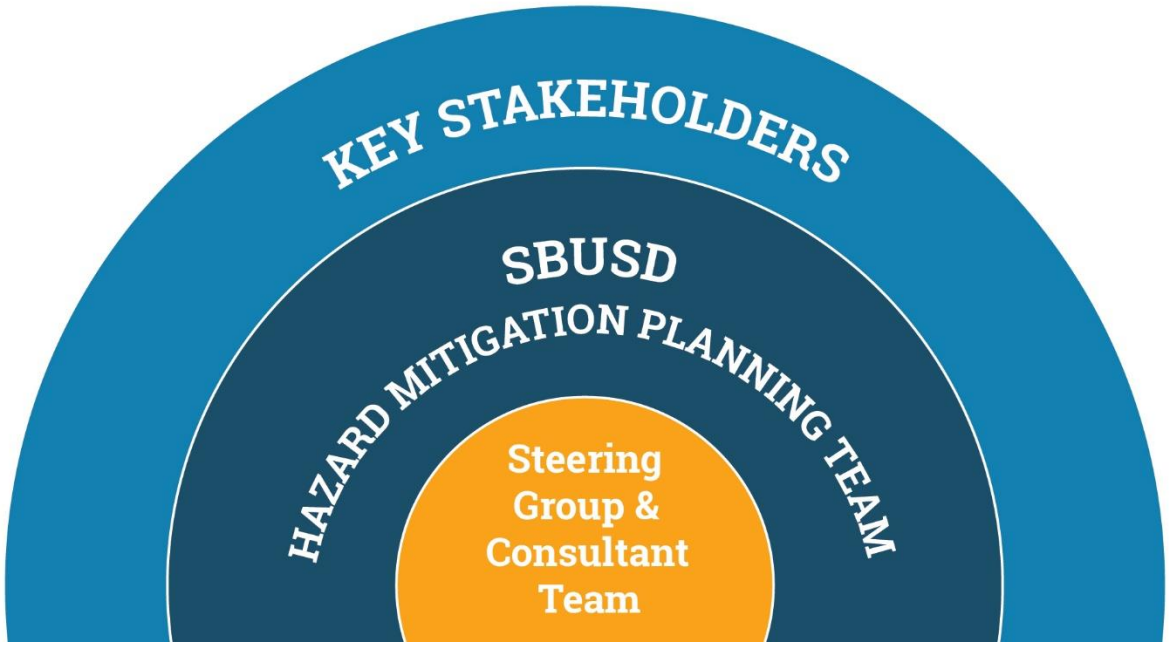
In addition to internal coordination, the District engaged key stakeholders to inform plan development. Input from administrators, operational staff, and other relevant personnel helped identify vulnerabilities, confirm hazard priorities, and refine mitigation actions. Outreach and engagement efforts were designed to ensure that the updated HMP reflects current operational realities and aligns with District goals and responsibilities. A summary of the county's public and stakeholder engagement strategy and the results thereof are provided in Section 4 and documented in Appendix B.

2.1.1 People & Expertise

Organizing the people and expertise necessary to develop this Hazard Mitigation Plan was led by the district's core Planning Team, which included designated representatives from key functional areas. This team was responsible for guiding plan development, coordinating internal review, and ensuring alignment with District policies and operational priorities. A structured stakeholder engagement strategy, described in Section 2.1.2, was implemented to support this effort and to facilitate information sharing across departments.

As part of this engagement process, the district coordinated with relevant regulatory agencies and external partners, as appropriate, to discuss public safety, facility resilience, and hazard mitigation priorities. Internal subject matter experts—including Facilities and Operations personnel, risk management staff, and administrative leadership—played a central role in identifying vulnerabilities, validating data, and refining mitigation actions. Where applicable, additional input was solicited from community stakeholders and interested parties to ensure that the plan reflects broader safety considerations and community needs.

While broader outreach efforts are described and documented in Section 2.1.2 and Appendix B, this section focuses on those District staff and subject matter experts who played an active and ongoing role in shaping the Hazard Mitigation Plan from initiation through completion.



Steering Group

The Steering Group was at the core of the LHMP planning process and was integral to ensuring its success. This group consisted of staff-level leadership and decision-makers from each participating jurisdiction and worked closely with the Consultant Team throughout the development of this LHMP, providing direction on the process and major plan components, including public and stakeholder engagement and the plan's future implementation and maintenance. Members of the Steering Group are listed in Table 2-2 and also doubled as members of the planning teams, which are discussed below and in the individual annexes in Volume 2.

Planning Team

The development of this Hazard Mitigation Plan (HMP) was guided by the District's Hazard Mitigation Planning Team (HMPT or "Planning Team"). The HMPT brought together District leadership, operational staff, and subject-matter experts with direct knowledge of facilities, infrastructure systems, emergency preparedness, and student services. The team provided direction and oversight throughout the planning process to ensure the plan reflects District priorities and operational realities.

The HMPT included representatives from key departments such as Facilities and Modernization, Maintenance and Operations, Business Services, Nutrition Services, Communications, Community Partnerships, and school administration. Members were selected for their expertise in campus safety, capital planning, infrastructure management, and student support services. Where appropriate, the district coordinated with external partners, including local public safety and regulatory agencies, to ensure alignment with broader hazard conditions and emergency response considerations.

Planning Team members contributed to hazard identification, vulnerability assessment, and mitigation strategy development. They also served as liaisons to their respective departments, ensuring that

information was shared internally and that proposed mitigation actions are feasible, practical, and aligned with existing District programs and policies. Through this collaborative and interdisciplinary approach, the HMPT ensured that the HMP is both technically sound and operationally implementable.

Table 2-2 provides a list of the district's HMPT members. The responsibilities of the HMPT and jurisdictional planning team members generally included:

- Participation in three structured HMPT meetings
- Contribution of detailed information and assisting in fulfilling data requests, when appropriate
- Input during the hazard selection and prioritization process
- Development of the districts mitigation strategies
- Review and comment on administrative drafts of the plan
- Coordination and promotion of community and stakeholder engagement efforts

Planning Team Meetings

The Planning Committee met throughout the development of the HMP document. Table 2-1 provides a summary of the meetings conducted throughout the planning process, including meeting date, type, and topics discussed. Meeting documentation, including agendas, hazard maps, PowerPoint presentations, minutes, sign-in sheets, and other relevant handouts, are provided in Appendix A.

Table 2-1: Meeting Summary

Meeting & Date	Agenda / Topics	Goals / Key Inputs
Steering Group Kickoff Meeting February 11, 2025	▪ Welcome and introductions ▪ Review roles and responsibilities ▪ Review project schedule and scope of work ▪ Review expectations of Steering Group, city-wide HMPT, and jurisdictional planning teams	▪ Shared project understanding ▪ Confirm roles and responsibilities
HMPT Meeting #1 March 6, 2025	▪ Welcome and introductions ▪ Hazard mitigation background and basic information ▪ Overview of funding opportunities ▪ Review of previous district plan and changes ▪ Mitigation successes in past 5 years ▪ Community engagement strategy ▪ Project schedule and expectations	▪ Shared project understanding ▪ Confirm roles and responsibilities ▪ Success stories ▪ Data requests

Meeting & Date	Agenda / Topics	Goals / Key Inputs
HMPT Meeting #2 June 5, 2025	▪ Reviewed progress since Meeting #1 and confirmed planning direction. ▪ Presented community demographics and vulnerability data to frame risk discussions. ▪ Reviewed preliminary hazard profiles and conducted a risk prioritization exercise. ▪ Identified site-specific areas of concern and key vulnerabilities. ▪ Demonstrated the RAMP tool and confirmed facility inventory. ▪ Provided outreach and survey update; discussed grant funding opportunities. ▪ Established next steps and follow-up data needs.	▪ Identify district-wide hazard problems and areas of concern ▪ Identify and prioritize district-wide hazards ▪ Community engagement volunteers
HMPT Meeting #3 October 5, 2025	▪ Welcome & Project Updates ▪ Overview of meeting goals, structure, and expected outcomes, and updates on project timeline. ▪ Designing the Mitigation Strategy ▪ Recap of the process and considerations for designing the mitigation strategy, including review of the draft capabilities assessment and SMARTIE principles. ▪ Defining the Problem ▪ Overview of areas of concern (AOCs) and review of draft problem statements. ▪ Evaluating Mitigation Alternatives ▪ Overview of mitigation alternatives and potential strategies, projects, and activities. ▪ Mitigation Strategy Refine & Align Exercise ▪ Interactive group exercise to review draft mitigation actions to align with jurisdictional capabilities and identified problems. ▪ Next Steps & Closeout ▪ Upcoming public outreach events, HMPT Meeting #4 ▪ Questions and open discussion	▪ Understand and Have Consensus on District Capabilities in implementing their unique mitigation strategy to address jurisdiction-specific problems and support regional collaboration ▪ Understand and Have Consensus on District Problem Statements which describe the area(s) of concern (victim, impact, or threat) for high-priority hazards and specific risks that were identified through the risk assessment process, community feedback, and prioritization exercise from Meeting #2 ▪ Understand and Have Consensus on District Mitigation Actions that align with district capabilities, community-driven priorities, and FEMA guidelines; address specific problem statements; follow the SMARTIE guidelines and are cost- and resource-effective; and support inter-agency collaboration.

Table 2-2: Members of Steering Group and All Planning Teams

Note: Jurisdiction leads in the Steering Group are presented in light blue rows with bold names.

Name	Title	Organization
Jose Jimenez	Director, Facilities and Modernization	Santa Barbara Unified School District
Desmond Ho	Project Manager, Operations and Sustainability (former)	Santa Barbara Unified School District
Jose Jimenez	Maintenance and Operations Manager, Maintenance and Operations Dept.	Santa Barbara Unified School District
Steve Venz	Chief Operations Officer, Facilities and Operations	Santa Barbara Unified School District
Lucia Gonzalez	Project Manager, Facilities Planning & Modernization Dept.	Santa Barbara Unified School District
Matthew Dittman	Director of Food Services, Nutrition Services	Santa Barbara Unified School District
Ed Zuchelli	Public Information Officer, Communications / Public Affairs Dept.	Santa Barbara Unified School District
David Benitez	Operations Foreperson, Maintenance & Operations Dept.	Santa Barbara Unified School District
Ernesto Magana Ortiz	Planning Specialist, Facilities Planning & Modernization Dept.	Santa Barbara Unified School District
Ismael Paredes Ulloa	Coordinator of Community Schools & Partnerships	Santa Barbara Unified School District
ShaKenya Edison	Assistant Superintendent for Student Services / Student & Family Services	Santa Barbara Unified School District
Brett Coulter	Project Manager Capital & Deferred Maintenance Projects	Santa Barbara Unified School District

Key Stakeholders

Key Stakeholders supported the planning process by providing subject-matter expertise, regulatory insight, and operational coordination beyond the district's internal Hazard Mitigation Planning Team (HMPT). These stakeholders represent local public safety agencies, emergency management authorities, resilience leadership, and design professionals with direct knowledge of hazard conditions, emergency response capabilities, and infrastructure resilience within the district's service area.

Key Stakeholders included representatives from the Santa Barbara Police Department, the City of Santa Barbara Fire and Emergency Management divisions, the City's Sustainability and Resilience Office, and architectural consultants supporting District facilities planning. Their participation ensured alignment between the district's mitigation strategy and broader community hazard response, emergency coordination protocols, and regulatory standards. The Public Survey and promotional planning communications were sent to members of the SBUSD community via the ParentSquare March 2026

Newsletter. This newsletter includes staff, administrators, parents and guardians, as well as some local community organizations/ non-profits such as Explore Ecology.

Engagement with Key Stakeholders occurred through targeted coordination meetings, email correspondence, and technical discussions focused on:

- Law enforcement and campus security considerations during disaster events
- Emergency response coordination and incident command alignment
- Fire prevention, wildfire risk reduction, and defensible space standards
- Climate resilience and sustainability planning
- Facility design, modernization, and structural resilience considerations

Public safety representatives provided insight into first-response capabilities, evacuation planning, and interagency coordination during hazard events. The Fire Marshal and Emergency Manager contributed expertise regarding wildfire risk, life-safety code compliance, and disaster response planning. The Sustainability and Resilience Director provided guidance on climate-related hazards and long-term adaptation considerations. Architectural representation supported discussion of structural performance, modernization standards, and resilient design integration.

These stakeholders were engaged at key milestones throughout the planning process to validate hazard priorities, confirm exposure findings, and ensure that mitigation actions are operationally feasible and aligned with community emergency management frameworks. Their participation strengthens coordination between the district and local agencies responsible for public safety and disaster response.

The individuals invited to participate as Key Stakeholders are listed in Table 2-3. Key Stakeholders were engaged by the district and the Consultant Team at various points during the planning process. These efforts and the findings thereof are summarized in Section 4 and documented in Appendix A.

Table 2-3: Key Stakeholders

Name	Title	
Charles Venable	Sgt., Santa Barbara Police Department	Santa Barbara Police Department
Benjamin Ahrens	Commander at Santa Barbara Police Department	Santa Barbara Police Department
Chris Payne	Lt., Santa Barbara Police Department	Santa Barbara Police Department
John Barriga	Stg., Santa Barbara Police Department	Santa Barbara Police Department
Ryan DiGuilio	Fire Marshall, City of Santa Barbara	City of Santa Barbara
Stacey Rosenberger	Emergency Manager, City of Santa Barbara	City of Santa Barbara
Alelia Parenteau	Sustainability and Resilience Director, City of Santa Barbara	City of Santa Barbara

Name	Title	
Joe Wilcox, KBZ Architects	President, KBZ Architects	KBZ Architects

HMP Consultant Team

To assist the Planning Committee, the District enlisted Dynamic Planning + Science due to its expertise in assisting public sector entities with developing hazard mitigation plans and strategies for particular hazard prone areas. Dynamic Planning + Science supported the district through facilitation of the planning process, data collection, meeting material development, and draft Plan development. The HMP Consultant Team, as shown in Table 2-4, consists of a variety of hazard mitigation and certified urban planning professionals.

Table 2-4: HMP Consultant Team

Name	Title	Project Role
Ethan Mobley, AICP	Owner / Principal Planner	Project Manager
Brian Greer	Co-Owner / Data Visualization Manager	GIS Lead / Data Analyst
Raini Ott, AICP, CFM	Principal Planner	Assistant Project Manager / Outreach Lead / Hazard Mitigation Planner
Cory Schreiner	Fire Prevention Service Manager	Hazard Mitigation Planner
Alex Krebs	Data Visualization Associate	GIS Assistant / Data Analyst
Grant Gruber	Senior Technical Writer	Hazard Mitigation Planner
Cassidy Baumann	Planning Associate	Outreach Assistant / Hazard Mitigation Planner / Data Analyst

2.1.2 Stakeholder Involvement/Outreach

Stakeholder engagement is a critical component in producing any effective and meaningful public planning process and actionable planning document, and public outreach is also a required component of the LHMP. (44 CFR § 201.6(c)) As such, it is vital that early and continued engagement is facilitated through a diverse range of mediums to ensure community members, neighboring jurisdictions, and other stakeholders have an adequate opportunity to provide input, especially on the mitigation strategy.

The public and stakeholder engagement efforts deployed for this plan exceed the minimum state and federal requirements for outreach. But more than that, the engagement strategy was developed, implemented, and refined over the course of the LHMP update planning process to ensure an abundance of enhanced opportunities for all types of community members to provide input.

By engaging with stakeholders and members of the public at specific points during the process, perspectives from an array of stakeholder categories were integrated throughout the LHMP rather than being mentioned

as an afterthought or an appendix. This extensive public and stakeholder engagement process and the results thereof are summarized in this section and fully documented in Appendix B.

The District conducted outreach and engagement following a six-step strategy and work plan with support from the Consultant Team and HMPT. The outreach strategy for this 2026 LHMP maximized stakeholder input and public involvement throughout the planning process, utilizing a diverse range of channels, mediums, and formats to ensure staff, students, and other community members were solicited for input on the plan from start to finish. Other community stakeholders, such as non-profits serving vulnerable populations, were also engaged using a variety of methods.



Implementation of the six-step strategy and work plan was conducted by the Steering Group and consisted of first identifying goals and the timeframe for engagement followed by identifying the planning team members, key stakeholders, tools, and resources to support the effort. Then a work plan was developed to organize the timeframe, teams, key stakeholders, and engagement tools and resources into a usable framework to guide the process toward accomplishing its stated goals. As the process progressed, it was continually assessed for its effectiveness and adjusted accordingly. This adaptive management approach ensured the engagement process supported the three goals identified in step one. In executing this engagement strategy and work plan, the District accomplished the following three goals:

1. Understand public safety and hazard concerns, problem areas, assets, and policy and mitigation priorities on a neighborhood scale, with intentional outreach to socially vulnerable and underserved populations, including Spanish-speaking residents and people with access and functional needs.
2. Provide accessible, inclusive information and tools — offered in multiple languages and formats — to community members, residents, and businesses to increase safety and decrease hazard risk at the private property-level, ensuring engagement with socially vulnerable populations.
3. Collaborate with adjacent communities, special districts, utility providers, and other local and regional regulatory agencies providing public safety services, while prioritizing coordination that supports underserved and socially vulnerable populations.

The overall timeframe for public and stakeholder engagement stretched across the development of the LHMP, occurring at regular intervals and important junctures. This schedule is illustrated below in Figure 2-3. The various tools, resources, and efforts undertaken, as well as the feedback gained from stakeholders and community members, are summarized in Appendix B. Appendix B fully documents the outreach process, as required by FEMA, Cal OES, and the California Office of Planning and Research (OPR).

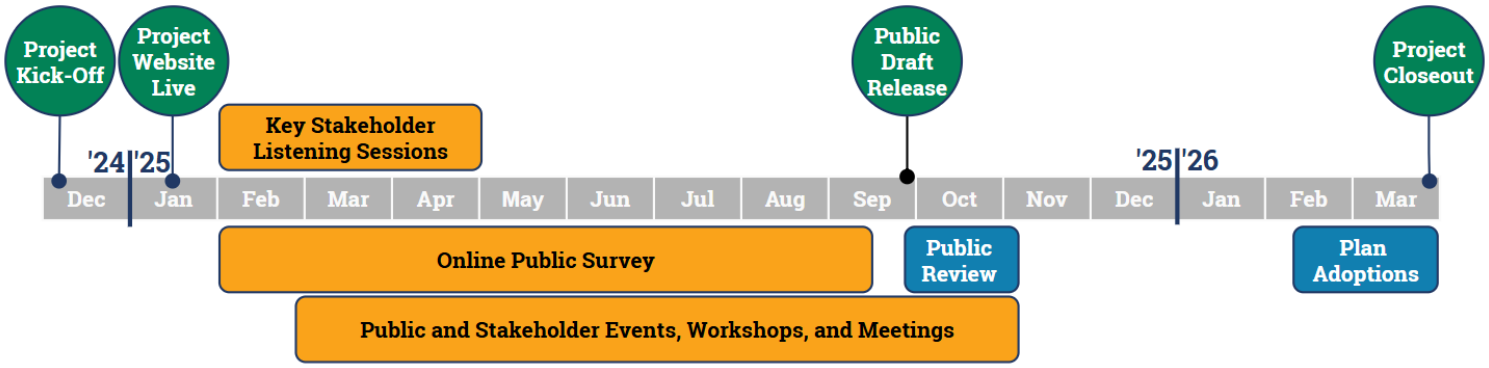


Figure 2-3: Overview of Public and Stakeholder Engagement Schedule

Websites, Social & Other Media

The District used their websites, social media platforms, and other media to widely advertise the update of the LHMP and solicit input from district stakeholders. In addition, a project portal was created through the Mitigate Hazards website maintained by the Consultant Team (https://legacymitigatehazards.com/santabarbara-usd-hmp/), which served and will continue to serve as a centralized project information and file-sharing platform throughout the lifecycle of the plan. This website provides a tool for project management, collaborative content, and for mitigation planning resources.

Project participants used the website as a project resource for the duration of the planning process and will continue to have access during the five-year cycle and beyond. The page hosts secure information, including a point of contact database and a mapping application built specifically for mitigation planning called the Risk Assessment Mapping Platform (RAMP). RAMP allows for interactive discovery of the robust risk assessment data that was developed for the LHMP. It displays facilities and buildings overlaid with natural hazards layers to bring interactivity and individual discovery to the GIS analysis performed for the plan. The website also hosts the Mitigation Action Support Tool (MAST) to help each jurisdiction track and update their mitigation strategy. See Sections 2.2.1 and Section 4for more information on RAMP and MAST, respectively.

In addition to internal coordination, the project website played a critical role in community engagement throughout the planning process and documenting public involvement, including for the public survey, planning team meetings and public review of the draft plan. Resources such as home-based mitigation measures, background documents, RAMP, links to meeting summaries, and the final plan are available to the public via the website.



Figure 2-4: Online Public Survey Advertisement in Spanish

Jurisdiction-maintained websites and social media are valuable and authoritative resources for the public that were used in addition to the project website to advertise the planning process and ways for community members to get involved. In general, users were directed from the district websites and social media posts to the primary project website to avoid inactive or outdated information. Information on the LHMP was communicated through the ParentSquare Newsletter to parents, staff, students, and community partners.

Alongside general project advertising, these websites, social media platforms, and local media outlets were used to publicize project milestones, the public survey, and community engagement events, as documented in Appendix B.

2.1.3 Planning Process Library

During the update process for this LHMP, the planning team engaged in and completed five different exercises to assess risk, prioritize hazards, identify areas of concern and hazard problems, assess existing capabilities and opportunities for improvement, and develop the mitigation strategy. These exercises, facilitated by Consultant Team, were integral components of the planning team meetings described in Section 2.1.1. A description of each exercise and its purpose are provided below.

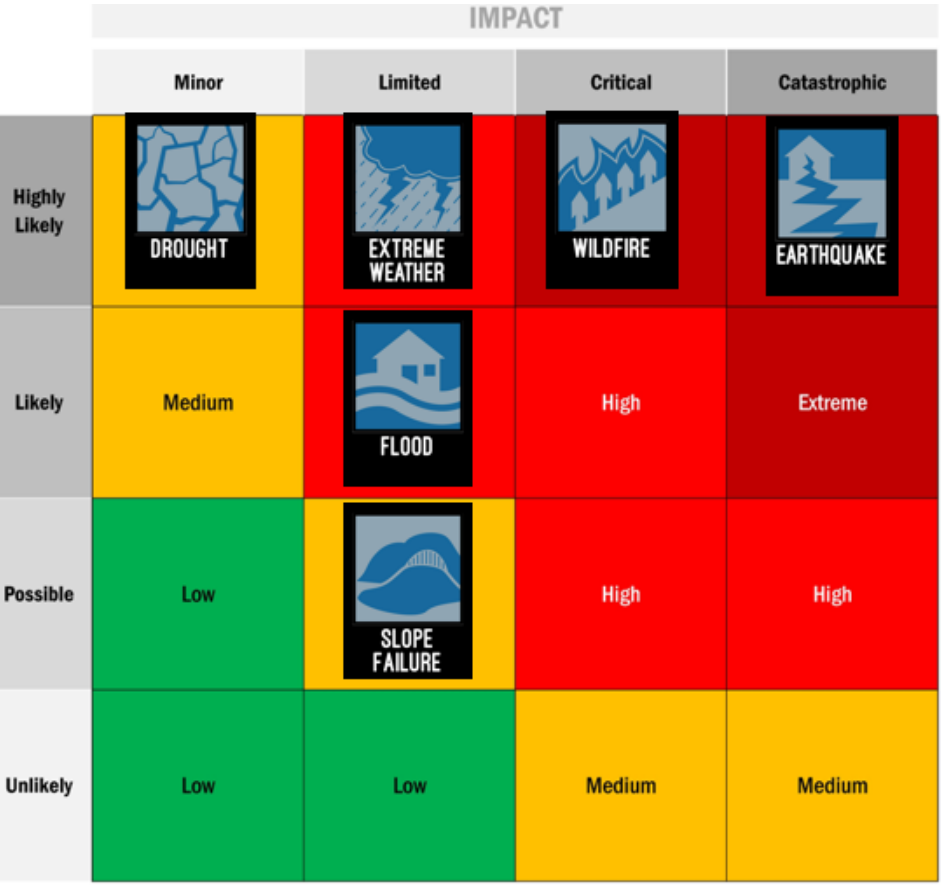
The outcomes of the five exercises completed by each participating jurisdiction are organized and documented in the form of a Planning Process Library (Table 2-5). Specific results from these exercises are incorporated into this document.

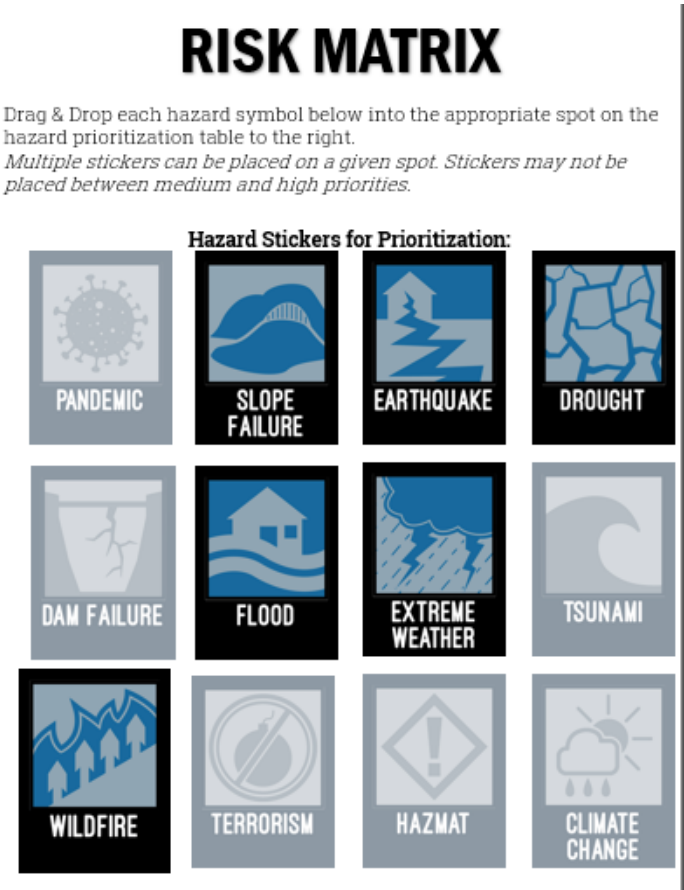
Exercise #1: Risk Assessment

The risk assessment exercise aimed to thoroughly identify jurisdiction-specific vulnerabilities based on the best available data. Hazard overlay maps, demographics reports, and other tools were utilized to educate and engage stakeholders with deep-dive discussions on local hazard concerns and priorities, guiding the development of the risk assessment. This exercise was facilitated by Consultant Team and engaged all the planning teams in reviewing and discussing the many factors that can impact community hazard risk (Figure 2-5). The Planning Process Library contains the snapshot hazard maps for each participating jurisdiction and a county-wide demographics report that were refined through this exercise and formed the foundation for developing specific, actionable mitigation strategies.

Exercise #2: Hazard Prioritization

The planning team considered and screened a broad range of hazards presented in relevant local, regional, and statewide hazard mitigation planning documents. The risk assessment (Exercise #1), past hazard events, and climate change projections also informed the selection of hazards for profiling in this plan. Each jurisdictional planning team then reviewed and prioritized all potential hazards, deciding which are most likely to happen (probability) vs how severe the impacts could be from an event (impact). The crosswalk of documents reviewed, as well as the results of screening and prioritizing relevant hazards, are outlined in Section 3.1.2. The Planning Process Library contains the completed risk matrixes resulting from this exercise, ranking hazards based on probability in and potential impact on each participating jurisdiction.





Exercise #3: Areas of Concern

The planning team engaged in this exercise to identify areas of concern and the potential effects of each of the identified priority hazards on the planning area in terms of impacts, victims, or threats. Problem statements were developed for these areas of concern, which describe the specific nature of the consequences of a hazard occurrence on the community and its assets. This ensured that the mitigation actions developed through the fifth exercise were tailored for each community and to the specific problems created by various hazard scenarios within it. The Planning Process Library contains the resulting problem statements for each jurisdiction.

Exercise #4: Capabilities Assessment

The capabilities assessment exercise involved analyzing the existing planning and regulatory, administrative and technical, financial, and education and outreach resources of each participating jurisdiction. Various tools are used to implement hazard mitigation activities, such as long-range planning documents; building, subdivision, and zoning regulations; trained staff; information systems; various funding mechanisms; and community preparedness education. Each of the Steering Group members, supported by their planning team and the Consultant Team, evaluated their jurisdiction's current capabilities in comparison to previous mitigation planning efforts and provided updated information to reflect recent developments. As part of the exercise, they also explored opportunities to improve capabilities and the various funding options available to support implementation of their mitigation strategy. The Planning Process Library contains the resulting capabilities assessment for each participating jurisdiction.

Review & Incorporation of Existing Documents

In organizing resources for the plan update, one of the initial steps was for each jurisdiction to identify and review their existing community plans, regulations, strategies, studies, and other documents with relevance to local community planning and hazards to help inform the development of the LHMP. This effort was led by the Consultant Team. Many documents reviewed already incorporate hazard topics and mitigation planning while others, some seemingly unrelated, would be appropriate to integrate in the future. Relevant documents are cited throughout the LHMP and in each hazard profile of the risk assessment.

As part of Exercises #1 through #4, the planning teams reviewed existing planning, policy, and regulatory documents for their relevance to hazard mitigation planning. The review included many documents into which previous mitigation plans are incorporated into the Section 5 Works Cited, Capabilities assessment and each of the hazard profiles. Since the adoption of its 2009 HMP, the district has incorporated the plan into various other planning mechanisms.

The capabilities assessment for each participation jurisdiction identifies the past and current usage of the documents found to be relevant to hazard mitigation, and opportunities for their future integration with the LHMP directly or indirectly (Table 2-5). The documents were also closely examined as part of the hazard prioritization exercise completed by each jurisdiction's planning team. The objective of this review was to ensure plan alignment with ongoing efforts, identify opportunities for integration, and avoid redundancy.

A summary of county-related documents which were identified, reviewed, and incorporated into this 2026 LHMP, or that may be integrated with the county's hazard mitigation planning efforts in the future, is provided in the Capabilities and Opportunities Assessment, Section 4.2.

Exercise #5: Strategy Development

The final exercise conducted as part of the interactive and comprehensive development of this LHMP was the creation of the mitigation strategy. Based on the results from all the previous exercises and background information surrounding them, including strategies from past mitigation plans, the Steering Group and Consultant Team led each of the planning teams through the review of potential mitigation actions and a variety of alternatives to consider for their particular jurisdiction during Breakout Meeting Series #2. Following individual strategy development, the HMPT met again to construct a collaborative, county-wide mitigation strategy that leverages resources to address shared needs among jurisdictions (Section 4).

The draft actions were then further refined by the Steering Group and jurisdictional leads to incorporate community feedback received during the public draft review period. The final Mitigation Action Plan for SBUSD is provided in Section 4, and the plans for the other participating jurisdictions are found in the Volume 2 annexes; the final plans are also in the Planning Process Library.

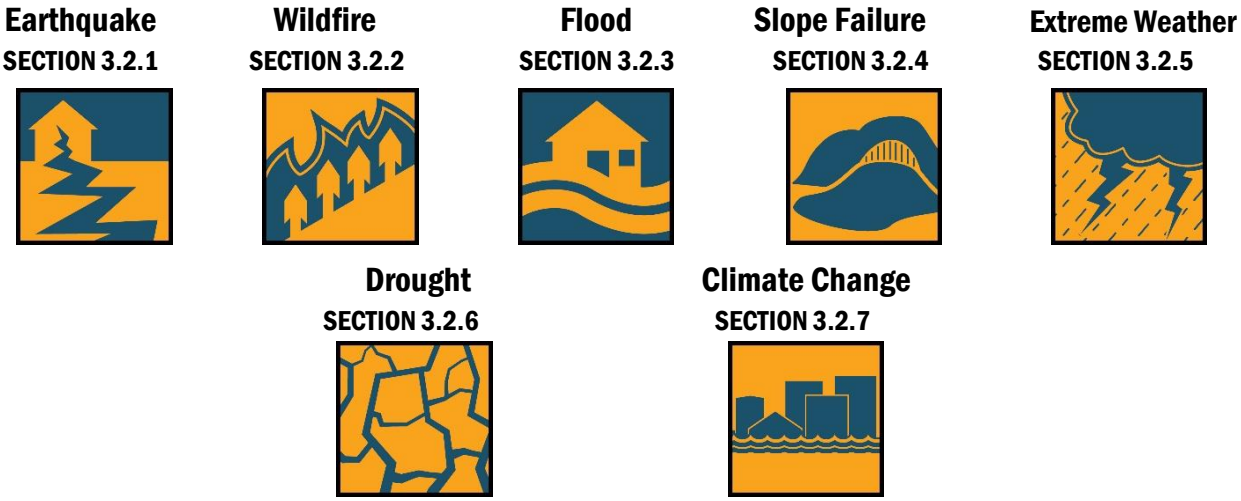
Table 2-5: Planning Process Library

No.	Exercise Title	Exercise Link
1	Risk Assessment	Hazard Maps
2	Hazard Prioritization	Risk Matrix
3	Areas of Concern	Problem Statements
4	Capabilities Assessment	Capabilities Assessment
5	Strategy Development	Mitigation Action Plan / Alternatives Considered

2.2 Assess the Hazard Risk

This section describes the second major step in the planning process: the comprehensive assessment of risks associated with natural hazards in the district. The planning team conducted a risk assessment for their planning areas. This involved identifying and prioritizing the natural hazards affecting SBUSD as a whole and each participating jurisdiction individually, followed by assessing vulnerabilities to those identified hazards. Results from this risk assessment process aided the identification of an effective mitigation strategy.

The process for, and results from, identifying and prioritizing which hazards to assess are described in Sections 3.1 and 3.1.2. This section describes the process, methods, and support tools used in assessing the hazard risks to all the planning areas. The hazard-specific vulnerability assessments are documented in the ten hazard profiles.



Assessing risks and vulnerabilities helps identify the unique characteristics of each hazard and clarifies which District facilities and operations may be susceptible to specific hazard events. The vulnerability assessment included site-level review and field verification, as well as Geographic Information System (GIS) analysis to evaluate hazard exposure in greater detail. This assessment was conducted by the District Planning Team with support from the Consultant Team.

Hazards were identified and prioritized based on local geographic conditions, facility locations, operational considerations, and stakeholder input. Through these methods, the Planning Team evaluated the potential exposure of District facilities, students, staff, and supporting infrastructure to the priority hazards. The results of this analysis provide the foundation for targeted mitigation actions and long-term resilience planning.

The purpose of the risk assessment in Section 3 is to evaluate the locations and causes of the priority natural hazards affecting significant parts of the planning area, as well as the existing regulatory environment around them, their probability, the extent and severity of their potential impacts, and the vulnerabilities within the district. The findings serve as the foundation for developing targeted mitigation strategies that are both proactive and cost-effective. The risk assessment is comprised of the following:

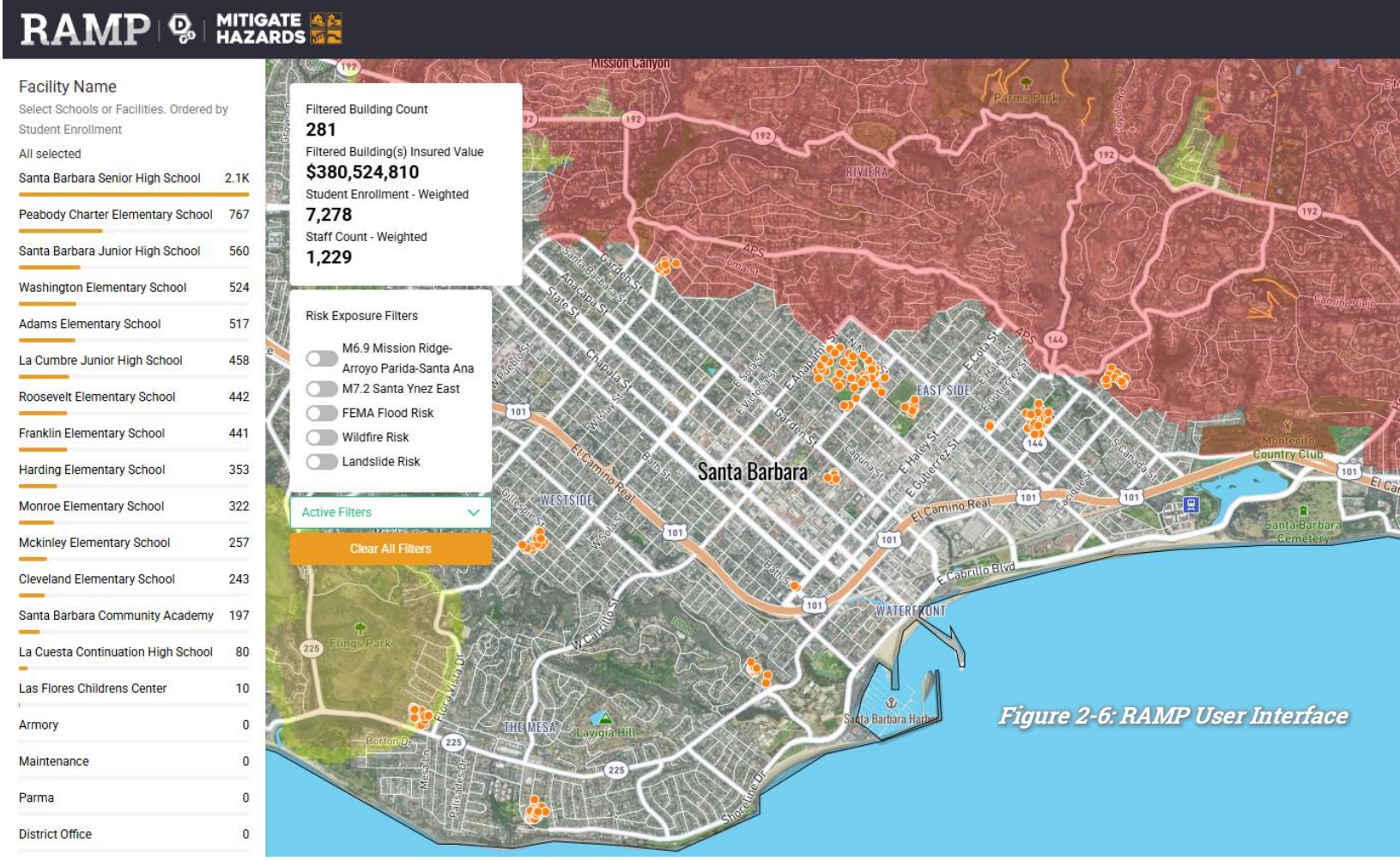
- **Section 1.3, District Profile:** Providing a geographic and demographic overview of district as the basis for the assessment, highlighting the populations most vulnerable to hazards in the planning area.
- **Section 3.1, Hazard Identification and Prioritization:** Identifying hazards that pose the most significant threats and prioritizing them based on probability and potential impact in the district.
- **Section 3.2, Hazard Profiles:** Detailing the characteristics, history, probability, and potential impacts of each hazard, including:
    - **Exposure Analysis:** Mapping the populations, assets, and critical facilities and infrastructure exposed to each hazard.
    - **Vulnerability Analysis:** Assessing how susceptible different populations, structures, and other assets are to hazard impacts.

2.2.1 RAMP (Risk Assessment Mapping Platform)

A highly interactive, web-based mapping platform was used to assist in the vulnerability assessment. RAMP, the Risk Assessment Mapping Platform, is hosted by and accessed through the project website (https://legacymitigatehazards.com/santabarbara-usd-hmp/) and allows the interactive discovery of robust risk, vulnerability, and exposure data developed especially for the district. RAMP was built specifically for mitigation planning and is a vital tool in identifying hazard exposure and risk (Figure 2-6).

RAMP displays the total population, total parcels and property values, and a jurisdiction's facilities and buildings overlaid with natural hazards layers. RAMP's robust data filtering and summation calculations allow the user to understand and visualize vulnerabilities at the property level with detailed information on the number of people and structures exposed to various hazards. This brings interactivity and individual discovery to the GIS analysis performed for the vulnerability assessment, allowing for the exploration of various hazard risks posed within and around a community and, ultimately, aiding in the prioritization of mitigation resources.

RAMP enabled the District's Hazard Mitigation Planning Team (HMPT) to identify and validate facility-level vulnerabilities and refine problem statements in support of the mitigation strategy. The Planning Team used RAMP during working sessions and throughout the planning process to evaluate exposure across the district, including potential impacts from adjacent hazard areas. Particular attention was given to facilities with higher student enrollment and staff concentrations to ensure life-safety considerations were appropriately prioritized.



2.2.2 Vulnerability Assessment Methodology

This subsection explains the methodologies used to assess vulnerabilities across the district and describes how the vulnerability assessment accounted for climate change impacts, which are expected to increase the frequency and severity of hazards like wildfire. The approach includes both qualitative and quantitative analyses to evaluate the risks associated with specific hazards. Methodologies were selected based on FEMA guidelines, state-level best practices, and local policy and expertise to ensure accuracy and relevance, and all data sources used in the analysis meet standards appropriate for hazard mitigation planning. The vulnerability assessment includes:

- **GIS-Based Mapping:** Visually representing hazard-prone areas, critical infrastructure and facilities, and vulnerable populations.
- **Data Collection and Analysis:** Utilizing historical disaster data, climate projections, and demographic information to estimate risk.
- **Scenario Modeling (Earthquake and Climate Change):** Conducting hypothetical disaster scenarios to understand potential impacts under varying conditions, including climate change.
- **Community Surveys and Stakeholder Feedback:** Incorporating local knowledge to identify vulnerabilities not captured in traditional data.

To accurately describe vulnerability for each identified hazard, it is first necessary to understand the total District population and assets potentially at risk. This section summarizes the methodology used to conduct the hazard-specific vulnerability assessments presented in Section 3.2.

For each hazard, the assessment begins with a general description of the hazard characteristics and local conditions. Vulnerability is then evaluated through a structured, two-step process. First, a comprehensive inventory of District buildings, facilities, and school populations was compiled to establish a clear baseline understanding of assets and occupants potentially exposed to hazard events. Second, this inventory was analyzed using spatial and risk-based filters to estimate exposure levels and potential impacts under varying hazard scenarios. For more detailed discussion of the explanation on risk assessment methods, see Appendix B.

Population & Asset Inventory

This subsection describes the methodology used to develop the inventory of District buildings, assets, and populations that may be vulnerable to natural hazard events. The inventory was compiled using District facility records, insurance documentation, and enrollment and staffing data, and was spatially analyzed using Geographic Information System (GIS) tools to evaluate hazard exposure. GIS mapping allowed the Planning Team to overlay hazard data with District facilities to support data-driven mitigation strategy development.

The asset and population inventory provides a baseline for understanding the scale and significance of potential impacts from natural hazard events. It also supports estimation of potential physical damages and financial exposure under severe or "worst case" hazard scenarios.

Building and Asset Inventory

The District's building inventory includes:

- **Building Count** – The total number of District buildings included in the analysis.
- **Building Insured Value** – Replacement value derived from the district's current insurance rolls. This value reflects insured building replacement costs and serves as the primary financial exposure metric used in this plan.

Unlike parcel-based municipal inventories, the district analysis focuses specifically on owned and operated school facilities and support buildings. Insured replacement values provide a consistent and defensible estimate of potential structural loss exposure for hazard modeling purposes.

Each facility in the district has a known location and layout. Many buildings in the district have a known structure and content value as well. Each facility and its associated buildings have been located and, where known, building value and structure characteristics have been linked to each structure in a centralized GIS database. For example, Roosevelt Elementary School consists of 7 buildings with known unique buildings characteristics. This information is crucial to inform the natural hazard exposure and potential damage analyses. Data determining these facilities and building characteristics primarily comes from the Insurance

Property Schedules (see "A" SBUSD Facilities Input Data in Figure 2-8). Additionally, each facility/ campus has associated enrollment data from the California Department of Education (CDE). As shown in Figure 2-8, both the SBUSD facilities dataset and the SBUSD buildings dataset served as inputs to the exposure analysis.

Student and Staff Population Inventory

The primary purpose of this Hazard Mitigation Plan is to protect people; therefore, accurately estimating the number of students and staff potentially exposed to hazard events is critical. Because school populations are not evenly distributed across facilities, a weighted methodology was used to better reflect occupancy patterns.

- **Student Enrollment – Weighted:** Student counts were proportionally allocated to buildings based on square footage to estimate the relative number of students likely to occupy facilities within hazard influence areas.
- **Staff Count – Weighted:** Staff counts were similarly weighted using building square footage to approximate potential staff exposure within affected facilities.

This square-footage-weighted approach provides a more realistic representation of exposure than assigning total campus enrollment uniformly across all buildings.

This methodology ensures that vulnerability assessments are grounded in District-specific operational data rather than generalized municipal parcel data. The resulting exposure analysis supports prioritization of mitigation actions aimed at protecting students, staff, facilities, and continuity of educational operations.

Hazard Exposure

Exposure analysis quantifies the extent to which District facilities, students, staff, and operational assets may be affected by identified hazard events. This analysis establishes the scale of potential impact by identifying which buildings and occupants are located within hazard influence areas and estimating the potential structural and financial consequences under modeled disaster scenarios. The exposure assessment considered:

- Hazard intensity and recurrence potential using historical data and accepted scientific models;
- Building characteristics, including construction era, structural type, and relative resilience;
- Geographic distribution of hazards such as wildfire threat areas, landslide-prone slopes, and modeled earthquake shaking zones; and
- Operational and life-safety considerations associated with student and staff occupancy patterns.



Figure 2-7: Hazard Exposure Explanation Graphic

Spatially Delineated vs. Non-Delineated Hazards

Geospatial data played a central role in identifying District facilities located within delineated hazard footprints. For hazards with defined geographic extents — such as earthquake shaking scenarios, wildfire risk areas, and slope failure zones. — GIS overlays were used to spatially intersect District buildings with mapped hazard areas. These intersections allowed the Planning Team to calculate building counts, insured values, and weighted population exposure within each hazard footprint.

Certain hazards, including extreme heat, drought, and broader climate-related conditions, do not have clearly delineated spatial boundaries. For these non-delineated hazards, exposure is evaluated at a District-wide scale rather than through geographic filtering.

Table 2-6: List of Profiled Hazards by Spatial Delineation of Hazards with Geographic Extents

DELINEATED HAZARDS	NON-DELINEATED HAZARDS
Earthquake	Drought
Wildfire	Extreme Weather
Flood	Climate Change
Slope Failure	

Certain hazards, including extreme heat, drought, and broader climate-related conditions, do not have clearly delineated spatial boundaries. For these non-delineated hazards, exposure is evaluated at a District-wide scale rather than through geographic filtering.

Putting it all together

Each hazard scenario affects District facilities differently depending on geographic location, building characteristics, occupancy patterns, and surrounding environmental conditions. The exposure analysis integrates District facility data with authoritative hazard datasets to determine which buildings and populations are located within hazard influence areas. As illustrated in Figure 2-8, the exposure methodology combines two primary data categories:

A. District Facilities Input Data:

- Facilities and campus spatial data
- Individual building footprints
- Enrollment data (used to develop weighted student exposure)
- Insurance property schedule data (used to determine insured replacement value)
- Seismic safety inventory information (AB-300 status where available)

B. Natural Hazard Spatial Data:

- FEMA Flood Zones
- USGS Earthquake Scenarios
- California Geological Survey (CGS) Landslide Hazard Mapping
- CAL FIRE Wildfire Hazard Severity Zones
- NOAA elevation data (where applicable)

These datasets were integrated using Geographic Information System (GIS) tools. Hazard layers were spatially overlaid with District building footprints to generate filtered exposure results for each priority hazard. For hazards with defined geographic extents—such as earthquake shaking scenarios, wildfire risk areas, and slope failure zones—facilities located within mapped hazard areas were identified and quantified.

The resulting exposure analysis quantified:

- **Building Count** within each hazard footprint
- **Insured Replacement Value** (derived from District insurance rolls)
- **Weighted Student Enrollment** (allocated proportionally by square footage)
- **Weighted Staff Count**

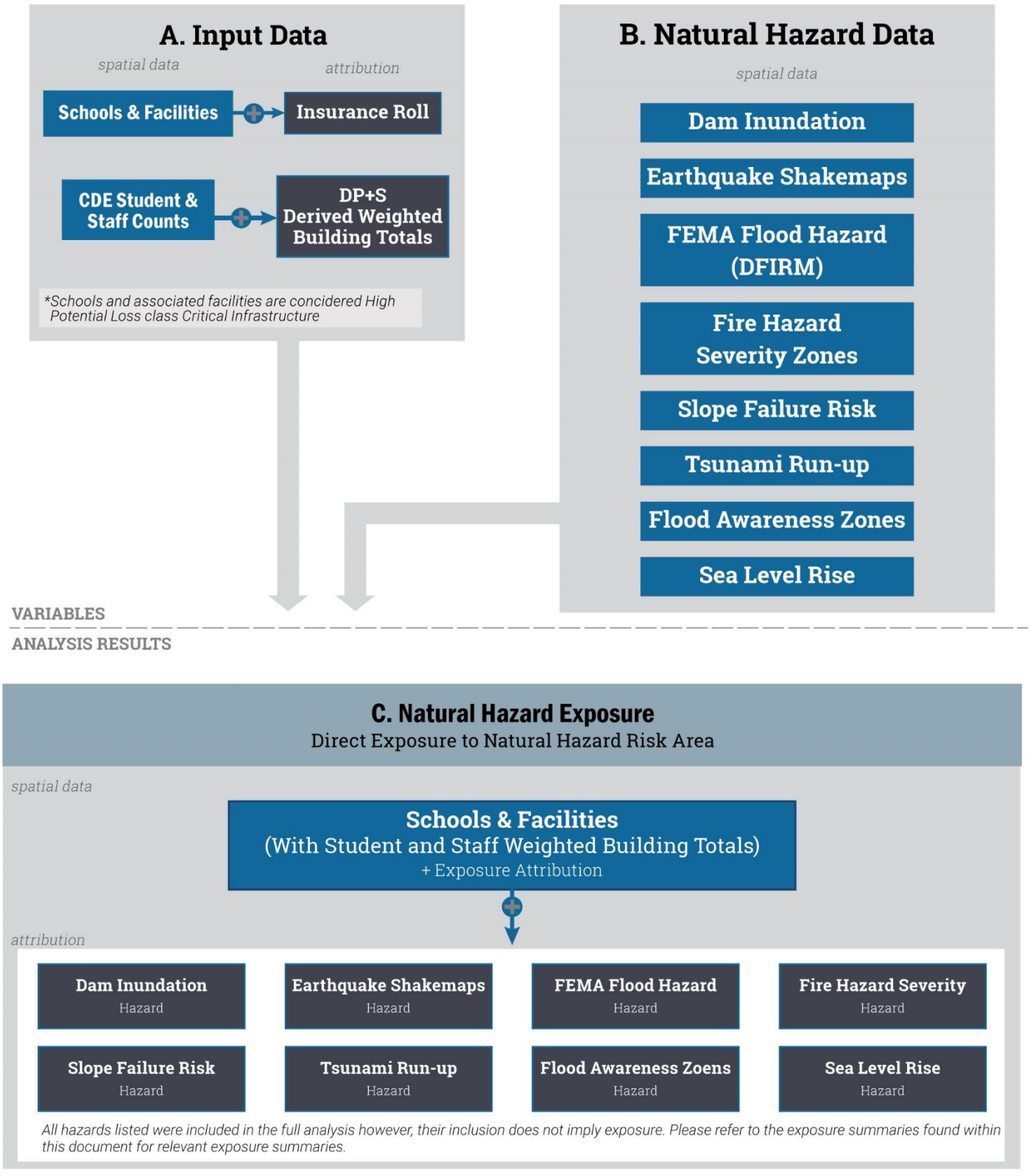


Figure 2-8: Data Source and Methodology

By combining these metrics, the Planning Team was able to estimate potential impacts to life safety, operational continuity, and financial exposure under varying hazard conditions.

It is important to note that this plan did **not** include probabilistic or depth-based damage estimation modeling (e.g., HAZUS). Instead, the District relied on exposure-based analysis to inform planning decisions. This approach focuses on identifying where hazards intersect with District assets and populations, rather than projecting exact dollar losses or structural damage percentages. For planning purposes, understanding *who and what is located within hazard areas* provides a clear and defensible basis for prioritizing mitigation actions.

The hazard-specific vulnerability assessments presented in Section 3.2 summarize exposure results for each priority hazard and identify facilities and populations that may be disproportionately affected. The integrated spatial overlay methodology ensures that mitigation priorities are grounded in measurable, spatially verified risk conditions and aligned with the District's operational and life-safety responsibilities.

2.3 Developing a Mitigation Strategy

This HMP was prepared in accordance with DMA 2000 plan update requirements, FEMA's mitigation guidance, CalOES policies, and the California Office of Land Use and Climate Innovation's recommendations. The development of this plan included identifying hazard problems across the planning area, setting goals for a mitigation strategy, assessing existing capabilities, considering the costs and benefits of alternatives, and developing new and improved mitigation actions.

Section 4 provides the mitigation strategy for this 2026 HMP, the blueprint for reducing potential losses identified in the risk assessment based on the existing capabilities of the district.

2.3.1 Identify the Problem

As part of the mitigation action identification process, the HMPT identified areas of concern in and the potential impacts of each of the prioritized hazards. Specific statements were developed to describe the district's hazard problems based on the risk assessment contained in Section 3 and lengthy discussions about unmapped vulnerabilities. These "problem statements" are organized by three major areas of concern, which describe the nature of the consequences or effects of a hazard occurrence on the district and its assets as victim, impact, or threat. This categorization ensures that the identified actions in the mitigation strategy are tailored to the district's specific problems created by various hazard scenarios.

Each hazard problem statement that was developed is addressed by at least one mitigation action; however, most are mitigated with a combination of short- and long-range activities, through planning, regulatory, operational, physical, or other projects. The district's problem statements are identified at the end of each hazard profile in Section Section 3 and are also available through the Mitigation Action Support Tool (MAST), which is summarized in Section 2.3.5.

Interpreting Areas of Concern (AOCs)

Areas of concern describe how hazards impact different aspects of a community and set the stage for identifying mitigation actions that reduce risk by changing the victims, impacts, or threats of different hazards. Each problem statement identifies which type of hazard problem (i.e., AOC) it concerns the most.

Areas of Concern		
Victim	**Impact**	**Threat**
		
Who is (most) impacted?	*What are the direct and indirect impacts of hazard events?*	*What local conditions create location-specific risk?*
Example Statement	**Example Statement**	**Example Statement**
Students and faculty with mobility limitations may lack adequate evacuation support during a rapid onset hazard event.	Heavy rain events overwhelm aging and inadequate drainage infrastructure.	Climate change is shifting precipitation patterns, increasing the frequency and severity of heavy rain events while also exacerbating drought conditions.

2.3.2 Identify Mitigation Goals

Hazard mitigation plans must identify goals for reducing long-term vulnerabilities to identified hazards. (44 C.F.R. § 201.6(c)(3)(i)) The HMPT reviewed past mitigation goals from the previous plan, the 2023 California State Hazard Mitigation Plan (SHMP), and other relevant plans to determine their present validity. The team also reviewed the updated risk assessment (Section 3) and public engagement results (Section 4) in defining the goals for this plan. The HMPT ultimately decided to keep and update the 2016 plan goals. The five resulting goals formed the basis for the development of the mitigation strategy and specific mitigation projects.

A mitigation strategy is considered effective based on how well the goals of the strategy are achieved. The goals are presented in Section 4.1 and are each directed toward a different area: people, services, property, and infrastructure. The goals in this plan all support each other, and the actions in the mitigation strategy were selected to meet multiple goals and prioritized in part by their ability to achieve multiple objectives.

2.3.3 Assess Capabilities & Opportunities

The capabilities assessment presented in Section 4.1 is a comprehensive review of the district's existing capabilities to implement the mitigation actions in the HMP and tools available to address known issues

and weaknesses from identified natural hazards. These capabilities were identified by the Steering Group and HMPT and were also reviewed for future opportunities for integration or enhancement, including the development of new policies, expansion of training programs, and increased collaboration with regional and state partners.

The district's assessment of its capabilities and future opportunities is found in Section 4.1. For more information on the regulatory environment surrounding each hazard, see the hazard profiles in Section 3.2.

2.3.4 Identify Mitigation Actions

The HMPT developed mitigation actions, as both planning activities and other types of projects, to address identified hazard problems from the risk assessment in line with the district's existing capabilities. As part of this process, the team reviewed and analyzed the status of mitigation actions from the previous plan, determining which have been completed, which are no longer relevant, and which need to be updated to reflect current circumstances. The district's results of this exercise are discussed and documented in Section 1.4.2.

After reviewing previous mitigation actions and current priorities, projects, activities, and other relevant documents, the HMPT developed potential new actions through an interactive exercise, as outlined in 2.1.3.The potential mitigation actions were then further scrutinized based on their relevance to the priority hazards, support from community members, realistic implementation parameters, and alternative measures that could be used to address various aspects of the hazard problems.

2.3.4.1 Public & Stakeholder Input

As part of the mitigation strategy development, the district reviewed and incorporated stakeholder feedback and public comments collected throughout the planning process to tailor the goals and mitigation actions toward specific stakeholder concerns and needs. Public input was collected on an ongoing basis via an online survey and at major injection points, such as during the public review period. These results are fully documented in Appendix B and summarized in Section 4. Section 4 also highlights public and stakeholder input that was specifically used in developing the mitigation strategies.

2.3.4.2 Mitigation Alternatives

Once hazard problems were defined (problem statements) and local resources and capabilities accounted for (capabilities and opportunities assessment), a range of mitigation solutions are identified that could be used to address concerns. These mitigation alternatives are evaluated for their associated costs and benefits to pinpoint which actions provide the greatest risk reduction using available resources and should be made part of the final mitigation strategy. This section describes the process that was used in identifying and evaluating a range of mitigation alternatives to address the hazards prioritized in the risk assessment (Section 3). Alternatives include both structural measures (e.g., firebreaks, seismic retrofitting) and non-structural measures (e.g., zoning changes, public education, warning systems) and were assessed based on:

- Community Support and Acceptance

- Alignment with Mitigation Goals
- Funding Eligibility and Cost-Effectiveness
- Multi-Benefit Outcomes

Based on the exercises conducted with the HMPT, the Consultant Team drafted mitigation actions for the team to consider, including refined actions from the previous plan and new alternative actions. Early discussions focused on reviewing the previous mitigation strategy, identifying current hazard-related challenges, and developing potential actions to address priority hazard concerns. These ideas were then further reviewed and prioritized based on district staff expertise and public and stakeholder input. The HMPT selected the most efficient and cost-effective actions by assessing vulnerabilities, evaluating existing capabilities, and building consensus on how best to address identified problems and meet the community's mitigation goals. The resulting Mitigation Action Plan is found in Section 4.4.

FEMA's six broad mitigation categories, listed below, provide the framework for identifying and evaluating potential mitigation actions. Categorizing mitigation actions in this way ensures a comprehensive approach to mitigation in the district addressing various facets of vulnerability reduction and resilience enhancement across the community and its built and natural environments.

- **Prevention (PRV):** Measures aimed at avoiding or minimizing hazard impacts through planning and the implementation of building codes, land use regulations, and other preventative measures.
- **Property Protection (PPRO):** Actions to safeguard individual properties from hazard damage by modifying or relocating existing buildings and structures to enhance resilience.
- **Public Education and Awareness (PE&A):** Efforts to engage and inform community members about hazard risks and effective mitigation strategies to foster preparedness and resilience.
- **Natural Resource Protection (NRP):** Strategies that preserve, restore, or manage natural resources, systems, and functions to reduce hazard impacts.
- **Emergency Services (ES):** Measures that help minimize the impacts of hazard events on people and property by enhancing emergency preparedness and response capabilities.
- **Structural Projects (SP):** Projects to construct, install, or improve infrastructure and systems designed to reduce hazard impacts.

The following subsections provide examples of mitigation actions according to the FEMA mitigation categories. This alternatives evaluation process is documented as part of the Planning Process Library discussed in 2.1.3 and provided in Table 2-5 (Alternatives Considered) to demonstrate transparency and support future funding applications.

PREVENTION (PRV)

Preventative activities keep hazard problems from getting worse and are typically administered through government programs or regulations addressing building and land development. Preventative actions are

particularly effective in reducing a community's future vulnerability in areas where development has not yet occurred or where capital improvements have not been substantial. Examples of preventative activities include:

- Land-Use Planning and Development Controls
- Building and Construction Regulations
- Policy, Ordinance, and Planning Updates
- Hazard Mapping, Data Collection, and Risk Reduction Planning
- Operational and Administrative Prevention Measures
- Infrastructure and Utility Policy Controls
- Drainage system maintenance
- Capital improvements programming

Examples of Local PRV Alternatives

- Ensure buildings meet DSA construction standards.
- Enhance the district's GIS database and capabilities related to hazards information.
- Update water conservation standards for grounds landscaping and plumbing fixture replacements.

PROPERTY PROTECTION (PPRO)

Property protection measures involve the modification, relocation, or removal of existing buildings and structures to help them better withstand the forces of a hazard. Examples include:

- Building elevation
- Retrofitting (e.g., seismic design techniques, etc.)
- Safe rooms, shutters, shatter resistant glass
- Insurance
- Critical facilities protection

Examples of Local PPRO Alternatives

- Assess school facilities for hazard resilience and construct improvements to address any deficiencies identified.
- Install shutoff valves and emergency connector hoses where utilities are exposed to ground shaking.

PUBLIC EDUCATION & AWARENESS (PE&A)

Public education and awareness activities advise community members and elected officials about hazards, hazardous areas, and mitigation techniques they can use to protect themselves and their property. Measures to educate and inform the public include:

- Hazard-Specific Public Outreach Campaigns
- Community Training and Capacity-Building
- Demonstration Projects and Hands-On Activities

- Hazard Mapping Display
- Public Information and Risk Communication
- Partnerships for Community Engagement
- School and Youth Education Programs

Examples of Local PE&A Alternatives

- Develop an educational program to teach students about natural hazards and mitigation measures.
- Conduct outreach with students, parents, and faculty on the updated risk assessment and available mitigation resources.
- Improve hazard preparedness and mitigation information on the district's website.

NATURAL RESOURCE PROTECTION (NRP)

Natural resource protection activities reduce the impacts of hazards by preserving or restoring natural areas and their protective functions. Such areas include wetlands, steep slopes, and sand dunes. Parks, recreation, or conservation agencies and organizations often implement these protective measures. Examples of these measures include:

- Erosion and sediment control
- Groundwater recharge projects
- Vegetation management (e.g., fire resistant landscaping, fuel breaks)
- Watershed management
- Wetland and habitat preservation/restoration

Examples of Local NRP Alternatives

- Increase tree trimming and add fire-safe vegetation around all schools abutting the WUI.
- Identify and stabilize high-risk slope failure locations.
- Improve overall cover of trees and natural surfaces across the district.
- Construct rainwater catchment systems to recharge groundwater in open space areas.

EMERGENCY SERVICES (ES)

Emergency services, while not traditionally categorized as mitigation, play a critical role in minimizing the impacts of natural hazard events on people and property. These services focus on preparedness, response, and recovery efforts to protect lives, reduce damages, and ensure the continuity of critical operations. The measures often include pre-disaster planning, resource staging, and infrastructure improvements to enhance emergency response capabilities. Examples include:

- Warning systems
- Sandbag staging for urban flood protection
- Identification / construction of evacuation routes
- Installing temporary shutters on buildings for wind protection

Examples of Local ES Alternatives

- Install back up power generators for critical facilities.
- Collaborate with the county and neighboring jurisdictions to improve emergency communications and coordinate emergency exercises.

STRUCTURAL PROJECTS (SP)

Structural mitigation projects are intended to lessen the impacts of a hazard by modifying the environment and natural progression of a hazard event through construction. They are usually designed by engineers and managed or maintained by public works staff. Examples include:

- Microgrid installation
- Utility facility / infrastructure upgrades
- Water system interties
- Stormwater detention / retention facilities
- Seismic retrofits to lifelines

Examples of Local SP Alternatives

- Repair and improve stormwater facilities and infrastructure to accommodate heavy rain events.
- Evaluate and improve emergency access and evacuation routes for school facilities.

2.3.4.3 Cost/Benefit Review

Mitigation action plans must be prioritized according to a cost/benefit analysis of the proposed projects and programs and their associated costs. (44 CFR §2 01.6(c)(3)(iii)) The benefits of proposed actions were weighed against estimated costs as part of the project prioritization process; however, it should be noted that this review does not meet FEMA Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program requirements. A less formal, less costly approach was used because some projects may not be implemented for up to 10 years, and associated costs and benefits could change dramatically in that time. Parameters were established for assigning subjective ratings (high, medium, and low) to the costs and benefits of these projects.

Cost ratings were defined as follows:

- **High:** Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
- **Medium:** The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- **Low:** The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.

Benefit ratings were defined as follows:

- **High:** Project will provide an immediate reduction of risk exposure for life and property.
- **Medium:** Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.
- **Low:** Long-term benefits of the project are difficult to quantify in the short-term.

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) were considered cost-beneficial and prioritized accordingly. For many of the strategies identified in this action plan, the partners may seek financial assistance under the HMGP or PDM programs, both of which require detailed benefit/cost analyses. These analyses will be performed on projects at the time of application using the FEMA benefit-cost model. For projects not seeking financial assistance from grant programs that require detailed analysis, the partners reserve the right to define "benefits" according to parameters that meet the goals and objectives of this HMP.

2.3.5 MAST (Mitigation Action Support Tool)

Development of the mitigation strategy for this 2026 HMP was strengthened by using an online platform called MAST, the Mitigation Action Support Tool. MAST is a web-based interactive tool that enables multiple users to search, view, enter, and update the details of mitigation actions, ideas or projects, and other information. The tool is accessible through the project website to the district staff, leadership, and partner agencies, including the Hazard Mitigation Advisory Team (HMAT) which will oversee the implementation phase of the planning cycle (see Section 2.4.2.1).

During the development of this HMP, MAST was used to document and relate described hazard vulnerabilities and areas of concern (referred to herein as "problem statements") and then to develop associated mitigation actions. As the planning cycle progresses, MAST will also be used to monitor and revise the mitigation strategy (Section 4.4). As a living document, mitigation activities will be updated through this web interface application developed specifically for this 2026 HMP.

State & Federal Funding Application Assistance

Using MAST, the district can improve its ability to apply for state and federal funding, including in the initial grant application processes through CalOES. MAST provides district staff and plan reviewers (CalOES and FEMA) easy access to mitigation action details that can be leveraged to support future risk reduction efforts and specific mitigation projects within the planning area. Additionally, MAST can be used to assist the district's HMAT in tracking project progress for grant and other required reporting.

Monitoring & Evaluating the Strategy

As local circumstances change and the plan evolves, mitigation actions will be updated through MAST. The online interface will provide the district's HMAT with the ability to easily record changes and progress and to adjust the strategy as needed. MAST will assist mitigation project managers across the entire planning area in adjusting reporting on the status and effectiveness of the mitigation action and overall strategy.

As described in Section 2.4.2, the Hazard Mitigation Advisory Team will oversee the collection and review of progress reports on specific strategies and will develop a district-wide progress report to deliver to the public and School Board. With MAST, updating the status and details of mitigation projects throughout the planning lifecycle will be greatly simplified and consolidated into one location.

2.4 Adopting & Implementing the Plan

Ensuring the HMP serves as a practical and accessible tool for the district is crucial for effective implementation and minimizing community hazard impacts. This section emphasizes integrating the HMP into existing planning mechanisms and frameworks, maintaining ongoing public engagement, and establishing procedures for implementation, monitoring, evaluation, and regular updates to keep the plan current and responsive to evolving needs. These efforts aim to enhance resilience and safeguard community well-being against hazards.

The implementation strategy herein also provides a roadmap for executing the identified mitigation actions, tracking progress, and integrating the plan into broader local and regional planning efforts. Further, it establishes an advisory team and procedures for evaluating and updating the HMP over its five-year lifecycle to reflect new data, hazard events, and community priorities.

It is important that this plan becomes a usable tool to ensure reductions in possible damage from a natural hazard event. This section is intended to ensure that the HMP remains relevant and evolves over time, including adjusting to changes in community priorities. As mitigation actions are implemented, the exact strategies for completing them will become more detailed. MAST will be an extremely useful tool for updating the mitigation strategies and tracking progress, including for individual mitigation actions as implemented or revised (see Section 2.3.5).

2.4.1 Adoption Proceedings

To comply with DMA 2000, the Santa Barbara Unified School District Board unanimously adopted this 2026 SBUSD HMP on 6/19/2026 during a regular public meeting. The adoption of the plan in its entirety recognizes the district's commitment to reducing the impacts of natural hazards within the planning area. A copy of the district's adoption record (Resolution 2025-2026-36) is provided at the end of the Executive Summary.

State & Federal Review

Prior to adoption by the district, this 2026 HMP was submitted to CalOES for review on 4/24/2026. Following additional revisions to ensure full compliance with 44 CFR § 201.6 and state requirements, the plan was submitted for FEMA review on 5/18/2026. Formal approval from FEMA was received on 6/17/2026 and is documented in Appendix B.

Public Input

Public input on the 2026 HMP was collected and incorporated throughout the planning process, including through an online public survey (English and Spanish) and during a public review period between March 6 2026 to April 24, 2026 as described in Section 4.

Further, the board reviewed the 2026 HMP at a regularly scheduled public meeting on 6/19/2026, which consisted of a presentation by the district leads on the HMPT and an invitation to members of the public for comment before the board voted to adopt the plan and their hazard mitigation strategy.

2.4.2 Monitoring, Evaluating & Updating

The district will regularly monitor, evaluate, and revise this plan in accordance with FEMA requirements to maintain eligibility for HMA grant programs. This section outlines the process and measures the district will take to ensure the HMP's long-term implementation, including monitoring, reporting, evaluation, maintenance, update, and revision procedures. Most of this implementation and maintenance will be done through MAST, which is further described in Section 2.3.5. This section also contains specifics on integrating mitigation with day-to-day decision making.

2.4.2.1 Hazard Mitigation Advisory Team (HMAT)

The Steering Group oversaw the development of the 2026 HMP and made decisions on key elements of the plan, including the maintenance strategy; however, a Hazard Mitigation Advisory Team (HMAT), directed and maintained by the Santa Barbara Unified Facilities and Operations Department, will oversee the implementation phase of the five-year planning cycle. The primary responsibilities of the HMAT in overseeing the implementation of the HMP are:

- Acting as a forum for hazard mitigation issues and continuing to solicit community input
- Facilitating interjurisdictional collaboration on hazard mitigation
- Coordinating implementation efforts across district departments and partner agencies
- tracking mitigation strategy progress and presenting a report to the board annually with recommendations on improvements

The HMAT will strive to include representation from various district departments, Key Stakeholders and other partner agencies, and members of the public. Keeping the HMAT intact for the duration of the planning cycle will also assist in jump-starting the next plan update.

Duties of the HMAT

The HMAT will coordinate with district departments and other responsible parties for each mitigation action to assess its status, effectiveness, and make modifications as appropriate. In addition, the HMAT will develop an annual progress report to provide reporting to and input from the board. The annual progress reports will be posted online for public review and released to the media and will cover possible improvements to the mitigation strategy and changes to be considered at the next update, in addition to

progress on mitigation actions. In evaluating the HMP's effectiveness, the following questions should be considered:

- Has the nature or magnitude of hazards affecting the planning area changed?
- Are there new hazards that have the potential to impact the planning area?
- Do the identified goals and actions address current and expected conditions?
- Have mitigation actions been implemented or completed?
- Has the implementation of identified mitigation actions resulted in expected outcomes?
- Are current resources adequate to implement the HMP?
- Should additional local resources be committed to address identified hazards?

The HMAT will also play a key role in preparing for the next HMP update by maintaining records and identifying emerging risks. Future updates to the plan will account for any new hazard vulnerabilities, special circumstances, or information or methodologies that become available. Issues that arise or updates made during the interim monitoring and evaluating period will be incorporated into the next update of the HMP, and the questions identified above will remain valid during its preparation.

2.4.2.2 Monitoring & Update Schedule

Monitoring the progress of mitigation actions will continue through the five-year period between adoption of this plan and the next update effort. The newly formed HMAT will meet annually, at a minimum, to monitor implementation, develop the progress report, and deliver that report to the board. The team's meeting schedule will be posted online, and meetings will be open to the public.

The HMP will be updated again after five years, as required by DMA 2000, and the update process will begin at least one year prior to the plan's expiration in 2031. However, should a significant hazard event occur within the district's planning area in the meantime, the HMAT will reconvene within 30 days of the disaster to review and update the plan as appropriate. As a DMA 2000 requirement, the board will adopt any written updates.

Funding Assistance Monitoring

The true worth of any mitigation plan is its implementation and success under grant and other funding programs. This HMP was assembled to reduce the risk of natural hazards and also to meet the requirements of DMA 2000 to maintain eligibility under FEMA's Hazard Mitigation Assistance (HMA) grant programs. FEMA's HMA Program is the catalyst that drives increased understanding and supports proactive community action to reduce losses from natural hazards. As outlined in Section 4.2.1, FEMA administers several programs that provide funding for jurisdictions with approved mitigation plans, including:

- **Hazard Mitigation Grant Program (HMGP):** Assists in implementing long-term hazard mitigation planning and projects following a Presidential major disaster declaration.
- **Flood Mitigation Assistance (FMA):** Provides funds for planning and projects to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP) on an annual basis.

Post-Disaster HMGP Process

Following a disaster, CalOES and officials from the district and Santa Barbara County would perform Preliminary Damage Assessments (PDA) of areas that sustained damage in a joint effort with FEMA. CalOES then submits the information collected through the FEMA Regional Office, along with a damage estimate to request a declaration from the President. A Presidential Major Disaster Declaration provides for the availability of HMGP funds at the request of the Governor in eligible communities. Figure 2-9 shows a timeline of how projects should be developed and administered by local government and FEMA under the HMGP program. HMGP grant recipients have 36 months from the close of the application period to complete projects.



Figure 2-9: HMGP Timeline

Mitigation Action Support Tool (MAST) Updates

Hazard problem statements and mitigation activities will be updated through the web-based interface application developed specifically for the district, available on the project website. This Mitigation Action Support Tool (MAST) will assist the district's advisory team in adjusting the mitigation strategy as circumstances evolve, and will assist mitigation project managers across all district departments in reporting on the status and effectiveness of the mitigation action and overall strategy. MAST will also be extremely useful in applying for CalOES funding.

Plan maintenance will be primarily performed through MAST, with most updates to the HMP occurring easily through this tool. MAST is further described in Section 2.3.5.

2.4.2.3 5-Year Update

Future updates to the HMP will account for any new hazard vulnerabilities, special circumstances, or new information or methodologies that become available. Issues that arise or updates made during the interim monitoring and evaluating period will be incorporated into the next update of the HMP, and the questions identified above will remain valid during its preparation.

The next five-year update will follow the same four-step FEMA planning process used for this 2026 update, including public and stakeholder engagement through meetings and other means to inform changing risks and priorities. The HMAT (i.e., the Facilities and Operations Department) will initiate the process at least one year before the plan expires and, depending on the scope of the update, will procure outside consultation to guide the process as needed. The HMAT will review the 2026 plan and process undertaken and make adjustments to methods and tools to strengthen the next update effort.

As detailed in **Error! Reference source not found.**, FEMA's four hazard mitigation planning process steps that will be followed for the next update are:

- **Step 1:** Organize Resources
- **Step 2:** Assess Risk
- **Step 3:** Develop a Mitigation Strategy
- **Step 4:** Adopt and Implement the Plan

2.4.2.4 Continuing Public & Stakeholder Engagement

The strategy for continuing engagement will utilize the same goals and resources as the strategy for developing the 2026 update, as described in Section 4 and documented in Appendix B. During the five-year planning cycle, the district will continue to involve members of the community in the implementation phase of the process through public gatherings and meetings. In addition, the Key Stakeholders involved in this update and other partner organizations will be invaluable resources for supporting continued public engagement, especially with underserved populations.

An electronic copy of the 2026 HMP document will be accessible through the district's website and at pre-determined physical locations. A physical copy of the 2026 HMP document is available at the SBUSD's Planning Department. Information on upcoming events related to hazard mitigation or the HMP will be announced via the same media tools discussed in Section 4, including the project website and district's website and social media.

2.4.3 Plan Integration

For the HMP to be successful, the recommendations and underlying principles of the plan should be incorporated into various aspects of local governance, including community planning and development (e.g., capital improvement budgeting) as well as everyday operations. Integration into a variety of departments and roles within the district provides an opportunity to network, identify, and highlight mitigation activities and opportunities at all levels of government. It is also important to monitor resources and opportunities which can be leveraged to implement the mitigation strategy.

As the plan evolves, the following should be considerations for implementing and integrating the mitigation strategy:

- **Use processes that already exist.** Take advantage of tools and procedures identified in the capability assessment in Section 4.1 Leaning on mechanisms already in use and familiar will give the planning implementation phase a strong initial boost.
- **Update work plans, policies, and procedures.** Incorporating hazard mitigation concepts and activities can help integrate the HMP into daily operations. These changes can include how major development projects are addressed in hazard-prone areas or can ensure that hazard mitigation concerns are considered in the approval of major capital improvement projects.
- **Revise job descriptions.** Work with department leads to revise job descriptions to include mitigation-related duties. Designating a "mitigation lead" within a department can further institutionalize hazard mitigation with little financial expenditure or programmatic overhaul.

The district's capabilities and opportunities assessment in Section 4.1 identifies the past and current usage of various planning and regulatory mechanisms relevant to hazard mitigation, and opportunities for their future integration with the HMP directly or indirectly. This integration helps to ensure plan alignment with ongoing efforts, identify opportunities for integration, and avoid redundancy. In general, information from this HMP will be incorporated into:

- **District Facilities Master Plan:** The HMP provides risk and vulnerability information that can be integrated into the District's Facilities Master Plan and capital improvement planning processes. Hazard exposure data and mitigation priorities identified in the HMP support informed decision-making related to modernization projects, site improvements, infrastructure replacement, and long-term facility investments. Incorporating hazard considerations into facilities planning helps ensure that safety, resilience, and continuity of operations are embedded into future development and renovation efforts.
- **Emergency Operations Plans:** The HMP complements the District's Emergency Operations Plans (EOP) by identifying long-term risk reduction strategies that address the same hazards managed during emergency response. While the EOP focuses on immediate preparedness, response, and recovery actions, the HMP emphasizes proactive mitigation measures that reduce the likelihood and severity of impacts before a disaster occurs. Together, these documents provide a coordinated framework for both emergency management and long-term resilience planning.
- **Hazard and Other Specific Plans:** The HMP will provide information that can be incorporated into topic- or campus-specific plans, and the HMP likewise captured mitigation actions derived from these types of documents. The HMP will provide risk assessment information such as geospatial hazard footprints, exposure summaries, and damage estimations that can be included in updates to operational and other plans.

A summary of the district's planning mechanisms into which hazard mitigation and this 2026 HMP have been or could be incorporated is provided in the Capabilities and Opportunities Assessment, Section 4.1.

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Section 3. Risk Assessment

The risk assessment measures the potential impacts of hazards on life, property, and the economy within the SBUSD boundaries. The intent of a risk assessment is to identify the qualitative and quantitative vulnerabilities of a community to the greatest extent possible given available data. These assessments increase understanding of hazard impacts and provide the foundation to develop and prioritize mitigation actions. In turn, mitigation actions reduce damage from disasters through increased preparedness and focusing resources on areas of the greatest vulnerability.

This risk assessment section evaluates potential losses from a given hazard event by assessing the vulnerabilities of people, buildings, and critical facilities and infrastructure. It identifies the characteristics and potential consequences of hazards, explores how much of the planning area could be affected by a hazard event, and assesses the impacts on city assets, specifically.

The process used for the risk assessment is described in Section 3 and Appendix A; the approach consists of three main components:

- **Section 1.3, District Profile:** Providing a geographic and demographic overview of the SBUSD as the basis for the assessment, highlighting the populations most vulnerable to hazards in the planning area.
- **Section 3.1, Hazard Identification & Prioritization:** Identifying hazards that pose the most significant threats and prioritizing them based on probability and potential impact on the community.
- **Section 3.2, Hazard Profiles:** Detailing the characteristics and history, frequency and probability, severity and extent, and potential impacts of each hazard, including:
- **Exposure Analysis:** Mapping the populations, assets, and critical facilities and infrastructure exposed to each hazard.
- **Vulnerability Analysis:** Assessing how susceptible different populations, structures, and other assets are to hazard impacts.

The District Profile in Section 1.3 ensures that the needs of underrepresented communities are recognized in developing the mitigation strategy and used in future planning and policymaking to foster more equitable and sustainable environments. This approach not only safeguards the most vulnerable populations but also enhances the overall resilience of the entire community.

3.1 Hazard Identification & Screening

Per FEMA guidance, the first step in developing the risk assessment is to identify a list of natural hazards that pose a significant threat to the district. Hazard selection is a twofold process. First, the HMPT considered and screened a broad set of hazards profiled in local, regional, and statewide hazard planning

documents. A crosswalk of select documents reviewed and the results of screening the relevant hazards for the planning area are outlined in 3.1.1.

Second, the HMPT reviewed the history of hazard events, particularly over the last five years, which impacted the planning area and the potential effects of climate change on the frequency and severity of hazards to inform the prioritization process outlined in Section 3.1.2. The team also took into account the initial results from public and stakeholder engagement on the community's top hazard concerns, which contributed to the HMPT's decision to exclude flood and dam failure hazards from this updated plan (see Section 3.1.2). This comprehensive approach ensures that the risk assessment is thorough and accounts for both established and emerging threats, providing a robust foundation for effective hazard mitigation planning.

Following completion of the screening and prioritization exercises, the HMPT discussed and formed consensus on which hazards would be included and profiled in the 2026 HMP. Based on their evaluation, the HMPT decided to profile seven priority hazards in this 2026 update.

Earthquake
SECTION 3.2.1



Wildfire
SECTION 3.2.2



Flood
SECTION 3.2.3



Slope Failure
SECTION 3.2.4



Extreme Weather
SECTION 3.2.5



Drought
SECTION 3.2.6



Climate Change
SECTION 3.2.7



3.1.1 Potential Hazards

The HMPT reviewed the previous HMP, as well as plans from regional and state entities, to determine the range of hazards with the potential to affect the planning area and surrounding region. Table 3-1 provides a crosswalk of hazards identified in select documents review, including the district's 2009 HMP, the City of Santa Barbara General Plan (Public Safety, Noise and Health Element), the Santa Barabara County MJHMP, and 2023 California State Hazard Mitigation Plan (SHMP).

The crosswalk was used to develop a preliminary hazards list, providing a framework for the HMPT to evaluate which hazards were truly relevant. For example, volcanoes were considered to have no relevance to SBUSD, while earthquake and wildfire were indicated in every hazard document. The preliminary hazards list was then used as the basis for narrowing and prioritizing which hazards should be profiled and analyzed in detail in this 2026 HMP, as discussed in 3.1.2.

Table 3-1: Document Review Crosswalk

Hazards	2009 Santa Barbara Schools District HMP	2022 City of Santa Barbara HMP Annex	2022 County of Santa Barbara HMP	2023 California State Hazard Mitigation Plan
Climate Change				■
Coastal Hazards (Hurricane/Coastal Surge)	■		■	■
Dam Inundation	■	■	■	■
Drought		■	■	■
Earthquake/ Geologic Hazards / Liquification	■	■	■	■
Extreme Heat		■	■	■
Extreme Cold				■
Flood	■	■	■	■
Hailstorm			■	
Hazardous Material Spill		■	■	■
High Winds/ Straight Line Winds			■	
Infestation				■
Landslide /Mudslide	■	■	■	■
Lightning				
Pandemic		■	■	■

Hazards	2009 Santa Barbara Schools District HMP	2022 City of Santa Barbara HMP Annex	2022 County of Santa Barbara HMP	2023 California State Hazard Mitigation Plan
Severe Thunderstorm				
Terrorism/Human Caused Threats		■	■	■
Tornado			■	
Tsunami	■	■	■	■
Volcanic Activity				
Wildfire	■	■	■	■
Winter Storm				

■ denotes a "low priority" hazard

3.1.2 Hazard Prioritization

Hazard prioritization took place early in the process and integrated historical data, future probability and impact potential, local knowledge, and consensus opinions to further evaluate the potential hazards identified through the hazard planning document crosswalk exercise described in Section 3.1.1. As part of this process, the HMPT participated in a prioritization exercise using a risk assessment matrix, which helped determine whether each potential hazard is a low, medium, high, or extreme risk, and thus priority, for the city based on its unique characteristics and the perceptions of the public and stakeholders.

The results of the initial hazard prioritization process, before further refinement, are displayed in the completed risk assessment matrix (Figure 3-2) and in the Planning Process Library (Table 2-5).

Hazards identified as medium to extreme priorities were profiled and thoroughly assessed in Section 3.2, and these hazards were also the focus of the mitigation strategies, with more deference given to those rated extreme and high. Other hazards ranked low or not at all on the matrix were excluded from the 2026 HMP due to comparatively low probability or impact potential. Table 3-4 summarizes all the potential hazards identified in Section 3.1.1 and their priority in this plan.

3.1.2.1 Past Major Hazard Events

An important consideration in identifying and prioritizing hazards is past major hazard events, especially those which have triggered federal or state disaster declarations. The HMPT reviewed and considered past major hazard events in the surrounding region as part of the hazard screening and identification process.

Hazard events occurring outside district boundaries can also directly or indirectly impact the school community. For example, wildfires may occur outside the City of Santa Barbara but could affect watersheds

that drain into the city, resulting in longer-term watershed health impacts. Power supply also could be interrupted due to extraterritorial hazard occurrences.

Most available information on major past hazard events comes from federal or state disaster declarations since these provide funding opportunities when the severity or magnitude of an event surpasses the abilities of the responsible governing body to respond and recover. State funding assistance can be provided when a local jurisdiction's capacity to respond to a disaster is exceeded and federal when the state's response and recovery capacities are also exceeded.

For the purposes of this plan, federal disaster declarations issued by FEMA are the primary mechanism for documenting and evaluating significant hazard events. Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, FEMA may issue either a Major Disaster Declaration or an Emergency Declaration, depending on the severity and scope of the incident. Major Disaster Declarations authorize long-term federal recovery programs, including Public Assistance and Hazard Mitigation Grant Program (HMGP) funding, while Emergency Declarations provide more limited, short-term assistance.

Disaster declarations are based on the type, extent, and severity of damage and the impact on public infrastructure and essential services. In California, a gubernatorial emergency proclamation typically precedes a federal request and authorizes the Governor's Office of Emergency Services (Cal OES) to coordinate state assistance under the California Disaster Assistance Act while supporting the request for federal declaration.

Santa Barabara County has been affected by 43 federal disaster declarations since 1969, some of which were statewide. Figure 3-1 identifies all the federal disaster declarations in the county since 1969 by hazard type, and Table 3-2 identifies these events individually. (FEMA, 2024)

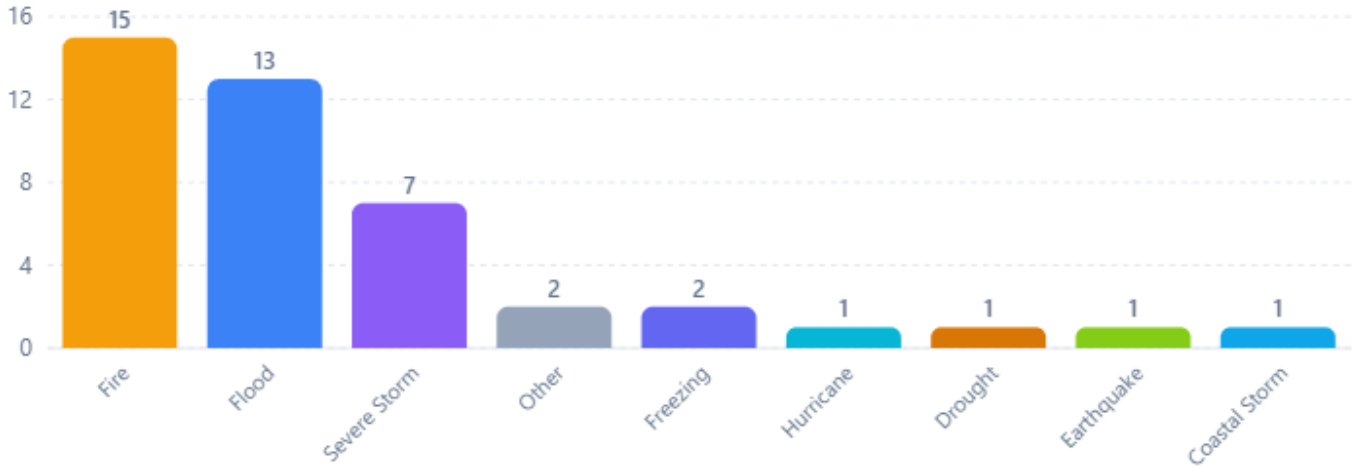


Figure 3-1: Disaster Declarations in Santa Barabara County by Hazard Type Since 1969 (FEMA, 2024)

Table 3-2: Disaster Declarations in Santa Barbara County 1969 to Present (FEMA, 2024)

Title	Hazard Type	Disaster Number	Fiscal Year
Severe Storms & Flooding	Flood	DR-253-CA	1969
Winds, Flooding, Mudslides	Flood	DR-316-CA	1972
Severe Storms, High Tides & Flooding	Flood	DR-364-CA	1973
Drought	Drought	EM-3023-CA	1977
Coastal Storms, Mudslides & Flooding	Flood	DR-547-CA	1978
Severe Storms, Mudslides & Flooding	Flood	DR-615-CA	1980
Coastal Storms, Floods, Slides & Tornadoes	Coastal Storm	DR-677-CA	1983
Severe Storms, High Tides & Flooding	Flood	DR-812-CA	1988
Fires	Fire	DR-872-CA	1990
Severe Freeze	Freezing	DR-894-CA	1991
Severe Winter Storm, Mud & Land Slides, & Flooding	Flood	DR-979-CA	1993
Severe Winter Storms, Flooding Landslides, Mud Flow	Severe Storm	DR-1046-CA	1995
Severe Winter Storms, Flooding, Landslides, Mud Flows	Severe Storm	DR-1044-CA	1995
Severe Winter Storms and Flooding	Severe Storm	DR-1203-CA	1998
Ca-Gaviota Fire-06-05-2004	Fire	FM-2519-CA	2004
Earthquake	Earthquake	DR-1505-CA	2004
Hurricane Katrina Evacuation	Hurricane	EM-3248-CA	2005
Severe Storms, Flooding, Debris Flows, And Mudslides	Severe Storm	DR-1577-CA	2005
Severe Freeze	Freezing	DR-1689-CA	2007
Wildfires, Flooding, Mud Flows, And Debris Flows	Fire	DR-1731-CA	2008
Wildfires	Fire	EM-3287-CA	2008
Wildfires	Fire	EM-3279-CA	2008
Gap Fire	Fire	FM-2780-CA	2008
Jesusita Fire	Fire	FM-2817-CA	2009
Tea Fire	Fire	FM-2790-CA	2009
Wildfires	Fire	DR-1810-CA	2009
Severe Winter Storms, Flooding, And Debris and Mud Flows	Flood	DR-1952-CA	2011
Severe Winter Storms, Flooding, And Mudslides	Flood	DR-4308-CA	2017
Severe Winter Storms, Flooding, And Mudslides	Flood	DR-4305-CA	2017
Holiday Fire	Fire	FM-5252-CA	2018
Thomas Fire	Fire	FM-5224-CA	2018
Wildfires, Flooding, Mudflows, And Debris Flows	Fire	DR-4353-CA	2018
Wildfires	Fire	EM-3396-CA	2018
Severe Winter Storms, Flooding, Landslides, And Mudslides	Severe Storm	DR-4431-CA	2019
Cave Fire	Fire	FM-5303-CA	2020

Title	Hazard Type	Disaster Number	Fiscal Year
COVID-19 Pandemic	Biological	DR-4482-CA	2020
COVID-19	Biological	EM-3428-CA	2020
Alisal Fire	Fire	FM-5419-CA	2022
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, And Mudslides	Severe Storm	DR-4699-CA	2023
Severe Winter Storms, Flooding, Landslides, And Mudslides	Flood	DR-4683-CA	2023
Severe Winter Storms, Flooding, Landslides, And Mudslides	Flood	EM-3592-CA	2023
Severe Winter Storms, Flooding, And Mudslides	Flood	EM-3591-CA	2023
Severe Winter Storms, Tornadoes, Flooding, Landslides, And Mudslides	Severe Storm	DR-4769-CA	2024

Source: FEMA OpenData (FEMA, 2024)

3.1.2.2 Probability & Impact

After the HMPT determined the realm of hazards that could affect the planning area, the team then completed a risk ranking exercise to determine which hazards should be prioritized for assessment in this HMP and, consequently, which hazards should be the focus in the mitigation strategy.

The hazard prioritization process combines historical data, local knowledge, climate projections, and consensus opinions to produce a risk matrix that illustrates whether each profiled hazard is an extreme, high, medium, or low priority for the planning area. Criteria for probability verses impact were used to evaluate hazards and identify those that pose the highest risks. Hazards determined to have a minor or limited impact and unlikely or possible probability were generally categorized as low risk and excluded from the risk assessment while those determined to cause more severe impacts and have a higher probability are profiled in detail in Section 3.2.

The results of the initial hazard prioritization process, before further refinement, are displayed in the completed risk assessment matrix (Figure 3-2) and in the Planning Process Library (Table 2-5).

Impact: What are the anticipated deaths, injuries, damages, or disruptions?

- **Minor:** Very few injuries, if any; only minor property damage and minimal disruption on quality of life; temporary shutdown of critical facilities.
- **Limited:** Minor injuries only; approximately 10% to 25% of property in disaster footprint damaged or destroyed, and complete shutdown of some critical facilities for more than one day.
- **Critical:** Multiple deaths and injuries possible; between 25% and 50% of property in disaster footprint is damaged or destroyed, and complete shutdown of critical facilities for more than one week.

- **Catastrophic:** High number of deaths and injuries possible; more than 50% of property in affected area damaged or destroyed, and complete shutdown of critical facilities for a month or more.

Probability: What is the likelihood of an event?

- **Unlikely:** Less than 1% annual probability, or might occur sometime in your lifetime.
- **Possible:** Between 1% and 10% annual probability, or likely to occur sometime in your lifetime.
- **Likely:** Between 10% and 100% annual probability, or will occur several times in your lifetime.
- **Highly Likely:** 100% annual probability, or likely to occur every year in your lifetime.

Secondary & Compounding Hazard Events

This HMP examines the vulnerabilities of hazard events individually within the planning area. However, it is recognized that hazards often occur in combination, leading to compounded effects. For example, a severe rain event following a wildfire can cause debris flows.

This plan discusses these multiple hazard risks within the hazard profiles by highlighting potential secondary hazards that could be triggered by initial events. The plan also considers the implications of pairing hazard events with the need for emergency evacuation or response, particularly in light of experiences during the COVID-19 pandemic. This includes local governments actively considering response and mitigation strategies that address the impacts of multiple-hazard events, such as a pandemic occurring alongside other hazards like earthquake, extreme weather, or wildfires.

By understanding the interplay among different hazards and preparing for compounded events, the HMP aims to enhance the resilience and preparedness of the planning area against a wide range of potential disaster scenarios.

Climate Change Impacts

Climate change is a global phenomenon that can impact many aspects of society including public health, natural and managed resources, critical facilities, buildings, infrastructure, and services. Projected changes to the climate are dependent on location. In California, the University of California Berkeley Geospatial Innovation Facility developed a platform called Cal-Adapt funded by the California Energy Commission (CEC). This platform provides tools and data on climate change across the state, including areas surrounding Santa Barbara County. Results in the tools are available from global scale models that have been localized (downscaled) to 3.7-mile by 3.7-mile grids.

California is already experiencing significant impacts from climate change, including prolonged drought, a lengthened wildfire season, increased coastal flooding and erosion, and widespread tree mortality. The state has observed rising average temperatures, more extreme heat days, fewer cold nights, a longer growing season, and shifts in the water cycle, with less winter precipitation falling as snow. In addition, summertime fog has declined by approximately 33%, and both snowmelt and rainwater runoff are occurring earlier in the year (Cal OES, 2018).

Average annual temperatures across most of California have already increased by more than 1°F, with some areas experiencing rises of over 2°F when comparing the 1901 to 1960 average to that of 1986 to 2016. Daily maximum temperatures—a key indicator of extreme heat—are projected to increase by 4.4°F to 5.8°F by 2050 and by 5.6°F to 8.8°F by 2100. Heat waves that impact public health, known as heat-health events, are also expected to intensify across the state. By 2050, these events are projected to last up to two weeks longer in the Central Valley and occur four to ten times more often in the Northern Sierra region (California Natural Resources Agency, 2022).

Long-term trends indicate a 12% to 20% decline in fog across California from 1900 through projections to 2070. Climate experts suggest that warming temperatures reduce the ability of air masses to cool enough to produce fog, which plays a critical role in supporting California's ecosystems (Grantham, Teodore; University of California, Berkeley, 2018).

Like California, the District is likely to experience climate change impacts in various forms, including increasing frequency and severity of hazard events which offer a tangible glimpse of future conditions. Existing conditions combined with predictive modeling indicate that the impacts of climate change will continue to be significant and will increase over time impacting all aspects of the local environment, built and natural. Recent events, including the COVID-19 pandemic, reveal another clear truth: the impacts of climate change will disproportionately be experienced by the most vulnerable and marginalized populations.

Table 3-3 summarizes these projected climate change impacts on relevant priority hazards.

Table 3-3: Climate Change Impacts on Hazards

Hazard	Summary of Impacts
Slope Failure (Section 3.2.4)	Increased susceptibility of landslides as precipitation variability increases and wildfires increase in frequency, area, and severity.
Wildfire (Section 3.2.2)	Increased probability of wildfire and extreme fire behavior from drought and variability in precipitation and seasonal wind. Fire season extended to year-round. Increases in wildfires also contribute to worsening air quality.
Drought (Section 3.2.6)	More frequent and severe periods of drought. Precipitation will arrive in more intense storms, increasing runoff and reducing the amount of water recharging local aquifers, further exacerbating the impacts of drought on water supply. Increases in longer periods of drought also contribute to worsening air quality.
Extreme Weather (Section 3.2.5)	Increased probability of intense rainstorms, including atmospheric river events, causing more erosion, slope failures, and localized urban flooding in low-lying areas. More variability in seasonal high winds, especially Santa Anas, contributing to increased wildfire risk.

Risk Assessment Matrix Definitions

PROBABILITY RATING

The likelihood of a hazard event occurring within a time period?

PROBABILITY

- **Highly Likely** - **Highly likely** - 100% annual probability. Or Likely to occur every year in your lifetime.
- **Likely** - **Likely** - between 10 & 100% annual probability. Or will occur several times in your lifetime.
- **Possible** - **Possible** - between 1 & 10% annual probability. Or Likely to occur some time in your lifetime.
- **Unlikely** - **Unlikely** - less than 1% annual probability. Or unlikely but possible to occur in your lifetime.

IMPACT RATING

In terms of injuries, damage, or death, would you anticipate impacts to be minor, limited, critical, or catastrophic when a significant hazard event occurs? The impact could be in terms of one hazard event (flooding from a culvert failure) or a large-scale event (multiple rivers flooding) in the same jurisdictional boundary.

IMPACT

Minor	Limited	Critical	Catastrophic

Minor - very few injuries, if any. Only minor property damage & minimal disruption on quality of life. Temporary shutdown of critical facilities.

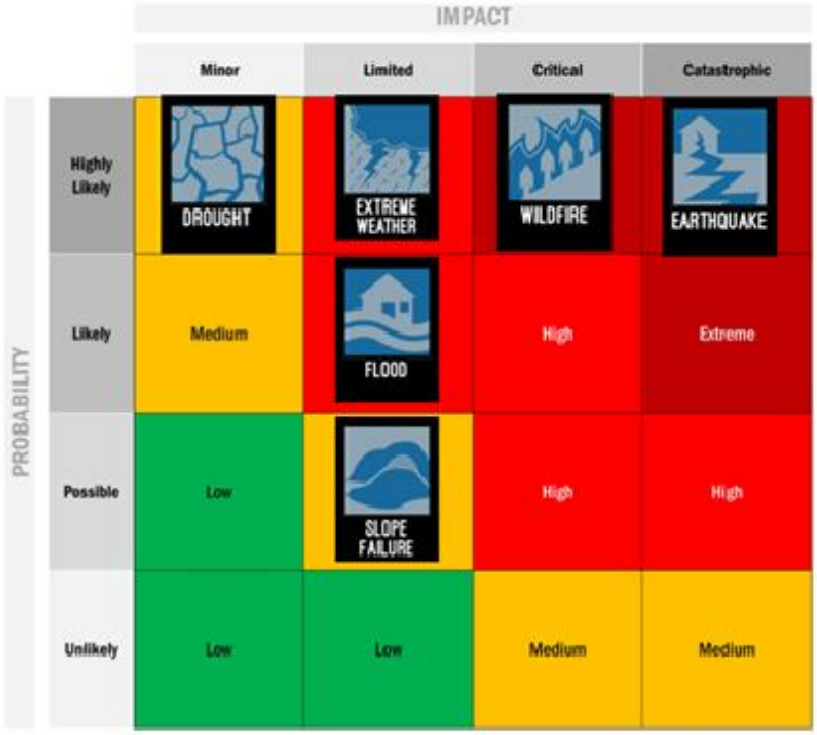
Limited - minor injuries only. Approx. 10% or less of property in disaster footprint damaged or destroyed. Complete shutdown of critical facilities for more than one day.

Critical - multiple deaths/injuries possible. Between 25% and 50% of property in disaster footprint is damaged or destroyed. Complete shutdown of critical facilities for more than one week.

Catastrophic - high number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for 30 days or more.

To concentrate resources, the jurisdictional planning team will focus on "High" and "Extreme" risk hazards. These hazards have the higher probability and greater impact as it relates to the jurisdictions planning area.

Hazard definitions are included in this plan. Some hazards are discussed as subset hazards. If a hazard is not present on the risk matrix or are grey in color, the jurisdictional planning team felt the hazard had a minimal footprint within their planning area and was not ranked.



Hazard Information / Legend:

CLIMATE CHANGE

Climate Change impacts will be addressed in each hazard section within the 2020 plan update and as a stand alone section.
Climate change may change the frequency, duration and intensity of hazards listed above.

Figure 3-2: Hazard Prioritization Risk Matrix

3.1.3 Priority Hazards

The final results of the hazard screening and prioritization exercises completed by the HMPT are identified in Table 3-4, which provides additional details about why the priority hazards and subhazards were chosen and why other hazards were not prioritized. However, it should be noted that many hazards not prioritized for profiling are briefly discussed as secondary or compounding hazards; subhazards that were profiled and included are listed specifically.

Table 3-4: Hazard Priority Summary

Hazard	Priority	Explanation
Earthquake / Liquefaction	**Extreme**	Profiled in Section 3.2.1, including Liquefaction
Wildfire	**Extreme**	Profiled in Section 3.2.2
Flood	**High**	Profiled in Section 3.2.3 and discussed as a compounding hazard in relevant profiles
Extreme Weather	**High**	Profiled in Section 3.2.5, specifically Heavy Rain and High Wind
Slope Failure	**Medium**	Profiled in Section 3.2.4 as Slope Failure
Drought	**Medium**	Profiled in Section 3.2.6
Agricultural Pests	-	Not a priority due to low impact potential
Avalanche	-	Not a priority due to low probability
Coastal	-	Not a priority due to no exposure
Dam Failure	-	Not a priority due to low probability and impact
Extreme Cold	-	Not a priority due to low probability
Extreme Heat	-	Not a priority due to low probability and impact, due to coastal conditions.
Human-Caused	-	Not a priority due to being addressed in other plans
Insects	-	Not a priority due to low impact potential
Levee Failure	-	Not a priority due to low probability and impact
Pandemic Disease	-	Not a priority due to being addressed in other plans
Sea Level Rise	-	Not a priority due to no exposure
Soil	-	Not a priority due to low impact potential
Subsidence	-	Not a priority due to low impact potential
Tornado	-	Not a priority due to low probability
Tsunami / Seiche Wave	-	Not a priority due to no exposure
Volcano	-	Not a priority due to no exposure

3.2 Vulnerability Assessment

The vulnerabilities assessment provides an explicit representation of what a community stands to lose in a disaster. This is useful for District Staff and other decision makers who need to balance the costs of hazard mitigation against the potential harm to students and staff and damage to property. It provides comparable measurements of community natural hazard exposure[1] and assists in determining where to first focus resources for hazard mitigation.

Through a hazard exposure and loss estimation analysis, quantitative data is developed to understand assets at risk to hazards. Qualitative data, with narrative information and descriptions of how each prevalent hazard could affect the District populations, buildings and other hard assets, also is developed and presented for hazards without measurable data. The hazard exposure and loss estimation analysis was developed with best available data and follows methodology described in the FEMA publication, *Understanding Your Risks—Identifying Hazards and Estimating Losses*.[2]

There are many intangible losses that could result from a natural hazard event, such as losses of historic or cultural integrity or damage to the environment, that are difficult to quantify. Other costs, including response and recovery costs, are often hard to estimate in large scale hazard events. For that reason, response and recovery costs are not addressed in this document.

[1] Exposure encompasses all elements, processes, and subjects that might be affected by a hazardous event. Consequently, exposure is the presence of social, economic, environmental or cultural assets in areas that may be impacted by a hazard.
[2] Available at https://www.fema.gov/media-library/assets/documents/4241.

3.2.1 Earthquake Hazard Profile



An earthquake is both the sudden slip on an active fault and the resulting shaking and radiated seismic energy caused by the slip (USGS, 2009). Sometimes the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free causing the ground to shake. Most earthquakes occur at the boundaries where the plates meet; however, some occur in the middle of plates.

Ground shaking from earthquakes can collapse buildings and bridges; disrupt gas, electric, and phone service; and sometimes trigger landslides, avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis). Buildings with foundations resting on unconsolidated landfills and other unstable soil, and trailers and homes not tied to their foundations are at risk because they can be shaken off their mountings during an earthquake. When an earthquake occurs in a populated area, it may cause deaths and injuries and extensive property damage. Earthquakes strike suddenly and without warning. Earthquakes can occur at any time of the year and at any time of the day or night. On a yearly basis, 70 to 75 damaging earthquakes occur throughout the world. Estimates of losses from a future earthquake in the United States approach $200 billion. (Center, 2012)

Earthquakes are a significant concern for the district. Unlike Southern California communities influenced primarily by the San Andreas system, the district is located within a complex and active coastal fault environment associated with the Santa Ynez Mountains and Transverse Ranges. Several mapped and potentially active fault systems traverse or lie adjacent to district facilities. These include:

- Mission Ridge Fault Zone
- More Ranch Fault (North and South strands)
- Mesa / La Mesa Fault
- Lavigia Fault
- Lagoon Fault (localized coastal faulting)

The Mission Ridge Fault Zone trends east-west along the foothills north of downtown and has contributed to uplift forming the Riviera and Mission Canyon areas. The Mesa / La Mesa Fault extends through portions of the Westside and Mesa areas (City of Santa Barbara, 2013). The More Ranch Fault system lies to the west near Goleta and UCSB, and additional local faults are mapped throughout the urbanized area of Santa Barabara.

3.2.1.1 Earthquake Classifications

Earthquakes are typically classified in one of two ways: By the amount of energy released, measured as **magnitude**, or by the impact on people and structures, measured as **intensity**.

3.2.1.1.1 Magnitude

The most common method for measuring earthquakes is magnitude, which measures the strength of earthquakes. Although the Richter scale is the most publicly-known measurement for magnitude, the majority of scientists currently use either the moment magnitude (Mw) Scale or Modified Mercalli Intensity (MMI) Scale. The effects of an earthquake in a particular location are measured by intensity. Earthquake intensity decreases with increasing distance from the epicenter of the earthquake.

The magnitude of an earthquake is related to the total area of the fault that ruptured, as well as the amount of offset (displacement) across the fault. As shown in Table 3-5, there are seven earthquake magnitude classes, ranging from great to micro. A magnitude class of great can cause tremendous damage to infrastructure, compared to a micro class, which results in minor damage to infrastructure.

Table 3-5: Moment Magnitude (Mw) Scale

Earthquake Magnitude Classes		
Magnitude Class	**Magnitude Range (M = Magnitude)**	**Description**
Great	M > 8	Tremendous damage
Major	7 <= M < 7.9	Widespread heavy damage
Strong	6 <= M < 6.9	Severe damage
Moderate	5 <= M < 5.9	Considerable damage
Light	4 <= M < 4.9	Moderate damage
Minor	3 <= M < 3.9	Rarely causes damage.
Micro	M < 3	Minor damage

3.2.1.1.2 Intensity

The Modified Mercalli Intensity value assigned to a specific site after an earthquake has a more meaningful measure of severity to the non-scientist than the magnitude because intensity refers to the effects actually experienced at that place. The **lower** numbers of the intensity scale generally deal with the manner in which the earthquake is felt by people. The **higher** numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above. Table 3-7 is an abbreviated description of the levels of Modified Mercalli intensity.

3.2.1.2 Ground Motion

Earthquake hazard assessment is also based on expected ground motion. This involves determining the annual probability that certain ground motion accelerations will be exceeded, then summing the annual probabilities over the time period of interest. The most commonly mapped ground motion parameters are the horizontal and vertical peak ground accelerations (PGA) for a given soil or rock type. Instruments called

accelerographs record levels of ground motion due to earthquakes at stations throughout a region. These readings are recorded by state and federal agencies that monitor and predict seismic activity.

Maps of PGA values form the basis of seismic zone maps that are included in building codes such as the International Building Code. Building codes that include seismic provisions specify the horizontal force due to lateral acceleration that a building should be able to withstand during an earthquake. PGA values are directly related to these lateral forces that could damage "short period structures" (e.g. single-family dwellings). Longer period response components determine the lateral forces that damage larger structures with longer natural periods (apartment buildings, factories, high-rises, bridges). Table 3-6 lists damage potential and perceived shaking by PGA factors, compared to the Mercalli scale.

Table 3-6: Mercalli Scale and Peak Ground Acceleration (PGA)

	Potential Structure Damage			
Modified Mercalli Scale	Perceived Shaking	Resistant Buildings	Vulnerable Buildings	Estimated PGA (%g)
I	Not Felt	None	None	<0.17%
II-III	Weak	None	None	0.17% - 1.4%
IV	Light	None	None	1.4% - 3.9%
V	Moderate	Very Light	Light	3.9% - 9.2%
VI	Strong	Light	Moderate	9.2% - 18%
VII	Very Strong	Moderate	Moderate/Heavy	18% - 34%
VIII	Severe	Moderate/Heavy	Heavy	34% - 65%
IX	Violent	Heavy	Very Heavy	65% - 124%
X - XII	Extreme	Very Heavy	Very Heavy	>124%

Note: PGA measured in percent of g, where g is the acceleration of gravity. Sources: USGS, 2008; USGS, 2010

Table 3-7: Modified Mercalli intensity level descriptions

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Abridged from The Severity of an Earthquake, USGS General Interest Publication 1989-288-913

3.2.1.3 Effect of Soil Types

The impact of an earthquake on structures and infrastructure is largely a function of ground shaking, distance from the source of the quake, and liquefaction, a secondary effect of an earthquake in which soils lose their shear strength and flow or behave as liquid, thereby damaging structures that derive their support from the soil. Liquefaction generally occurs in soft, unconsolidated sedimentary soils. A program called the National Earthquake Hazard Reduction Program (NEHRP) creates maps based on soil characteristics to help identify locations subject to liquefaction. Table 3-8 summarizes NEHRP soil classifications. NEHRP Soils B and C typically can sustain ground shaking without much effect, dependent on the earthquake magnitude. The areas that are commonly most affected by ground shaking have NEHRP Soils D, E and F. In general, these areas are also most susceptible to liquefaction.

Table 3-8: NEHRP Soil Classification System

NEHRP Soil Type	Description	Mean Shear Velocity to 30 m (m/s)
A	Hard Rock	1,500
B	Firm to Hard Rock	760-1,500
C	Dense Soil/Soft Rock	360-760
D	Stiff Soil	180-360
E	Soft Clays	< 180
F	Special Study Soils (liquefiable soils, sensitive clays, organic soils, soft clays >36 m thick)	

3.2.1.4 Regulatory Environment

Building codes provide one of the best methods of addressing earthquake hazards. When properly designed and constructed according to code, the average building can withstand many of the impacts of natural hazards. There are multiple State earthquake hazard regulations that control school site development, building construction and other building related operations. This section provides explanation of major codes that enhance building safety and provides mitigation of earthquake related risk related to the District.

Field Act

The Field Act of California was enacted on April 10, 1933, one month after the Long Beach Earthquake in which many schools were destroyed or suffered major damage. Public school construction has been governed by the Field Act ever since and enforced by the Division of the State Architect (DSA). In any community, public schools constructed under the Field Act after 1978 are likely to be among the safest buildings in which to experience a major earthquake. The Field Act requires:

- School building construction plans are prepared by qualified California licensed structural engineers and architects;

- Designs and plans are checked by the DSA for compliance with the Field Act before a contract for construction can be awarded;
- Qualified inspectors, independent of the contractors and hired by the school districts, continuously inspect construction and verify full compliance with plans;
- The architects responsible and/or structural engineers observe the construction periodically and prepare changes to plans (if needed) subject to approval by DSA; and
- Architects, engineers, inspectors and contractors file reports, under penalty of perjury, to verify compliance of the construction with the approved plans emphasizing the importance of testing and inspections to achieve seismically safe construction.

The Field Act has been updated often, generally to incorporate lessons learned from major earthquakes in California, especially in the 1971 San Fernando earthquake. In the late 1960s, regulations were put in place to have pre-Field Act (1933) buildings retrofitted, removed from school use, or demolished. The Field Act now prohibits use of unreinforced masonry in school buildings. The Field Act regulations in place since 1978 are considered adequate for public school buildings in most cases.

Private schools are covered under the Private Schools Building Act of 1986, not the Field Act, with the legislative intent that children attending private schools be afforded life safety protection similar to that of children attending public schools.

California Code of Regulations

California also regulates earthquake preparedness in schools through several different regulatory provisions implementing the Field Act. First, "a school site shall not contain an active earthquake fault or fault trace." (Cal. Code Regs tit. 5 § 14010). If a school district is planning to construct any school building "within the boundaries of any special study zones or within an area designated geologically hazardous in the safety element of the local general plan," then an investigation of the public interest of such a site much include geological or soil engineering studies to "provide an assessment of the nature of the site and potential for earthquake or other geologic hazard damage," as well and information on "population, transportation, water supply, waste disposal facilities, utilities, traffic hazards, surface drainage conditions, and other factors."(Cal. Code Regs tit. 5 § 17212). The assessment must highlight any instance where the "geological and site characteristics are such that the construction effort required to make the school building safe for occupancy is economically unfeasible." (Id.) These requirements also apply to any reconstruction or alteration of a school building where estimated costs exceed $25,000. (Cal. Code Regs tit. 5 § 17212.5).

Building Codes

Numerous building and zoning codes exist at the state and local level to decrease the impact of an earthquake event and resulting liquefaction on residents and infrastructure. Construction and rehabilitation of California public K–12 schools, community colleges, essential services buildings, and various other state-owned and leased facilities is overseen by the Division of the State Architect (DSA) to ensure they comply with current code requirements initiated by the State.

Before the Field Act, school buildings were usually constructed according to the codes used by local jurisdictions. The first Field Act seismic provisions for public schools built upon the seismic requirements suggested by the 1927 Uniform Building Code (UBC) and required school buildings to be designed for lateral forces of two to ten percent of the building weight with most school buildings falling in the six to ten percent range. Table 3-10 provides timeline of milestone events, building code changes and legislation that have affected the design of buildings in California and Table 3-9 is a similar timeline specific to nonstructural and architectural requirements.

Structures designed based on the CBC and the UBC include performance objectives for public school buildings that are slightly higher than for buildings built under the UBC, particularly with regard to nonstructural damage control. The Field Act has stricter structural code requirements and guidelines for design professional, plan approval processes, construction inspection, and reporting. See Table 3-9 for details.

Table 3-9: Field Act vs. UBC Administrative Requirements

FIELD ACT TITLE 24, CCR	UNIFORM BUILDING CODE (Non-Field Act Buildings)
Design Professionals	
School building construction plans must be prepared by a California Registered Structural Engineer or a licensed Architect.	A licensed Civil Engineer can be responsible for design and construction
Plan Approval Process	
The designs are reviewed and checked by the Department of General Services (an independent State agency) and design errors or omissions must be corrected or included on the plans before a contract for construction can be issued.	Detailed requirements are not provided.
Inspection of Construction	
An independent inspector (DSA certified) is required to provide continuous inspection of the construction to verify that the construction is in conformance with the approved plans.	Periodic special inspection by the local jurisdiction, at certain construction milestones, is specified (e.g., before concrete placement and covering of structural framing).
Changes to Plans During Construction	
The responsible architects and engineers are required to periodically observe the construction and prepare changes to plans, if needed, to the DSA for review and approval.	Changes to plans are generally not subject to review.
Reporting	
All parties concerned (architects, engineers, inspectors, testing laboratories and contractors) must file reports, under penalty of perjury, to verify compliance with approved plans.	No similar reports are required.

Structural Elements

Since 1933, the UBC (and subsequently the CBC) has gone through many revisions based on the growing body of knowledge in the field of earthquake engineering. A timeline of code changes and corresponding earthquakes can be found in Table 3-10. From 1933 to 1976, the design earthquake forces on school buildings in California were similar to those of other buildings and varied from 2 to 13% of the building weight, depending on the type of structural system and soil strength. Cities in high seismicity areas, such as San Francisco and Los Angeles, often adopted more detailed guidelines than the UBC based on growing knowledge in the field of structural dynamics and earthquake engineering, including for public schools.

Following the 1971 San Fernando Earthquake, which caused extensive damage to numerous buildings in the Los Angeles area, major changes appeared in the 1976 UBC. Those changes included increased design force levels (particularly for concrete and masonry structures), requirements to limit the horizontal swaying of the building when subjected to earthquake shaking, and revisions to the map defining earthquake hazard zones. In addition, an occupancy factor was added that increased the seismic design force for "essential" facilities, such as hospitals and fire stations, and for buildings where groups of more than 300 persons assembled. Most of the changes made to the 1976 UBC were adopted, effective July 1, 1978, by the Building Standards Commission and were included in the CBC for public schools.

Table 3-10: Milestone Seismic Events and Building Code Updates

Year	Code/Event/Legislation	Notes
1927	**UBC**	Lateral force requirements were not required.
1933 Long Beach Earthquake		
1933	**Field Act**	In addition to lateral force requirements, administrative regulations on qualified design professionals, peer review of plans and specifications, and construction, observation and verification were added for public schools and are still in place.
1933	**Riley Act**	Lateral force requirements (between 2%-10%) applied to all non-Field Act buildings in California.
1935	**UBC**	Seismic zones 1-3 defined, Provisions or limited nonstructural elements prescribed.
1939	**Garrison Act**	Pre-1933 public school buildings reported as being unsafe by a structural engineer must be upgraded. Time limit for evaluation was not specified.
1952 Kern County Earthquake		
1952	**UBC**	Until this point most seismic codes were developed by cities such as Los Angeles and San Francisco via modifications to the model UBC codes. Lateral loads for multistory buildings vary inversely with the height of the building. Deflection limits established.

Year	Code/Event/Legislation	Notes
1959	SEAOC "Blue Book"	Publication of recommended lateral force requirements by the Structural Engineers Association of California (SEAOC). Represented efforts of the SEAOC Seismology Committee to develop a uniform seismic code.
1961	UBC	First separate section to address nonstructural elements.
1967	Greene Act (I)	All public-school buildings not constructed under the Field Act to be examined before January 1, 1970.
1967	SEAOC "Blue Book"	Commentary described building three-tiered performance expectations. Commentary also discussed issues such as damping, deformation, and inelastic action.
1967 - 1968	UBC CBC	Adopted 1966 SEAOC Blue Book recommendations.
1968	Greene Act (II)	All school buildings considered unsafe to be abandoned or retrofitted by June 30, 1975. This deadline was extended to June 30, 1977.
1970	UBC	Seismic zone factor (Z) was introduced.
1971 San Fernando Earthquake		
1972	Hospital Act	Administrative regulations almost identical to the Field Act were adopted for hospitals.
1972	Alquist-Priolo Special Studies Zone Act	Required geologic studies for fault rupture hazards.
1976	UBC	Significant increase in base shear for short and mid-height buildings. Site soil factor (S) and occupancy importance factor (I) were introduced. (I) was similar for Field Act and non-Field Act.
1978	ATC 3-06 by the Applied Technology Council	ATC 3-06 developed seismic design provisions as part of a cooperative program in building practices for disaster mitigation between NSF and the National Bureau of Standards. Several new concepts that differed from existing provisions were found in the ATC 3-06 provisions.
1979	UBC	Significant revision to seismic design code for nonstructural elements.
1986	Private Schools Safety Act	Intended that private school students be afforded similar life safety protection to that of public-school students.
1987	Hughes Earthquake Safety Act	Purpose was to ensure that no public-school pupils were housed in unsafe school buildings after September 1, 1990. Required that leased portable facilities that were previously exempt from the Field Act comply to Field Act requirements or be removed.
1988 1989	UBC / CBC	Base shear equation changed to that used in ATC3-06, effective design force levels were not changed. Inelastic behavior and ductility considered in response modification were added.
1989 Loma Prieta Earthquake		
1992	Charter Schools Act	Authorized the establishment of charter schools. Seismic safety regulations unclear.
1994 Northridge Earthquake		
1994 - 1995	UBC / CBC	UBC Seismic Importance factor still 1.0 for non- Field Act non-essential school buildings.

Year	Code/Event/Legislation	Notes
1995	SEAOC Framework for Performance Based Engineering (Vision 2000 Report)	Set framework and guidelines for Performance Based Engineering (PBE) and published in Appendix B of 1996 SEAOC "Blue Book".
1996 1997	NEHRP (FEMA 273), (ATC-40)	First guidelines to use deformation-based analysis procedures and Performance Based Engineering. NEHRP Guidelines for the Seismic Rehabilitation of Buildings (FEMA 273), Seismic Evaluation and Retrofit of Concrete Buildings (ATC-40).
1997 - 1998	UBC / CBC	Move from allowable stress to strength design philosophy. Seismic Importance factor for Field Act buildings still differ (1.0 vs. 1.15) Near fault effects added. Major revision to requirements for nonstructural elements.
1999	SB 1122 regarding the securing of building contents	Guidelines for securing building contents for public schools were published in 2003, after commissioning development of such guidelines in this 1999 bill.
2002	Seismic Safety Inventory of California Public Schools (AB 300)	Inventory of pre-1978 non woodframe Field Act buildings screened for seismic safety vulnerability.
2006 - 2007	UBC / CBC	"I" rating same for Field Act and non-Field Act buildings (I = 1.25). Changes to base shear equation based on ASCE 7-05.

Non-Structural Elements

Building code requirements originally focused on the design of the structural elements of buildings and these requirements have improved over time. Similarly, engineers soon realized damage to nonstructural elements posed a significant safety risk and begun developing and improving engineering guidelines to secure nonstructural elements.

In 1961, the first detailed engineering guidelines for nonstructural elements were included in the UBC. After the Northridge Earthquake, the 1997 UBC included significant revision to nonstructural guidelines. The design force for securing nonstructural and architectural elements to the building is similar to that illustrated in Table 3-10, for the seismic force to the entire building. The design force for securing a nonstructural element is based on applying a force to the element that is equal to a percentage of the weight of the element.

3.2.1.5 Past Events

California earthquakes result from the movement of the Pacific and North American tectonic plates. Along the central and southern California coast, tectonic deformation is expressed through a complex system of onshore and offshore faults, including the Santa Ynez, Mission Ridge–Arroyo Parida–Santa Ana, Mesa, More Ranch, and Hosgri fault systems.

Unlike areas farther south where the San Andreas Fault dominates seismic hazard, the Santa Barbara region is influenced by both regional plate boundary motion and localized crustal compression associated with the "Big Bend" of the San Andreas Fault. This compression has uplifted the Transverse Ranges and created numerous active faults capable of generating moderate to large earthquakes.

Santa Barbara County has experienced multiple damaging earthquakes historically, including the 1925 Santa Barbara earthquake (M6.3), which caused significant structural damage in the downtown area. Offshore and coastal faults remain capable of producing strong ground shaking throughout the SBUSD service area.

Although thousands of small earthquakes occur in California each year, most are not felt and do not cause damage. However, earthquakes greater than magnitude 4.0 occur periodically within or near Santa Barbara County. Since 2000, several earthquakes of magnitude 4.0 or greater have been recorded in or near the region, including events near Isla Vista, Carpinteria, Ojai, and Maricopa.

The most recent earthquake of magnitude 4.0 or greater occurred in November 2023, approximately 7 kilometers east-southeast of Ojai (M4.0). No significant damage or injuries were reported in Santa Barbara County. Table 3-11 lists earthquakes of magnitude 4.0 or greater occurring in or near Santa Barbara County since 2000.

Table 3-11: Earthquakes 4.0 Magnitude or Higher in or near Santa Barbara County Since 2000

Date	Location	Magnitude
11/03/2023	7 km ESE of Ojai	4.0
8/20/2023	7 km SE of Ojai	5.1
5/17/2017	12 km W of Isla Vista	4.1
3/12/2016	17 km ENE of Ojai	4.1
5/29/2013	6 km W of Isla Vista	4.8
5/08/2010	13 km ESE of Maricopa	4.3
5/08/2009	6 km E of Ojai	4.2
5/06/2005	20 km E of Maricopa	4.1
4/16/2005	20 km ESE of Maricopa	4.6
7/24/2004	8 km ESE of Carpinteria	4.3
5/09/2004	15 km W of Isla Vista	4.4

Source: USGS

3.2.1.6 Location/ Geographic Extents

The district is located within a tectonically active coastal region of Southern California influenced by multiple mapped Quaternary-age fault systems. As illustrated in Figure 3-3, the USGS Quaternary Faults map for the District area, numerous faults traverse or lie immediately adjacent to the District boundary, including the Santa Ynez River Fault Zone to the north, the Santa Ynez Fault (eastern section), the Glen Annie Fault near Goleta, the San Jose Fault through the Santa Barbara urban area, and offshore structures such as the Red Mountain Fault Zone.

Although active and potentially active faults are mapped within and surrounding the District, no Alquist-Priolo Earthquake Fault Zones (AP Zones) are currently designated within the City of Santa Barbara or the greater SBUSD area. AP Zones are regulatory areas established by the California State Geologist where sufficiently well-defined active faults with evidence of Holocene movement require site-specific investigations prior to most types of development. The absence of mapped AP Zones indicates that surface fault rupture hazards have not been formally zoned for regulatory setback purposes within the District.

However, the mapped USGS Quaternary faults demonstrate that seismic sources are distributed throughout the broader Santa Barbara and Goleta coastal plain and foothill areas. Several District facilities are located in proximity to these fault traces, particularly along the coastal corridor and foothill transition zones. While the probability of direct surface rupture at specific campus sites is considered low in the absence of AP Zones, these faults remain capable of generating moderate to strong ground shaking.

The geographic extent of earthquake hazard exposure within the District therefore includes:

- Areas influenced by mapped Quaternary[3] faults within and adjacent to the district boundary;
- Foothill and hillside areas where faulting intersects steeper terrain;
- Coastal and alluvial areas where unconsolidated sediments or artificial fill may amplify seismic shaking; and
- The broader regional setting influenced by larger fault systems, including the Santa Ynez Fault system and the San Andreas Fault located approximately 40 miles north of Santa Barbara.

As shown on the accompanying map, earthquake hazard exposure within SBUSD is regionally distributed rather than confined to a single rupture corridor. Consequently, the primary seismic risk to District facilities is associated with **ground shaking and secondary geologic effects**—such as liquefaction, lateral spreading, and slope instability—rather than mapped surface fault rupture zones.

[3] Quaternary faults are those active faults that have been recognized at the surface and which have evidence of movement in the past 1.6 million years - the duration of the Quaternary Period.

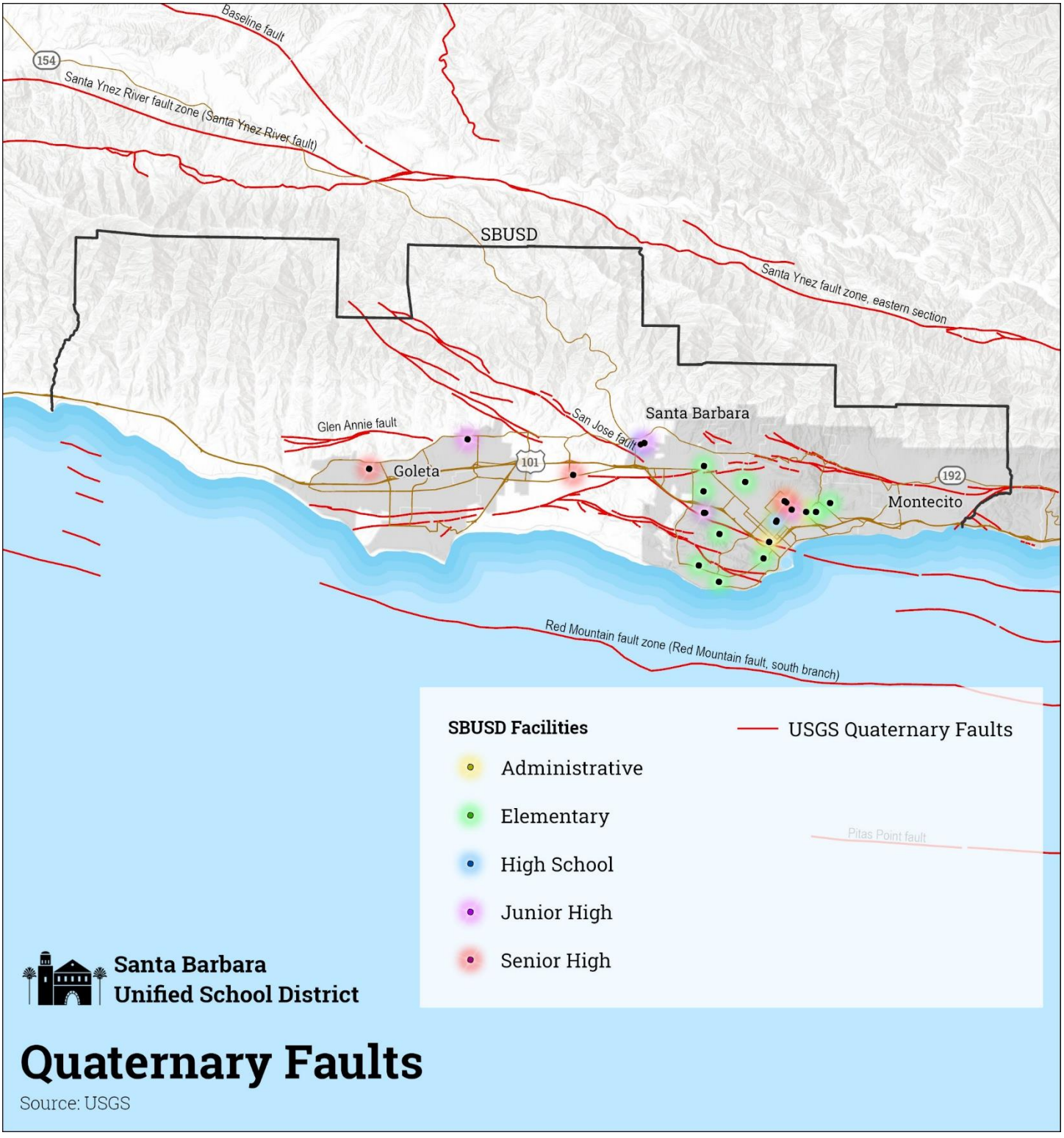


Figure 3-3: Earthquake Faults near SBUSD

3.2.1.7 Frequency/ Probability of Future Events

According to the California State Hazard Mitigation Plan, earthquakes large enough to cause moderate damage to structures—those of Magnitude 5.5 or larger—occur three to four times a year statewide. Strong earthquakes of Magnitude 6 to 6.9 strike on an average of once every two to three years. Major earthquakes (Magnitude 7 to 7.9) occur in California about once every 10 years.

Probability of earthquake events is based on the approximate location of earthquake faults within and outside the region. The Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3)[4] is a comprehensive model of earthquake occurrence for California. It represents the best available science for authoritative estimates of the magnitude, location, and likelihood of potentially damaging earthquakes in California.

According to UCERF3 probability maps, shown in Figure 3-4, the San Andreas fault has a greater than 19% chance of an earthquake of 6.7 magnitude or greater in the next 30 years, while the off shore Red Mountain Fault has a approx. 8% chance respectively.

While earthquake prediction science is not exact, the USGS, Cal Tech, the California Geological Survey, and universities share research to make analysis better. Continued earthquake mapping efforts have been made in California in the past two decades, rising public awareness as a result. Despite fault mapping progress, most California communities remain unprepared because there is a general lack of understanding regarding earthquake hazards among the common public.

[4] UCERF3 was developed by the 2014 Working Group on California Earthquake Probabilities (WGCEP), a multi-disciplinary collaboration of leading experts in seismology, geology, geodesy, paleoseismology, earthquake physics, and earthquake engineering. The development of UCERF3 involved numerous public meetings and included formal evaluations by five separate review panels. The study was led by the U.S. Geological Survey, the Southern California Earthquake Center, and the California Geological Survey, with partial financial support from the California Earthquake Authority, which is the largest provider of homeowner earthquake insurance in California.

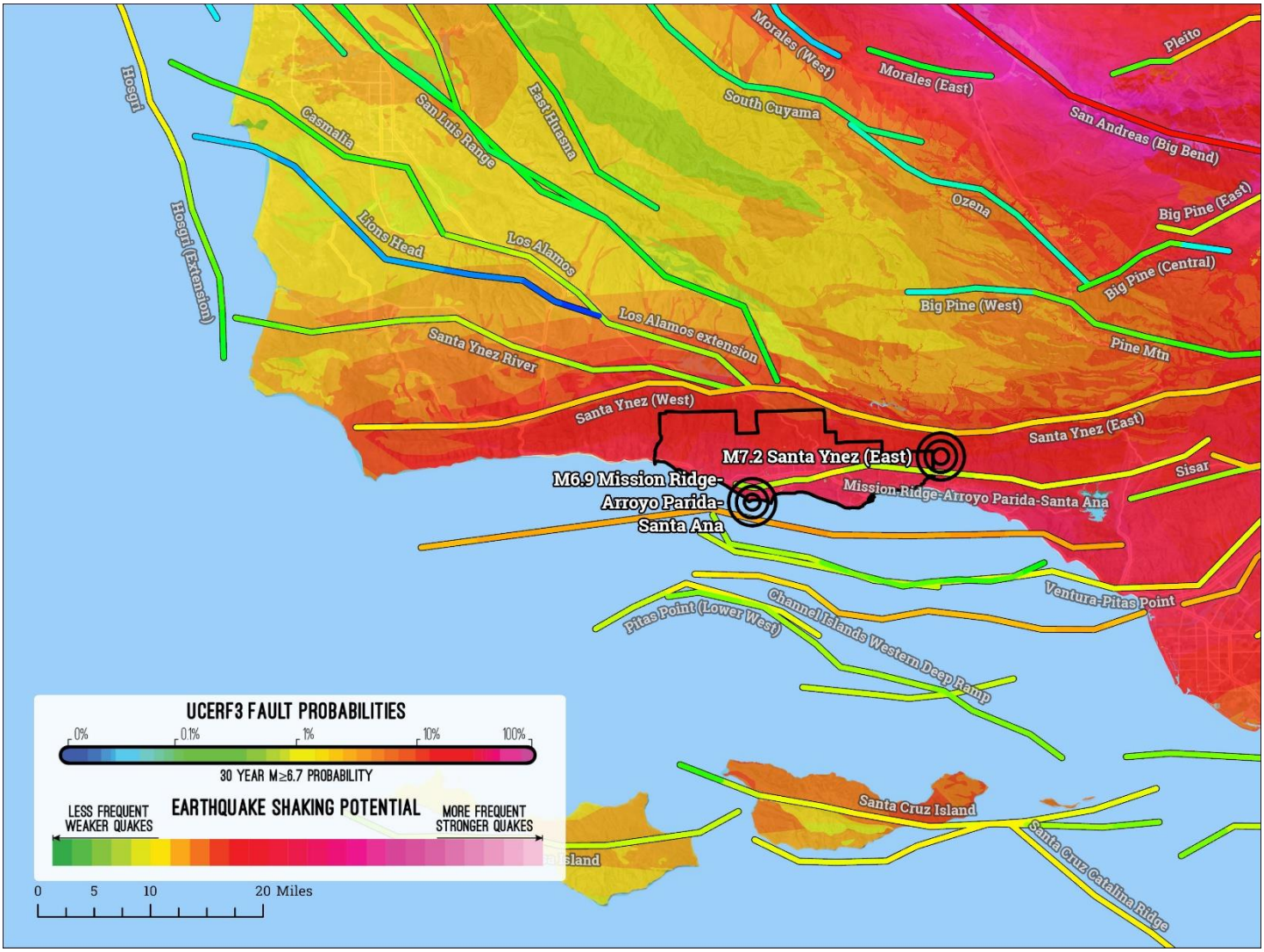


Figure 3-4: SBUSD Region Earthquake Probability

3.2.1.8 Development Trends

Development trends within the Santa Barbara Unified School District (SBUSD) play a critical role in shaping both current and future earthquake risk. The district's facilities reflect more than a century of growth, evolving building practices, and changing regulatory standards. As a result, the building inventory includes a wide range of construction types, ages, and structural systems, each with varying levels of seismic performance. Understanding how past development patterns have influenced the district's built environment is essential for identifying vulnerabilities and prioritizing mitigation actions.

At the same time, future development and modernization efforts are guided by some of the most stringent seismic safety regulations in the nation, including the California Field Act and oversight by the Division of the State Architect (DSA). These regulatory frameworks ensure that new construction and major renovations are designed to withstand significant seismic events, thereby reducing long-term risk. This

section evaluates how historic development, current regulatory requirements, and anticipated future growth collectively influence earthquake hazard exposure and resilience across SBUSD facilities.

Past Development Patterns

SBUSD facilities have been developed over more than a century, with a significant portion of the building inventory constructed prior to modern seismic design standards. Several campuses date to the early 20th century (1920s–1930s), and a large share of facilities were constructed during the mid-20th century expansion period (1950s–1970s), prior to the adoption and refinement of current seismic codes. While many of these structures have undergone modernization and retrofitting, the presence of older construction types and mixed-age campuses continues to influence seismic vulnerability across the district's approximately 460 buildings.

Anticipated Future Growth

Future development within SBUSD is expected to focus primarily on modernization, replacement, and incremental infill, rather than large-scale expansion into undeveloped areas. State regulations, including the California Field Act and Title 5 site selection requirements, strictly limit the placement of new school facilities in areas with known seismic hazards, including active fault zones. As a result, future facilities will be designed and constructed to current seismic safety standards under Division of the State Architect (DSA) oversight, significantly reducing structural risk for new development.

Development Impacts on Earthquake Hazard

Past development patterns, particularly pre-1978 construction and legacy building types, have contributed to increased seismic risk due to outdated design standards and materials. However, ongoing capital improvement programs, seismic retrofits, and modernization efforts have reduced vulnerability over time. New development and rehabilitation projects incorporate advanced seismic design, improved materials, and stricter code compliance, thereby reducing the overall hazard exposure of the built environment.

Impacts of Earthquake Hazard on Development

Earthquake risk continues to strongly influence development decisions within the district. Seismic hazards drive facility design standards, retrofit prioritization, and capital planning investments, often increasing construction and modernization costs. Additionally, potential earthquake impacts, such as structural damage, utility disruption, and campus closures, necessitate planning for redundancy, continuity of operations, and resilient infrastructure systems. These considerations shape long-term facilities planning and reinforce the need to prioritize seismic upgrades in older buildings and critical campus infrastructure.

3.2.1.9 Vulnerability Assessment

The primary major impacts from earthquakes are casualties, injuries, and damage to infrastructure occurring from ground movement along a particular fault or earthquake rupture scenario. The degree of infrastructure damage depends on the magnitude, focal depth, distance from fault, duration of shaking, type

of surface deposits, presence of high groundwater, topography, and the design, type, and quality of infrastructure construction.

3.2.1.9.1 General District Vulnerability

Public school buildings in California are some of the safest in the nation due to the long history of state regulation. School building codes exceed the seismic standards required for most other buildings and provide a level of protection that assures the safety of California's public-school children. However, constant evaluation and re-evaluation of vulnerable structures is necessary as technology and available information advances. This section provides a vulnerability assessment of specific buildings in the District which could be exposed to severe earthquake shaking and potential damage according to FEMA-developed Hazus damage estimation software.

State Assembly Bill 300 School Building Inventories

Recognizing that seismic hazards analysis is constantly evolving and improving, the California Legislature passed AB300 in 2002, which required the Department of General Services (DGS) to conduct an inventory of public-school buildings constructed of concrete tilt-up and non-wood frame walls. (Corbett, Chapter 622, Statutes of 1999). These buildings may not meet the 1976 UBC, which significantly increases the base shear for short and mid- height buildings. The 1976 UBC also introduced a site soil factor and occupancy importance factor.

The DSA, tasked by the DGS to implement AB300, adopted the building classification system provided in the FEMA 310[5] Handbook to begin to determine if school building across California meet requirements of AB300. The classification system is based on prevalent construction systems in the nation's building stock. See Table 3-12 for building types and definitions used in FEMA 310. DSA's AB300 classification system and inventory has two categories for identifying vulnerabilities to buildings:

- **Category 1:** building types that are likely to perform well, based on their performance in prior earthquakes, and are expected to achieve life-safety performance in future earthquakes; and
- **Category 2:** building types that are not expected to perform as well as Category 1 building types in future earthquakes and that require detailed seismic evaluation to determine if they can be expected to achieve life-safety performance when subjected to earthquake ground motions equivalent to those specified for new design in the 1997 UBC.

If, after detailed seismic evaluation, it is determined that a Category 2 building will not achieve life-safety performance when subjected to the specified ground motions, DGS/DSA provides several risk reduction options:

[5] Handbook for the Seismic Evaluation of Buildings, Published in 1998. First introduced by the ATC in the NSF-funded ATC-14 Report, Evaluating the Seismic Resistance of Existing Buildings (ATC, 1987)

(1) seismically rehabilitating the building to meet DSA's life safety requirements,
(2) a change in use, or
(3) demolition.

Table 3-12 provides a definition of FEMA building types. Table 3-13 provides the District's Inventory of each building type. The inventory list is approximate, as DSA's building inventory may include buildings no longer owned by the district. According to DSA, SBUSD has 40 buildings on the AB300 inventory list (13 category 1 and 27 category 2). 24 SBUSD buildings are identified as Category 2 reinforced masonry bearing wall with flexible floor and roof diaphragms. Category 1 building types are highlighted in **green** and the category 2 building types are highlighted in **orange**.

Table 3-12: FEMA / AB300 Building Types

FEMA Building Type*	Description
W1	Wood Light Frame
W1A	Wood Light Frame (multi-unit residence)
W2	Wood Frame (commercial and industrial)
S1	Steel Moment Frames
S2	Steel-braced Frames
S3	Steel Light Frames
S4	Steel Frames with concrete shear walls
S5	Steel Frames with infill masonry walls
C1	Concrete Moment Frames
C3	Concrete Frames with infill masonry shear walls
C2	Concrete Shear Walls
PC1	Tilt-Up Concrete shear walls
PC2	Precast Concrete Frames with shear walls
RM1	Reinforced Masonry Walls with flexible diaphragms
RM2	Reinforced Masonry Walls with stiff diaphragms
URM	Unreinforced Masonry Bearing Walls

The DSA building classification system uses all of the building types included in the FEMA 310 Handbook, excluding wood-frame buildings. Several building types dominant in California public school construction that were not originally included in the FEMA 310 Handbook were later added.

Table 3-13: Building Types by Seismic Vulnerability Category* (Seismic-Safety Inventory of California Public Schools)**

Category 1: Building types expected to perform well in future earthquakes	Category 2: Building types requiring detailed seismic evaluation
C2, C3	C1, C1B, C2A, C3A
S1, S1A, S2, S2A, S4, S5, S5A	M
RM2	S1B, S3
	PC1, PC1A, PC2, PC2A
	RM1, URM, URMA

**Excludes consideration of the seismic performance of nonstructural components.*
***Non-wood-frame schools designed before July 1st, 1978*

Table 3-14: SBUSD Category 2 Building Inventory from AB300 Report

Row Labels	Sum of SqFt
La Colina	**8,900**
RM1	8,900
Santa Barbara Junior High	**37,620**
RM1	35,220
S3	2,400
Mc Kinley	**38,800**
C2A	38,800
Franklin	**41,452**
RM1	41,452
San Marcos	**112,270**
RM1	112,270
Santa Barbara Senior High	**159,532**
C2A	124,416
RM1	35,116
Goleta Valley Junior High	**176,604**
RM1	176,604
Grand Total	**575,178**

3.2.1.9.2 Portable Classroom Buildings

The 1994 Northridge Earthquake caused significant damage to portable and relocatable classroom buildings throughout Southern California. Many units constructed prior to 1976 with wood pier foundations experienced foundation failures, including cripple wall racking of up to eight inches out of plumb. Some units fell from their supports. In many cases, deferred maintenance, deteriorated wood framing, and loosened fasteners contributed to poor seismic performance forces (California Seismic Safety Commission, 1995).

These failures prompted substantial reforms in the regulation of portable classrooms under the Field Act. While relocatable classrooms owned by public school districts are required to comply with Field Act standards, historically some temporary or leased units were exempt from Division of the State Architect (DSA) review if classified as short-term structures. In response to Northridge, DSA implemented regulatory changes in the mid-1990s requiring improved foundation anchorage, lateral bracing, and compliance standards for relocatable buildings. Subsequent policy changes allowed the use of federally approved portable classrooms provided they are permanently anchored to adequate foundations and nonstructural components (e.g., lighting, ceilings) are properly braced.

Within Santa Barbara Unified School District (SBUSD), portable and relocatable buildings represent a meaningful, though not dominant, component of the district's facility inventory. The district currently maintains **126 portable facilities totaling approximately 15.9 million square feet** across elementary, junior high, high school, and alternative education campuses. The largest concentrations of portable square footage are located at:

- San Marcos Senior High School – 16 units (~5.87 million sq ft)
- Franklin Elementary School – 21 units (~1.67 million sq ft)
- Dos Pueblos Senior High School – 4 units (~1.54 million sq ft)
- Santa Barbara Senior High School – 3 units (~1.41 million sq ft)
- Adams Elementary School – 17 units (~1.06 million sq ft)
- Peabody Charter Elementary School – 14 units (~0.94 million sq ft)
- Goleta Valley Junior High School – 7 units (~0.94 million sq ft)

Several additional elementary campuses maintain between 4 and 14 portable structures, reflecting enrollment growth, program expansion, and site constraints over time.

Although modern portable classrooms are required to meet anchorage and structural standards, relocatable buildings remain inherently more sensitive to foundation conditions and connection detailing than permanent concrete or steel structures. Their seismic performance depends heavily on proper installation, ongoing inspection of tie-down systems, and maintenance of anchorage hardware and bracing.

During the mid-1990s, under pressure of increasing enrollments and limited budgets, some districts resorted to using nonconforming portable buildings. Since these units were classified as temporary, with a life of less than three years, they did not require DSA approval. They were sited without permanent foundations designed to resist lateral seismic forces. In the Northridge, earthquake some of these temporary buildings fell off their supports. These failures highlighted a need for relatively inexpensive and rapidly obtained factory-built school buildings that are installed on adequate foundations (California Seismic Safety Commission, 1995).

DSA developed a four-part program to address these issues. Three of the four parts went into effect via regulations in December 1994. In 1995, DSA proposed legislation that deemed existing trailer-type leased relocatable classrooms built after 1979 beholden to Housing and Community Development standards compliant with the Field Act and suitable for permanent use. Since 1995, DSA instituted a number of policy

changes to accommodate the fact that school districts need to obtain inexpensive units rapidly, while also correcting the present problem of units avoiding Field Act requirements. Currently, DSA allows public schools to use federally approved portable classrooms as long as they are adequately attached to their foundations and as long as light fixtures and other nonstructural elements are braced (California Seismic Safety Commission, 1995).

3.2.1.9.3 Student, Staff and Insured Building Exposure

Earthquake exposure for SBUSD was evaluated using two scenario events: a M6.9 Mission Ridge–Arroyo Parida–Santa Ana fault scenario and a M7.2 Santa Ynez East fault scenario. Facility locations, student enrollment, staffing levels, and insured building values were analyzed relative to modeled shaking intensities for each event.

M6.9 Mission Ridge–Arroyo Parida–Santa Ana Scenario

Under the M6.9 scenario, severe shaking is modeled across nearly the entire District. As a result, exposure is widespread and affects all school types.

Districtwide exposure under this scenario includes:

- 13,349 students
- 1,935 staff
- Approximately $600.5 million in insured building value

Because severe shaking is broadly distributed across the District, this scenario represents a high-consequence, systemwide event in which elementary, junior high, senior high, and administrative facilities are all subject to significant ground shaking. Senior high and junior high campuses account for a substantial portion of the total exposed building value due to their larger facility footprints.

M7.2 Santa Ynez East Scenario

The M7.2 Santa Ynez East scenario produces a more varied distribution of shaking intensity across the District, with exposure categorized as Severe, Strong, and Very Strong. Districtwide exposure under this scenario includes:

Severe Shaking:

- 1,244 students
- 239 staff
- Approximately $106.1 million in insured building value

Strong Shaking:

- 2,034 students
- 268 staff
- Approximately $76.4 million in insured building value

Very Strong Shaking:

- 10,071 students
- 1,428 staff
- Approximately $418.0 million in insured building value

Unlike the Mission Ridge scenario, which concentrates severe shaking across the District, the Santa Ynez East scenario distributes impacts across multiple shaking intensities. A significant portion of student population and building value falls within the Very Strong shaking category, with more limited exposure in the Severe category.

Comparative Exposure

The Mission Ridge M6.9 scenario results in broader and more uniformly severe shaking across SBUSD facilities, representing the higher overall consequence scenario in terms of total exposed population and building value.

The Santa Ynez East M7.2 scenario, while larger in magnitude, produces a more graduated shaking pattern. Although fewer facilities are exposed to Severe shaking, a substantial number experience Very Strong shaking, which may still result in structural and non-structural damage, operational disruption, and potential life-safety concerns.

Together, these scenarios demonstrate that SBUSD faces significant earthquake exposure under multiple fault rupture conditions, with potential impacts affecting thousands of students and staff and hundreds of millions of dollars in insured building assets. These results support continued prioritization of seismic mitigation, facility retrofits, emergency planning, and post-event response capacity.

See Table 3-15 and Table 3-16 for each scenario exposure results.

Table 3-15: EQ Exposure to M6.9 Mission Ridge-Arroyo Paride Santa Ana Scenario

EQ Hazard M6.9 Mission Ridge-Arroyo Parida-Santa Ana Severe			
School Facilities by Type	**Student Count**	**Staff Count**	**Insured Bldg. Value (in Millions)**
Administrative	10	206	$25,688
Armory	0	0	$10,901
District Office	0	131	$8,047
Las Flores Children's Center	10	2	$631
Maintenance	0	71	$4,810
Parma	0	2	$1,298
Elementary	4,346	577	$154,690
Adelante Charter At Franklin Elementary School	8	2	$153
Adams Elementary School	517	73	$15,510
Cleveland Elementary School	243	57	$11,093

EQ Hazard M6.9 Mission Ridge-Arroyo Parida-Santa Ana Severe			
School Facilities by Type	**Student Count**	**Staff Count**	**Insured Bldg. Value (in Millions)**
Franklin Elementary School	433	91	$23,251
Harding Elementary School	353	68	$16,771
Mckinley Elementary School	257	51	$20,622
Monroe Elementary School	322	59	$14,663
Peabody Charter Elementary School	767	16	$18,885
Roosevelt Elementary School	442	56	$14,949
Santa Barbara Charter School	283	13	
Santa Barbara Community Academy	197	29	$5,960
Washington Elementary School	524	62	$12,832
Junior High	2,635	343	$176,562
Goleta Valley Junior High School	717	86	$38,848
La Colina Junior High School	900	94	$37,583
La Cumbre Junior High School	458	76	$40,233
Santa Barbara Junior High School	560	87	$59,899
High School	197	44	$5,713
Alta Vista Alternative High School	117	2	$307
La Cuesta Continuation High School	80	42	$5,406
Senior High	6,161	765	$237,797
Dos Pueblos Senior High School	2,034	268	$76,398
San Marcos Senior High School	2,020	243	$66,790
Santa Barbara Senior High School	2,107	254	$94,609
Grand Total	**13,349**	**1,935**	**$600,450**

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Table 3-16: EQ Exposure to M7.2 Santa Ynez East Scenario

	EQ Hazard M7.2 Santa Ynez East								
	Severe			Strong			Very Strong		
School Facilities By Type	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)
Administrative	0	2	$11,676				10	204	$14,012
Armory	0	0	$10,379				0	0	$523
District Office							0	131	$8,047
Las Flores Childrens Center							10	2	$631
Maintenance							0	71	$4,810
Parma	0	2	$1,298						
Elementary	684	150	$34,498				3,662	427	$120,193
Adalante Charter At Franklin Elementary School	8	2	$153						
Adams Elementary School							517	73	$15,510
Cleveland Elementary School	243	57	$11,093						
Franklin Elementary School	433	91	$23,251						
Harding Elementary School							353	68	$16,771
Mckinley Elementary School							257	51	$20,622
Monroe Elementary School							322	59	$14,663
Peabody Charter Elementary School							767	16	$18,885
Roosevelt Elementary School							442	56	$14,949
Santa Barbara Charter School							283	13	
Santa Barbara Community Academy							197	29	$5,960
Washington Elementary School							524	62	$12,832
Junior High	560	87	$59,899				2,075	256	$116,663

	EQ Hazard M7.2 Santa Ynez East								
	Severe			Strong			Very Strong		
School Facilities By Type	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)
Goleta Valley Junior High School							717	86	$38,848
La Colina Junior High School							900	94	$37,583
La Cumbre Junior High School							458	76	$40,233
Santa Barbara Junior High School	560	87	$59,899						
High School							197	44	$5,713
Alta Vista Alternative High School							117	2	$307
La Cuesta Continuation High School							80	42	$5,406
Senior High				2,034	268	$76,398	4,127	497	$161,399
Dos Pueblos Senior High School				2,034	268	$76,398			
San Marcos Senior High School							2,020	243	$66,790
Santa Barbara Senior High School							2,107	254	$94,609
Grand Total	**1,244**	**239**	**$106,073**	**2,034**	**268**	**$76,398**	**10,071**	**1,428**	**$417,979**

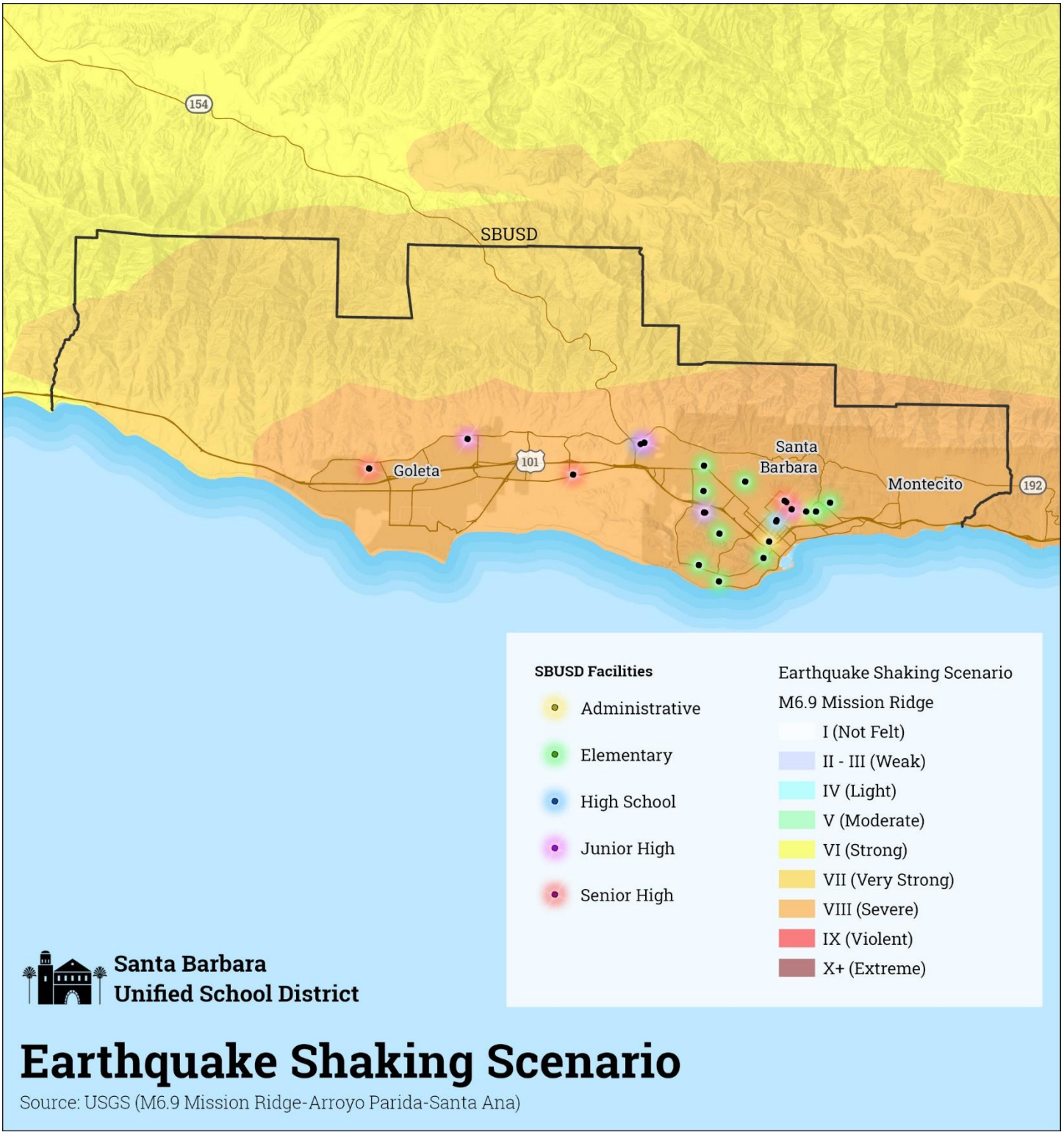


Figure 3-5: M6.9 Mission Ridge-Arroyo Parida-Santa Ana

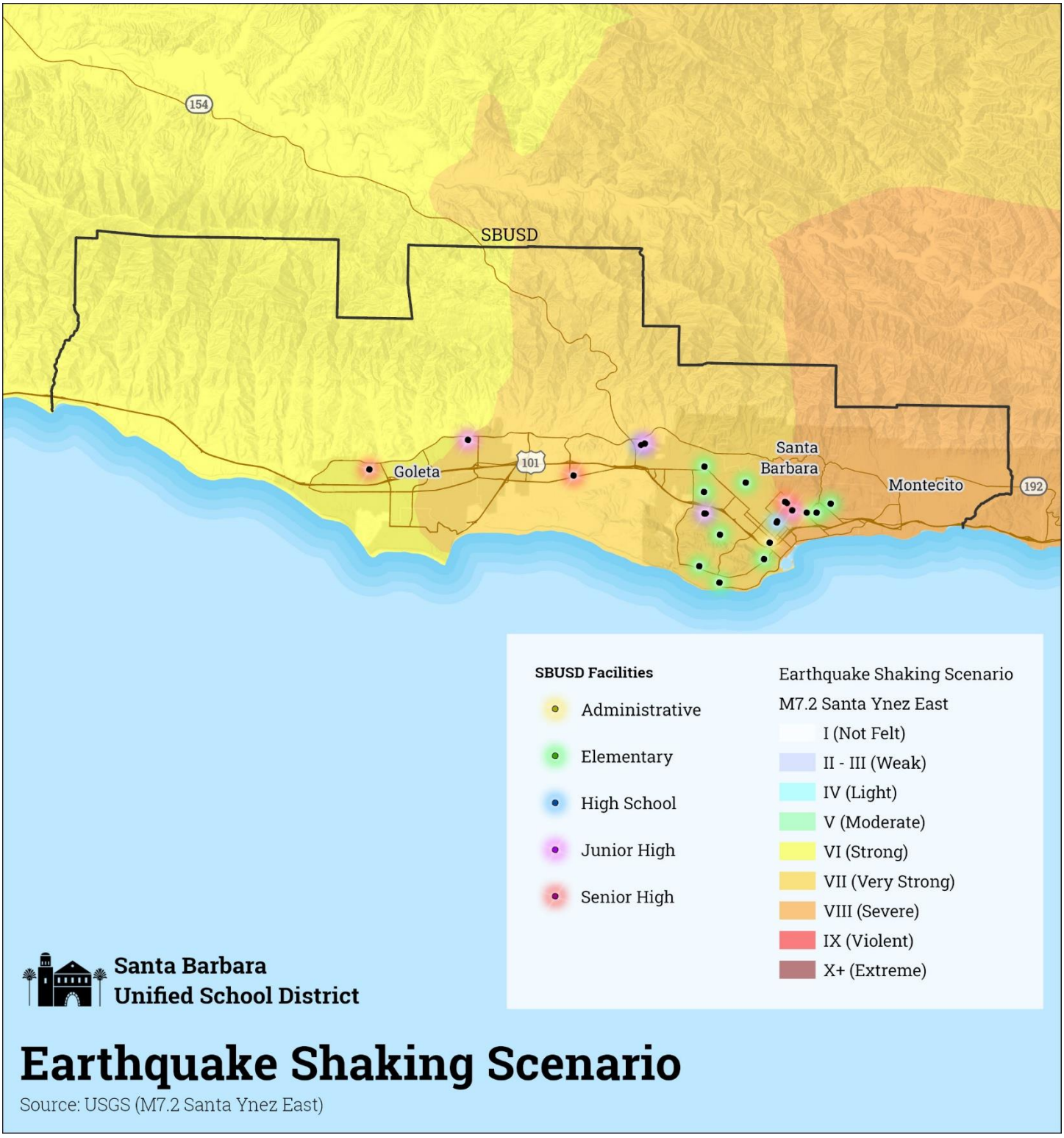


Figure 3-6: M7.2 Santa Ynez East

3.2.1.10 Earthquake Hazard Problem Statements

As part of the mitigation action identification process, the Planning Committee identified issues and/or weaknesses (aka problem statements) as a result of the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic earthquake data. Earthquake problem statements are listed in Table 3-17. Identifying these common issues and weaknesses assists the Planning Committee in understanding the realm of resources needed for mitigation. The goal is have at least one mitigation action for every problem statement. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-17 and Table 4-3.

Table 3-17 Earthquake Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Earthquake	EQ-01	Structural Problem – Pre-Code Construction: Buildings constructed prior to adoption of modern seismic design standards (pre-1978 CBC/DSA updates) may not meet current life-safety performance expectations and are located in areas of strong to very strong modeled ground shaking. Structural capacity and anchorage require verification.	SP - Structural Projects	
Earthquake	EQ-02	Soft-Story and Irregular Structures: Certain multi-use or modified buildings exhibit structural irregularities (e.g., soft-story conditions, additions, load-path discontinuities) that may increase collapse risk during seismic events.	PPRO - Property Protection	
Earthquake	EQ-03	Non-Structural Vulnerabilities – Critical Equipment: Essential equipment including servers, communication racks, lab equipment, mechanical systems, and suspended components may not be adequately braced or anchored, posing injury risk and operational disruption.	ES - Emergency Services	
Earthquake	EQ-04	Relocatable Classroom Anchoring: Existing relocatable or modular classroom buildings may lack modern foundation anchoring or lateral bracing systems required to resist current seismic loads.	SP - Structural Projects	

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Earthquake	EQ-05	Emergency Operations Continuity: Emergency Operations Center (EOC) and critical dispatch functions are located within relocatable or non-hardened structures, increasing risk of loss of command capability following a major seismic event.	SP - Structural Projects	
Earthquake	EQ-06	Post-Earthquake Utility Failure: Campus utilities (gas lines, water supply, fire sprinkler systems, and electrical panels) may lack seismic shutoff devices or flexible connections, increasing risk of fire, flooding, or extended facility downtime.	SP - Structural Projects	
Earthquake	EQ-07	Acquired Facilities Outside DSA Oversight: Recently acquired or repurposed facilities may not have undergone full DSA seismic compliance review, resulting in unknown structural or life-safety vulnerabilities.		
Earthquake	EQ-08	Transportation & Fleet Readiness: District transportation yards and fleet storage areas may lack seismic hazard mitigation measures, including structural bracing of maintenance facilities and continuity planning for dispatch and fueling operations.		
Earthquake	EQ-09	Lifeline Interdependencies: Critical facilities depend on off-site utilities (power, water, telecommunications) that may fail during major earthquakes, limiting district response capability and prolonging recovery timelines.		
Earthquake	EQ-10	Seismic Risk Data Gaps: Incomplete structural documentation, limited as-built drawings, or outdated facility assessments hinder accurate seismic vulnerability modeling and mitigation prioritization.		
Earthquake	EQ-11	Special education classrooms and medically fragile students may face higher injury risk or delayed evacuation during and after an earthquake.		

3.2.2 Wildfire Hazard Profile



A wildfire is an unwanted wildland fire including unauthorized human-caused fires, escaped wildfire use events, escaped prescribed wildfire projects, and all other wildfires.

Wildfires present a significant potential for disaster for the SBUSD, a region of relatively high temperatures, low humidity, and low precipitation during the summer. This long summer season is followed by a fall season that is famous for Santa Ana winds, high velocity, very dry winds that come out of the desert. The Santa Ana winds very consistently arrive from the middle of October to the end of November. In and of themselves, these weather patterns would be of little significance without the unnaturally dense forest and undergrowth that has grown unabated for the last several decades. Compounding the danger is the development of substantial housing and businesses in the wildfire-prone, foothill area, often referred to as the Wildland-Urban Interface (WUI). Most fires are extinguished successfully in short order, especially with the growth and sophistication of fire services responding to wildfires in the WUI. However, this quick response eliminates nature's way of thinning the forest through smaller fires. A wildfire burning into the SBUSD could destroy or damage school facilities and disrupt the school year.

Landslides/Mudslides After Wildfire

The risk of landslides increases after wildfire due to vegetation loss and soil exposure. Post-wildfire landslides could involve any type of slope failure such as a mass of rock, earth or debris.

Wildfire disturbs the natural stability of the slope, increasing the risk of slope failure by making the slope more susceptible to ground erosion triggered by rainfall runoff and slope failure caused by rainfall seeping into the ground, especially rainfall immediately following a wildfire. Slope erosion triggered by rainfall runoff is more prevalent after wildfire than landslide caused by water seepage in the slope because fires reduce the rate at which water can seep into the soil. (United States Geological Survey, 2018)

Landslide susceptibility in the SBUSD generally is considered low to moderate. The following conditions potentially increase landslide hazard:

- A slope greater than 33 percent
- A history of landslide activity or movement during the last 10,000 years
- Stream or wave activity, which has caused erosion, undercut a bank, or cut into a bank to cause the surrounding land to be unstable
- The presence of an alluvial fan, indicating vulnerability to the flow of debris or sediments
- The presence of impermeable soils, such as silt or clay, which are mixed with granular soils such as sand and gravel

3.2.2.1 Regulatory Environment

Local, state, tribal, and federal organizations all have legal and financial responsibility for wildfire protection. In many instances, two fire organizations have dual primary responsibility on the same parcel of land—one for wildfire protection and the other for structural fire protection. To address wildfire jurisdictional responsibilities, in 1981 the California State Legislature outlined various wildfire responsibilities, described below, in Public Resources Code § 4291.5 and Health and Safety Code § 13108.5:

- **Federal Responsibility Areas (FRAs):** FRAs are fire-prone wildland areas that are owned or managed by a federal agency such as the U.S. Forest Service, National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Department of Defense. Primary financial and rule-making jurisdictional authority rests with the federal land agency. In many instances, FRAs are interspersed with private land ownership or leases. Fire protection for developed private property is usually not the responsibility of the federal land management agency but of the relevant local government agency.

- **State Responsibility Areas (SRAs):** SRAs are lands in California where the California Department of Forestry and Fire Protection (CAL FIRE) has legal and financial responsibility for wildfire protection and where CAL FIRE administers fire hazard classifications and building standard regulations. SRA boundaries are those adopted by the California Board of Forestry and are reviewed and updated every five years. Where SRAs contain structures or development, the responsibility for fire protection of those improvements falls to the relevant local government agencies. SRAs are defined as lands that are unincorporated county areas; not federally owned; have wildland vegetation cover rather than agricultural or ornamental plants; or have watershed, range, or forage values.

- **Local Responsibility Areas (LRAs):** LRAs include land in cities, cultivated agriculture lands, unincorporated non-flammable areas, and lands that do not meet the criteria for SRA or FRA. LRA fire protection is typically provided by city or county fire departments, fire protection districts, or by CAL FIRE under contract to local governments. LRAs may still include areas of flammable vegetation and WUI.

Wildfire Protection Responsibilities in Santa Barabara

Within the City of Santa Barbara, wildfire protection and prevention responsibilities are shared among local fire agencies, public entities such as the district, and private property owners. The Santa Barbara City Fire Department (SBFD) provides primary fire protection services within city limits, including structural fire response, wildland fire suppression, vegetation management coordination, emergency planning, and evacuation support. Campuses located outside City limits fall under the jurisdiction of the Santa Barbara County Fire Department, with coordinated response protocols between agencies.

SBFD operates multiple fire stations strategically positioned to respond to both urban and wildland-urban interface (WUI) incidents. Given Santa Barbara's proximity to the Santa Ynez Mountains and chaparral-dominated foothills, SBFD maintains specialized wildland firefighting capability, including rapid response

to wind-driven fires influenced by Sundowner conditions. During significant wildfire events, SBFD coordinates with Santa Barbara County Fire, CAL FIRE, and state and federal partners under the Incident Command System (ICS).

While SBFD provides emergency response and broader wildfire risk reduction programs, SBUSD retains responsibility for wildfire risk mitigation within school properties. This includes:

- Maintaining defensible space around campus structures;
- Managing on-site vegetation and slope fuels;
- Ensuring access roads and fire lanes remain unobstructed;
- Maintaining fire hydrant clearance and emergency water supply access;
- Implementing building hardening measures consistent with applicable codes.

In addition, SBFD provides inspection, plan review, and guidance regarding vegetation management, defensible space standards, and fire access requirements. For campuses located near hillside or open space areas, SBFD coordination is particularly important for evacuation planning and pre-incident response mapping.

At the state level, wildfire risk planning is guided by California Government Code §§ 65040.20 and 65302.5, which require local governments in State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones (VHFHSZ) to address wildfire hazards within their General Plan Safety Elements. Although the City of Santa Barbara is primarily within a Local Responsibility Area (LRA), portions of surrounding foothill and unincorporated areas fall within State Responsibility Areas, where CAL FIRE plays a primary role in wildfire prevention and suppression.

Local governments must incorporate wildfire safety guidelines and California Environmental Quality Act (CEQA) wildfire hazard checklists issued by the Governor's Office of Land Use and Climate Innovation (LCI) when applicable. These requirements influence land use planning, subdivision approvals, and development standards that affect wildfire exposure around school campuses and surrounding neighborhoods.

Through coordinated efforts between SBFD, Santa Barbara County Fire, CAL FIRE, and SBUSD facilities staff, wildfire protection for District schools involves both proactive vegetation management and rapid emergency response capability. Continued collaboration and compliance with evolving wildfire planning requirements remain critical to reducing risk to students, staff, and school facilities.

California Code of Regulations

State funded school districts are required to coordinate with the local planning agency while siting future school sites, including providing written notice to the relevant planning agency and receiving a written report on the site's conformity with the adopted General Plan. (Cal. Code Regs tit. 5 § 14011(f))

City of Santa Barabara General Plan Policies

The City of Santa Barbara 2013 General Plan Safety Element establishes wildfire risk reduction through the following adopted plans and municipal code provisions:

- Wildland Fire Plan (2004) – Provides wildfire risk assessment criteria based on topography, vegetation, building construction, access, and emergency response standards
- Municipal Code Chapter 8.04 – City Fire Code – Adopts and amends the California Fire Code to establish local construction standards, defensible space requirements, and vegetation management provisions to reduce wildfire risk
- Municipal Code Chapter 22.24 – Floodplain Management Code (cross-referenced for hazard mitigation consistency)
- California Building Code (as locally amended) – Requires ignition-resistant construction, fire-resistant roofing materials, and structural hardening measures in designated fire hazard areas
- Land Use and Hillside Development Regulations – Regulate development intensity, roadway standards, and emergency access in hillside and high fire hazard areas (implemented through zoning and subdivision review processes consistent with the Safety Element framework)
- Participation in the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan – Ensures regional coordination and consistency between City wildfire mitigation policies and broader countywide hazard planning efforts

3.2.2.2 Past Events

SBUSD is located along the South Coast of Santa Barbara County, a region with a long and well-documented history of significant wildland-urban interface (WUI) fires. Unlike inland Southern California communities influenced primarily by Santa Ana wind regimes, Santa Barbara's wildfire history is strongly influenced by Sundowner winds, topography of the Santa Ynez Mountains, prolonged drought cycles, and dense chaparral fuels. Wildfires in the greater Santa Barbara area are characterized by:

- Rapid uphill fire spread driven by downslope Sundowner winds;
- Heavy chaparral fuel loads with long fire return intervals;
- Alignment of wind, slope, and fuel during extreme fire weather events;
- Periodic large fire events occurring during drought cycles.

Historically, the South Coast has experienced several major wildfire events that affected or threatened developed areas, including the Painted Cave Fire (1990), Tea Fire (2008), Jesusita Fire (2009), Sherpa Fire (2016), Thomas Fire (2017), and Cave Fire (2019). Several of these events resulted in evacuations, structure loss, and significant suppression costs throughout Santa Barbara County.

While many ignitions in the region are human-caused, extreme fire behavior is typically associated with high-wind conditions combined with critically dry fuels. Large fire events tend to occur episodically rather than annually, often following multiple years of drought or above-average vegetation growth that increases fuel loading.

Within the SBUSD service area, wildfire exposure varies by campus location. Schools located near the foothill interface and hillside neighborhoods—particularly those adjacent to open space, canyon areas, or unmanaged vegetation—face higher potential exposure from wind-driven fire spread. Although most wildfire ignitions in the City and surrounding areas are contained at small sizes due to rapid response by Santa Barbara City Fire and County Fire, regional fire events have periodically resulted in evacuation warnings, air quality impacts, and precautionary campus closures.

3.2.2.3 Location/ Geographic Extents

CAL FIRE maps areas of significant fire hazards based on factors such as fuel, weather and terrain. CAL FIRE then designates Fire Hazard Severity Zones (FHSZ) based on the number of days of moderate, high and extreme fire hazard. These zones define the application of various mitigation strategies to reduce risk associated with wildfires.

The FHSZ model is built from existing data and hazard constructs from CAL FIRE FRAP. The model refines the zones to characterize fire exposure mechanisms that cause ignitions to structures. The model characterizes potential fire behavior for vegetation fuels, which are by nature dynamic. Since model results are used to identify permanent engineering mitigations for structures, the model reflects changes in fire behavior over the length of time a structure is likely to be in place. Significant land-use changes need to be accounted for through periodic maintenance of the FHSZ model by CAL FIRE. Figure 3-8 shows the FHSZ map for the SBUSD.

3.2.2.4 Magnitude/ Severity

The Fire Severity Zones in Figure 3-8 identify areas of Very High, High, and Moderate fire hazard severity throughout the district. Fire Severity Zones are used in determining additional protective measures required when building new structures or remodeling older structures within a specific zone. Additional measures must be taken on the property around a structure in the higher ranked Fire Severity Zones.

The Severity Zones shown in this section are comprised of data sources identified in Appendix A, where the maximum hazard level is applied to a geographical area using GIS union methodology.

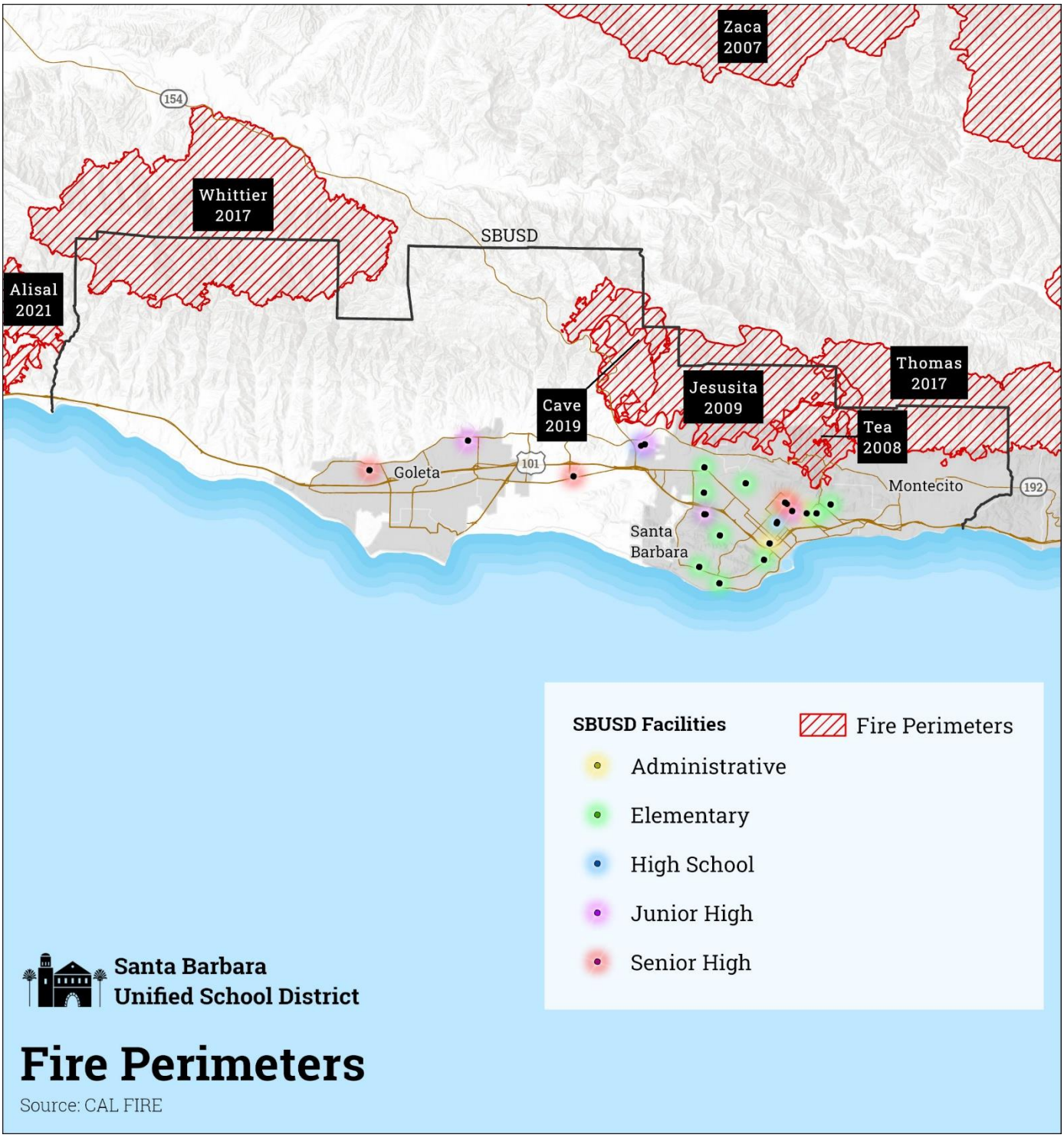


Figure 3-7: Cal Fire FRAP Fire Perimeters 2006-19 Greater than 10 Acres



Figure 3-8: Wildfire Severity Zones

3.2.2.5 Frequency/ Probability of Future Occurrences

SBUSD faces a seasonal wildfire threat each year, particularly during late summer and fall when vegetation is dry and offshore wind events occur. Wildfire conditions in the Santa Barbara region typically arise from a combination of prolonged dry weather, accumulated vegetative fuels, low relative humidity, and strong Sundowner wind events. During drought cycles or following years of increased vegetation growth, fuel loads can become elevated, increasing the probability of ignition and rapid-fire spread.

Three primary factors influence wildfire frequency and behavior within and around SBUSD campuses: fuel, topography, and weather.

Fuel: The dominant native vegetation in the Santa Barbara foothills and adjacent open space areas is coastal sage scrub and chaparral. These vegetation communities are highly adapted to fire and contain plant species with volatile oils and low moisture content during dry months. Common fuels include cured grasses, brush, leaf litter, ornamental landscaping, and unmanaged vegetation in canyon and hillside areas. Human-made materials such as wood fencing, stored materials, and nearby structures can also contribute to fire spread. Light fuels such as grasses ignite easily and can carry fire rapidly toward heavier fuels, increasing intensity. Periods of drought can further dry vegetation, increasing ember production and the likelihood of spot fires.

Topography: The district is located along the base of the Santa Ynez Mountains, where steep slopes, canyons, and ridgelines significantly influence fire behavior. Fire intensity and rate of spread increase on steeper slopes because heat rises and preheats fuels uphill. In canyon areas, fire can accelerate rapidly in what is commonly referred to as a "chimney effect," where terrain alignment and wind combine to drive fast-moving flame fronts. Several SBUSD campuses located near foothill or wildland-urban interface (WUI) areas may experience elevated exposure due to this topographic influence.

Weather: High temperatures and low relative humidity during late summer and fall dry fuels and increase ignition potential. The most significant weather-related factor in Santa Barbara is the occurrence of Sundowner wind events, which are strong, dry downslope winds that develop along the South Coast. These winds can rapidly increase fire spread rates and cause unpredictable fire behavior. Wind-driven wildfires under Sundowner conditions have historically resulted in fast-moving incidents that threaten developed areas within hours. In addition, periodic drought conditions and climate variability contribute to increased wildfire susceptibility by stressing vegetation and extending the duration of peak fire season.

While many wildfire ignitions in the Santa Barbara region are quickly contained due to rapid response by local fire agencies, the district remains exposed to episodic, wind-driven wildfire events. The probability of wildfire affecting district operations is considered moderate to high on a seasonal basis, particularly for campuses located near open space and foothill areas. Even when direct flame exposure does not occur, smoke impacts, evacuation warnings, and Public Safety Power Shutoffs (PSPS) may disrupt school operations.

Overall, wildfire risk within SBUSD is recurring and seasonal in nature, driven by regional fuel conditions, the steep foothill topography of the Santa Ynez Mountains, and periodic Sundowner wind events. Consistent with the District's risk assessment methodology, the probability of a wildfire affecting SBUSD in any given year is classified as **Likely (10% to 100% annual chance)**. Wildfire activity in the Santa Barbara region most commonly occurs during the late summer and fall months (typically June through November), when vegetation is dry and offshore wind events are most pronounced. Campuses located near open space, canyon areas, and the wildland-urban interface (WUI) face elevated exposure due to proximity to dense chaparral fuels and wind-driven ember transport.

Future wildfire frequency and intensity may increase as climate change contributes to higher temperatures, prolonged drought conditions, and extended fire seasons. Continued development in WUI areas surrounding District campuses may also elevate ignition potential and structural exposure. Although many wildfire ignitions are quickly contained through rapid response by local fire agencies, the potential for large, wind-driven events remains a persistent and credible hazard to SBUSD facilities and operations.

3.2.2.6 Development Trends

Development patterns within the SBUSD influence both exposure to wildfire hazards and the district's ability to mitigate risk over time. The district's facilities are distributed across a diverse landscape that includes coastal urban areas, foothill neighborhoods, and locations adjacent to wildland-urban interface (WUI) zones. As development has expanded toward hillside and vegetated areas, wildfire exposure has increased for certain campuses, particularly those located near open space, chaparral, and canyon environments.

At the same time, evolving building codes, defensible space requirements, and fire-resistant construction standards have significantly improved the resilience of newer development. State and local regulations, including California Building Code Chapter 7A and Public Resources Code requirements, have strengthened wildfire mitigation measures for both new construction and facility upgrades. This section evaluates how past development patterns, current conditions, and future growth influence wildfire risk and resilience across SBUSD facilities.

Past Development Patterns

Historically, development within SBUSD has expanded from the urban core of Santa Barbara into surrounding foothill and suburban areas, including Goleta and Montecito. Several campuses are located near or within areas now classified as wildland-urban interface (WUI), where development meets natural vegetation. Earlier development often occurred prior to the adoption of modern wildfire-resistant building standards, resulting in facilities with combustible materials, limited defensible space, and legacy landscaping practices that may increase fire risk. Over time, these conditions have contributed to varying levels of wildfire vulnerability across District sites.

Anticipated Future Growth

Future development within SBUSD is expected to focus on facility modernization, campus improvements, and targeted redevelopment, rather than expansion into new undeveloped WUI areas. New construction and major renovations will be required to comply with current fire-resistive building standards, including ignition-resistant materials, ember-resistant vents, and defensible space requirements. Additionally, ongoing vegetation management and campus hardening efforts are expected to further reduce wildfire risk. As a result, future development will generally improve resilience, although existing site constraints and proximity to natural vegetation will continue to influence risk.

Development Impacts on Wildfire Hazard

Past development patterns have increased wildfire exposure by placing facilities in or near vegetated areas and foothill environments subject to Sundowner winds and dry fuel conditions. Landscaping practices, building materials, and campus layouts in older developments may contribute to increased ignition potential and fire spread. However, more recent development and modernization efforts have incorporated fire-resistant design, defensible space maintenance, and vegetation management, which help reduce the intensity and likelihood of wildfire impacts at district facilities.

Impacts of Wildfire Hazard on Development

Wildfire risk continues to shape development decisions within SBUSD by influencing site planning, building design, and maintenance practices. Facilities located near WUI areas require ongoing investment in defensible space, fuel reduction, and fire-resistant construction upgrades. Wildfire hazards can also impact operations through smoke exposure, air quality degradation, and potential evacuations, even when structures are not directly damaged. These risks necessitate integration of wildfire mitigation into capital planning, maintenance programs, and emergency preparedness efforts, ensuring that both existing and future facilities are better equipped to withstand wildfire events.

3.2.2.7 Vulnerability Assessment

In an approaching wildfire, facility components that are combustible can be ignited by embers, firebrands, flames, radiant energy, and convective energy, as described below.

- Embers and firebrands, carried on air currents, can travel significant distances in advance of a wildfire and land on a District facility, igniting exterior materials, or enter the facility through an opening, igniting interior materials.
- Flames from the combustion of nearby materials can transfer to a facility and cause ignition of facility components.
- Radiant energy from combustion of nearby materials can cause ignition of facility components, even if the components are not on the exterior of the facility.
- Convective energy, in the form of hot gases, removes moisture from the air, penetrates openings, and can cause ignition of facility components.
- A wildfire can deform or melt facility components that do not initially ignite.

- Damage to power systems can cause surges that damage electrical and mechanical equipment.

3.2.2.7.1 General District Vulnerability

Facilities that are particularly vulnerable to wildfire damage include those that have the following characteristics:

- Combustible construction materials or materials that deform or melt when heated;
- Combustible exterior components or attached structures;
- Openings such as vents that allow heat, embers, or firebrands to enter the facility and ignite combustible components within the facility;
- Features such as overhangs that allow heat, gases, embers, and firebrands to be trapped adjacent to combustible materials;
- Features such as gutters, decks, and fences that allow combustible debris to accumulate, providing fuel adjacent to the facility that can ignite facility components; and
- Interior components that can ignite when the facility exterior is heated.

The presence, density, and type of vegetation surrounding facilities is a greater contributing factor to wildfire vulnerability than facility design and construction. Vegetative fuels can lead surface fires to the facility and produce embers and firebrands that can cause ignition when striking or entering the facility. Additionally, leaf litter, needles, and other vegetative matter that accumulate in or near a facility can ignite and spread fire to the facility. Although measures to reduce or eliminate vegetative fuels may not be eligible for HMGP funding, these measures are critical to reducing the vulnerability of a facility to a wildfire and the cost of the measures can be minimal.

3.2.2.7.2 Student, Staff and Insured Building Exposure

Wildfire exposure for Santa Barbara Unified School District (SBUSD) was evaluated using facility inventory data provided by the District's Facilities/Operations Office and current Insurance Property Schedules. These datasets provide a reliable representation of student population, staffing levels, and insured building values for planning-level analysis.

Exposure was analyzed relative to the CAL FIRE mapped FHSZ and locally adopted amendments. Table 3-18 summarizes the number of students, staff, and insured building values located within Moderate and Very High Fire Hazard Severity Zones. Districtwide, approximately:

- 2,125 students, 174 staff, and $71.7 million in insured building value are located within Moderate FHSZ areas;
- 752 students, 92 staff, and $41.0 million in insured building value are located within High FHSZ areas (per CAL FIRE classification updates);
- 685 students, 113 staff, and $26.0 million in insured building value are located within Very High FHSZ areas.

Exposure varies by campus level:

- Several elementary schools have student populations and building values within both Moderate and Very High zones, reflecting their proximity to foothill and interface areas.
- Junior high campuses account for a significant share of Moderate zone exposure, particularly at La Colina Junior High School.
- Limited but notable exposure occurs at select high school and alternative education campuses, including Alta Vista Alternative High School and Dos Pueblos Senior High School.

It is important to note that mapped FHSZ do not capture all aspects of wildfire risk. Certain hillside and open space areas adjacent to campuses may experience recurring vegetation fires but are not fully reflected within the FHSZ designations. In addition, wildfire impacts such as smoke intrusion, evacuation warnings, and Public Safety Power Shutoffs (PSPS) may affect campuses located outside designated Very High zones.

Figure 4-13 illustrates the geographic distribution of SBUSD facilities relative to Moderate and Very High Fire Hazard Severity Zones, demonstrating that wildfire exposure is concentrated in foothill and wildland-urban interface areas of the district.

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Table 3-18: SBUSD Wildfire Threat Exposure (in $Millions)

	Cal Fire FHSZ & Local Amendments								
	High			Moderate			Very High		
Row Labels	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)	Student Count	Staff Count	Insured Bldg. Value (in Millions)
Elementary	**1,089**	**75**	**$33,548**				**685**	**113**	**$26,042**
Cleveland Elementary School							243	57	$11,093
Monroe Elementary School	322	59	$14,663						
Peabody Charter Elementary School	767	16	$18,885						
Roosevelt Elementary School							442	56	$14,949
Junior High	**919**	**97**	**$37,891**	**698**	**83**	**$38,455**			
Goleta Valley Junior High School	19	3	$308	698	83	$38,455			
La Colina Junior High School	900	94	$37,583						
High School	**117**	**2**	**$307**						
Alta Vista Alternative High School	117	2	$307						
Senior High				**54**	**9**	**$2,576**			
Dos Pueblos Senior High School				54	9	$2,576			
Grand Total	**2,125**	**174**	**$71,746**	**752**	**92**	**$41,030**	**685**	**113**	**$26,042**

3.2.2.8 Wildfire Hazard Problem Statements

As part of the mitigation action identification process, the HMPT identified issues and weaknesses (aka problem statements) for SBUSD facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic wildfire data. Wildfire problem statements are listed in Table 3-19.

Identifying these common issues and weaknesses assists the HMPT in understanding the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-19 and Table 4-3.

Table 3-19 Wildfire Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Wildfire	WF-03	Wildfire smoke and PSPS (power shutoffs) could close campuses and interrupt instruction; limited air-filtration and backup-power capability.		
Wildfire	WDF-3 (Existing)	Lack of fire-resistant landscaping around schools.		
Wildfire	WDF-4 (Existing)	Inadequate vegetation maintenance and defensible space.		
Wildfire	WDF-2 (Existing)	Need to improve fire-resistant construction materials.		

Wildfire	WF-01	Vegetation and slope fuels adjacent to La Colina JHS, McKinley ES, and Roosevelt ES increase ignition potential; defensible-space maintenance inconsistent.	
Wildfire	WF-02	Lack of coordinated vegetation management and building-hardening standards across facilities.	
Wildfire	WF-05	No districtwide vegetation-management or hardening program exists.	
Wildfire / Air Quality	WF-04	Schools located within or near wildland-urban interface zones face risks from advancing wildfire, embers, and smoke exposure to students and staff.	
Wildfire / Air Quality	WF-05	Poor air quality and smoke infiltration can force school closures and lead to respiratory illness among sensitive students.	
Wildfire / Air Quality	WF-06	Outdoor athletic and extracurricular activities may need to be cancelled or relocated during wildfire smoke events, affecting student health and engagement.	

3.2.3 Flood Hazard Profile



Flooding is one of the most common natural hazards affecting SBUSD facilities and typically occurs during periods of heavy rainfall, winter storms, or intense seasonal precipitation. Flood events can disrupt operations, damage infrastructure, and impact campus accessibility, particularly in low-lying or poorly drained areas. While flood occurrences are relatively frequent compared to other hazards, the overall extent of facility exposure remains limited within the district. A flood, as defined by FEMA's National Flood Insurance Program (NFIP) is: "[a] general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties from:

- Overflow of inland or tidal waters,
- Unusual and rapid accumulation or runoff of surface waters from any source,
- Mudflow, or
- Collapse or subsidence of land along the shore of a lake or similar body of water because of erosion or undermining caused by waves or currents of water.

Floods can be slow- or fast-rising, generally developing over a period of hours or days. The standard for flooding is the 1% annual chance flood, commonly called the 100-year flood or the base flood. This is also the benchmark used by the FEMA to establish a standard of flood control in communities throughout the country.

Heavy Rain Events

Heavy rain events can happen throughout the year in the SBUSD, putting life and property at risk. More than .30 inches of rain per hour, equivalent to a month's worth of rain for a given location falling in one day, is considered a heavy rain event.

Significant rainfall contributes to backed-up storm drains, saturated ground, and overflowing river drainages, all of which contribute to flooding. Heavy rainfall events are on the rise in frequency and intensity throughout the United States. These events are more likely in a warmer environment when an atmospheric disturbance is present (Association, 2018).

Slope Failure and Mudslides After Flooding

Slope failure and mudslides are a secondary hazard of flooding. Soil rapidly collects and absorbs water during flooding, making slopes susceptible to slope failure involving rock, earth, or debris flow. Slope failures that result from flooding either involve a flow of mud, rock, or earth that results from water accumulating in the ground or a slide of rock and debris down a steep slope that results from water moving down a slope and detaching material from that slope.

3.2.3.1 Regulatory Environment

Flood hazard management for SBUSD facilities is governed by a coordinated framework of federal, state, and local regulations designed to reduce risk to life and property.

At the federal level, the Federal Emergency Management Agency (FEMA) establishes Special Flood Hazard Areas (SFHAs) and regulates development within the 100-year floodplain through the National Flood Insurance Program (NFIP). Projects located within mapped flood zones must comply with FEMA elevation and floodproofing standards.

At the state level, public school construction is regulated by the California Division of the State Architect (DSA) pursuant to the California Building Code (CBC), California Administrative Code (Title 24, Part 1), and Education Code §§17280–17317. DSA review and approval is required for new construction, modernization, and site development projects. Where school facilities are located within flood hazard areas, DSA ensures compliance with CBC flood-resistant construction standards, including elevation requirements, structural design criteria, and protection of critical building systems.

At the local level, the City of Santa Barbara implements floodplain development standards through its adopted Floodplain Management Code (Municipal Code Chapter 22.24), which regulates construction and grading within designated flood hazard areas

The City's 2013 Safety Element further identifies flood-prone areas and integrates flood risk considerations into land use and infrastructure planning

For SBUSD facilities, flood hazard compliance is achieved through coordination between DSA, the District, and the local jurisdiction to ensure that school sites and buildings meet federal floodplain standards, state construction requirements, and local flood management regulations.

National Flood Insurance Program (NFIP)

The National Flood Insurance Program (NFIP) makes federally backed flood insurance available to homeowners, renters, and business owners in participating communities. In most participating communities, FEMA has prepared a detailed Flood Insurance Study (FIS). This study presents water surface elevations for floods of various magnitudes, including the 1% annual chance or base flood (also known as the 100-year flood) and the 0.2% annual chance flood (or 500-year flood).

Base Flood Elevations (BFE) and the boundaries of the 100- and 500-year floodplains are shown on Flood Insurance Rate Maps (FIRMs). These maps are the primary tools for identifying the extent and location of flood hazards. FIRMs also designate the regulatory floodway which is the channel of the river or stream and the adjacent land that must remain free from obstruction so that the base flood can be conveyed downstream. FIRMs represent the most detailed and consistent data source available and, in many communities, they define the minimum regulatory area for floodplain management.

The most recent Flood Insurance Rate Maps (FIRMs) for areas within the District became effective on September 28, 2018, and identify several areas of flood hazard (Figure 3-35). Most mapped zones within the district limits indicate a 1% annual chance of shallow flooding (e.g., AO Zone) or areas where Base Flood Elevations (BFEs) have not been determined (e.g., A Zone). The County of Santa Barbara is currently undergoing a FEMA Flood Risk Mapping, Assessment, and Planning (Risk MAP) update process, which will result in revised FIRMs and updated flood hazard data. However, this HMP relies on the currently effective September 18, 2018 FIRMs for analysis and exposure assessment. Overall, adopted FIRM data indicate that the majority of District facilities are not located within mapped Special Flood Hazard Areas, though the maps may not fully capture localized urban flooding associated with intense rainfall events, storm drain limitations, or short-duration storms.

While SBUSD does not regulate floodplain development or administer floodplain permits, district facilities located within mapped flood hazard areas remain subject to the requirements of communities that participate in the NFIP. Under the NFIP, participating jurisdictions must regulate development within Special Flood Hazard Areas (SFHA) to ensure that:

- New buildings and substantially improved structures are elevated or otherwise protected to resist damage from the base flood.
- New development does not increase flood hazards or cause additional damage to other properties.
- Development incorporates reasonable and prudent measures to protect natural floodplain functions and ecosystems.

Compliance with NFIP standards is monitored by FEMA Region 9 and the California Department of Water Resources (DWR) under contract with FEMA. For SBUSD, this regulatory framework means that any new construction or substantial modernization of school facilities within mapped flood hazard areas must comply with locally administered NFIP requirements, as well as applicable California Building Code and Division of the State Architect (DSA) standards.

Although the District is not the regulating authority, adherence to NFIP and local floodplain development standards is essential to maintaining community eligibility for federal flood insurance and ensuring that district facilities are constructed to appropriate flood protection standards.

General Plan Policies

Santa Barbara Unified School District facilities are located within the City of Santa Barbara, the City of Goleta, and portions of unincorporated Santa Barbara County. As a result, District properties are subject to the flood hazard policies and implementing regulations adopted by each respective jurisdiction through their General Plans and Safety Elements.

Both the City of Santa Barbara and the City of Goleta Safety Elements establish policies intended to minimize risk to life and property from flooding. These policies generally:

- Require the use of the most current FEMA Flood Insurance Rate Maps (FIRMs) when reviewing development proposals in flood hazard areas.

- Discourage or restrict new development within 100-year floodplains and designated floodways unless adequate mitigation is provided.
- Require compliance with locally adopted Floodplain Management Ordinances.
- Protect natural drainage systems, creeks, and watershed functions to preserve flood conveyance capacity.
- Discourage the siting of critical facilities within flood hazard areas unless appropriate engineering and mitigation measures are implemented.
- Coordinate with regional flood control agencies to reduce flood risk and improve stormwater infrastructure.

For SBUSD, these policies do not create regulatory authority over floodplains; rather, they establish the framework within which District facilities are planned, modernized, and constructed. Any new construction or substantial improvements at District sites located within mapped flood hazard areas must comply with applicable local floodplain development standards, as well as California Building Code and Division of the State Architect (DSA) requirements.

Because the District serves areas that extend beyond city boundaries into unincorporated Santa Barbara County, coordination with multiple jurisdictions is essential to ensure consistent application of flood hazard policies and continued alignment with regional flood risk management efforts.

3.2.3.2 Past Events

Flooding associated with severe winter storms has affected Santa Barbara County on a recurring basis. District facilities are subject to flood risk from intense rainfall, stormwater runoff, creek overtopping, localized drainage constraints, and post-wildfire debris flows. Flood events in the region are most common during the winter months, particularly during atmospheric river events and El Niño-driven storm seasons.

While no single catastrophic flood event has resulted in widespread long-term closure of SBUSD campuses in recent decades, regional extreme weather events have caused localized flooding, roadway closures, debris flows, and temporary operational disruptions affecting school access and transportation routes. Flood impacts in Santa Barbara County are often compounded by steep topography, burn scars in foothill areas, and constrained urban drainage systems.

Between 2005 and 2024, multiple federally declared disasters in Santa Barbara County (FEMA Region 9) included flooding, debris flows, mudslides, and severe winter storm impacts. These events are summarized below in Table 3-20.

Table 3-20: Extreme Weather Events Leading to Flooding 2005-2025

FEMA Disaster Description	Hazard ID	Disaster Number	Start Date

Severe Storms, Flooding, Debris Flows, and Mudslides	Severe Storm	DR-1577-CA	12/26/2004
Wildfires, Flooding, Mud Flows, and Debris Flows	Fire	DR-1731-CA	10/20/2007
Severe Winter Storms, Flooding, and Debris and Mud Flows	Flood	DR-1952-CA	12/16/2010
Severe Winter Storms, Flooding, and Mudslides	Flood	DR-4308-CA	1/31/2017
Severe Winter Storms, Flooding, and Mudslides	Flood	DR-4305-CA	1/17/2017
Wildfires, Flooding, Mudflows, and Debris Flows	Fire	DR-4353-CA	12/3/2017
Severe Winter Storms, Flooding, Landslides, and Mudslides	Severe Storm	DR-4431-CA	2/12/2019
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	Severe Storm	DR-4699-CA	2/20/2023
Severe Winter Storms, Flooding, Landslides, and Mudslides	Flood	DR-4683-CA	12/26/2022
Severe Winter Storms, Flooding, Landslides, and Mudslides	Flood	EM-3592-CA	3/8/2023
Severe Winter Storms, Flooding, and Mudslides	Flood	EM-3591-CA	1/7/2023
Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	Severe Storm	DR-4769-CA	1/30/2024

3.2.3.3 Location / Geographic Extent

Flooding represents a recurring natural hazard within the district, particularly in low-lying coastal areas, along creek corridors, and at the base of the Santa Ynez foothills. Flood risk within the district is shaped by coastal influences, watershed hydrology, steep upstream terrain, and urban drainage infrastructure.

As shown in Figure 3-9 (FEMA Flood Zones), mapped 100-year floodplains (Special Flood Hazard Areas) are primarily concentrated along major drainage corridors and coastal lowlands, including areas associated with San Jose Creek, San Pedro Creek, Mission Creek, Arroyo Burro Creek, and other tributaries that drain south from the foothills toward the Pacific Ocean. Additional 500-year floodplain areas extend inland in portions of Goleta and eastern Santa Barbara.

Several SBUSD facilities are located within or adjacent to mapped 100-year and 500-year flood zones. These sites are generally situated in lower-elevation coastal areas or near creek systems where shallow flooding or overbank flows may occur during significant winter storm events. The majority of district facilities, however, are located outside FEMA-designated 100-year floodplains.

Flood hazards within the district are typically confined to creek channels, flood control corridors, and low-lying coastal areas. However, localized urban flooding may occur outside mapped FEMA floodplains due to storm drain capacity limitations, blocked inlets, undersized culverts, or short-duration high-intensity rainfall events. Temporary roadway ponding or overtopping during major storms may affect campus access and transportation routes.

In addition to riverine flooding, the district's coastal proximity introduces potential exposure to coastal storm surge and long-term sea level rise in shoreline-adjacent areas. Post-wildfire debris flows originating in foothill watersheds can also exacerbate flood conditions by increasing sediment loads and reducing channel conveyance capacity.

Overall, flood exposure within SBUSD is geographically concentrated but operationally significant, particularly during intense winter storm seasons.

3.2.3.4 Magnitude / Severity

The magnitude and severity of flooding impacts to SBUSD depend on storm intensity, watershed response, and local drainage capacity. Intense rainfall events, particularly those associated with atmospheric rivers, can generate flash flooding in steep foothill canyons and along drainage corridors that convey runoff toward the coastal plain.

Flash flooding near transportation routes can result in roadway overtopping, debris accumulation, erosion, and localized washouts. As a result, SBUSD campuses may experience temporary street closures, transportation delays, or restricted emergency access due to sediment deposition, standing water, or damaged infrastructure. Cleanup and repairs following significant storm events may require multiple days depending on the extent of debris and infrastructure impacts.

Within the more urbanized coastal plain, localized flooding can occur where stormwater systems are undersized, blocked, or overwhelmed by high-intensity rainfall. Although much of the valley floor is relatively flat, this low gradient can allow water to pond in streets, parking areas, and low-lying properties during even moderate storm events.

Several SBUSD campuses are located near creeks, drainage channels, or at the base of foothill areas where runoff concentrates. In addition, portions of the district lie on historic alluvial fan deposits, where sediment transport during major storm events can exacerbate flood and debris impacts.

While regional flood control infrastructure reduces overall flood risk, extreme storm events may exceed system design capacity. Under such conditions, impacts to District operations may include building intrusion, access disruptions, athletic field damage, utility interruptions, and temporary campus closures.

Overall, the severity of flooding impacts to SBUSD ranges from minor nuisance flooding to more significant operational disruptions during major storm events.

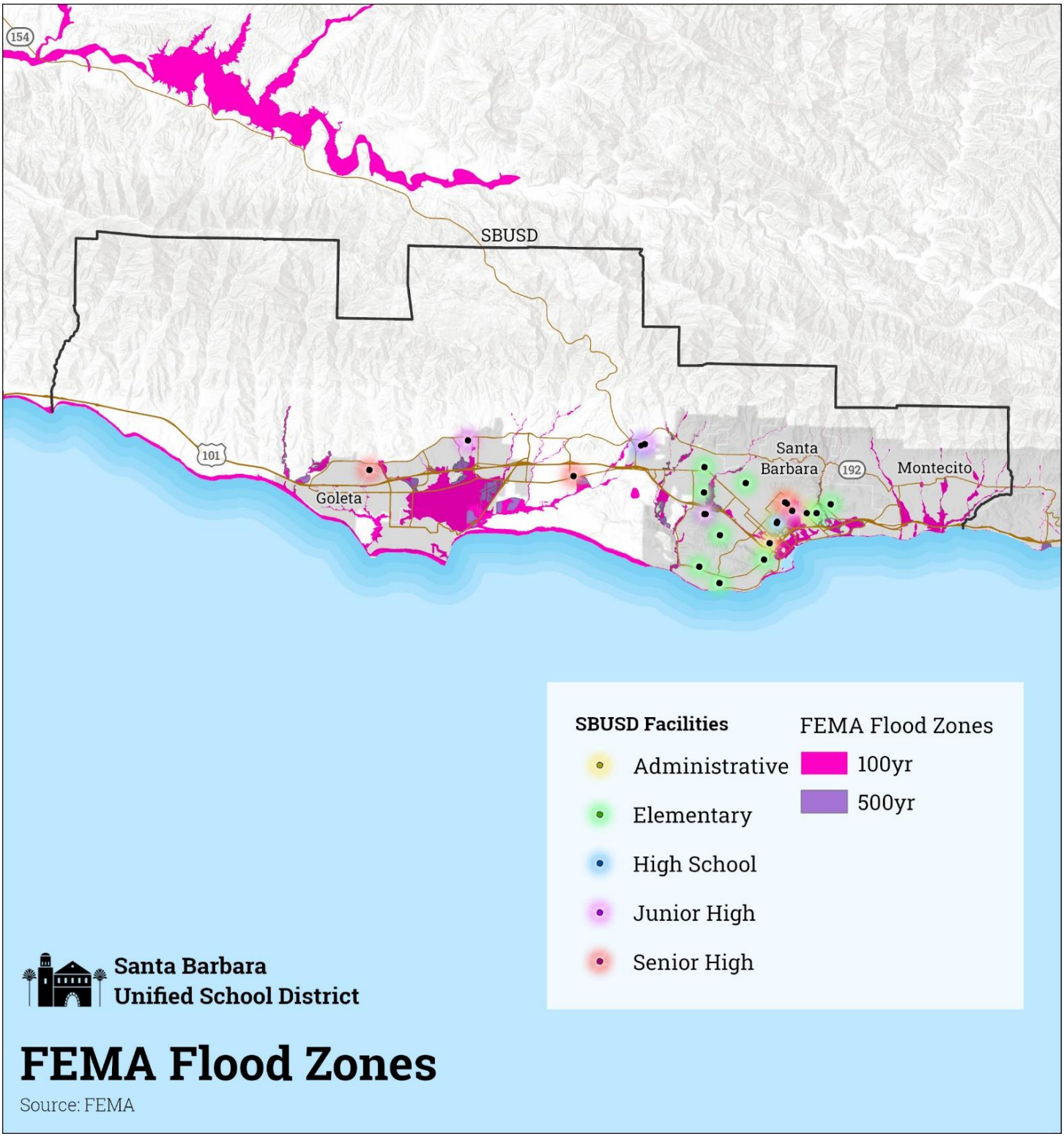


Figure 3-9: 100 and 500- Year Flood Zones in SBUSD

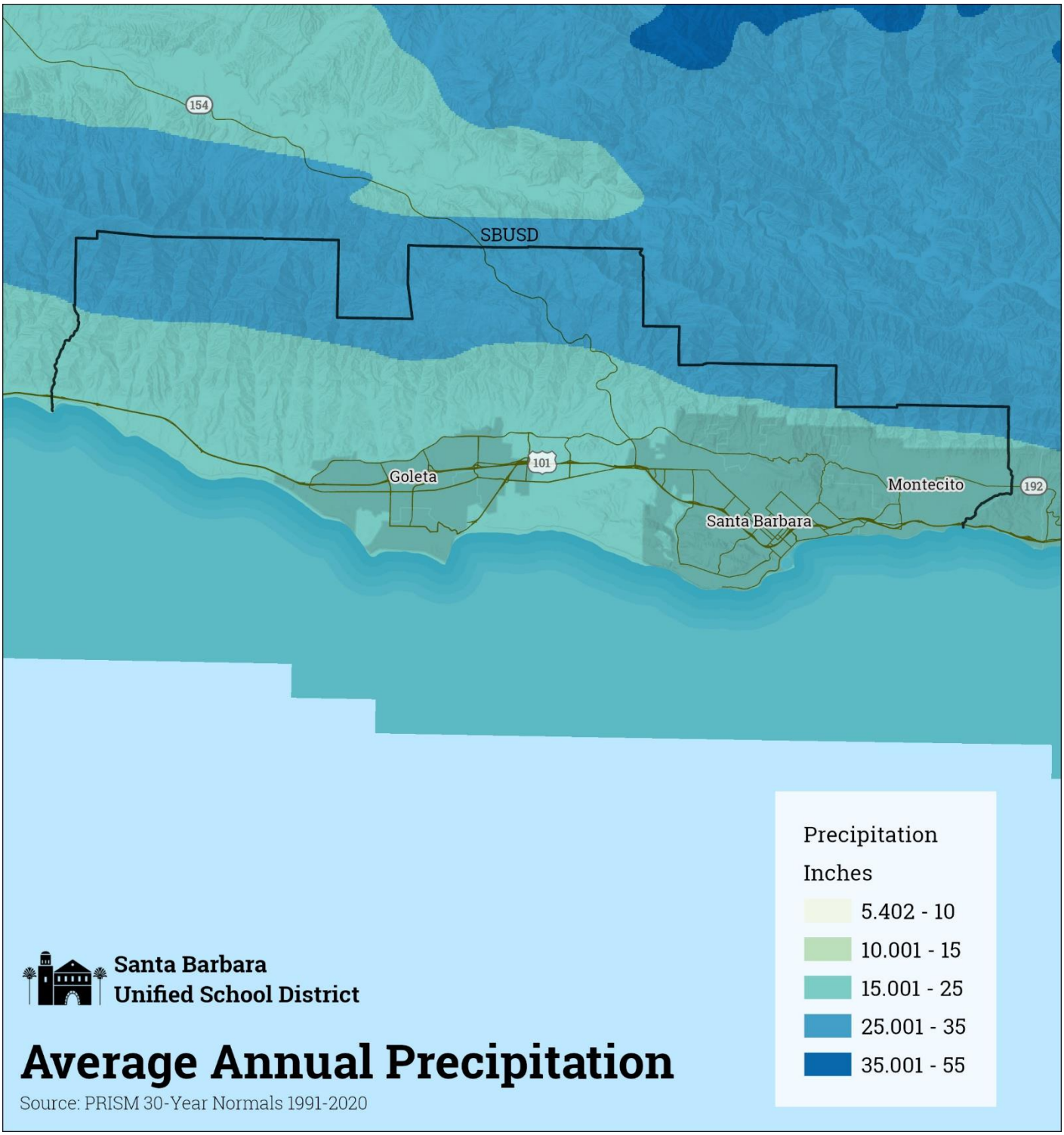


Figure 3-10: Average Annual Precipitation

3.2.3.5 Frequency / Probability of Future Events

Flooding within the SBUSD is most commonly associated with winter storm systems, particularly atmospheric river events that bring prolonged, high-intensity rainfall to the South Coast. These storm events typically occur between December and March, although intense rainfall can occur at other times of the year. Flood conditions may result from creek overtopping, coastal storm surge, storm drain exceedance, or debris accumulation that reduces channel capacity.

In addition to riverine flooding, localized urban flooding can occur due to short-duration, high-intensity rainfall that overwhelms stormwater systems. Low-lying areas, parking lots, athletic fields, and access roadways may experience temporary ponding even when not located within mapped floodplains. Post-wildfire conditions in foothill watersheds can further increase the probability of debris flows and sediment-laden runoff during heavy rain events.

FEMA's Flood Insurance Rate Maps (FIRMs) identify flood hazard zones for insurance and floodplain management purposes and provide an estimate of the probability of future flooding. Areas mapped within the 100-year floodplain (Special Flood Hazard Area) have a 1-percent annual chance of flooding in any given year. Areas mapped within the 500-year floodplain have a 0.2-percent annual chance of flooding. While these percentages describe annual probability, they do not predict when flooding will occur. Multiple significant storm events can occur within a short timeframe, as demonstrated by recent consecutive winter disaster declarations in 2017, 2023, and 2024.

The recurrence interval represents a long-term statistical average rather than a fixed schedule. As a result, flood events of similar magnitude may occur more frequently than mapped probabilities suggest. Recent patterns of intense winter storms indicate that SBUSD should anticipate continued periodic flooding, particularly during strong winter storm seasons and atmospheric river events.

3.2.3.6 Development Trends

Development patterns within the SBUSD play a significant role in shaping flood risk to district facilities. The district is located within a coastal watershed system influenced by steep upstream terrain, urbanized lowlands, and proximity to the Pacific Ocean. These conditions contribute to a range of flood hazards, including urban stormwater flooding, creek overflows, and coastal flooding during extreme weather events. The distribution of facilities across these varied environments results in differing levels of exposure and vulnerability.

Over time, improvements in stormwater infrastructure, floodplain management, and regulatory standards have reduced risk for newer development. However, older facilities and surrounding urban areas may still experience limitations in drainage capacity during high-intensity rainfall events. This section evaluates how historic development patterns, current infrastructure conditions, and future growth influence flood risk and resilience across SBUSD facilities.

Past Development Patterns

Much of the development within SBUSD occurred prior to modern stormwater management standards, particularly in the mid-20th century urban expansion period. Schools and surrounding neighborhoods were often constructed in low-lying coastal areas and along natural drainage corridors, including creeks such as Mission Creek and Arroyo Burro. Earlier development frequently relied on undersized or aging drainage infrastructure, with limited consideration for extreme precipitation events. As a result, some campuses remain susceptible to localized flooding, ponding, or runoff impacts during heavy rainfall.

Anticipated Future Growth

Future development within SBUSD is expected to focus on modernization, site improvements, and incremental redevelopment, rather than expansion into new flood-prone areas. Current regulations and design standards require consideration of floodplain mapping, stormwater management, and site drainage design for new construction and major renovations. Projects increasingly incorporate low-impact development (LID) strategies, improved drainage systems, and resilient site design to manage runoff and reduce flood risk. These measures are expected to enhance overall resilience of district facilities over time.

Development Impacts on Flood Hazard

Urban development has altered natural drainage patterns by increasing impervious surfaces, such as roofs, parking lots, and paved play areas, which accelerate runoff and can overwhelm existing drainage systems. In older areas, this has contributed to localized flooding and reduced infiltration capacity. However, more recent development and redevelopment efforts incorporate engineered drainage systems, detention features, and stormwater controls, which help mitigate these impacts and reduce flood hazard at the site level.

Impacts of Flood Hazard on Development

Flood risk continues to influence facility planning, design, and maintenance across SBUSD. Existing facilities in flood-prone areas may require drainage upgrades, elevation of critical systems, and floodproofing measures to reduce vulnerability. Flood events can disrupt school operations through campus flooding, road closures, and limited site access, even when structural damage is minimal. As a result, flood hazard considerations are integrated into capital improvement planning, maintenance programs, and site design standards, ensuring that both existing and future facilities are better equipped to manage stormwater and flood-related impacts.

3.2.3.7 Vulnerability Assessment

District vulnerabilities from flooding vary depending on the origin of the flooding. Types of flooding and resulting impacts include:

- **Localized flooding.** Rain events can cause damage to buildings if stormwater drainage systems are damaged or improperly designed. Localized flooding results from blocked or inadequate stormwater drainage systems which cause water to back up and flood low-lying areas, around buildings, and

basements or first floors. Localized flooding is not as dramatic as a major flood, but repetitive localized flooding can have long-term impacts, including safety hazards, property damage, and public health concerns. SBUSD facilities that are located near failing or outdated stormwater drainage facilities are most vulnerable to localized flooding. Standing water that results from localized flooding can be a breeding zone for mosquitos that can transmit harmful disease. Localized flooding can result in the development of mold or mildew that can cause or exacerbate existing health problems such as asthma, allergies, and respiratory illness. Carpet, walls, and insulation can be permanently damaged when exposed to even small amounts of water.

- **Regional flooding.** Regional flooding involves flooding of multiple tributaries and drainages throughout the SBUSD. Regional flooding presents a catastrophic threat to SBUSD facilities and transportation networks. This type of event is highly unlikely.

Note: SBUSD is not eligible to participate in the National Flood Insurance Program (NFIP), nor does it have repetitive loss properties; no statistics on NFIP participation or repetitive loss are included.

3.2.3.7.1 General District Vulnerability

This section describes the vulnerability of SBUSD facilities to flooding based on exposure analysis and review of available flood hazard data.

Flood exposure data were developed using District facility information provided by the Facilities and Operations Department and associated property inventory records. These datasets were spatially analyzed against FEMA Flood Insurance Rate Maps (FIRMs) to identify buildings located within mapped 100-year and 500-year flood hazard areas.

The exposure assessment is based on currently effective FEMA mapping and available jurisdictional flood hazard datasets. While these data sources are appropriate for planning-level analysis, they are not intended to replace site-specific engineering or hydrologic studies. Flood depths, duration, and site drainage characteristics can vary significantly depending on storm intensity, watershed conditions, sediment accumulation, and localized infrastructure constraints. SBUSD facilities that are located within or adjacent to mapped flood hazard areas may be vulnerable to:

- Shallow overbank flooding from nearby creeks or drainage channels
- Surface ponding due to storm drain exceedance
- Debris-laden flows following intense rainfall or post-wildfire conditions
- Access disruptions caused by flooded roadways

In addition to direct building exposure, operational vulnerability includes potential impacts to utilities, access routes, parking areas, athletic fields, and other site improvements.

Overall, the planning-level exposure analysis provides a reasonable estimate of flood vulnerability across District facilities and supports the development of mitigation strategies to reduce potential future losses.

3.2.3.7.2 Student, Staff and Insured Building Values

Flood exposure for Santa Barbara Unified School District (SBUSD) was evaluated using facility inventory data provided by the District's Facilities/Operations Office and current Insurance Property Schedules. These datasets provide a reliable representation of student population, staffing levels, and insured building values for planning-level analysis.

Exposure was analyzed relative to the currently effective FEMA Flood Insurance Rate Maps (FIRMs). Table 3-21 summarizes the number of students, staff, and insured building values located within FEMA-identified flood hazard areas. Districtwide, approximately:

- 570 students, 89 staff, and $71.4 million in insured building value are located within FEMA 100-year flood zones (0.1-percent annual chance areas);
- Junior high campuses account for the majority of mapped flood exposure, particularly Santa Barbara Junior High School.

It is important to note that FEMA flood zones reflect modeled riverine and coastal flood hazards but do not capture all localized stormwater conditions. Urban drainage limitations, short-duration high-intensity rainfall, debris blockage, or post-wildfire sedimentation may result in localized flooding outside mapped floodplains. In addition, operational impacts such as roadway closures, access disruptions, and temporary utility interruptions may affect campuses not located within designated FEMA flood zones.

Figure 3-9 illustrates the geographic distribution of SBUSD facilities relative to FEMA 100-year and 500-year flood hazard areas, demonstrating that mapped flood exposure is concentrated in low-lying coastal and creek-adjacent areas of the district.

Table 3-21: Flood Exposure to FEMA 100-YR Flood Hazard

100-YR FEMA Flood Zone School Facilities by Type	Student Count	Staff Count	Insured Bldg. Value (in Millions)
Administrative	10	2	$11,530
ARMORY	0	0	$10,901
LAS FLORES CHILDRENS CENTER	10	2	$629
Junior High	560	87	$59,914
GOLETA VALLEY JUNIOR HIGH SCHOOL	0	0	$15
SANTA BARBARA JUNIOR HIGH SCHOOL	560	87	$59,899
Grand Total	**570**	**89**	**$71,445**

3.2.3.7.3 Santa Barbara Junior High Flood Exposure

Santa Barbara Junior High School represents the district's most concentrated area of mapped flood exposure. Based on spatial analysis of District facility data and the currently effective FEMA Flood Insurance Rate Maps (FIRMs), approximately **12–13 buildings** at the campus are located within the FEMA 100-year floodplain (1-percent annual chance flood zone).

Review of the FEMA flood mapping indicates that the mapped 100-year floodplain in the vicinity of Santa Barbara Junior High is associated with riverine flooding tied to Mission Creek and its downstream floodplain, with potential coastal influence at lower elevations. While coastal storm surge contributes to broader flood hazard along the waterfront and East Beach areas, the floodplain mapped at Santa Barbara Junior High is primarily influenced by creek overflow and localized overbank flooding during intense winter storm events.

The campus is located within the Eastside area of Santa Barbara, where relatively flat topography, urbanized drainage patterns, and proximity to Mission Creek increase modeled flood extent during a 1-percent annual chance event. Flood depths in this area are generally characterized as shallow overland flow rather than high-velocity channel flooding; however, site-specific depth and velocity conditions would require engineering-level analysis to confirm.

Operational Considerations

Flood exposure at Santa Barbara Junior High presents both structural and operational vulnerability considerations:

- Potential shallow flooding of buildings and site improvements
- Temporary ponding in parking lots and athletic areas
- Access disruption along surrounding roadway corridors
- Utility interruptions during severe winter storm events

Although FEMA mapping reflects modeled 1-percent annual chance conditions, recent regional disaster declarations demonstrate that multiple severe winter storms can occur within a single season, increasing the probability of short-term operational disruption.

illustrates the campus-level exposure and confirms that Santa Barbara Junior High accounts for the majority of mapped 100-year flood exposure within SBUSD.

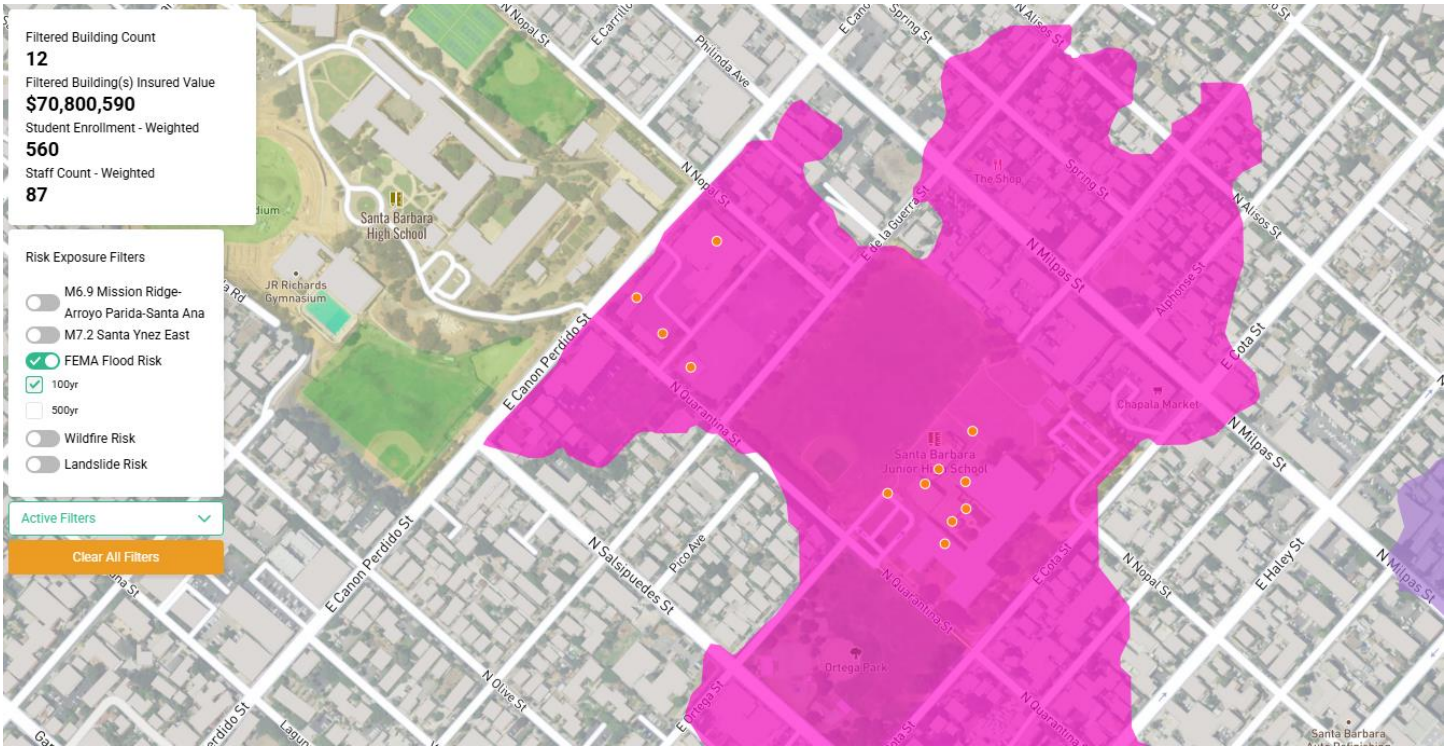


Figure 3-10: Campus Level Flood Risk Santa Barbara Junior High

3.2.3.8 Flood Hazard Problem Statements

As part of the mitigation action identification process, the HMPT identified issues and/or weaknesses (aka problem statements) for SBUSD facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic flood data. Flood hazard problem statements are listed in Table 3-22.

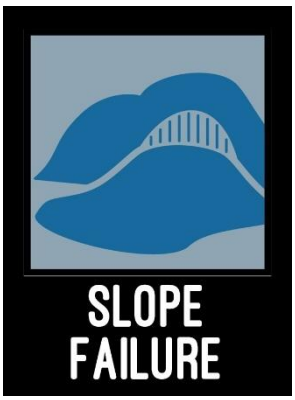
Identifying these common issues and weaknesses assists the Planning Committee in understand the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-22 and Table 4-3.

Table 3-22 Flood Hazard Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Flood	FL-01	SBHS Multimedia-Arts Design Academy basement floods during heavy rain; drainage systems clogged or undersized.		
Flood	FL-02	Franklin ES, Cleveland ES, and Washington ES experience ponding and inadequate runoff control.		
Flood	FL-03	Flooding may damage classrooms, HVAC, and electrical systems.		
Flood	FL-04	Drainage-related flooding at several campuses.		
Flood	FL-05	Roof drainage leaks causing interior flooding.		
Flood	FL-06	Drainage infrastructure districtwide is aging and undersized for atmospheric river events.		

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3.2.4 Slope Failure Hazard Profile



Slope failure is a broad term used to describe the downslope movement of soil, rock, and debris under the influence of gravity. These events include landslides, debris flows, earthflows, rockfalls, and other forms of mass movement that may occur independently or transition from one type to another during movement. Slope failures can occur gradually or suddenly and are often triggered by intense rainfall, seismic shaking, erosion, wildfire, or human disturbance.

The stability of a slope is influenced by a combination of geologic and environmental factors, including soil and rock composition, slope steepness and orientation, groundwater conditions, weathering processes, vegetation cover, and land alteration such as grading or drainage modification. In Santa Barbara County, the combination of steep terrain, weak sedimentary formations, episodic heavy winter storms, coastal erosion processes, wildfire burn scars, and regional seismic activity creates conditions that are conducive to slope instability in certain areas.

Key factors contributing to slope failure susceptibility in the planning area include:

- Steep topography and highly erodible geologic formations;
- Periods of intense rainfall associated with winter storms and atmospheric river events;
- Seismic activity capable of triggering ground shaking and slope movement;
- Wildfire impacts that remove vegetation and reduce soil cohesion on steep slopes; and
- Human activities such as vegetation removal, grading, drainage concentration, or aging infrastructure that alter natural slope stability.

In burned watersheds, even relatively low rainfall thresholds may initiate debris flows or shallow landslides due to the loss of vegetative stabilization and hydrophobic soil conditions. Additionally, deteriorating drainage systems or poorly maintained access roads can concentrate runoff and exacerbate localized slope instability.

While slope failures may not always result in structural damage to District facilities, they can significantly disrupt transportation access, emergency response routes, utilities, and daily school operations. Road closures and cleanup costs are among the most common impacts, and prolonged disruptions can have secondary economic and operational consequences for the district.

3.2.4.1 Compounding Hazards

Certain hazards can directly trigger slope failures or significantly increase their likelihood and severity. In the Santa Barbara area, wildfire and heavy rainfall/flooding are the primary compounding hazards affecting slope stability. Both hazards are influenced by changing climate conditions, which may increase the frequency and intensity of extreme weather events. As a result, slope failure risk may also be indirectly compounded by climate change.

Heavy Rain & Flooding

Intense rainfall and associated flood events are among the most common triggers of slope failure. Prolonged or high-intensity precipitation saturates soils, increases pore water pressure, and reduces soil cohesion and shear strength, particularly in steep mountain watersheds. When soils become fully saturated, slopes may fail in the form of landslides, debris flows, mudslides, or rockfalls.

Flood events can also destabilize slopes by eroding or undercutting the toe of a slope, thereby removing foundational support and initiating collapse. In developed areas, slope instability may be exacerbated by stormwater infrastructure that exceeds capacity, clogged or failed culverts, or concentrated runoff from impervious surfaces.

In Santa Barbara County, heavy rainfall events most commonly occur between November and April and are frequently associated with atmospheric river systems. These storms can deliver intense precipitation rates—sometimes exceeding one inch per hour over extended periods—resulting in flash flooding in steep and mountainous terrain. The interaction between heavy rainfall, surface runoff, and steep topography creates conditions highly conducive to slope failure. Atmospheric rivers and severe storm patterns are discussed in greater detail in the Extreme Weather Profile.

Wildfires

Wildfires significantly alter slope stability in both the short and long term. Fire removes vegetation that stabilizes slopes through root reinforcement and interception of rainfall. It can also alter soil structure, reduce infiltration capacity, and create hydrophobic (water-repellent) soil layers that increase surface runoff.

Following a wildfire, even relatively small rainfall events can generate rapid runoff, debris flows, and shallow landslides. Burned areas are particularly vulnerable during the first several rainy seasons after a fire, when vegetation has not yet reestablished. As a result, areas previously mapped as low or moderate slope failure risk may experience temporarily elevated risk conditions after a wildfire event.

Because climate change is expected to increase wildfire frequency, drought severity, and extreme precipitation events, the interaction between wildfire and heavy rainfall may further compound slope failure risk over time.

3.2.4.2 Types of Slope Failure

Within the Santa Barbara region, several types of slope failure present potential risks to District facilities, access routes, and supporting infrastructure. While large-scale slope failures are more common in mountainous and canyon areas, their secondary impacts, particularly roadway closures and utility disruptions, can directly affect school operations. The primary slope failure concerns relevant to the District include landslides, debris flows, and bank failure.

Landslide

Landslides involve the downward and outward movement of soil, rock, artificial fill, or a combination of materials under the influence of gravity. Landslides are classified into various types based on material composition, movement mechanism, and rate of failure.

Some landslides move slowly, such as rotational slumps or earthflows, which may gradually distress foundations, pavements, retaining walls, and underground utilities. Although slower-moving events may pose less immediate threat to life safety, they can cause long-term structural damage and costly repairs.

In contrast, faster-moving landslides—including rockfalls and certain debris flows—pose a greater risk to life safety and infrastructure. Many significant slope failures are complex, involving multiple failure mechanisms occurring simultaneously or sequentially. For the District, landslide impacts are most likely to affect transportation corridors, hillside roadways, or utility lines that serve school campuses rather than causing direct structural failure of school buildings.

Debris Flow

According to NOAA, debris flows, also known as mudslides, mudflows, or debris avalanches, are the most common type of slope failure in Santa Barbara County. These fast-moving landslides occur when slope material becomes saturated with water. As such, they typically occur during or after intense rainfall.

Debris flows originate on steep hillsides as liquefied, shallow flows that become concentrated in steep canyons. They can accelerate from approximately 10 miles per hour to over 35 miles per hour and carry a variety of materials such as boulders, trees, and even vehicles. Debris flows vary in consistency from watery mud to thick, rocky mud with entrained debris, and can severely damage road surfaces and structures. As debris flows converge from adjacent channels, they accumulate more materials and muddy water, thus increasing in destructive force. From a geologic perspective, there are generally two types of debris flows.

- **Shallow Landslide Debris Flows:** These debris flows occur due to soil failure from oversaturation, causing the soil to liquify and run downhill. This type of debris flow generally results from a shallow landslide (less than 15 feet deep) and has a discrete initiation zone depositional area. Shallow landslides tend to occur in winter but are most likely after prolonged periods of heavy rainfall when soil materials are saturated.
- **Post-Wildfire Debris Flows:** This type of debris flow is a result of post-wildfire conditions, where burned and baked soil surfaces increase rainfall runoff that concentrates in a channel and picks up debris as it moves. Under extreme wildfire conditions, soils can be damaged to the point of becoming hydrophobic, preventing water absorption or infiltration over large areas where the fire was most intense, such as steep hillsides and drainages with dense vegetation. Post-wildfire debris flows have a less discrete initiation zone but are otherwise similar in form to a debris flow derived from hillslopes.

An example of a catastrophic post-fire debris flow is the event that occurred in Santa Barbara County on January 9, 2018, when, after the Thomas Fire, numerous canyons deposited debris flows onto urbanized

alluvial fans in Montecito and Carpinteria with little warning time resulting in significant fatalities. (CalOES, 2018)

Bank Failure

Bank failure refers to the collapse or erosion of stream or riverbanks due to hydraulic forces, geologic instability, or loss of vegetative cover. Bank failure may occur gradually through chronic undercutting and slumping or suddenly during high-flow storm events when saturated soils give way.

This hazard is particularly relevant in areas where development occurred prior to modern setback and drainage standards. Roads, utilities, and other infrastructure located adjacent to creeks or drainage channels may be vulnerable to erosion and localized failure.

For the District, bank failure may not directly affect school buildings but could damage nearby roadways, bridges, or underground utilities, potentially disrupting access, transportation routes, and daily operations.

3.2.4.3 Regulatory Environment

Santa Barbara Unified School District (SBUSD) facilities are located within the City of Santa Barbara, the City of Goleta, and portions of unincorporated Santa Barbara County. Each jurisdiction's General Plan Safety Element establishes policies intended to reduce risk from geologic and slope-related hazards, including landslides, erosion, unstable soils, and debris flows.

The City of Santa Barbara General Plan Safety Element includes policies that:

- Require identification and mapping of areas subject to geologic and slope instability hazards;
- Discourage siting of critical facilities, including schools, within areas of known geologic or slope instability unless appropriate mitigation is provided;
- Require site-specific geotechnical investigations for development proposed in areas with steep slopes or identified geologic hazards;
- Ensure compliance with the California Building Code and related seismic and geotechnical design standards;
- Integrate slope stability considerations into land use planning and capital improvement decisions.

Similarly, the City of Goleta Safety Element (Policy SE 5: Soil and Slope Stability Hazards) requires:

- Geotechnical and geologic studies for development proposed on slopes generally equal to or exceeding 25 percent or within areas of moderate to high landslide potential;
- Evaluation of soil expansion, compressible soils, and slope-related hazards prior to approval of development;
- Avoidance of landslide-prone areas for critical facilities, including schools, where feasible;
- Implementation of appropriate mitigation measures when development cannot avoid slope hazard areas.

For SBUSD, these policies do not grant regulatory authority over slope hazards but establish the framework within which school facilities are designed, modernized, and constructed. Any new construction or substantial improvements at District sites located within areas of potential slope instability are subject to local review and must incorporate recommendations from licensed geotechnical professionals.

In addition to local General Plan policies, school construction projects are reviewed and approved by the California Division of the State Architect (DSA), which requires compliance with California Building Code provisions addressing geotechnical investigation, foundation design, slope stability, and seismic safety.

Together, local land use policies, state construction standards, and professional geotechnical review provide a layered regulatory framework intended to minimize risk from slope failure and associated geologic hazards within the District.

3.2.4.4 Past Events

Table 3-20 lists slope failure events that have been reported in Santa Barbara County between 2010 and 2025. The most significant slope failure event was the January 2018 debris flow in Summerland that caused 21 fatalities, injured 168 persons, and resulted in more than $600 million in property damage.

Table 3-23: Slope Failure Events in Santa Barbara County, 2010-2025

Date	Event Type	Location	Fatalities	Injuries	Property Damage
1/09/2018	Debris Flow	Summerland	21	168	$617 million
12/21/2023	Debris Flow	Summerland	0	0	None Reported
2/19/2024	Debris Flow	Santa Barbara / Goleta	0	0	None Reported
3/30/2025	Debris Flow	Goleta	0	0	None Reported

3.2.4.5 Location / Geographic Extents

The location of past slope failures remains the strongest indicator of where future movement may occur. Ancient landslide deposits can often be identified by distinctive topographic features that persist for hundreds to thousands of years. Although many of these historic slides are currently dormant, they represent areas of weakened and displaced material that may be reactivated by seismic shaking, prolonged or intense rainfall, wildfire impacts, or construction-related disturbance.

As shown on Figure 3-11, areas of highest landslide susceptibility are concentrated along the steep foothills and mountainous terrain north of the coastal plain. These high-susceptibility zones generally correspond to steep slopes, canyon systems, and geologic formations prone to instability. Moderate susceptibility areas extend downslope into portions of the developed urban interface, particularly near the base of the foothills and along coastal bluffs and drainages.

The map indicates that the majority of SBUSD facilities are located within the relatively flat coastal plain, where mapped landslide susceptibility is predominantly low to moderate. However, several campuses—particularly those located closer to the foothill interface and in eastern portions of the District—are situated near or within moderate susceptibility zones. While few facilities appear to be directly located within extensive high-susceptibility areas, many are in proximity to steep terrain or drainage corridors that could affect access routes and supporting infrastructure during slope failure events.

Slope failures in the District planning area are therefore most likely to occur:

- Along steep slopes in the Santa Ynez foothills north of the urbanized area;
- Within canyon and drainage systems that convey runoff from mountainous terrain;
- Along coastal bluffs and incised stream corridors; and
- In areas with documented historic landslide deposits.

Even where school buildings are not directly located within high-susceptibility zones, the potential for roadway blockages, utility disruptions, or debris deposition from upslope failures remains a key operational concern. Accordingly, both mapped susceptibility and proximity to steep terrain are important considerations in evaluating District vulnerability to slope failure hazards.

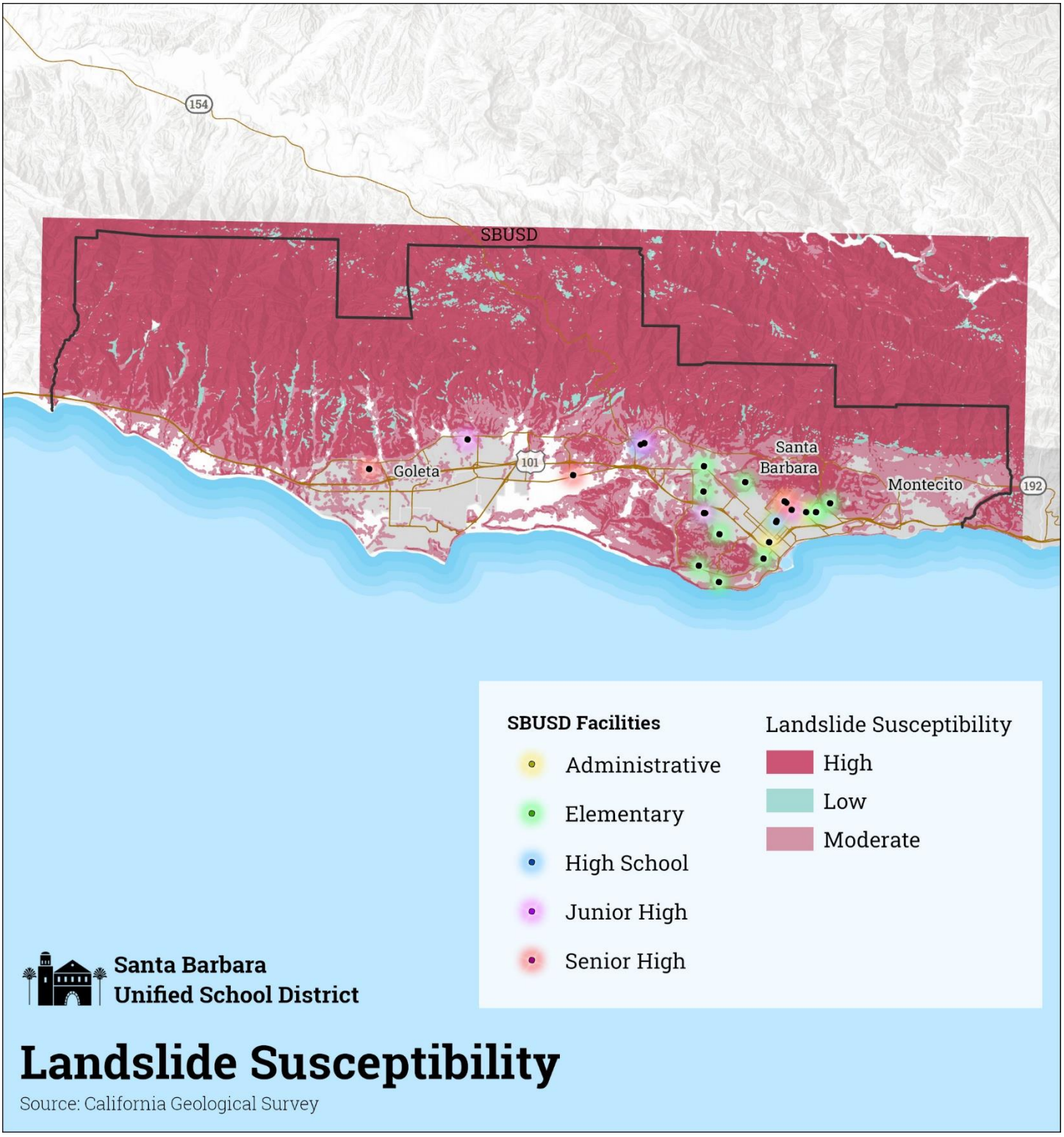


Figure 3-11: Landslide Exposure Map

3.2.4.6 Frequency / Probability of Future Events

Measuring the frequency and probability of slope failure hazards requires a combination of historical data analysis, geologic mapping, climate trends, and probabilistic modeling, as these hazards are influenced by factors such as precipitation, seismic activity, topography, and human development. To assess hazard frequency, researchers examine past events recorded in geological surveys, historical documents, and remote sensing data. For example, slope failure occurrences in Santa Barbara County are often linked to intense rainfall, and analyzing past precipitation patterns and climate change models helps estimate future probabilities. Probabilistic models, such as landslide susceptibility mapping, incorporate variables like slope gradient, soil composition, and vegetation cover to predict the likelihood of future events.

Slope failures are most frequently triggered in periods of high rainfall during the winter months, November to April, in Sana Barbara County. The hazard is greatest in steeply sloped areas, although slides may occur on slopes of 15% or less if the conditions are right. Slope steepness and underlying soils are the most important factors affecting the landslide hazard. However, surface and subsurface drainage patterns also affect the hazard, and vegetation removal can increase the likelihood of slope failure. Human activities contribute to instability through grading of steep slopes, overloading with artificial fill, extensive irrigation, construction of impermeable surfaces, and excessive groundwater withdrawal.

3.2.4.7 Severity

Slope failures, including landslides, debris flows, and bluff failures, pose significant hazards in Santa Barbara County, often disrupting essential services and emergency response capabilities. The severity of slope failure hazards depends on local geologic and soil conditions, including moisture content, slope, and vegetation cover.

The primary impacts from slope movement are on roads and any underlying or aboveground utilities including water and sewer infrastructure. While landslides occasionally threaten human life, their more common impact lies in blocking transportation routes, damaging buildings and infrastructure, damming creeks, and contaminating water supplies. The cleanup of these hazards on transportation routes can be costly and have substantial economic repercussions for the county. In coastal areas, transportation and utility infrastructure located at the top edge of coastal bluffs are highly vulnerable to damage because the rate of erosion and bluff retreat in unprotected areas, which is expected to increase in response to increased exposure to storm waves and intense rain events.

A significant amount of linear infrastructure (or lifelines) are exposed to slope failure, as further discussed in the vulnerability assessment section. Impacts to these lifelines can include:

- **Roads:** Access to major roads is crucial to life-safety, response, and recovery operations after a disaster event. Landslides can block egress and ingress on roads, causing isolation for neighborhoods, traffic problems, and delays for public and private transportation. This can also result in economic losses for businesses.

- **Bridges:** Landslides can significantly impact bridges, by knocking out bridge abutments or weakening the soil supporting them. Debris flows can also clog drainages at choke points such as bridges with downed trees, boulders, and other materials picked up along their path, triggering additional flooding impacts.

- **Power Lines:** Power lines are generally elevated above steep slopes, but the towers and poles supporting them can be subject to landslides. A landslide could trigger failure of the soil underneath support structures, causing them to collapse and rip down the lines. Power and communication failures due to landslides can create problems for first responders, vulnerable populations, and businesses.

3.2.4.8 Development Trends

Development patterns within the SBUSD significantly influence exposure to slope failure hazards, including landslides, debris flows, and erosion. The district is located at the base of the Santa Ynez Mountains, where steep terrain, unstable soils, and seasonal rainfall create conditions conducive to slope instability. These risks are further exacerbated in post-wildfire environments, where vegetation loss and soil hydrophobicity increase the likelihood of rapid debris flows during storm events.

Over time, advances in geotechnical engineering, grading practices, and adoptions of strengthened regulatory requirements have improved slope stability for newer development. However, legacy development patterns and site constraints continue to affect vulnerability at certain campuses. This section evaluates how historic development, current conditions, and future growth influence slope failure risk and resilience across SBUSD facilities.

Santa Barbara coastal and hillside areas generally face challenges from erosion and increased storm activity, leading to proactive management of school site infrastructure. Slope stabilization efforts are currently underway at McKinley Elementary School. Removal of historic vegetation, benching of hillside and re-seeding activities have occurred on the hillside near the entrance to stabilize hillside erosion and sluffing. This stabilization project and others that have occurred since the last plan was adopted decreased SBUSD's vulnerability to slope failures. In addition, due to declining enrollment, no new facilities or campuses have been developed since the 2009 HMP; thus, exposure to slope failure is limited to past development.

Past Development Patterns

Historically, development within SBUSD expanded into foothill and hillside areas, where proximity to natural terrain increased exposure to slope instability. Earlier construction often occurred prior to modern geotechnical standards, resulting in facilities located near steep slopes, canyon edges, and areas with variable soil conditions. In some cases, older developments may include aging retaining walls, cut-and-fill slopes, and limited drainage controls, which can contribute to erosion or slope movement during heavy rainfall. Additionally, historical development did not always fully account for the compounded risks associated with wildfire followed by intense precipitation.

Anticipated Future Growth

Future development within SBUSD is expected to focus on modernization, redevelopment, and site-specific improvements, rather than expansion into new hillside areas. Current regulations require geotechnical investigations, slope stability analysis, and engineered grading design for projects located in or near potentially unstable terrain. New construction and major renovations will incorporate modern slope stabilization techniques, improved drainage systems, and erosion control measures. These requirements are expected to reduce slope failure risk for future development, although existing site constraints will continue to influence overall exposure.

Development Impacts on Slope Failure Hazard

Development activities can both increase and reduce slope failure risk. Grading, vegetation removal, and the creation of impervious surfaces can alter natural slope stability and drainage patterns, potentially increasing erosion and runoff. In hillside areas, poorly managed development may contribute to localized slope instability or debris flow pathways. Conversely, modern development practices, including engineered retaining systems, slope reinforcement, and stormwater controls, help stabilize slopes and reduce hazard potential. Ongoing maintenance of drainage systems and vegetation is critical to sustaining these benefits. Slope stabilization efforts are underway in a few campuses, but due to declining enrollment no new facilities or campuses have been developed.

Impacts of Slope Failure Hazard on Development

Slope failure hazards influence development decisions by requiring site-specific engineering, design constraints, and ongoing maintenance commitments. Facilities located near slopes may require retaining structures, drainage improvements, and erosion control measures to remain safe and functional. Slope failure events can impact District operations by damaging access roads, disrupting utilities, and depositing debris on campuses, particularly following intense rainfall or post-fire conditions. As a result, slope stability considerations are integrated into facility planning, capital improvement projects, and maintenance programs, ensuring that both existing and future facilities are better equipped to withstand slope-related hazards.

3.2.4.9 Vulnerability Assessment

This section evaluates the vulnerability of SBUSD facilities to slope failure hazards using planning-level landslide susceptibility data developed by the California Geological Survey. District facility locations, student populations, staffing levels, and insured building values were spatially analyzed against mapped High and Moderate susceptibility zones to identify potential exposure.

While landslide susceptibility mapping reflects relative risk rather than confirmed instability, it provides a reasonable basis for identifying facilities that may be vulnerable to ground movement, debris deposition, or access disruptions. The results of this exposure analysis support the development of mitigation strategies to reduce potential impacts to District operations and life safety.

3.2.4.9.1 General District Vulnerability

This section describes the vulnerability of SBUSD facilities to slope failure based on exposure analysis and review of available landslide susceptibility data.

Slope failure exposure data were developed using district facility information provided by the Facilities and Operations Department and associated property inventory records. These datasets were spatially analyzed against California Geological Survey landslide susceptibility mapping to identify facilities located within High and Moderate susceptibility areas.

The exposure assessment is based on currently available statewide geologic mapping and is appropriate for planning-level analysis. However, susceptibility mapping reflects relative potential for slope instability and does not replace site-specific geotechnical investigations. Actual slope performance can vary depending on rainfall intensity, groundwater conditions, seismic activity, vegetation cover, site grading, and localized drainage patterns. SBUSD facilities located within or adjacent to mapped susceptibility areas may be vulnerable to:

- Ground movement affecting foundations, retaining walls, or paved surfaces;
- Debris deposition from upslope failures;
- Erosion or instability along drainage corridors or coastal bluffs;
- Damage to utilities, stormwater systems, or site infrastructure; and
- Access disruptions caused by roadway blockages or slope instability.

In addition to direct structural exposure, operational vulnerability includes potential impacts to transportation routes, emergency access, parking areas, and other site improvements.

Overall, the planning-level exposure analysis provides a reasonable estimate of slope failure vulnerability across district facilities and supports the development of mitigation strategies to reduce potential impacts to students, staff, and district operations.

3.2.4.9.2 Student, Staff and Insured Building Values

Slope failure exposure was evaluated using California Geological Survey landslide susceptibility mapping. Table 3-24 summarizes the number of students, staff, and insured building values located within High and Moderate landslide susceptibility zones. districtwide, approximately:

- 154 students, 16 staff, and $3.9 million in insured building value are located within High landslide susceptibility areas; and
- 5,785 students, 726 staff, and approximately $214 million in insured building value are located within Moderate landslide susceptibility areas.

Exposure is predominantly concentrated within Moderate susceptibility zones, with limited but notable exposure in High susceptibility areas. Junior high and senior high campuses account for a substantial portion of the Moderate susceptibility exposure, while High susceptibility exposure is comparatively limited.

It is important to note that landslide susceptibility mapping reflects areas where geologic and topographic conditions are conducive to slope instability. These maps do not predict when or if failure will occur. Additionally, impacts to District operations may extend beyond mapped susceptibility areas, particularly where roadway access, utilities, or surrounding slopes are affected by failure.

Figure 3-11 illustrates the geographic distribution of SBUSD facilities relative to mapped landslide susceptibility zones, demonstrating that higher susceptibility areas are generally concentrated along the foothill interface north of the developed coastal plain.

Table 3-24: Landslide Exposure Summary Table

Landslide Susceptibility	High			Moderate		
School Facilities by Type	**Student Count**	**Staff Count**	**Insured Bldg. Value (in Millions)**	**Student Count**	**Staff Count**	**Insured Bldg. Value (in Millions)**
Elementary	68	11	$2,755	2,286	335	$81,642
Adams Elementary School				502	71	$15,201
Cleveland Elementary School				243	57	$11,093
Mckinley Elementary School	0	0	$1	187	40	$19,492
Monroe Elementary School	68	11	$2,754	254	48	$11,909
Roosevelt Elementary School				442	56	$14,949
Santa Barbara Charter School				283	13	
Washington Elementary School				375	50	$8,998
Junior High	28	4	$1,032	1,513	164	$69,774
Goleta Valley Junior High School				641	74	$33,222
La Colina Junior High School	28	4	$1,032	872	90	$36,551
La Cumbre Junior High School				0	0	$1
High School	58	1	$153	59	1	$153
Alta Vista Alternative High School	58	1	$153	59	1	$153
Senior High				1,927	226	$62,423
Dos Pueblos Senior High School				457	56	$17,788
San Marcos Senior High School				1,160	133	$42,893
Santa Barbara Senior High School				310	37	$1,742
Grand Total	**154**	**16**	**$3,941**	**5,785**	**726**	**$213,992**

3.2.4.10 Slope Failure Hazard Problem Statements

As part of the mitigation action identification process, the HMPT identified issues and/or weaknesses (aka problem statements) for SBUSD facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic slope failure data. Slope failure problem statements are listed in Table 3-22.

Identifying these common issues and weaknesses assists the Planning Committee in understanding the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-25 and Table 4-3.

Table 3-25 Slope failure Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Slope Failure	SF-02	Landslides could block emergency routes or damage utilities serving hillside schools.		
Slope Failure	SF-01	Slope instability and erosion behind La Colina JHS and McKinley ES threaten retaining walls and paths.		

3.2.5 Extreme Weather Hazard Profile



Extreme weather refers to any hazardous atmospheric event with the potential to cause physical damage, social disruption, or loss of life. This includes thunderstorms, downbursts, heavy rain, snowstorms, ice storms, strong winds, and other extreme weather conditions.

Extreme weather events can be categorized into two types. Those that affect broad geographic regions, such as Pacific Northwest windstorms or large-scale winter storms, are classified as general extreme weather. Events with a more confined area of impact, such as isolated thunderstorms or localized snow squalls, are considered localized extreme weather.

The most significant secondary hazards associated with extreme weather in the planning area include flooding, downed trees, landslides, power outages, and, in some cases, increased wildfire risk following wind-driven damage or infrastructure failure.

3.2.5.1 Subhazards

For the school district, there are specific subhazards of extreme weather that are more relevant to the planning area than others. This includes high wind and heavy rain, which are profiled as part of this section.

High Wind

Damaging winds are classified as those exceeding 60 mph. Damage from such winds accounts for half of all extreme weather reports in the lower 48 states and is more common than damage from tornadoes. Wind speeds can exceed 100 miles per hour (mph) and can produce a damage path extending for hundreds of miles. There are seven types of damaging winds:

- **Straight-Line Wind:** Any thunderstorm wind that is not associated with rotation; this term is used primarily to differentiate from tornado winds. Most thunderstorms produce some straight-line winds as a result of outflow generated by the thunderstorm downdraft.
- **Downdraft:** A small-scale column of air that rapidly sinks toward the ground.
- **Downburst:** A strong downdraft with horizontal dimensions larger than 2.5 miles resulting in an outward burst or damaging winds on or near the ground. Downburst winds may begin as a microburst and spread out over a wider area, sometimes producing damage similar to a strong tornado. Although usually associated with thunderstorms, downbursts can occur with showers too weak to produce thunder.
- **Microburst:** A small concentrated downburst that produces an outward burst of damaging winds at the surface. Microbursts are generally less than 2.5 miles across and short-lived, lasting only 5 to 10 minutes, with maximum wind speeds up to 168 mph. There are both wet and dry microbursts:. A wet microburst is accompanied by heavy precipitation. Dry microbursts, common in places like the high plains and the intermountain west, occur with little or no precipitation reaching the ground.

- **Gust Front:** A gust front is the leading edge of rain-cooled air that clashes with warmer thunderstorm inflow. Gust fronts are characterized by a wind shift, temperature drop, and gusty winds out ahead of a thunderstorm. Sometimes the winds push up air above them, forming a shelf cloud or detached roll cloud.
- **Derecho:** A derecho is a widespread thunderstorm wind caused when new thunderstorms form along the leading edge of the boundary formed by horizontal spreading of thunderstorm-cooled air. The word "derecho" is of Spanish origin and means "straight ahead." Thunderstorms feed on the boundary and continue to reproduce. Derechos typically occur in summer when complexes of thunderstorms form over plains, producing heavy rain and severe wind. The damaging winds can last a long time and cover a large area.
- **Bow Echo:** A bow echo is a linear wind front bent outward in a bow shape. Damaging straight-line winds often occur near the center of a bow echo. Bow echoes can be 200 miles long, last for several hours, and produce extensive wind damage at the ground.

Wind is classified by the National Laboratory of the Rockies (NLR) based on average speeds across the ground at different elevations in meters per second (m/s) and the amount of power it is capable of producing (wind power density), as provided in Table 3-26. The same wind event exhibits various speeds depending on elevation because of differences in the amount of friction encountered in proximity to the Earth's surface; this is most often measured at 10 and 50 meters above grade, or 33 and 164 feet, respectively. According to the Rayleigh wind speed distribution principle, speed increases 3% per 1,000 meters in elevation (or 5% per 5,000 feet). Power density is measured in the amount of watts (W) that can be produced per square meter (m^2) of surface area on the blades of a wind turbine. There have been 34 wind events in Santa Barbara County that have exceeded the damaging 60 MPH since 2010 (National Oceanic and Atmospheric Administration , 2026). Figure 3-26 demonstrates the average annual wind speed impacting the region.

Table 3-26: Classes of Wind Power

Wind Power Class	10 m (33 ft)		50 m (164 feet)[1]	
	Wind Power Density W/m^2	Mean Speed[2] m/s (mph)	Wind Power Density W/m^2	Mean Speed[2] m/s (mph)
1	≤ 100	4.4 (9.8)	≤ 200	5.6 (12.5)
2	100-150	5.1 (11.5)	200-300	6.4 (14.3)
3	150-200	5.6 (12.5)	300-400	7.0 (15.7)
4	200-250	6.0 (13.4)	400-500	7.5 (16.8)
5	250-300	6.4 (14.3)	500-600	8.0 (17.9)
6	300-400	7.0 (15.7)	600-800	8.8 (19.7)
7	>400	9.4 (21.1)	>800	11.9 (26.6)

Notes: [1]Vertical extrapolation of wind speed based on the 1/7 power law. [2]Mean wind speed is based on Rayleigh speed distribution of equivalent mean wind power density and is for standard sea level conditions.

Source: NREL, 2007

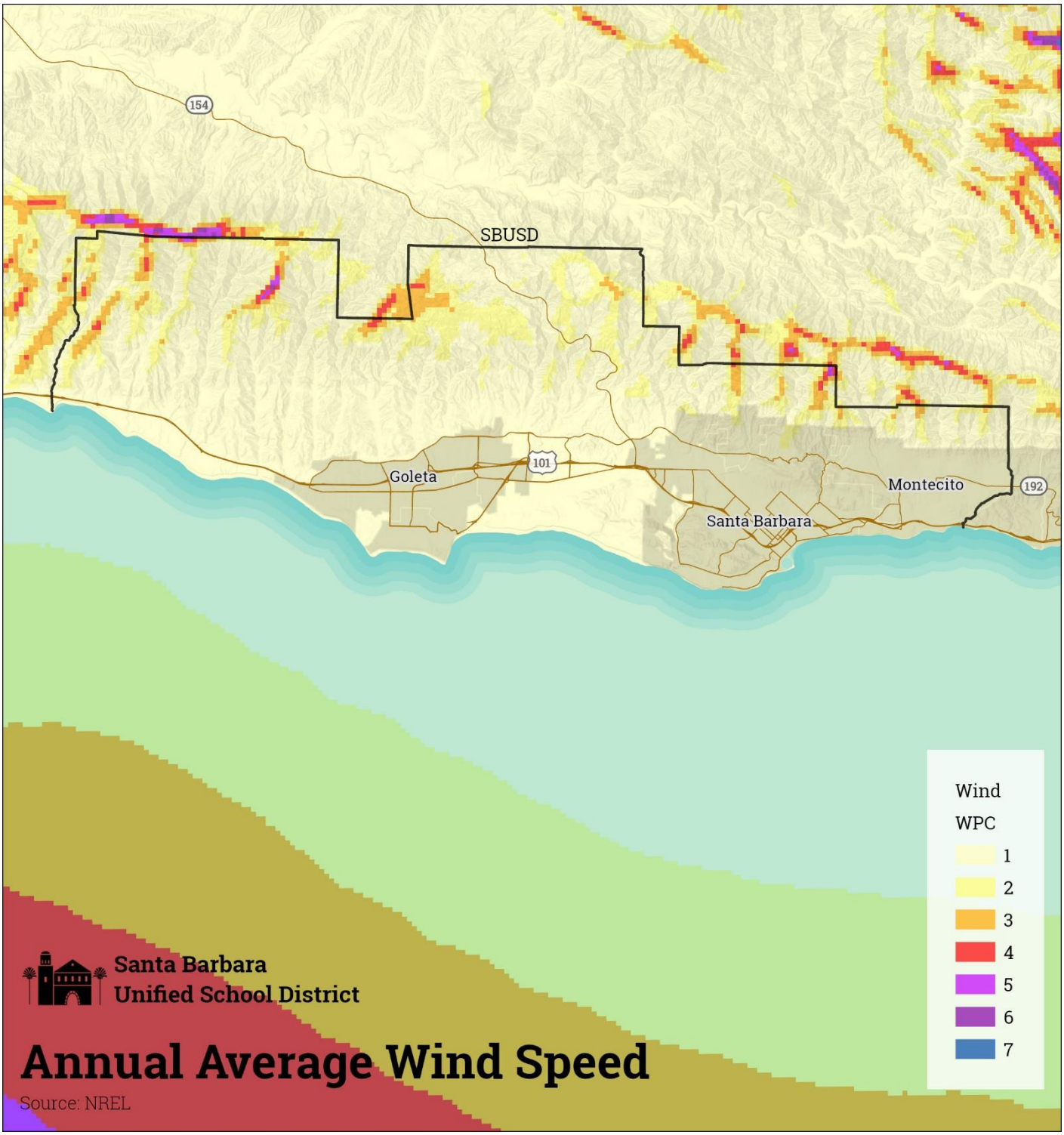


Figure 3-27: Annual Average Wind Speed

Heavy Rain

As storms arrive onto land from the Pacific and rise over the mountains and ridges that border the eastern boundaries of the county, the air associated with those storms cools and that cooling results in large amounts of precipitation, also known as orographic lift. The topography of Santa Ynez Mountains provides fairly steep and well-defined watershed areas to funnel the falling rain into runoff tributaries and potentially trigger flood hazards within the district.

Heavy rain can overwhelm both natural and man-made drainage systems, causing overflow and property destruction, and landslides can occur when the soil on slopes becomes oversaturated and fails. In Santa Barabara County, heavy rain events are common from November to April. These heavy rainstorms, often associated with an “atmospheric river” event, can deliver over one inch of rain per hour for extended time frames.

Atmospheric rivers are relatively long, narrow regions in the atmosphere (i.e., rivers in the sky) that transport water vapor, mostly from the tropics. While these rivers can vary greatly in size and strength, the average atmospheric river carries an amount of water vapor roughly equivalent to the average flow of the Mississippi River, but exceptionally strong rivers can transport up to 15 times that amount. When the atmospheric rivers make landfall, it typically releases this water vapor in the form of rain or snow. These events can disrupt travel, induce slope failures, and cause damage to life and property. A well-known referential terms for this phenomenon is the "Pineapple Express," which is a strong atmospheric river that brings moisture from the tropics near Hawaii to the West Coast. A singular or series of atmospheric rivers can cause significant damage and flooding. In 2023, more than two dozen atmospheric rivers caused two federally declared disasters. In 2024 it was one major atmospheric river that caused a federally declared disaster on the California Coast.

Flash floods are the leading cause of heavy rain-related fatalities. Further, the presence of burn scars from previous wildfires, such as those left from wildfires, increases runoff and flood risks in vulnerable areas. Heavy rain and flash flooding can affect vulnerable populations such as residents living near burn scars or in low-lying areas and tourists and hikers unaware of flash flood risks in remote, mountainous areas. Impacts on property and critical infrastructure include temporary road closures as well as damage to roads, bridges, and structures. Water treatment plants and electrical substations located near waterways are particularly vulnerable.

For more information on the secondary impacts caused by heavy rain, such as flooding, refer to the Flood and Slope Failure Hazard Profiles, respectively.

3.2.5.2 Regulatory Environment

There are very few formal regulations that pertain directly to extreme weather events. The California Building Standards Code, adopted by Santa Barbara County and other participating jurisdictions, is generally adequate to properly address development impacts from extreme weather events.

California Building Standards Code

The California Building Code (CBC), adopted by the City of Santa Barbara, is another name for the body of regulations known as the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. The CBC incorporates by reference the International Building Code (IBC) requirements with necessary California amendments.

Division of the State Architect

DSA (Division of the State Architect) requires strict adherence to the California Building Code (CBC) for schools in flood-prone areas, emphasizing structural safety and site resilience. Key requirements include comprehensive geotechnical, geologic, and flood hazard reports (Interpretation of Regulations (IR) A-4) to determine site suitability, ensuring structures are elevated above base flood levels, and compliance with CALGreen requirements.

3.2.5.3 Past Events

Between 2010 and 2025, the City of Santa Barbara and surrounding areas within Santa Barbara County experienced multiple federally declared severe winter storm and flood events that affected public infrastructure, transportation corridors, and community facilities, including school district properties. These events were primarily associated with atmospheric river systems, producing intense rainfall, localized flooding, saturated soils, and landslides.

While only two extreme weather events (thunderstorm wind) were formally recorded in certain local datasets between 2010 and 2025, the broader FEMA disaster record shows a clear pattern of recurring winter storm impacts affecting the region and triggering federal emergency and major disaster declarations.

Table 3-28: Extreme Weather Events in City of Santa Barbara, 2017-2025

EVENT TITLE	Hazard Type	Disaster No.	Start Date	End Date	FY
Severe Winter Storms, Flooding, and Mudslides	Flood	DR-4308-CA	1/31/2017	2/22/2017	2017
Severe Winter Storms, Flooding, and Mudslides	Flood	DR-4305-CA	1/17/2017	1/22/2017	2017
Severe Winter Storms, Flooding, Landslides, And Mudslides	Severe Storm	DR-4431-CA	2/12/2019	2/14/2019	2019
Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	Severe Storm	DR-4699-CA	2/20/2023	7/9/2023	2023
Severe Winter Storms, Flooding, Landslides, and Mudslides	Flood	DR-4683-CA	12/26/2022	1/30/2023	2023
Severe Winter Storms, Flooding, Landslides, and Mudslides	Flood	EM-3592-CA	3/8/2023	7/9/2023	2023
Severe Winter Storms, Flooding, and Mudslides	Flood	EM-3591-CA	1/7/2023	1/30/2023	2023
Severe Winter Storms, Tornadoes, Flooding, Landslides, And Mudslides	Severe Storm	DR-4769-CA	1/30/2024	2/8/2024	2024

2022–2023 Atmospheric River Storm Series

December 26, 2022 – July 9, 2023: (FEMA Declarations: DR-4683-CA, EM-3591-CA, EM-3592-CA, DR-4699-CA)

During the winter of 2022–2023, California experienced a prolonged series of atmospheric river systems that delivered repeated rounds of heavy rainfall across the Central Coast. Santa Barbara County was included in multiple federal emergency and major disaster declarations as storm impacts compounded over several months.

Storm Characteristics

- Repeated high-intensity rainfall events
- Extended periods of saturated soil conditions
- Urban and creek flooding
- Landslides and localized slope instability
- Straight-line wind impacts during certain storm periods

The cumulative nature of this storm series was particularly significant. Rather than a single short-duration storm, the District faced ongoing weather impacts spanning several months, increasing strain on infrastructure and operations.

Impacts Relevant to the School District

While impacts varied by campus location, district-wide considerations included:

- Stormwater System Stress: Prolonged rainfall tested campus drainage systems, catch basins, and culverts.
- Roofing and Building Envelope Exposure: Repeated rain events increased the likelihood of leaks, ponding, and minor facility damage.
- Field and Outdoor Facility Saturation: Athletic fields and play areas experienced oversaturation, leading to closures or maintenance needs.
- Access and Transportation Disruptions: Flooded roadways and debris created potential student and staff travel challenges.
- Operational Flexibility: Ongoing monitoring and communication were required to ensure safe campus conditions.

This event series reinforced that severe winter storms represent a recurring operational hazard for the District, particularly when multiple systems occur in close succession.

January–February 2024 Severe Winter Storm Series

January 30 – February 8, 2024: (FEMA Declaration: DR-4769-CA)

In early 2024, another intense winter storm system impacted Santa Barbara County, prompting a local emergency proclamation and a subsequent federal major disaster declaration (DR-4769-CA). The event brought heavy rainfall, flooding, landslides, and in some regions of California, isolated tornado activity.

Storm Characteristics

- High rainfall totals over short durations
- Flash flooding conditions
- Debris flow and rockfall concerns in steep terrain
- Elevated creek and drainage channel flows

Given Santa Barbara County's coastal and hillside geography, heavy rainfall events quickly translate into heightened flood and slope hazards, particularly in areas with prior wildfire burn scars.

Impacts Relevant to the School District

For the School District, the 2024 storm event underscored several risk considerations:

- Rapid-Onset Flooding Risk: Intense rainfall increased the potential for localized flooding around low-lying campuses.
- Debris and Slope Hazards: Campuses near hillsides required monitoring for erosion and slope movement.
- Emergency Coordination: District leadership coordinated with City and County emergency management to track storm forecasts and protective actions.
- Preventative Maintenance Emphasis: Drainage clearing and facility inspections were critical before and after peak rainfall.

Although shorter in duration than the 2022–2023 storm series, the 2024 event demonstrated the District's continued exposure to severe winter storms capable of producing immediate operational disruption.

3.2.5.4 Location / Geographic Extents

Extreme weather events have the potential to happen anywhere in the planning area and have historically occurred in all parts of the county; although, the types of events and their impacts are not evenly distributed. Local topography and microclimates, especially within the Santa Ynez Mountains, can cause the same storm system to produce different hazardous conditions as it moves across an area and encounters more or less moisture, various temperatures, and orographic lift, which can all influence its behavior. High wind events are most damaging to areas that are heavily wooded, while heavy rain impacts are typically seen over steep terrain and in low-lying urban areas. Additionally, the trajectory of storm systems plays a significant factor. Storms coming in directly off the Pacific Ocean tend to bring more moisture, while storms coming in from the southeast over the Santa Ynez Range tend to bring less moisture.

3.2.5.5 Frequency & Probability of Future Events

Extreme weather events for Santa Barbara County are most often related to high winds and heavy rain. These events occur regularly throughout a typical year and will continue to occur in the county. However,

as demonstrated over the past decade, climate change is driving an increased frequency in more extreme weather events. This is especially true in Santa Barbara due to its location on the coast and influences from a warming Pacific Ocean, as discussed in more detail in the Climate Change Hazard Profile.

Both heavy rain and high wind events are highly likely in Santa Barbara County (100% annual probability).

3.2.5.6 Severity

Extreme weather poses significant hazards in Santa Barbara County, particularly during the winter months. While tornadoes are extremely rare, the region is regularly affected by damaging winds, heavy rain, hail, and winter weather, including extreme cold, black ice, and occasional snowfall at higher elevations. These hazards can lead to property damage, widespread power outages, and significant transportation disruptions. The most common impacts include loss of utilities and restricted mobility. Roads may become impassable due to flooding, downed trees, snow accumulation, or slope failures triggered by intense rainfall or high winds. Although fatalities are uncommon, they can occur, especially during extreme cold events or hazardous driving conditions.

High Wind

The most common impact of high wind is power outages due to downed or damaged power lines, causing interruptions to critical services, such as emergency response, or to utilities lacking backup power, such as water or communications. These impacts can be localized or widespread, depending on the type of event.

High-wind events occur multiple times per year, particularly along the coast, in exposed valleys, and in constricted canyons and mountain passes. Windstorms in the county are rarely life-threatening but do disrupt daily activities. Strong winds can cause significant damage, uprooting trees and causing power outages and structural damage to buildings. Wind-driven wildfires are also a major concern, as high winds can rapidly spread flames. Other impacts of high winds can be erosion, crop damage, and building damage, primarily to roofs. It is important to note that the predicted wind speed given in wind warnings issued by the NWS is for a one-minute average; gusts may be 25 to 30% higher.

Heavy Rain

Heavy rain alone is rarely life-threatening, but it often triggers other hazard events that can cause serious injury or death and extensive property damage, such as slope failures and localized flash flooding, particularly in burn scar areas from previous wildfires. Of particular concern in Santa Barbara County is heavy rain's impacts on urbanized areas with inadequate drainage infrastructure, mountainous terrain susceptible to slope failure, and erosion and sedimentation within vulnerable watersheds.

During the warmer and dryer months, April through November, maximum daily rain totals are typically less than one inch to about three inches. However, as seen in historic rainfall events, the SBUSD planning area can receive up to four or five inches of rain in a single day during the winter months. These extreme heavy rain events can cause—and have caused in the past—localized flooding around campuses, water intrusion

into low-lying classrooms and facilities, and secondary impacts such as erosion or slope failure. The highest maximum single day precipitation records from the National Weather Service include:

- 4.52 inches on December 24, 2025
- 4.22 inches on January 9, 1954
- 4.16 inches on February 17, 1988
- 5.23 inches on March 20, 1964

3.2.5.7 Development Trends

Extreme weather events, including heavy rainfall, high winds, and winter storms, play an important role in shaping risk to SBUSD facilities. While the region benefits from a generally mild Mediterranean climate, periodic atmospheric river events and intense storm systems can produce short-duration, high-impact conditions. These events can result in localized flooding, wind damage, and infrastructure disruption across the district's service area.

Development patterns, infrastructure capacity, and facility design all influence how extreme weather impacts SBUSD campuses. Over time, improvements in building codes, stormwater design, and maintenance practices have increased resilience; however, older facilities and urban infrastructure constraints continue to present vulnerabilities. This section evaluates how past development, current conditions, and future growth influence extreme weather risk across SBUSD facilities.

Due to declining enrollment, SBUSD has not developed any new facilities or campuses since 2009; thus, there has been no increase in exposure or vulnerability to extreme weather events. However, some existing aging facilities are still vulnerable to high wind and heavy rain, and there are multiple mitigation actions that aim to reduce these vulnerabilities through drainage improvements, structural upgrades, and back-up power installation.

Past Development Patterns

Much of SBUSD's development occurred during periods when storm intensity and variability were less emphasized in design standards, particularly prior to recent climate-informed planning approaches. Facilities and surrounding infrastructure were often designed based on historical rainfall averages, with limited consideration for extreme precipitation events or high wind impacts. Additionally, aging building systems, including roofing, drainage, and exterior components, may be more susceptible to damage during extreme weather events.

Anticipated Future Growth

Future development within SBUSD is expected to focus on modernization, system upgrades, and facility hardening, rather than expansion. New construction and renovation projects increasingly incorporate enhanced stormwater management, wind-resistant design, and climate-informed engineering standards. These improvements include upgraded roofing systems, improved drainage capacity, and more resilient

building envelopes. As a result, future development is expected to reduce vulnerability to extreme weather impacts over time.

Development Impacts on Extreme Weather Hazard

Urban development has increased the extent of impervious surfaces, which can exacerbate runoff during heavy rainfall and contribute to localized flooding. Additionally, dense development patterns can influence wind behavior, potentially increasing wind exposure in certain areas. However, modern development practices, including improved drainage systems, stormwater controls, and resilient building materials, help mitigate these impacts and reduce hazard intensity at the site level. Although design standards and a formal maintenance program do not exist at this time, and ma-FL-SBU-01 aims to establish these.

Impacts of Extreme Weather Hazard on Development

Extreme weather hazards influence facility planning and operations by requiring upgraded drainage systems, durable building materials, and routine maintenance of roofs, gutters, and stormwater infrastructure. High wind events can damage roofing, equipment, and outdoor structures, while heavy rainfall can disrupt campus access and operations. Increasing variability in storm intensity also necessitates integration of climate resilience considerations into capital planning and maintenance programs, ensuring that both existing and future facilities are better prepared to withstand extreme weather events.

3.2.5.8 Vulnerability Assessment

SBUSD facilities are vulnerable to impacts from heavy rain and high-wind events, particularly during the winter storm season. While these events are typically short in duration, they can cause operational disruptions, property damage, and temporary campus closures.

Heavy Rain

Heavy rainfall can affect District facilities through stormwater exceedance, localized flooding, erosion, and drainage system failure. Campuses with aging or undersized stormwater infrastructure, flat topography, or limited site drainage capacity are more susceptible to ponding and water intrusion. Even moderate rainfall can result in:

- Surface ponding in parking lots, playfields, and access roads;
- Water intrusion into classrooms, portable buildings, and ground-level spaces;
- Erosion along drainage channels or landscaped slopes;
- Sediment deposition following intense rainfall or post-wildfire conditions; and
- Temporary loss of access due to flooded streets.
- Although heavy rain alone rarely results in catastrophic structural damage, repetitive water intrusion can degrade building materials, damage flooring and insulation, and create conditions conducive to mold growth. In addition, heavy rainfall may trigger compounding hazards such as slope failures or debris flows that affect transportation corridors serving District campuses.

High Wind

High-wind events pose a different set of vulnerabilities. The most common impacts to SBUSD facilities include:

- Power outages caused by downed power lines;
- Damage to roofing materials, rooftop equipment, fencing, and portable classrooms;
- Falling tree limbs or uprooted trees impacting buildings or blocking access routes; and
- Disruptions to outdoor activities, transportation, and athletic programs.
- Campuses located in exposed coastal areas, open valleys, or near mature tree canopies may experience elevated wind-related impacts. While most windstorms are not life-threatening, they can result in widespread utility interruptions and short-term operational disruptions.

Operational Vulnerability

In addition to direct building impacts, heavy rain and high winds can affect District operations by:

- Interrupting electrical service, communications, or internet connectivity;
- Blocking roadways used for student transportation and emergency access;
- Requiring facility inspections and debris removal before reopening; and
- Delaying instructional time due to safety concerns.

Overall, heavy rain and high-wind events represent moderate but recurring hazards for SBUSD. While widespread catastrophic damage is unlikely, the cumulative impacts of repeated storm events can strain maintenance resources and increase long-term facility repair costs. Planning-level vulnerability assessment supports mitigation measures such as improved drainage maintenance, vegetation management, backup power planning, and routine roof and infrastructure inspections.

3.2.5.9 Extreme Weather Problem Statements

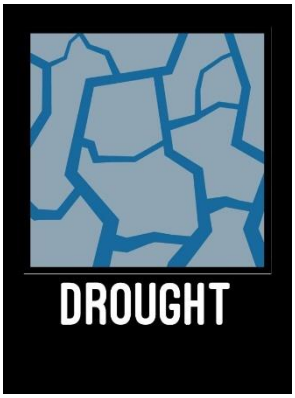
As part of the mitigation action identification process, the Planning Committee identified issues and/or weaknesses (aka problem statements) for SBUSD facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic flood data. Flood hazard problem statements are listed in Table 3-22.

Identifying these common issues and weaknesses assists the Planning Committee in understand the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-29 and Table 4-3.

Table 3-29 Extreme Weather Hazard Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Extreme Weather (Heavy Rain)	EW-01	Undersized culverts and outfall connections adjacent to campuses increase backflow risk, impacting access roads and parking areas during peak storm runoff.		
Extreme Weather (Heavy Rain)	EW-02	Aging storm drains cause campus flooding during intense rainfall.		
Extreme Weather (High Wind)	EW-03	Outdoor learning areas, shade structures, and athletic facilities are vulnerable to wind damage, creating safety hazards during severe storm events.		
Extreme Weather (All)	EW-04	High winds and heavy rain can cause roof, canopy, or window damage at school sites, creating unsafe conditions and disrupting instruction.		
Extreme Weather (All)	EW-05	Power outages during storms can disrupt classroom instruction, heating, and communication systems, leaving students and staff without safe shelter or lighting.		
Extreme Weather (High Wind)	EW-06	Portable classrooms and temporary structures are particularly vulnerable to wind damage and may not provide adequate protection during extreme weather.		

3.2.6 Drought Hazard Profile



California's water resources have been stressed by periodic drought cycles, but climate change is expected to increase the frequency, severity, and duration of droughts across the state. While the length of drought periods is always in question, it is certain that California and Santa Barbara County will continue to be impacted by drought. (California Drought Contingency Plan, 2021)

Santa Barbara County surface and groundwater resources provide drinking water for residents and visitors, critical habitat to numerous plant and animal species, and opportunities for recreational and commercial activities. Like many other areas of California, the county faces water resource challenges, including inadequate water supply particularly during droughts, impaired water quality, over-drafted groundwater basins, depleted streams, and degraded riparian habitat. The overwhelming majority of Santa Barbara County's water supply is locally derived—a unique situation in a state supported by large federal and state water projects. Domestic supply within the region is provided by five large public agencies, four medium water systems, 115 small water systems, and some 8,000 individual wells. Water use in 2024 is summarized in this section.

U.S. Drought Monitor

The U.S. Drought Monitor provides drought data and maps both nationally and on a localized watershed scale, categorized from D0 through D4, with D4 being the highest "exceptional drought." The Drought Monitor is released on a weekly basis and is jointly produced and maintained by the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln, the U.S. Department of Agriculture (USDA), the National Oceanic and Atmospheric Administration (NOAA), and the National Integrated Drought Information System (NIDIS). Table 3-30 depicts drought classifications and impacts from the level of drought occurrence in California.

Table 3-30: Drought Classifications and Impacts for California

CATEGORY	DESCRIPTION	POSSIBLE IMPACTS
D0	Abnormally Dry	• Soil is dry; irrigation delivery begins early • Dryland crop germination is stunted • Active fire season begins • Winter resort visitation is low; snowpack is minimal
D1	Moderate Drought	• Dryland pasture growth is stunted; producers give supplemental feed to cattle • Landscaping and gardens need irrigation earlier; wildlife patterns begin to change • Stock ponds and creeks are lower than usual
D2	Severe Drought	• Producers increase water efficiency methods and drought-resistant crops • Grazing land inadequate • Fire season is longer, with high burn intensity, dry fuels, and large fire spatial extent; more fire crews on staff • Lake- and river-based tourism declines; boat ramps close

CATEGORY	DESCRIPTION	POSSIBLE IMPACTS
		• Trees are stressed; plants increase reproductive mechanisms; wildlife diseases increase • Water temperatures increase; programs to divert water to protect fish begin • River flows decrease; reservoir levels are low and banks are exposed
D3	Extreme Drought	• Federal water not adequate to meet irrigation contracts; extracting supplemental groundwater is expensive • Fire season lasts year-round; fires occur in typically wet parts of the state; burn bans are implemented • Ski and rafting business is low; mountain communities suffer • Low water levels impede fish migration and cause lower survival rates • Wildlife encroach on developed areas; little native food and water is available for bears, which hibernate less • Water sanitation is a concern; reservoir levels drop significantly; surface water is nearly dry, flows are very low; water theft occurs • Livestock need supplemental feed, cattle and horses are sold; little pasture remains • Well and aquifer levels decrease; homeowners drill new wells
D4	Exceptional Drought	• Fire season is very costly; number of fires and areas burned are extensive • Many recreational activities are affected • Fields are left fallow; orchards are removed; vegetable yields are low; honey harvest is small; agricultural unemployment is high, food aid is needed • Fish rescue and relocation begins; pine beetle infestation occurs; forest mortality is high; wetlands dry up; wildlife death is widespread; algae blooms appear • Poor air quality affects health; greenhouse gas emissions increase as hydropower production decreases; West Nile outbreaks rise • Water shortages are widespread; surface water is depleted; federal irrigation water deliveries are curtailed; water prices are extremely high; wells are dry, more and deeper wells are drilled; water quality is poor

Source: Adapted from U.S. Drought Monitor Drought Classifications and Impacts

3.2.6.1 Secondary & Compounding Hazards

Drought is compounded by climate change and contributes to secondary hazards like wildfire and extreme heat. These hazards are briefly discussed in this section in relation to drought; detailed assessments of wildfire and climate change are found in their respective profiles, in Sections 3.2.2 and 3.2.7.

Climate Change

The long-term effects of climate change on precipitation in Southern California is relatively uncertain, and conditions in any given year are subject to influence by the presence of internal patterns of climate variability. Southern California lies between two larger zones of opposite precipitation change over the next century, with general wetting over northern mid-latitudes and general drying in the southern sub-tropics. Dry and wet extremes, including drought, are expected to increase. The state's latest climate assessment shows a potential doubling in the frequency of extremely dry years by the late 21st century, as identified in Figure 3-12. (Hall, Berg, & Reich, 2018)

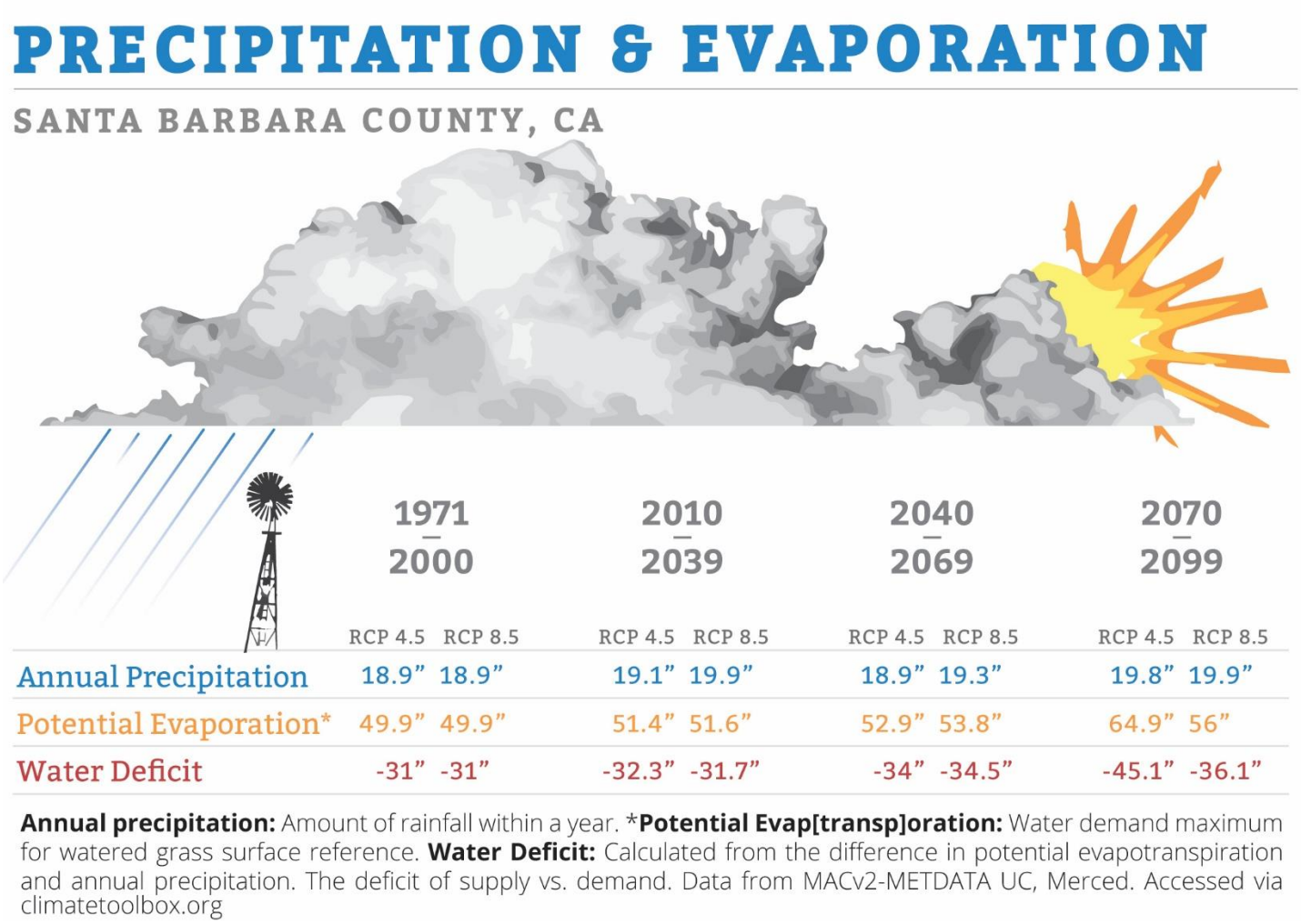


Figure 3-12: Projected Precipitation, Evaporation, and Water Deficit Through 2099

Southern California's wildfire risks are also increasingly tied to the phenomenon of "weather whiplash," where extreme swings between wet and drought conditions intensify fire hazards. A particularly wet winter can foster the rapid growth of flammable shrubs and grasses, while a subsequent dry year transforms this vegetation into highly combustible fuel. This dynamic, driven by intensifying precipitation patterns, creates perfect conditions for large, fast-moving wildfires. (Pappas, 2025) In addition, rising global temperatures from greenhouse gas emissions have disrupted natural precipitation and fire cycles, increasing the likelihood and severity of wildfires. (*Id.*)

The compression of Southern California's wet season, with reduced rainfall in the fall and spring, exacerbates this risk. With fewer opportunities for consistent moisture, the fire season is lengthened, increasing the probability of overlap with the Santa Ana wind season, which typically spans October through January. Even as Santa Ana winds are predicted to occur less frequently in a warming climate, their intensity is not expected to decline. This means that just one high-intensity wind event during a dry period can trigger devastating wildfire outbreaks. (*Id.*) Understanding and planning for the impacts of weather

whiplash is critical in hazard mitigation efforts, as this phenomenon amplifies the risks posed by increasingly variable precipitation patterns that can lead to the threat of fast-moving fires. (*Id.*)

Santa Barbara County has experienced firsthand the devastating consequences of this weather whiplash pattern. Following periods of above-average rainfall that spurred dense vegetation growth, subsequent drought and Santa Ana wind events have fueled some of the most destructive fires in the region's history. The 2008 Tea Fire, 2009 Jesusita Fire, 2017 Thomas Fire, 2018 Montecito Debris Flow (triggered by post-fire burn scars), and the 2021 Alisal Fire collectively underscore the community's vulnerability to wind-driven wildfires and cascading hazards. These events destroyed thousands of structures, displaced residents, disrupted schools and critical infrastructure, and caused long-term economic and environmental damage. The Thomas Fire alone burned over 280,000 acres across Santa Barbara and Ventura Counties, becoming one of the largest wildfires in modern California history at the time. (*Id.*)

Wildfire

The secondary hazard most closely associated with drought for Santa Barbara Unified School District is wildfire. Extended periods of limited precipitation dry and stress vegetation on and around school campuses, increasing the likelihood of ignition and fire spread. Elevated temperatures during drought conditions further accelerate the drying of grasses, shrubs, and landscaped areas, intensifying fire risk. As climate trends point toward longer fire seasons and drier fuel conditions, drought-related wildfire impacts are expected to increase in both frequency and severity across Santa Barbara.

While SBUSD campuses are primarily located within urbanized areas, many schools are situated near open space, foothills, or areas influenced by wildland-urban interface (WUI) conditions. As demonstrated by past events such as the Tea Fire, Jesusita Fire, and Thomas Fire, wind-driven wildfires can rapidly threaten neighborhoods, school facilities, and evacuation routes. In addition to direct fire exposure, SBUSD campuses are vulnerable to smoke impacts from regional wildfires, which can degrade air quality, disrupt outdoor activities, and result in temporary school closures. Prolonged drought conditions therefore present both direct and indirect wildfire-related risks to District facilities, students, and staff.

City of Santa Barbara Water Supply

Santa Barbara Unified School District (SBUSD) receives potable water service from the City of Santa Barbara. The district does not operate its own wells or water treatment facilities and is fully dependent on the City's municipal water system for campus operations, including drinking water, restrooms, food services, irrigation, fire suppression systems, and cooling equipment.

The City of Santa Barbara maintains a diversified water supply portfolio that includes surface water from local reservoirs, groundwater, State Water Project supplies, and desalinated ocean water. During drought conditions, the City implements water conservation measures and usage restrictions consistent with its Urban Water Management Plan and Water Shortage Contingency Plan.

Because SBUSD facilities rely entirely on municipal delivery, any prolonged drought, infrastructure disruption, or emergency affecting the City's water system could impact school operations. Potential effects include reduced irrigation of athletic fields and landscaping, limitations on cooling systems, sanitation challenges, and possible temporary campus closures in extreme scenarios. The District coordinates with the City to remain informed of conservation requirements and emergency water management actions to ensure continuity of educational services.

3.2.6.2 Regulatory Environment

The District receives water service from the City of Santa Barbara who is subject to state and local drought regulations applicable to urban water suppliers.

The California State Water Resources Control Board has broad authority to regulate water conservation during drought emergencies and to implement statewide water use restrictions. Executive Order B-37-16 (2016) established permanent urban water conservation measures and strengthened long-term drought planning requirements across California. During declared drought conditions, the State Water Board may impose mandatory conservation standards that affect landscape irrigation, non-essential water use, and operational practices at public facilities, including schools.

The Sustainable Groundwater Management Act (SGMA) requires long-term groundwater sustainability in high- and medium-priority basins statewide. While SBUSD does not directly manage groundwater supplies, SGMA influences regional water availability and long-term supply reliability for the City of Santa Barbara.

Water efficiency in new or modernized school facilities is governed by the California Building Standards Code (Title 24), including CALGree3.2.5.5n, which establishes requirements for water-efficient plumbing fixtures, irrigation systems, and landscape design. The Division of the State Architect (DSA) enforces these building standards for K-12 school construction projects but does not regulate drought policy or water allocation.

Collectively, these state-level frameworks influence water supply reliability, conservation requirements, and facility design standards that affect SBUSD operations during drought conditions.

3.2.6.3 Past Events

California has experienced significant population growth and land use change over the past century, increasing demand on limited water resources. (DWR, 2015) The state's hydrologic history includes several severe and prolonged droughts that have strained reservoirs, reduced groundwater supplies, and triggered emergency water conservation measures. The drought of 1976–1977 remains one of the driest periods on record, leading to widespread reservoir depletion and drought emergency declarations across much of the state. *(Id.)*Subsequent multi-year droughts—including 1987–1992, 2007–2009, and the severe 2012–2016 event—resulted in mandatory water use restrictions, reduced surface water allocations, and expanded conservation requirements statewide. During these periods, urban water suppliers implemented rationing measures, restricted outdoor irrigation, and accelerated investment in diversified water supply portfolios, including groundwater banking, recycled water, and desalination. While droughts are a recurring feature of

California's climate, many have ended abruptly following exceptionally wet winters, highlighting the state's highly variable precipitation patterns. (DWR, 2020)

Santa Barbara County has experienced similar cyclical drought conditions. The 2012–2016 drought reached D4 conditions, significantly reducing local reservoir storage and groundwater levels, prompting conservation mandates and renewed investment in the City of Santa Barbara's desalination facility to enhance supply reliability. The most recent severe drought in Santa Barbara County was in 2021 during the declared statewide drought. During the most recent severe droughts over the past decade, the district has been impacted through water use restrictions which caused landscaping to dry out and become a fire hazard, as well as instances of recreation fields being closed. For SBUSD, these historic and ongoing drought cycles underscore the importance of water conservation planning, coordination with the City of Santa Barbara, and operational preparedness to ensure continuity of educational services during periods of reduced water availability.

3.2.6.4 Location / Geographic Exents

Drought is one of the few hazards with the potential to directly or indirectly impact the entire population of Santa Barbara County, be it from water restrictions, higher water and food prices, reduced air or water quality, restricted access to recreational areas, or secondary impacts like wildfire. No portion of the county is immune from drought conditions.

3.2.6.5 Frequency & Probability of Future Occurrences

Droughts may not be predictable, but they should be expected. They occur with some regularity and varying levels of severity. The magnitude and duration of a drought, is something that can be predicted based on historical records and should be taken into account in water resources planning. According to the results of the hazard risk ranking exercises conducted by the participating jurisdictions, the probability of drought occurring in Santa Barbara County is likely (between 10% and 100% annual probability).

Currently there is no data on the probability of drought akin to data for predicting earthquakes or flood probability. Empirical studies conducted over the past century have shown that meteorological drought is never the result of a single cause. It is the result of many causes, often synergistic in nature; these include global weather patterns that produce persistent, upper-level high-pressure systems along the West Coast with warm, dry air resulting in less precipitation.

The expected effects of climate change will also increase the risk of drought. Numerous climate models have been run with various predictions for the Santa Barbara County area. Although it is unclear whether the average amount of rainfall will increase, it is apparent that the timing and intensity of rainfall will change, which will lead to more severe and extended droughts. More intense rainfall (as opposed to longer, less intense events) will not contribute as much to groundwater recharge or dry season stream baseflows and will ultimately have adverse impacts on water supply quality through flooding and erosion.

3.2.6.6 Severity

The severity of a drought depends on the degree of moisture deficiency, the duration, and the size and location of the affected area. The longer the duration of the drought and the larger the area impacted, the more severe the potential impacts. Droughts are not usually associated with direct impacts on people or property, but they can have significant impacts on agriculture, local economies, and natural resources, impacting people indirectly.

Drought eventually affects groundwater sources but generally not as quickly as surface water supplies, but groundwater supplies take longer to recover. Reduced precipitation during a drought means that groundwater is not replenished at a normal rate, leading to problems such as reduced pumping capacity, wells going dry, seawater intrusion, and land subsidence. Shallow wells are more susceptible than deep wells. Reduced replenishment of groundwater also affects streams and other surface water supplies. Much of the flow in streams comes from groundwater, especially during the summer when there is less precipitation. Reduced groundwater levels mean that even less water will enter streams when steam flows are lowest.

On average, the nationwide annual impacts of drought are greater than the impacts of any other natural hazard. They are estimated to be between $6 billion and $8 billion annually in the United States and occur primarily in the agriculture, transportation, recreation and tourism, forestry, and energy sectors. Water-dependent industries are commonly forced to shut down all or a portion of their facilities, resulting in layoffs. Social and environmental impacts are also significant, although it is difficult to put a precise cost on these impacts. Droughts that occur in populated areas may not have direct effects to the residents but may increase the threat of wildfire.

3.2.6.7 Warning Time

Unlike most disasters, droughts normally occur slowly but last a long time. Droughts are climatic patterns that occur over extended periods of time. Only generalized warning can take place due to the numerous variables that scientists have not pieced together well enough to make accurate and precise predictions.

Scientists at this time do not know how to predict drought more than a month in advance for most locations. Predicting drought depends on the ability to forecast precipitation and temperature. Anomalies of precipitation and temperature may last from several months to several decades. How long they last depends on interactions between the atmosphere and the oceans, soil moisture and land surface processes, topography, internal dynamics, and the accumulated influence of weather systems on the global scale.

3.2.6.8 Vulnerability Assessment

Vulnerability to drought varies with the different water agencies and their water sources. Agencies with a greater reliance on surface water are more vulnerable than those that rely entirely on groundwater. For this reason, many county water agencies have installed interties among jurisdictions to be able to exchange water in the event of an emergency or shortage.

The county-wide decline in groundwater levels and streamflow is indicative of the continuing need to reduce any non-essential water use throughout the planning area by small and large water systems, private

wells, and stream diversions. Conservation programs, curtailment programs, and plans to increase water supply are all components that will decrease the vulnerability of the community to drought.

Drought Impacts on School Facilities and the School Community

All students, staff, and school facilities within the district are either directly or indirectly susceptible to drought conditions. Direct impacts include reduced water availability for campus operations, stressed landscaping and athletic fields, and increased wildfire risk associated with dry vegetation. Indirect impacts include higher utility costs, operational constraints due to conservation mandates, reduced outdoor programming opportunities, and broader community economic stress that may affect families within the school body.

Extended drought conditions can affect school facilities in several operational ways. Reduced surface water supplies and declining groundwater levels may result in mandatory water conservation measures that limit irrigation of landscapes, playing fields, and outdoor learning spaces. As irrigation is reduced, turf areas, shade trees, and campus landscaping can become stressed or die off, increasing maintenance needs and long-term replacement costs. Stressed vegetation also increases the accumulation of dry fuels on and around campuses, elevating wildfire ignition potential — particularly for schools located near hillside or wildland-urban interface areas.

Water restrictions may also impact custodial operations, cooling systems, and irrigation-dependent erosion control measures. Athletic programming may be affected when fields deteriorate or become unsafe due to dry, compacted soils. In addition, tree canopy loss from drought stress can reduce shade coverage, increasing heat exposure for students during outdoor activities.

Drought-related air quality impacts are also a concern. Dry soils, increased dust, and regional wildfire smoke can elevate airborne particulate matter. These conditions may exacerbate respiratory illnesses such as asthma among students and staff, potentially increasing absenteeism and the need for modified outdoor activities.

From a community perspective, drought can create financial pressures for families through higher water rates and increased living costs. These broader economic stresses may indirectly affect student well-being, attendance, and overall educational stability. Schools serving lower-income populations may see disproportionate impacts where families face water affordability challenges or housing instability related to prolonged drought conditions.

Finally, drought-induced vegetation die-off and landscape decline can alter campus aesthetics and student experience, reducing the quality of outdoor learning environments and community spaces.

In summary, drought presents a multifaceted risk to the School District — affecting facilities, operations, landscape health, wildfire exposure, air quality, and the broader school community. Continued integration of water efficiency, landscape resilience, and defensible-space management strategies will be essential to maintaining safe and functional educational environments during extended dry periods.

3.2.6.9 Development Trends

The greater Santa Barbara area is a compact urban area surrounded by mountains, greenbelt, and the Pacific Ocean. The sizes of the water service areas are generally fixed by the county's urban services line via its Growth Management Ordinance. Water service areas for all jurisdictions have generally remained constant over time due to policies limiting water main extensions to unserved areas. The only extensions of service or agency boundaries have involved incorporating an existing developed area into a larger district, which has better capabilities for providing reliable water service. Accordingly, any growth and redevelopment that does happen going forward is expected to be concentrated within the confines of the existing service area boundaries.

Only a relatively small amount of land remains undeveloped in the county; consequently, the majority of future growth is likely to be achieved through redevelopment, remodeling, in-fill, and increased density on underutilized land, along with new construction on the little amount of vacant land remaining. In other words, the service areas are relatively fixed and not growing outward. There has not been a residential subdivision in rural areas of the county since the adoption of Measure J, the county's growth management plan, in the late 1970s. A few other municipalities have also established urban growth boundaries.

The general plan housing elements of the county and incorporated cities set forth goals and objectives for housing production, rehabilitation, and conservation, and must address water needs to support their allocation of units. The plans identify generally where sites are available for housing to be built and describe programs to facilitate new housing opportunities; however, this does not necessarily mean such housing will be constructed. Regardless, all new development is required to incorporate water conservation measures to mitigate potential impacts from drought.

Due to declining enrollment, no new facilities or campuses have been developed since 2009. As such, SBUSD's exposure to drought has not increased, but some of the district's existing older—and less water-efficient—campuses and facilities may still be vulnerable to drought. Therefore, this 2026 HMP directs the district to replace landscaping on campuses for water conservation and conduct a water audit for older facilities.

3.2.6.10 Drought Hazard Problem Statements

As part of the mitigation action identification process, the HMPT identified issues and/or weaknesses (aka problem statements) for SBUSD facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping tool and historic flood data. Flood hazard problem statements are listed in Table 3-22.

Identifying these common issues and weaknesses assists the HMPT in understanding the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-22 and Table 4-3.

Table 3-31 Drought Hazard Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Drought	DR-01	Prolonged drought stresses campus vegetation, increasing wildfire exposure, defensible space maintenance needs, and landscape deterioration.	TBD	TBD
Drought	DR-02	SBUSD is fully dependent on municipal water delivery and has limited on-site redundancy, creating operational vulnerability during prolonged shortages or emergency restrictions.	TBD	TBD
Drought	DR-03	Mandatory conservation measures may impact irrigation, athletic field conditions, outdoor programming, sanitation practices, and cooling system performance.	TBD	TBD
Drought	DR-04	Drought-driven wildfire activity and smoke events may degrade air quality, increase absenteeism, and disrupt school operations.	TBD	TBD
Drought	DR-05	Increased water and energy costs during drought conditions may strain District operational budgets and affect long-term facility maintenance planning.		

3.2.7 Climate Change Hazard Profile



Throughout this plan, each hazard section includes an assessment of how climate change is expected to alter frequency, severity, and cascading impacts. This integrated approach ensures that mitigation strategies are informed by the best available climate science and address the ways climate change is making existing hazards more damaging and harder to manage.

This stand-alone section on climate change focuses specifically on sea level rise, a subhazard that requires unique attention due to its long-term and irreversible impacts. Unlike other hazards that can ebb and flow with weather cycles, sea level rise will steadily increase exposure for coastal communities, infrastructure, and ecosystems. Rising seas compound flood risk, accelerate coastal erosion, and threaten the stability of underground utilities, transportation corridors, and low-lying neighborhoods. Vulnerable populations, including low-income residents and those living near the shoreline, will face disproportionate impacts from displacement, loss of access, and reduced public safety.

It is important to emphasize that this HMP is not a climate change plan. Broader strategies to reduce greenhouse gas emissions and plan for long-term climate adaptation are addressed within the district's sustainability initiatives. Instead, this plan highlights how climate change drives changes in natural hazard risks.

3.2.7.1 Regulatory Environment

California Green Building Standards

The district has adopted the California Green Building Standards, also known as CALGreen Code. CALGreen Code establishes regulations for green building, nonresidential and residential buildings. Topics covered in the regulations include planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency and environmental quality. The code also includes voluntary measures for residential, nonresidential and health facilities.

California Adaptation Planning Guide (APG)

California has been taking action to address climate change for over 20 years, focusing on both greenhouse gas emissions reduction and adaptation. The California APG provides guidance and support for communities addressing the unavoidable consequences of climate change.

California Coastal Commission Sea Level Rise Guidance

The California Coastal Commission Sea Level Rise Guidance provides guidance for addressing sea level rise in coastal programs and development permits. The guidance includes interpretive guidelines for LCPs and is based on updated scientific knowledge of statewide sea level rise and coastal hazards. It offers practical approaches for state agencies, local governments, and communities to enhance coastal resilience and

protect vital ecosystems. The guidance emphasizes the importance of sustainable adaptation strategies to manage the impacts of rising sea levels.

Local Regulatory and Policy Environment – Climate Adaptation and School Facilities

California has increasingly emphasized the need for climate-resilient school facilities in response to growing risks from extreme heat, wildfire smoke, drought, and extreme weather. State leaders, public health officials, and education stakeholders have highlighted the need to ensure that K-12 campuses provide safe indoor temperatures, healthy air quality, and resilient infrastructure capable of withstanding climate-related disruptions. While statewide guidance continues to evolve, school districts are encouraged to integrate climate adaptation considerations into long-term facilities planning, modernization projects, and capital improvement programs.

At the local level SBUSD advances climate adaptation and sustainability through its Facilities and Modernization Department and Sustainability initiatives. The district has implemented policies and projects that strengthen resilience, including:

- Installation of solar photovoltaic systems and battery storage at select campuses to improve energy reliability and reduce greenhouse gas emissions.
- HVAC modernization and ventilation upgrades to improve indoor air quality during wildfire smoke events and extreme heat conditions.
- Smart irrigation systems and water-efficient plumbing fixtures to reduce water consumption during drought conditions.
- Landscape transitions and maintenance practices that reduce water demand and support defensible space objectives.
- Waste reduction and electrification efforts that align with broader climate resilience and operational sustainability goals.

These initiatives support both mitigation and adaptation objectives by reducing operational vulnerability to power outages, extreme heat, wildfire smoke, and water shortages. Through integration of sustainability principles into facilities planning and maintenance, SBUSD is strengthening its capacity to maintain safe and functional educational environments under increasingly variable climate conditions.

3.2.7.2 Past Occurrences

While climate change itself is a long-term trend rather than a single event, Santa Barbara County has experienced numerous climate-related disasters over the past several decades that reflect increasing variability and extremes in temperature, precipitation, drought, and storm intensity. The region has endured repeated multi-year droughts (including 2007–2009 and 2012–2016), record-breaking wildfire seasons such as the 2017 Thomas Fire and 2021 Alisal Fire, prolonged extreme heat events, and powerful winter storm systems producing coastal flooding, high surf, debris flows, and infrastructure damage.

Recent years have demonstrated the growing volatility of California's climate system. Extended drought periods have been followed by intense atmospheric river events, including the severe winter storms of 2018 and 2023 that produced flooding, erosion, and coastal impacts throughout Santa Barbara County. These "weather whiplash" patterns—rapid swings between extreme dry and extreme wet conditions—have increased the frequency of compound hazards, including post-wildfire debris flows such as the 2018 Montecito disaster.

In addition, extreme heat days have increased in frequency statewide, and wildfire seasons have lengthened, with fire activity now commonly extending into late fall due to delayed rainfall and Santa Ana wind events. Coastal storms and high surf events have also intensified, contributing to bluff erosion, roadway damage, and shoreline flooding.

Together, these recurring droughts, severe storms, wildfires, heatwaves, and coastal events illustrate that climate-driven hazards are not hypothetical future risks but ongoing and increasingly frequent stressors affecting Santa Barbara County and Santa Barbara Unified School District facilities.

3.2.7.3 Location

The effects of climate change are not limited by geographical borders. The district, Santa Barabara County, the State of California, the United States, and the rest of the world are all at risk of climate change. As such, the entire district is at risk to the effects of climate change.

3.2.7.4 Magnitude/ Severity

Climate change is increasingly affecting California and Santa Barbara County, with rising temperatures, more frequent and prolonged heatwaves, worsening wildfire smoke conditions, and more intense storm events. These climate-driven hazards place growing pressure on K-12 school facilities, many of which were not originally designed to withstand extreme heat or degraded air quality. Across the state, efforts are underway to modernize school infrastructure to improve resilience to extreme heat, wildfire smoke, and localized flooding. Strategies include upgrading HVAC systems to ensure safe indoor temperatures and adequate ventilation, installing energy-efficient cooling systems, incorporating cool roofs and shade structures, and transforming asphalt-dominated schoolyards into greener, shaded environments that reduce heat exposure. State policy direction increasingly supports comprehensive resilience planning, facility modernization, and sustainable design standards to ensure that school campuses remain safe, healthy, and operational under changing climate conditions.

3.2.7.5 Frequency/ Probability of Future Events

Unlike earthquakes or floods, which occur over defined timeframes, climate change continuously influences the frequency, severity, and interaction of other natural hazards affecting Santa Barbara County the district.

In the near term, temperature-related impacts, particularly extreme heat events, are the most immediate and probable climate-driven hazard affecting the region. The frequency, duration, and intensity of

heatwaves are expected to increase, elevating risks to student and staff health, increasing cooling demand, and straining school facilities not originally designed for sustained high temperatures.

Over the mid-term, climate change is projected to exacerbate wildfire risk, drought frequency, and intense precipitation events. Longer dry periods combined with higher temperatures are expected to increase vegetation stress and fuel loads, contributing to more frequent and severe wildfires. At the same time, more intense atmospheric river events are projected to produce higher peak runoff, localized flooding, erosion, and post-fire debris flow hazards.

State climate assessments consistently project:

- Increased frequency and severity of extreme heat events;
- More frequent and persistent drought conditions;
- Greater variability in precipitation, including more intense rainfall events;
- Heightened wildfire activity driven by hotter, drier conditions; and
- Increased coastal storm impacts compounded by sea-level rise.

Because climate change amplifies existing hazards rather than creating entirely new ones, its probability of occurrence is effectively ongoing and certain. The primary uncertainty lies in the rate and magnitude of impacts. For SBUSD, planning efforts should prioritize adaptation strategies that address extreme heat, wildfire smoke, drought stress, and severe storm events, as these represent the most probable and operationally disruptive climate-related risks in the foreseeable future.

3.2.7.6 Severity

Drought conditions in Santa Barbara County are expected to increase in frequency and intensity as temperatures rise and precipitation patterns become more variable. For the Santa Barbara Unified School District (SBUSD), drought primarily affects water supply reliability, landscape vegetation health, and the condition of surrounding natural fuels that influence wildfire risk near school facilities. Extended dry periods can stress urban vegetation and surrounding wildland fuels, increasing the likelihood of wildfire ignition and spread in areas adjacent to school campuses, particularly where facilities interface with open space or coastal foothills.

Drought can also affect school operations through water conservation requirements imposed by state or local agencies. Mandatory water restrictions may limit irrigation of athletic fields, landscaping, and outdoor learning spaces, which can affect campus usability, maintenance costs, and facility management practices. In addition, prolonged drought conditions often coincide with extreme heat events, which can increase cooling demands for school buildings and create uncomfortable or unsafe conditions for students and staff, particularly at older campuses with limited climate control infrastructure.

At the state level, California has been addressing climate change and drought impacts for several decades through policies that reduce greenhouse gas emissions and promote climate adaptation. The California Adaptation Planning Guide (APG) provides a framework for assessing climate risks and developing adaptation strategies across the state's climate regions. Santa Barbara County lies within the Central Coast

climate region, where climate projections indicate increasing temperatures, more variable precipitation, longer dry seasons, and an elevated likelihood of drought conditions. These changes have implications for water supply reliability, vegetation health, and wildfire conditions that may indirectly affect school district facilities and operations.

3.2.7.7 Warning Time

As this section as described, many existing hazards could be intensified as a result of climate change, decreasing warning times and exacerbating impacts. Warning times are discussed under the various other hazards. Other climate change impacts are more long-term; scientists have a high confidence in predicting the rise in global temperatures and have reached a consensus on the future impacts of climate change and the time frame in which they will occur.

3.2.7.8 Development Trends

Climate change is not a single hazard but a risk multiplier that influences the frequency, intensity, and geographic extent of multiple hazards affecting the Santa Barbara Unified School District (SBUSD), including wildfire, flooding, extreme weather, drought, and slope failure. The district's facilities, distributed across coastal, urban, and foothill environments, are exposed to evolving climate conditions such as increasing temperatures, shifting precipitation patterns, and more frequent extreme weather events. These changes have direct implications for facility performance, infrastructure systems, and long-term planning.

Development patterns and facility design play a critical role in determining how climate-related risks are experienced across SBUSD sites. While newer development incorporates improved sustainability and resilience standards, older facilities and infrastructure may not be designed for future climate conditions. This section evaluates how past development, anticipated future growth, and evolving regulatory frameworks influence the district's ability to adapt to and mitigate climate-related risks.

Past Development Patterns

Historically, SBUSD facilities were designed using historical climate data and stationary assumptions, with limited consideration for long-term variability or extreme conditions. Older campuses may include undersized drainage systems, aging building envelopes, and landscaping practices that are less resilient to prolonged heat, drought, or high-intensity rainfall. Additionally, development patterns in coastal and foothill areas have placed facilities in locations where climate-driven hazards, such as wildfire, erosion, and flooding, may intensify over time.

Anticipated Future Growth

Future development within SBUSD will primarily focus on modernization, system upgrades, and resilient design, rather than expansion. New construction and major renovations increasingly incorporate climate-informed design practices, including improved stormwater capacity, heat mitigation strategies, water-efficient systems, and energy-efficient building design. State and local policies, as well as district

sustainability initiatives, are expected to further integrate climate adaptation and resilience considerations into capital planning and facility design.

Development Impacts on Earthquake Hazard

Development influences climate-related risk through energy use, water demand, land cover, and infrastructure performance. Increased impervious surfaces can exacerbate runoff during extreme rainfall events, while inefficient buildings and systems contribute to higher energy demand and heat-related impacts. However, modern development practices, including green infrastructure, energy-efficient systems, and sustainable site design, help reduce greenhouse gas emissions and improve resilience to climate stressors.

Impacts of Earthquake Hazard on Development

Climate change is expected to influence SBUSD development and operations by requiring adaptation of facility design standards, increased maintenance demands, and greater investment in resilient infrastructure. Facilities may experience increased stress from extreme heat, heavier precipitation events, prolonged drought, and wildfire-related impacts, affecting both structural systems and day-to-day operations. These evolving conditions necessitate integration of climate resilience into capital improvement planning, maintenance programs, and long-term strategic planning, ensuring that both existing and future facilities remain functional and safe under changing environmental conditions.

3.2.7.9 Vulnerability Assessment

Climate change functions as a hazard multiplier for the district, intensifying the frequency and severity of extreme heat, wildfire smoke, drought, and severe storm events. These climate-driven conditions affect both the health and safety of students and staff and the performance and reliability of school facilities. The following assessment evaluates the vulnerability of the school community first, followed by the district's physical assets and operational systems, recognizing that student well-being and continuity of education are the district's primary concerns.

Population (Students, Staff, and School Community)

School-age children represent a uniquely vulnerable population in the context of climate-related hazards. Children are physiologically more susceptible to heat-related illness, respiratory distress, and dehydration than adults. They also depend on structured environments for safety, supervision, nutrition, and medical support during emergencies.

Extreme heat events pose a significant vulnerability for students, particularly in classrooms or facilities without modernized HVAC systems. Prolonged high indoor temperatures may impair concentration, increase the risk of heat exhaustion, and exacerbate existing medical conditions such as asthma. Outdoor activities, including recess, athletics, and physical education, may require modification or cancellation during heat events.

Wildfire smoke presents an additional concern. Poor air quality can trigger asthma attacks and other respiratory conditions, increase absenteeism, and disrupt instructional continuity. Students with pre-existing respiratory or cardiovascular conditions are particularly vulnerable. Extended smoke events may require shelter-in-place procedures or temporary school closures.

Drought conditions may indirectly affect students through degraded outdoor spaces, reduced shade from vegetation loss, increased heat exposure, and broader community economic stress. Families experiencing economic strain from drought-related utility increases or wildfire impacts may face housing instability or financial hardship, which can affect student attendance and well-being.

Severe storms and flooding events can disrupt transportation routes, damage homes, and interrupt school operations, creating both physical and psychological stress for students and staff.

Overall, climate-related hazards disproportionately affect vulnerable student populations, including younger children, students with disabilities, those with chronic health conditions, and students from economically disadvantaged households.

School Facilities and Operations

SBUSD facilities are vulnerable to climate-related hazards that affect building performance, site conditions, and operational continuity.

Extreme Heat: Many school facilities were constructed prior to modern cooling standards and may not be fully designed for sustained high-temperature conditions. Increased cooling demand strains HVAC systems and electrical infrastructure. Loss of tree canopy and shade increases surface temperatures on playgrounds, athletic fields, and outdoor gathering areas.

Wildfire and Smoke: Campuses located near foothill and open space areas face increased wildfire exposure due to vegetation stress and extended fire seasons. Even when not directly threatened by flames, regional wildfire smoke can infiltrate buildings lacking enhanced filtration systems. Ember intrusion, defensible space maintenance, and evacuation planning remain operational concerns.

Drought: Extended drought conditions stress campus landscaping, increase irrigation restrictions, and elevate maintenance costs. Drought-driven vegetation die-off may increase wildfire risk and erosion potential during subsequent storm events. SBUSD's reliance on municipal water supply creates vulnerability during prolonged shortages or emergency conservation mandates.

Severe Storms and Flooding: atmospheric river events and high-intensity rainfall may overwhelm drainage systems, damage roofs, and impact access roads. Post-fire debris flow risk may increase in hillside-adjacent areas. Flooding can damage building materials, electrical systems, and outdoor facilities.

Energy and Utility Dependence: Climate-related events, including Public Safety Power Shutoffs (PSPS) and extreme heat-driven grid stress, may disrupt operations. While some campuses have solar and battery storage, most facilities remain dependent on grid reliability.

3.2.7.10 Future Trends in Development

Future development within the district is expected to focus primarily on modernization, renovation, and campus improvements rather than large-scale new school construction. As enrollment patterns stabilize and available land remains limited within the urbanized service area, capital investments will likely prioritize upgrading aging facilities to improve safety, energy efficiency, and climate resilience.

Modernization efforts present an opportunity to incorporate adaptation measures that address increasing risks from extreme heat, wildfire smoke, drought, and extreme weather. Planned and future projects may include HVAC system upgrades to improve indoor air quality and cooling capacity, installation of high-efficiency windows and roofing systems, campus solar and battery storage expansion, improved stormwater drainage, water-efficient landscaping, and enhanced defensible space design in wildfire-prone areas.

Additionally, evolving state building standards and sustainability goals are expected to influence facility design and renovation projects. As facilities are rehabilitated or replaced, climate-resilient design considerations—such as increased shading, cool roofs, electrification, green infrastructure, and water conservation systems—will likely become integrated into long-term capital planning.

Overall, future development trends suggest that SBUSD has opportunities to reduce long-term vulnerability to climate-related hazards through strategic modernization, infrastructure upgrades, and integration of sustainability and resilience principles into facility planning.

3.2.7.11 Climate Change Problem Statements

As part of the mitigation action identification process, the Hazard Mitigation Planning Team (HMPT) identified key issues and vulnerabilities affecting SBUSD facilities based on the risk assessment and vulnerability analysis. The resulting climate change hazard problem statements are presented in Table 3-32.

Identifying these common issues and weaknesses assists the Planning Committee in understand the realm of resources needed for mitigation. The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 4-3 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 3-32 and Table 4-3.

Table 3-32 Climate Change Hazard Problem Statements

Hazard	Problem No.	Problem Description	Mitigation Alternatives	Related MA
Climate Change	CC-01	Increasing frequency and intensity of extreme heat events create unsafe indoor learning conditions in facilities without adequate cooling or modern HVAC systems.		
Climate Change	CC-02	Aging buildings and legacy construction standards did not anticipate sustained high-temperature conditions, increasing operational strain and energy demand.		
Climate Change	CC-03	Asphalt-dominated schoolyards with limited tree canopy contribute to elevated surface temperatures and increased heat exposure for students during outdoor activities.		
Climate Change	CC-04	Limited shade infrastructure and green space reduce campus-level cooling capacity and exacerbate urban heat island effects.		
Climate Change	CC-05	Prolonged extreme heat events increase the risk of instructional disruption, modified schedules, and health impacts for vulnerable student populations.		

Section 4. Mitigation Strategy

The Santa Barbara Unified School District's mitigation strategy prescribes a series of actions designed to achieve the greatest reduction of vulnerability, resulting in reduced potential for mortality, injuries, facility damages, and operational disruptions in the event of a natural hazard. This strategy is the guidebook to future hazard mitigation administration for the district, capturing key outcomes of the HMP planning process described in Section 2. The intended outcome is to reduce vulnerabilities outlined in Section 3 with a prescription of specific and realistic mitigation actions, including policies and physical projects that outline specific roles and resources and are compatible with current capabilities.

4.1 Mitigation Goals & Objectives

Hazard mitigation plans must identify goals for reducing long-term vulnerabilities to priority hazards. (44 CFR § 201.6(c)(3)(i)) The SBUSD Planning Team established a set of goals and objectives for this plan, based on review of the previous goals from 2009, goals from neighboring jurisdictions' HMPs, and from the state-wide mitigation plan. The team also considered the preliminary risk assessment and public outreach results in setting the 2026 HMP goals and objectives, ultimately deciding to adopt consolidated and revised goals from the 2009 plan.

These goals and objectives form the basis for the district's Mitigation Action Plan (Table 4-3) and specific mitigation projects. A mitigation strategy is considered effective based on how well goals are achieved, and the goals and mitigation actions in this plan all support each other. Actions were prioritized based on their ability to achieve multiple goals.

GOAL 1: Promote school safety through increased understanding and support for effective hazard mitigation.
OBJECTIVE 1.A: Enhance hazard risk and mitigation communications and partnerships with parents, local businesses, and media outlets.
OBJECTIVE 1.B: Foster increased awareness and understanding of—and action on—natural hazards among students, faculty, and staff.
GOAL 2: Protect the district's human and capital assets from natural hazards by building capacity and commitment to address vulnerabilities.
OBJECTIVE 2.A: Ensure that all new development is sited and constructed to avoid or mitigate hazard risks through strengthened standards.
OBJECTIVE 2.B: Protect existing assets from current and future hazard risks through diligent mitigation efforts, including capacity-building and physical projects.
GOAL 3: Ensure the continuity of the district's core mission of education through collaboration with the city, county, and other partner agencies.
OBJECTIVE 3.A: Foster strong partnerships with the city, county, and other regional agencies to address mutual hazard problems and ensure continuity of academic services.
OBJECTIVE 3.B: Integrate risk assessment considerations and hazard mitigation strategies with existing district plans and policies, and encourage partners to do the same.

4.2 Capabilities & Opportunities Assessment

This section examines the district's current hazard mitigation capabilities and future opportunities for integration with this HMP to address known issues and weaknesses in mitigating profiled hazards. The assessment also includes considerations of adaptive capacity for climate change, as outlined in the CalOES 2020 California Adaptation Planning Guide. Adaptive capacity is the existing ability for a community or region to moderate climate change impacts. Assessing adaptive capacity includes analysis of policies, plans, programs, funding, and staffing capacity. (Cal. Adaptation Planning Guide, 2020)

This section explores various district planning mechanisms, administrative capacity, financial capabilities, and education and outreach initiatives. For more information on the regulatory environment surrounding each hazard, refer to the hazard-specific profiles in Section 3. The capabilities and opportunities assessment covers the following four topic areas:

- **Planning and Regulatory:** The information in this assessment is used to align mitigation actions with the existing planning and regulatory capabilities of SBUSD. Planning and regulatory tools most commonly used by local jurisdictions to implement hazard mitigation activities include building codes, land use and subdivision regulations, floodplain management policies, and other municipal planning documents.
- **Administrative and Technical:** The assessment identifies the administrative and technical capabilities of the district. These capabilities include having dedicated staff and the tools necessary to support mitigation efforts, such as overseeing grant applications, organizing public outreach, or reviewing hazard-specific development.
- **Fiscal:** The assessment identifies the financial tools or resources that the district has to potentially fund mitigation activities, such as system improvement and service fees or taxing authority.
- **Education and Outreach:** The assessment lists the district's capabilities for public education and outreach, as well as local citizen groups that communicate hazard risks. These efforts include hazard-specific programs, availability of technical assistance, and various media platforms.

The capabilities and opportunities assessment presented in Table 4-1 is based on color coding to quickly identify which policies and plans are present, have been integrated with hazard mitigation planning, or could be integrated in the future. The assessment uses a legend to communicate how three questions are answered according to the color indicated: green, yellow, or orange. The columns in each table represent deeper dives into the following questions:

- Is the existing planning or regulatory mechanism used currently? (Column 1, Status)
- Has the HMP already been integrated into the planning mechanism so that the named mechanism is currently used in HMP planning? (Column 2, Current Mitigation Use)
- Is there a future opportunity to expand, improve upon, or incorporate the HMP into the planning or regulatory mechanism? (Column 3, Future Opportunity)

CAPABILITIES AND OPPORTUNITIES ASSESSMENT LEGEND

Status	Current Mitigation Use	Future Opportunity
Currently in use or present.	Used widely for mitigation.	Opportunity to expand and integrate.
(Sort of) Seldomly used or limited presence.	Limited use in mitigation planning.	Limited opportunity to expand and integrate.
(No) Not present or available.	Not used in mitigation planning.	No opportunity to expand or integrate.

Expanding & Improving Existing Capabilities

The capabilities assessment exercise presents an opportunity for the SBUSD to examine what capabilities it does and does not currently have and where it makes the most sense to expand and improve upon those capabilities in the future. The assessment was used to shape mitigation actions for all-hazards as well as for specific hazards that focus on expanding and improving existing policies and programs. The expansions and improvements were based upon identified vulnerabilities and areas of concern, as profiled in Section 3.

Summary of Capabilities & Opportunities

Planning & Regulatory

As a school district and not a municipality, SBUSD does not use traditional regulatory mechanisms for hazard mitigation, such as land use and subdivision codes. However, SBUSD still maintains a strong foundation of planning and regulatory tools that are used to support mitigation, including board-adopted policies, the district's Facilities Master Plan, site-specific School Safety Plans, and compliance with state building codes and Division of the State Architect (DSA) standards. These tools are actively used in capital planning, modernization, and new construction, and have been integrated with hazard risk considerations and mitigation strategies in the past.

Opportunities exist to further integrate the HMP into several of these planning and regulatory mechanisms, including through strengthening district development standards (ma-AH-SBU-03) and updating the Facilities Master Plan (ma-EQ-SBU-01) by explicitly incorporating hazard vulnerability findings (e.g., seismic, wildfire, climate change). Another opportunity is to formally align the SBUSD's Comprehensive School Safety Plans with the 2026 HMP, ensuring hazard mitigation strategies are embedded in annual safety plan updates and emergency preparedness protocols.

Administrative & Technical

The SBUSD demonstrates substantial administrative and technical capacity that is used for mitigation, including facilities staff oversight, coordination with local fire and emergency agencies, use of consultants for risk assessments and capital projects, and access to hazard data. These capabilities are used generally and specifically for project-level mitigation (e.g., seismic upgrades), though integration into long-term

hazard mitigation tracking could be expanded. A key future opportunity is to formalize interdepartmental and interagency coordination among Facilities, Maintenance and Operations, Risk Management, and specific school administrators to create a structured mitigation action tracking system tied to the HMP. Additionally, integrating hazard data and risk findings into maintenance management systems would create a stronger feedback loop between day-to-day operations and long-term resilience planning.

Fiscal

SBUSD has meaningful financial tools in use that could support mitigation efforts, including capital improvement funding, bond measures, and eligibility for state and federal grants. These funding mechanisms are already used widely for mitigation through seismic retrofits, life safety upgrades, and infrastructure improvements. However, future opportunities exists to more deliberately align the HMP with the district's Facilities Mast Plan and budgeting cycles so that identified mitigation actions are embedded in funding prioritization. Another opportunity is to strengthen integration with state and federal hazard mitigation grant programs (e.g., FEMA HMA, Cal OES programs) by pre-identifying grant-ready projects within the HMP to improve competitiveness and reduce reliance solely on local capital funds.

Education & Outreach

SBUSD's education and outreach capabilities are strong but used only moderately for mitigation at this time, particularly through emergency drills, staff training, parent communications, and collaboration with local emergency response partners. While these efforts support preparedness, there is opportunity to expand integration of hazard-specific education (e.g., wildfire smoke response, earthquake preparedness) into district communications and curriculum-related initiatives. A notable future opportunity is to align hazard mitigation messaging with broader climate resilience, sustainability, and student wellness programs to create consistent risk communication that extends to parents and the greater Santa Barbara community. Formalizing partnerships with the city, county, and local agencies for coordinated outreach campaigns would further strengthen integration and elevate the visibility of mitigation as an ongoing district priority rather than a stand-alone planning effort.

Table 4-1: Capabilities and Opportunities Assessment

Resource	HMP Integration			Notes / Additional Detail
	Status	Current Mitigation Use	Future Opportunity	
Planning and Regulatory Capabilities				
Hazard Reduction Programs (Annually Conducted)				
Capital Improvements Program (CIP) or Plan				Identified in 2025 Five-Year Facilities Master Plan and Facilities Condition Assessment.

Resource	HMP Integration: Status	HMP Integration: Current Mitigation Use	HMP Integration: Future Opportunity	Notes / Additional Detail
Planning and Regulatory Capabilities				
Hazard-Specific Regulations and Standards				Complies with state law for construction requirements, safety plans and emergency procedures, property maintenance, and insurance for specific hazards (Cal. Education Code, Public Resources Code, etc.)
Annual Fire Prevention Plan				Fire/life safety addressed through EOP and facility inspections
Seismic Safety Program (Non-structural)				Covered under Field Act compliance and Facilities Master Plan capital improvements projects
Earthquake Modernization Plan (Building Safety)				Structural retrofits prioritized in Facilities Master Plan (e.g., roof and HVAC modernization projects).
Stormwater Management Program (Annual Inspections)				Managed through site maintenance; not a formalized annual stormwater program.
Hazard Plans and Programs				
Floodplain Response Plan				Flooding referenced in EOP; no district-specific flood plan in place.
Community Wildfire Protection Plan (CWPP)				Wildfire risks discussed in HMP; district participates in City/County coordination but no CWPP.
Groundwater Management Planning / Plans	N/A	N/A	N/A	Not applicable – district facilities rely on municipal water service.
Climate Action Plan				Energy efficiency and CalSHAPE projects underway and included in Facilities Master Plan; formal CAP not adopted.
Drought Management / Contingency Plan				Water conservation addressed in facilities operations; potential to formalize a drought contingency plan.
FireWise Communities within District				Multiple FireWise communities within district
Hazard-Related Public Outreach Program				Ongoing safety communications, stakeholder engagement, and Facilities Master Plan outreach.
Administrative and Technical				
Staff Capacity				
Emergency Manager				Safety & Emergency Management Coordinator designated; maintains EOP and training.

Resource	HMP Integration: Status	HMP Integration: Current Mitigation Use	HMP Integration: Future Opportunity	Notes / Additional Detail
Planning and Regulatory Capabilities				
Civil / Facilities Engineer				Engineering expertise under Facilities & Modernization; supports resilience design and DSA coordination.
Dedicated Public Outreach Personnel				Communication Dept.
GIS Specialist and Capability				GIS support through Facilities Planning and consultants; used for risk mapping and facility inventory.
Grant Manager / Writer / Specialist				Facilities & Business Services pursue CalSHAPE, Proposition 2, and FEMA mitigation funds.
Other (Risk Management / JPA)				California Schools Risk Management JPA provides hazard assessment and insurance coordination.
Warning Systems/Services				
General				District-wide emergency notification system integrated with EOP and NIMS/ICS.
Flood				General alerts cover flooding; no dedicated flood warning system.
Wildfire				Covered under general alerting; opportunity to integrate with County OEM wildfire warnings.
Geological Hazards				Earthquake drills and procedures in place; structural hazard monitoring part of modernization projects.
Fiscal Capabilities				
Financial Resources for Hazard Mitigation				
Levy for Specific Purposes with Voter Approval				Measures I and J provide precedent for voter-approved funding; future Proposition 2 bond eligible.
Utilities Fees	N/A	N/A	N/A	Not a utility provider
System Development Fee				Developer fees collected; reinvested in facility improvements.
General Obligation Bonds to Incur Debt				Major funding mechanism for facility modernization and hazard mitigation.
Special Tax Bonds to Incur Debt				None currently authorized; potential long-term funding option.
Withheld Spending in Hazard-Prone Areas	N/A	N/A	N/A	Site selection governed by state education codes and DSA safety standards.
Stormwater Service Fees	N/A	N/A	N/A	Not a service provider

Resource	HMP Integration: Status	HMP Integration: Current Mitigation Use	HMP Integration: Future Opportunity	Notes / Additional Detail
Planning and Regulatory Capabilities				
Capital Improvement Project Funding				Five-Year Facilities Master Plan with identified project priorities and funding strategies.
Asset Valuations				Replacement cost appraisals updated regularly by Admin/Risk Management
Education / Outreach Capabilities				
Education/Outreach Resources				
Website Dedicated to Hazard Topics				District Safety & Emergency content pages exist and host safety resources.
Dedicated Social Media				District uses social channels for general outreach and safety alerts.
Hazard Info Available at Library / Planning Desk				No public info desk; opportunity to provide for faculty, students, and parents
Annual Public Safety Events				Safety events throughout the year, including drills and campus safety fairs
Ability to Field Public Technical Assistance Requests				Facilities & Operations handles facility and maintenance requests, but not open to public; emergency reporting capabilities exist.
Public Safety Newsletters or Printed Outreach				District communications and newsletters regularly include safety / emergency messaging.
Fire Safe Councils				No campuses under a formal Fire Safe Council
Resource Conservation Districts				Cachuma RCD
Other				Coordination with local media for emergency and hazard messaging (radio and print)

4.2.1 Funding Opportunities

The federal and state funding opportunities listed in Table 4-2 are provided as potential options to leverage and increase the district's mitigation capabilities, adaptive capacities, and future integration opportunities. This includes the FEMA Hazard Mitigation Assistance (HMA) grant program as well as other national and state agencies, programs, and grants. Note that this list serves as a resource and is not exclusive or exhaustive.

Table 4-2: Federal and State Funding Opportunities

Agency / Program / Grant	Information
Federal Funding Opportunities	
FEMA HMA and Other Programs	FEMA HMA grant programs include: ▪ Hazard Mitigation Grant Program (HMGP): fema.gov/hazard-mitigation-grant-program ▪ Building Resilient Infrastructure and Communities (BRIC)* Program: fema.gov/grants/mitigation/building-resilient-infrastructure-communities ▪ Flood Mitigation Assistance (FMA) Program: fema.gov/flood-mitigation-assistance-grant-program For more information on current HMA grants visit fema.gov/hazard-mitigation-assistance
	Assistance to Firefighters Grant (AFG) Program: Grants for firefighting resources, fire prevention and safety, and staffing for adequate response. fema.gov/welcome-assistance-firefighters-grant-program
	Fire Prevention and Safety (FP&S) Program: Grants to enhance the safety of the public and firefighters and administered as part of the AFG Program. FP&S Grants are offered to support projects that cover fire prevention and safety activities and research and development activities. fema.gov/fire-prevention-safety-grants
	Emergency Management Performance Grants (EMPG): Grants for equipment such as backup generators. fema.gov/emergency-management-performance-grant-program
	Regional Catastrophic Preparedness Grant Program (RCPGP): Grants for housing, logistics, and supply chain management encouraging innovative regional solutions to issues related to catastrophic incidents. fema.gov/regional-catastrophic-preparedness-grant-program
	The Flood Mitigation Assistance Swift Current (Swift Current) effort provides funding to mitigate buildings insured through the NFIP after a major disaster declaration following a flood-related disaster event to reduce risk against future flood damage. fema.gov/grants/mitigation/learn/flood-mitigation-assistance/swift-current

Agency / Program / Grant	Information
Office of State and Community Energy Programs (SCEP)	The Office of State and Community Energy Programs (SCEP) is part of a concerted effort at the DOE to extend the capacity and capability of states, tribes, local governments, schools, and community-serving organizations to implement high-impact, self-sustaining clean energy projects that center the needs of low-income and disadvantaged communities. SCEP does this through the management and oversight of over $16 billion in formula grants, competitive grant awards, consumer rebate grants, and technical assistance. energy.gov/scep/office-state-and-community-energy-programs
U.S. Department of Agriculture (USDA) Programs	USDA offers a variety of programs to help farmers, ranchers, communities, and businesses that have been hard hit by natural disaster events. Available FSA programs; are available at farmers.gov. For additional USDA programs visit: fsa.usda.gov/programs-and-services/disaster-assistance-program
U.S. Bureau of Reclamation (BOR) Programs	BOR has annual funding available through the WaterSMART grant program, including for Water Reclamation and Reuse, Drought Resiliency Project, and Water and Energy Efficiency Grant. usbr.gov/watersmart/
State Funding Opportunities	
California Department of Housing and Community Development (HCD) Programs	Community Development Block Grants (CDBG) include: ▪ Community Development (CD) ▪ Economic Development (ED) ▪ Neighborhood Stabilization Program (NSP) ▪ Disaster Recovery Initiative (DRI) ▪ Emergency Solutions Grant (ESG) Program: Funds projects that serve homeless individuals and families with emergency housing and supportive services or that provide homelessness prevention assistance. The Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 places new emphasis on assisting people to quickly regain stability in permanent housing after experiencing a housing crisis or homelessness. For more information on current grants visit hcd.ca.gov/grants-and-funding
California Governor's Office of Emergency Services (Cal OES) Programs	Get notified via email when a new Competitive Funding Opportunity (CFO) or Public Meeting Notice is released: Join the Cal OES Grants Management Mailing List Search for active Cal OES grant programs here: caloes.ca.gov/office-of-the-director/policy-administration/finance-administration/grants-management/search-for-grants/
California Department of Forestry and Fire Protection (CAL FIRE)	Wildfire Prevention and Forest Health Grants: Supports CWPPs and collaborative wildfire risk reduction. fire.ca.gov/what-we-do/grants

Agency / Program / Grant	Information
California Water Resources Control Board Programs	The Division of Financial Assistance (DFA) has the lead in administering the State Water Resources Control Board's financial assistance programs. These programs include loan and grant funding for construction of drinking water treatment and distribution systems, municipal sewage conveyance and treatment systems; water recycling facilities; remediation for underground storage tank releases and groundwater contamination; technical assistance for small communities; nonpoint source pollution control projects; interim water, and operation and maintenance/Administrator support for small, disadvantaged community water systems; and drought support for individual households. DFA coordinates closely with the Division of Administrative Services, Office of Chief Counsel, Division of Drinking Water, Division of Water Quality, and the Regional Water Quality Control Board, as well as other State, federal, local, and non-governmental organizational partners. DFA administers the Operator Certification Program, which oversees the certification of all wastewater treatment plant and drinking water treatment plant and distribution system operators in California. For more information visit: waterboards.ca.gov/water_issues/programs/grants_loans/
California Department of Transportation (CalTrans) Programs	Caltrans' Local Assistance Program oversees more than one billion dollars annually available to over 600 cities, counties and regional agencies for the purpose of improving their transportation infrastructure or providing transportation services. This funding comes from various Federal and State programs specifically designed to assist the transportation needs of local agencies. Annually, over 1,200 new projects are authorized through the Local Assistance Program of which approximately 700 are construction projects. dot.ca.gov/programs/local-assistance
California Community Emergency Response Team (CERT) Program Manager Course	There are over 450 CERT programs in California. The State CERT Administrator provides technical support and CERT updates to programs in California. caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/community-emergency-response-team/
California Residential Mitigation Program	The California Residential Mitigation Program (CRMP): Established to carry out mitigation programs to assist California homeowners who wish to seismically retrofit their houses. californiaresidentialmitigationprogram.com/ ▪ Earthquake Brace + Bolt (EBB) Program: Developed as part of the CRMP to help homeowners lessen the potential for damage to their houses during an earthquake by offering eligible homeowners up to a $3,000 incentive to seismically retrofit their homes. earthquakebracebolt.com/

Agency / Program / Grant	Information
California Air Resources Board (CARB) Incentives, Grants, and Credit Programs	These programs have hundreds of millions of dollars in grants available over the next several years to reduce emissions from on- and off-road vehicles and equipment. arb.ca.gov/ba/fininfo.htm
California Department of Water Resources (DWR) Grants and Loans	Agency offers a variety of grants and loans related to integrated regional water management, flood mitigation, water conservation and efficiency, environmental restoration, groundwater, water quality, and water supply. water.ca.gov/Work-With-Us/Grants-And-Loans
California Department of Conservation (DOC)	Funds projects that improve soil, water, and habitat conservation at the local level. conservation.ca.gov/information-for/funding-grants-easements
2024 Climate Bond (Proposition 4)	Voters passed the 2024 Climate Bond (Proposition 4) in November 2024, a general obligation bond that will yield $10 billion for a variety of climate resilience efforts, including flood, wildfire, coastal, watershed, water supply, and natural resource management programs. resources.ca.gov/Bonds-Oversight/Proposition-4-Climate-Bond

*Notes: *If reinstated; BRIC funds were not allocated for 2025*

4.3 Translating Strategy to Action

As detailed in Section 2.3.4, the mitigation actions in this 2026 HMP were developed through an extensive process and are based on public and stakeholder input. This process included a high-level cost/benefit analysis as well as consideration of potential mitigation alternatives.

Mitigation alternatives are organized into FEMA's six broad categories, which provide a consistent framework for identifying, evaluating, and prioritizing hazard reduction efforts. These categories include Prevention (PRV), Property Protection (PPRO), Public Education and Awareness (PEA), Natural Resource Protection (NRP), Emergency Services (ES), and Structural Projects (SP). Together, they capture the full range of strategies available to reduce hazard risks for the SBUSD.

The 2026 mitigation actions align with these categories, highlighting both the diversity of approaches and the emphasis on solutions that provide multiple benefits. This framework ensures that limited resources are directed toward the actions with the greatest potential to reduce risk and strengthen long-term resilience.



Figure 4-1: Mitigation Alternatives

Integrating Public Input

Public participation played a central role in shaping the Mitigation Action Plan by ensuring that the strategies and actions reflect the needs, concerns, and priorities of residents across the district. Through the online survey and stakeholder engagement, community members identified the types of mitigation projects they value most for improving the SBUSD's hazard resilience. Engagement efforts are further described in Section 2.3.4.1.

While the survey only received two submissions, those results show strong community concerns about damage to school district facilities, loss of communication capabilities from/to SBUSD, and sheltering. The results also show high demand for the school district to strengthen or replace facilities to reduce risk. In consideration of the public input received, several mitigation actions were revised or developed to address concerns. These include enhancing communications and alerts, strengthening construction standards, a district-wide outreach program, and many targeted facility and campus resilience projects.

Action Details & Prioritization

The actions in this 2026 HMP (Table 4-3) are the product of a structured process that combined data from the risk assessment, input from planning partners and stakeholders, and a prioritization framework designed to ensure accountability and transparency. Each action was evaluated against the prioritization factors presented previously and accompanied by key details to guide implementation and accountability:

- **Timeline:** Short-term, medium-term, or long-term implementation schedule.

- **Responsibility:** The lead department and supporting partners.
- **Cost/Benefit Review:** A qualitative review of relative costs and benefits. Actions with benefits equal to or greater than their costs are considered cost-beneficial.
    - Cost: Low (fundable under existing budget), Medium (requires budget adjustment or multi-year allocation), or High (requires new funding source such as grants or bonds).
    - Benefit: Low (difficult to quantify in short-term), Medium (provides long-term benefits or immediate property risk reduction), or High (provides immediate life-safety and property protection).
- **Funding Potential:** Local resources such as the district's general fund, as well as opportunities for state, federal, and local funding, including FEMA Hazard Mitigation Assistance programs and Cal OES grants.

Together, these elements ensure that the Mitigation Action Plan is not just a list of projects but a carefully prioritized and actionable strategy. By balancing cost-effectiveness, current capabilities, community priorities, and strategic alignment, the plan provides a clear pathway for the district to reduce risk while maximizing benefits.

4.4 Mitigation Action Plan

The Mitigation Action Plan is the roadmap for reducing hazard risk and strengthening resilience across the Santa Barbara Unified School District. It is based on the updated risk assessment and translates the district's goals and objectives, range of mitigation alternatives, and community input gathered into a set of actionable steps designed to safeguard students, faculty, staff, and other district assets.

Mitigation Action Identification

Table 4-3 lists each mitigation action for the SBUSD, which are also available in MAST (see Section 2.3.5). Each action identifies the responsible party, time frame, potential funding sources, and other key details.

Mitigation actions consist of both new actions developed for this plan update as well as old actions that were yet to be completed from the 2009 HMP and were found to still be relevant. Section 1.4 discusses progress toward the 2009 HMP actions and indicates which were completed, have been cancelled, or are ongoing or pending. The detail provided in MAST and captured in Table 4-3 meets the regulatory requirements of FEMA and DMA 2000.

As a living document, hazard problem statements and mitigation actions will be updated through MAST on a regular basis and as appropriate. A distinct identification number was assigned to each mitigation action for easy reference and management. As demonstrated in Figure 4-3, identification numbers use four sets of alphanumeric characters based on the unique attributes of the subject action, including the primary type of hazard being mitigated.

Table 4-3 lists each priority mitigation action. Implementation plans in the MAST identify the responsible party, time frame, potential funding source, implementation steps and resources needed to implement these priority mitigation actions.

The actions listed in Table 4-3 were developed as described in Section 2.3.4 including consideration of alternatives according to FEMAs six categories. Ultimately, all the actions considered were confirmed and adopted as identified in Table 4-3 .

Important Note: In recognizing that new needs and priorities may arise as a result of a disaster or other circumstance, the SBUSD reserves the right to support new actions and edit existing actions as necessary if they conform to the overall goals of the plan.

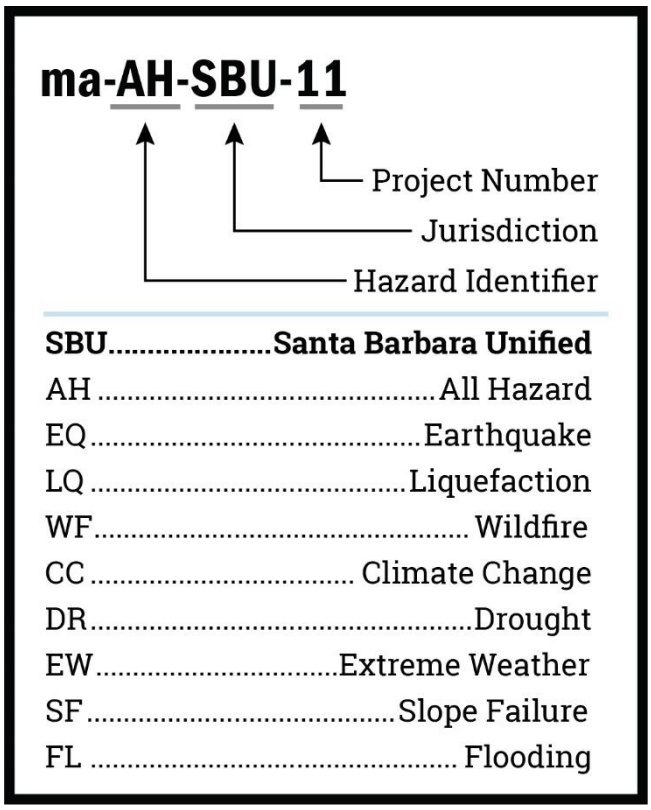


Figure 4-2: Mitigation Strategy Key

Table 4-3: SBUSD Mitigation Action Plan

Hazard	Action ID (Existing ID or "New")	Action Title	Action Description	Priority	Timeframe	Cost	Benefit	Potential Funding Source	Responsibility
All Hazard	**ma-AH-SBU-01**	Enhance Alerts & Communications	Implement enhanced communications to reach parents and teachers quickly through an integrated and redundant system.	High	Short (1-3 Years)	Medium	Medium	General Fund, HMA/HMGP	District Administration; Facilities & Modernization; ETS; Principals
All Hazard	**ma-AH-SBU-02**	Update Continuity of Operations Plan	Update the Continuity of Operations Plan to align with Continuity of Learning Standards and the updated hazard risk assessment, covering admin continuity, resource sharing, alternate locations, and mutual aid.	High	Short (1-3 Years)	Low	Medium	General Fund, HMA/HMGP	Board of Education; District Administration; Facilities & Modernization; Emergency Preparedness Committee
All Hazard	**ma-AH-SBU-03**	Strengthen Construction Standards & Techniques	Establish enhanced construction standards and techniques that strengthen hazard resilience, including through adoption of CALGreen and WUI code (Chapter 7A) requirements.	Medium	Medium (3-5 Years)	Low	High	General Fund, HMA/HMGP	Facilities & Modernization; Project Managers
All Hazard	**ma-AH-SBU-04**	Develop & Strengthen Local Partnerships	Develop and strengthen partnerships with local businesses for support on small-scale mitigation projects and "safety project days," including campus and structure hardening.	Medium	Medium (3-5 Years)	Low	High	General Fund, HMA/HMGP	Board of Education; District Administration; Facilities & Modernization; Principals
All Hazard	**ma-AH-SBU-05**	District-Wide Outreach Program	Develop a district-wide outreach program that regularly engages and informs students, parents, faculty, and partner organizations about hazard risks and mitigation resources, including regular events and presentations for the PTA, student body, and staff.	Medium	Medium (3-5 Years)	Low	High	General Fund, HMA/HMGP	District Administration; Principals
Earthquake / Liquefaction	**ma-EQ-SBU-01**	Earthquake Risk Analysis & Retrofits	Update mapping and geotechnical data for earthquake risks on and around campuses and schools, especially for liquefaction risks. Conduct retrofits for older, high-risk facilities to bring them into compliance with current seismic safety standards, and integrate new mapping and data into the Facilities Master Plan for future siting and standards.	Medium	Long (5-10 Years)	High	High	General Fund, HMA/HMGP	Facilities & Modernization; Principals; MAC Designee
Earthquake	**ma-EQ-SBU-02**	Improve Earthquake Safety Program	Improve the volunteer-based nonstructural earthquake safety and mitigation program through additional outreach, education, and incentives.	Low	Medium (3-5 Years)	Low	High	General Fund, HMA/HMGP	Emergency Preparedness Committee; Principals; Site Custodians
Wildfire / Climate Change	**ma-WF-SBU-01**	Facility HVAC System Upgrades	Identify facilities with old or inadequate HVAC systems and upgrade ventilation, filtration, and cooling systems to better protect students and faculty from wildfire smoke and indoor air quality impacts	Medium	Medium (3-5 Years)	Medium	High	General Fund, HMA/HMGP	Facilities & Modernization; Principals
Wildfire / Drought	**ma-WF-SBU-02**	Replace Landscaping & Enhance Vegetation Management	Evaluate existing landscaping at schools in or near the WUI and replace with fire-resistant and drought-tolerant vegetation. Develop an enhanced vegetation management program to annually establish and maintain defensible space around high-risk facilities, including fuel breaks.	Medium	Medium (3-5 Years)	Medium	High	General Fund, HMA/HMGP, CAL FIRE, DWR, Prop 4	Facilities & Modernization; Maintenance; Principals; Fire Services

Hazard	Action ID (Existing ID or "New")	Action Title	Action Description	Priority	Timeframe	Cost	Benefit	Potential Funding Source	Responsibility
Flood / Extreme Weather (Heavy Rain)	**ma-FL-SBU-01**	Drainage Improvements & Maintenance	Evaluate flooding issues from both known floodplains and heavy rain events, and implement grading, drainage system, roof, and structural improvements that account for recent and projected climate change-driven shifts precipitation patterns. Collaborate with the City and County to improve off-sight drainage issues that cause street flooding. Establish design standards and an enhanced maintenance program for both campus and roof drainage systems.	High	Medium (3-5 Years)	Medium	High	General Fund, HMA/HMGP, FMA, DWR, Prop 4	Facilities & Modernization; Maintenance; Principals; Site Custodians; City and County
Extreme Weather (High Wind)	**ma-EW-SBU-02**	Windstorm Hardening & Forestry Management	Evaluate campuses and facilities for vulnerabilities to windstorm events and upgrade roofing, install back-up power, and conduct other improvements for high wind resilience. Establish a forestry management program to regularly trim or remove/replace trees near facilities or infrastructure that are susceptible to wind damage.	Medium	Medium (3-5 Years)	Medium	High	General Fund, HMA/HMGP	Facilities & Modernization; Maintenance; Principals; Site Custodians
Slope Failure	**ma-SF-SBU-01**	Slope Failure Analysis & Stabilization	Conduct slope stability studies for high-risk campuses and facilities and implement slope stabilization and drainage improvements to modern geotechnical standards at the most vulnerable sites.	Medium	Long (5-10 Years)	Medium	High	General Fund, HMA/HMGP	Facilities & Modernization; Maintenance; Principals; Geotechnical Consultant
Drought	**ma-DR-SBU-01**	District-Wide Water Audit & Conservation Upgrades	Evaluate facilities district-wide for water use efficiency and identify infrastructure vulnerabilities under long-term drought and water rate increases. Upgrade plumbing fixtures, irrigation systems, and water service infrastructure components to reduce waste and increase water conservation.	Low	Medium (3-5 Years)	Medium	High	General Fund, HMA/HMGP, DWR	Facilities & Modernization; Maintenance; Principals; Site Custodians

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Appendix A. Analysis Methodology

A GIS-based vulnerability assessment was conducted for each of the priority hazards identified by the Planning Team. Several sources of data are necessary to conduct a vulnerability analysis. This appendix presents an outline of the data inputs, processing steps, and outputs used to create the vulnerability analysis results presented in the Hazard Mitigation Plan. The analysis methodology is presented first, followed by an overview of the analysis data.

A.1. Natural Hazard Exposure

The natural hazard exposure analysis (see C. Natural Hazard Exposure in Figure A- 4) is an inventory of buildings and student/staff counts within each natural hazard area. As shown in Figure A- 1 the presence of a structure inside a natural hazard area (the flood zone in this example) qualifies that structure as exposed to the natural hazard.



Figure A- 1: Hazard Exposure

The total counts of schools, facilities, and the sum of enrollment and staff within the planning area which could be exposed to a hazard event is referred to as the "exposure" in this plan. A natural hazards overlay was developed to reflect the combination of many known natural hazard spatial footprints. The spatial overlay method enables summarization of building and occupant exposure within a hazard's geographic extents (see C. Natural Hazard Exposure in Figure A- 4). The input data is used to evaluate exposure for earthquakes, wildfire, flood related hazards and slope failure.

A.2. Analysis Data

A.2.1. Assets, Value, and Occupancy

SBUSD Facilities

Facility location and structural information in the form of property insurance rolls were used as the main asset inventory data for the Santa Barbara Unified School District. School campuses were geolocated based on address information within the insurance rolls and further refined with imagery and street basemap layers for rooftop placement of individual campus buildings. Detailed attributes for these locations were retained from the insurance rolls.

Occupancy

Estimated student enrollment totals along with records of staff counts from the California Department of Education served as the occupancy baselines for facility locations. These baselines were weighted by building number per facility so that each building location represents a spatial per capita representation of facility totals.

A.2.2. Natural Hazard Data

Dam Inundation Zones

Detailed dam inundation boundaries from the California Department of Water Resources were used for analysis purposes of potential dam inundation exposure.

Hazard	Description
Inundation Area	Dam Inundation maps for the State of California are required by California Government Code Section 8589.5(b). DWR Dam Breach Inundation studies are used for inundation sourcing for dams with published inundation areas.

Source: CA DWR

Earthquake Shaking

USGS Earthquake Scenario Shakemaps were used in evaluating potential earthquake exposure to assets. These are scenarios that have been modeled and have not occurred, nor is this a prediction of occurrence location or intensity. These Shakemaps serve as hypothetical scenarios for which to evaluate shaking potential along fault zones with close proximity and probability of movement. The M6.9 Mission Ridge - Arroyo Parida - Santa Ana. and M7.2 Santa Ynez East scenarios were both evaluated in this analysis. Below is a legend explaining the different MMI Intensity level expectations. The USGS Shape Probability and UCERF mapping were used to determine appropriate Earthquake Scenario Shakemaps to use for this plan.

Intensity	MMI	Description/Damage
I-Not felt	0-1	Not felt except by a very few under especially favorable conditions.
II-Weak	1-2	Felt only by a few persons at rest, especially on upper floors of buildings.

Intensity	MMI	Description/Damage
III-Weak	2-3	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV-Light	3-4	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V-Moderate	4-5	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI-Strong	5-6	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII-Very strong	6-7	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII-Severe	7-8	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX-Violent	8-9	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X-Extreme	9-10	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS Scenario MMI Grid

Flood Zones

The Authoritative FEMA countywide DFIRM was used for defining flood boundaries and zone types. This is also often referred to as the National Flood Insurance Layer (NFHL). The Flood Zones and their Descriptions in the legend below discuss the specificities as they relate to official FEMA NFHL Documentation and attribution.

Hazard	Flood Zone	Description
100-YR Flood [SFHA]	Subtype: Floodway	A "Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations.
	SFHA outside Floodway	The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.
	VE	Coastal High Hazard Area where wave action and fast moving water have potential to cause high levels of damage during a base flood event. Part of the SFHA.
500-YR Flood [non-SFHA]	Subtype: 0.2% Annual Chance	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones.

Source: FEMA DFIRM

Fire Hazard Severity Zones

A hybrid layer was produced to capture the most up-to-date Local Responsibility Areas (LRAs) in order to reflect City Draft LRA modifications and authoritative State Responsibility Areas (SRAs). See below for a detailed description of each hazard level and data sourcing.

Hazard	Native Class	Description
Moderate	Moderate	Classification of a zone as Moderate, High, or Very High Fire Hazard Severity is based on a combination of expected fire behavior and the likelihood of flames and embers threatening structures. This dataset represents a hybrid fire hazard severity layer developed for the Santa Barbara Hazard Mitigation Plan update, combining: (1) Fire Hazard Severity Zones (FHSZ) in the State Responsibility Area (SRA), effective April 1, 2024, and recommended FHSZ in the Local Responsibility Area (LRA) (2007–2011), as published by the California Department of Forestry and Fire Protection (CAL FIRE); and (2) locally adopted City of Santa Barbara fire hazard zone designations (coastal, coastal interior, foothill, and extreme foothill) derived from publicly available City GIS data (2025). The hybrid layer was developed to reflect the City's adopted policy framework while maintaining consistency with CAL FIRE classifications. City zones were translated to FHSZ-equivalent categories (High and Very High), and where CAL FIRE data indicated a higher hazard classification, the CAL FIRE designation was retained.
High	High	
Very High	Very High	

California Department of Forestry and Fire Protection (CAL FIRE), Fire Hazard Severity Zones (SRA, effective April 1, 2024; LRA recommendations 2007–2011); City of Santa Barbara Fire Hazard Zone GIS data and public materials (2025).
https://santabarbaraca.gov/press-releases/santa-barbara-update-safety-plans-new-fire-hazard-zone-maps

Slope Failure

Landslide Susceptibility from the California Geologic Society was reclassified for the purposes of this plan as described below.

Hazard	Native Class	Description
Low	1-5	These classes express the generalization that on very low slopes, landslide susceptibility is low even in weak materials, and that landslide susceptibility increases with slope and in weaker rocks.
Medium	6-7	Very high landslide susceptibility, classes VIII, IX, and X, includes moderate and steep slopes in hard rocks and weak rocks.
High	8-10	Very high landslide susceptibility, classes VIII, IX, and X, includes very steep slopes in hard rocks and moderate to very steep slopes in weak rocks.

Source: CGS Susceptibility to Deep-Seated Landslides in California. Reclassified by native class.

Tsunami Run-up

Tsunami Run-up Areas are those areas where potential tsunami event highlines are delineated. Tsunami modeling is complex and varies across products. Please refer to the California Department of Conservation for more details.

Hazard	Description
Tsunami Run-up Area	California Tsunami Hazard Area Maps are produced collectively by the California Governor's Office of Emergency Services, the California Geological Survey, AECOM Technical Services, and the Tsunami Research Center at the University of Southern California.

Source: CA Dept. of Conservation

Best Available Mapping (BAM) Flood Awareness Zones

USACE comprehensive study 100-year flood awareness zones. This is not a regulatory FEMA flood potential data layer, however it demonstrates areas that may not be captured by FEMA flood insurance rate mapping and is helpful for planning purposes.

Hazard	Description
Awareness Zone	Awareness floodplains identify the 100-year flood hazard areas using approximate assessment procedures. These floodplains will be shown simply as flood prone areas without specific depths and other flood hazard data.

Source: BAM USACE

Sea Level Rise (SLR)

The best available sea level rise data are modeled outputs with high complexity and take into consideration more than simple mean sea levels. The data used in this plan are from CoSMos and only represent the 50cm mean sea level rise under a 100-year coastal flood event scenario. Other scenarios are available through CoSMoS for the region, however, the modeled outputs are not continuous and as such, are best evaluated with overlay analyses individually.

Hazard	Native Class	Description
Sea Level Rise	50_w100	CoSMoS - 50cm Sea Level Rise modeled 100-YR Coastal Flood Event inundation boundary

Source: CoSMoS - Downlaoded May 2025

A.2.3. Methodology Overview

Input Data (A) was overlaid with Natural Hazard Data (B) with GIS software in order to calculate exposure (C) as demonstrated in Figure A- 4.

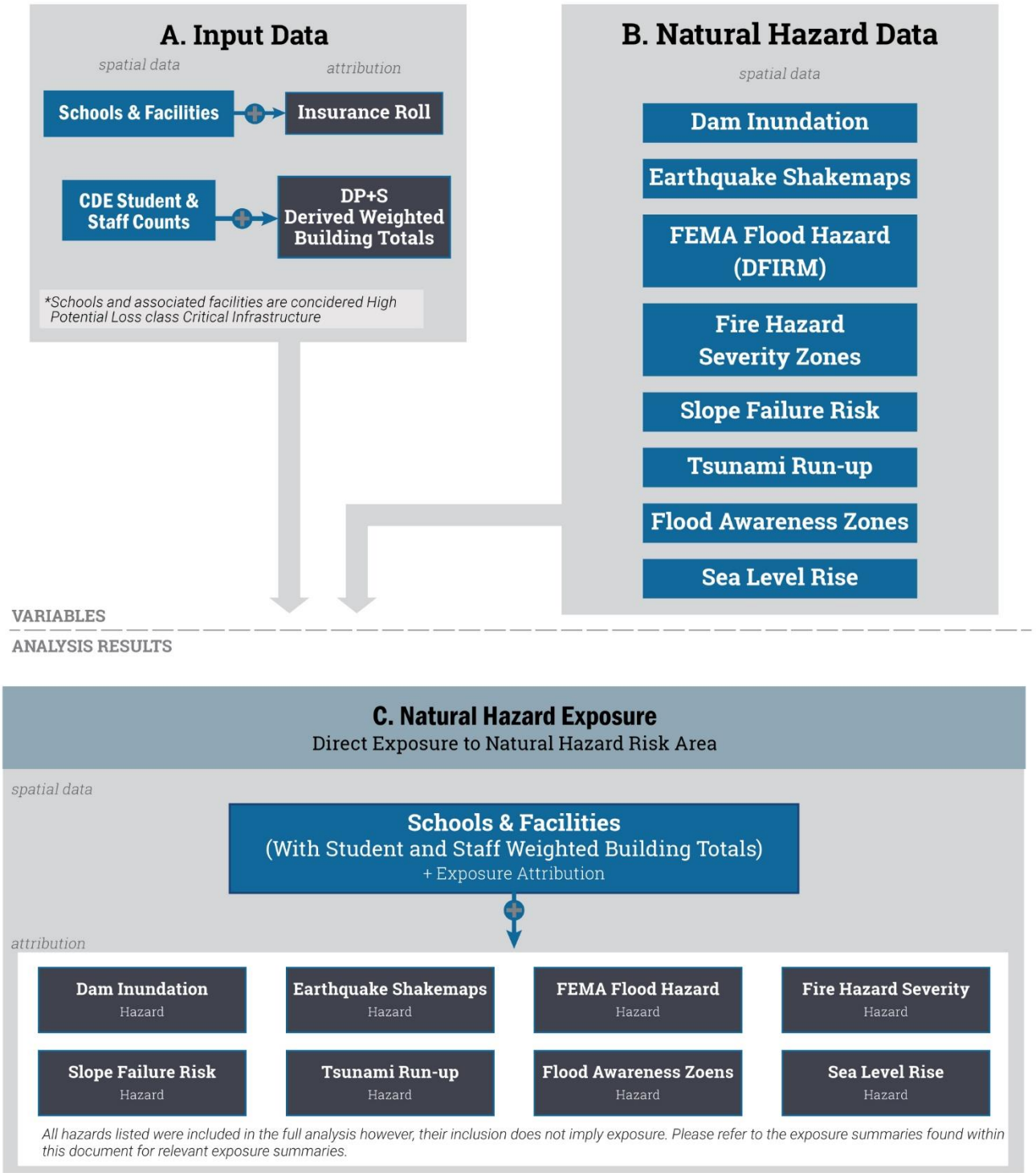


Figure A- 2: Data Analysis Methodology

Data Dictionary

Table A- 1: Data Dictionary

Dataset	Steward	Notes
County	Census	County boundary for cartographic purposes
Incorporated Cities	Census	For cartographic purposes
School Districts	Local Jurisdiction	Received from local jurisdiction, consolidated with CDE School Ownership
Place	Census	TIGER dataset
Stream	NHD Plus	Multiple stream basemap layers for various cartographic products
Water	NHD Plus	Downloaded from Esri dataset
SBUSD Facilities	SBUSD	SBUSD Insurance
Enrollment & Staff (Tabular)	CDE	Student Enrollment and staff count estimates
Dam Inundation	Cal OES	Dam inundation from Cal OES zones
EQ Probabilistic MI	USGS, CISN	Used to determine scenarios
EQ Scenarios 1-2	USGS, CISN	Scenarios as determined by Probabilistic composition
Qfaults	USGS	Used for overview, global source
EQ Fault Zones	CGS	Used for overview, global source
Flood Hazard	FEMA	NFHL
USACE Flood Zones (Awareness Zones)	USACE NLD/DWR	From National levee Dataset
Landslide Susceptibility	CGS	High class 8-10 from raw data
Wildfire Hazard Severity Zone	Cal Fire / CPUC	Proprietary composite layer for DPS including Cal Fire / CPUC data
Wildfire Hazard Severity Zone	Santa Barbara City	From City AGOL
Fire Perimeter Calfire	Cal Fire	Used for overview, global source

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Appendix B. Planning Process Documentation

B.1 Planning Committee Meetings Documentation

B.2 Public Notice & Press Releases Documentation

B.3 Survey & Results Documentation

B.4 Mitigation Strategy Prioritization Process Documentation

B.5 Website Documentation

[Section in development]

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Planning Process Documentation Appendix

Table of Contents

Planning Committee Meeting Documentation B.1-1

Public Notice & Press Release Documentation B.2-1

Survey & Results Documentation B.3-1

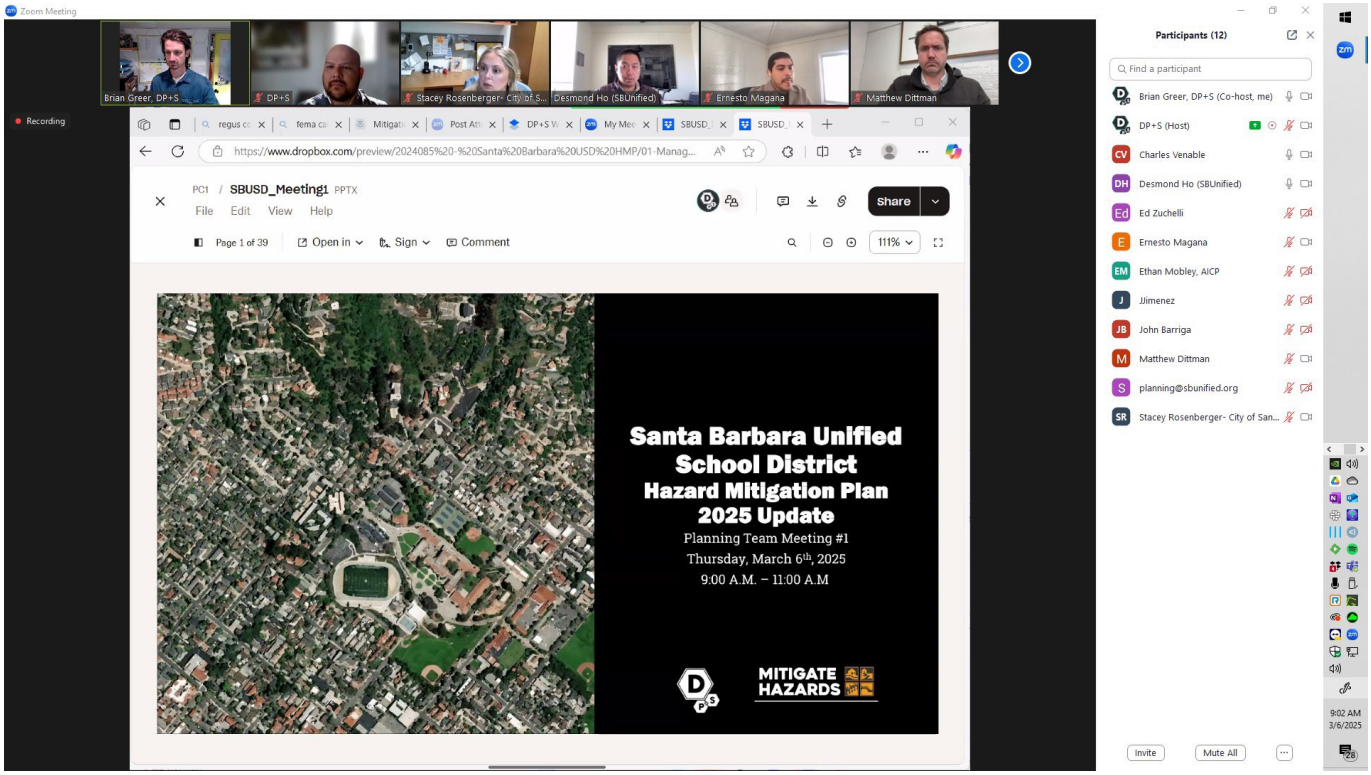
Mitigation Strategy Prioritization Process Documentation B.4-1

Website Documentation B.5-1

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Planning Committee Meeting Documentation

Appendix B.1



Planning Committee 1 Attendees



Planning Committee 2 Slide



In Person Site Visit (1)



In Person Site Visit (2)



In Person Site Visit (3)



In Person Site Visit (4)

Planning Team Meeting #3
AGENDA

Attachment A – Meeting #3 Details & Agenda
Santa Barbara Unified School District

Date: Tuesday, October 21st, 2025
Time: 10:00 AM – 12:00 P.M.
Location: 720 Santa Barbara St, Santa Barbara, CA 93101
Room ID: District Office-1st Floor-Anacapa (111)

Facilitator(s): Dynamic Planning + Science (DP+S), Ethan Mobley and Brian Greer

Meeting Purpose

Meeting #3 is part of Phase 3, Develop the Mitigation Strategy, which is the most important phase of developing the 2025 SBUSD Local Hazard Mitigation Plan (LHMP). This meeting will focus on taking all the information we've previously gathered, discussed, and analyzed, and using it to build an actionable mitigation strategy that addresses the highest priority hazard problems and greatest areas of concern; aligns with community feedback and jurisdictional capabilities; and considers opportunities for multi-jurisdictional collaboration.

At the end of Meeting #3, participants will:

- **Understand and Have Consensus on District Capabilities** in implementing their unique mitigation strategy to address jurisdiction-specific problems and support regional collaboration (see SECTION 2 and Attachment B).
- **Understand and Have Consensus on District Problem Statements** which describe the area(s) of concern (victim, impact, or threat) for high-priority hazards and specific risks that were identified through the risk assessment process, community feedback, and prioritization exercise from Meeting #2 (see SECTION 3 and Attachment C).
- **Understand and Have Consensus on District Mitigation Actions** that align with district capabilities, community-driven priorities, and FEMA guidelines; address specific problem statements; follow the SMARTIE guidelines and are cost- and resource-effective; and support inter-agency collaboration (see SECTION 4 and Attachment D).

Planning Committee 3 Agenda



Planning Committee 3 In Person (2)



Planning Committee 3 In Person

Santa Barbara Unified School District
Local Hazard Mitigation Plan

2025 SANTA BARBARA UNIFIED SCHOOL DISTRICT HAZARD MITIGATION PLAN

Planning Committee Meeting #3

SBCUSD District Office
720 Santa Barbara St, Santa Barbara, CA 93101
October 21, 2025, 10:00 a.m. - 12:00 p.m.

Name	Agency	Email	Phone
Ernesto Magana	SB Unified	emaganaortiz@sbunified.org	
* Brett Coulter	SB unified	bcoulter@sbunified.org	
* Lucia Gonzalez-Medina	SB Unified	lgonzalez@sbunified.org	x6295 (805) 564-5791
* Ryan DiGuilio	SB Fire Department	RDiGuilio@santabarbaraca.gov	
Marina Verdian	SBUSD	mverdian@sbunified.org	510-207-1961
Matthew Dittman	SBUSD	mdittman@sbunified.org	209-202-20[illegible]
BEN AHRENS	SBPD	bahrens@sbpd.com	805-897-2371
CHARLES VENABLE	SBPD	CVENABLE@SBPD.COM	8058972332

Planning Committee 3 Sign In

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Public Notice & Press Release Documentation

Appendix B.2

Outlook

Fwd: March Family Newsletter

From Desmond Ho <desmondho@sbunified.org>
Date Fri 3/20/2026 10:56 AM
To Ethan E. Mobley <ethan@dynamicplanning.co>; Brian Greer <Brian@dynamicplanning.co>
Cc Ernesto Magana Ortiz <emaganaortiz@sbunified.org>; Howe, Mae@CalOES <Mae.Howe@caloes.ca.gov>; Tam, Patricia@CalOES <Patricia.Tam@caloes.ca.gov>

Hi Ethan and Brian,

This is the newsletter that goes out via ParentSquare, which gets sent out to every parent and staff within the District. Within this group, it also went to stakeholders and community organizations/non-profits such as Explore Ecology as the CEO of that organization is a parent of SBUnified.

The HMP survey + document is within this email.

Does that help?

Desmond

---------- Forwarded message ---------
From: **Ed Zuchelli** <ezuchelli@sbunified.org>
Date: Fri, Mar 6, 2026 at 4:06 PM
Subject: Fwd: March Family Newsletter
To: Desmond Ho <desmondho@sbunified.org>

Survey sent

Santa Barbara Unified
Every child, every chance, every day.

Ed Zuchelli
Chief of Communications
Santa Barbara Unified School District
ezuchelli@sbunified.org
www.sbunified.org
805.803.5580

---------- Forwarded message ---------
From: **Santa Barbara Unified School District via ParentSquare** <donotreply+04c4b365-7d7f-504b-a145-8fc6cc093783@parentsquare.com>
Date: Fri, Mar 6, 2026 at 4:05 PM

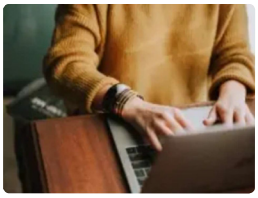
Parent Square Survey Outreach 1

The LHMP outlines natural hazards that face SB Unified, assesses their potential impact, and proposes targeted mitigation actions. By addressing vulnerabilities within each jurisdiction, the plan supports lifesaving measures, property protection, and environmental resilience.

The planning effort covers all facilities owned by the Santa Barbara Unified School District
In the coming months, stakeholders will refine mitigation strategies based on public feedback and survey responses.

Take the Survey (English)

Take the Survey (Spanish)



Celebrations or Questions?

If you have an SB Unified celebration or question to share, please email info@sbunified.org.

View in ParentSquare

Stay involved with your child's learning and activities at school.

Download on the App Store GET IT ON Google Play

You received this email because you are a ParentSquare user in Santa Barbara Unified School District. If you received this email in error or wish to disable your account, click here to unsubscribe.

Parent Square Survey Outreach 10

ParentSquare Inc · 6144 Calle Real, #200A · Goleta, CA 93117

CONFIDENTIALITY NOTICE: This is a transmission from the Santa Barbara Unified School District and may contain privileged and confidential information. It, and any attachments, are intended only for the addressee(s) . If you are not the intended recipient, you are hereby notified that any review, dissemination, distribution or duplication of this communication and its attachments is strictly prohibited by applicable state and federal law. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message and attachments.

Santa Barbara Unified School District - "Every child, every chance, every day."

Parent Square Survey Outreach 11

Subject: March Family Newsletter
To: <ezuchelli@sbunified.org>

Unified Link

Santa Barbara Unified Family Newsletter

MARCH 6, 2026



Dear Santa Barbara Unified Families,

As we welcome the first signs of spring to our beautiful coast, there is a natural sense of renewal and optimism in our schools. This season is the perfect time to check in with our students and remind them of the incredible potential we see in them every day.

The Power of Yet

As we move deeper into the semester, academic or personal challenges can sometimes feel daunting. In these moments, I want our students to remember one small but mighty word: **Yet**.

When a child feels they cannot master a concept or reach a goal, we remind them they simply haven't done it *yet*. This shift in language changes everything. It moves the focus from a fixed limit to a world of possibility. I invite you to join me in echoing this at home. Let your children know that we see their hard work, and we believe in their ability to grow.

Cultivating Wellness

Spring is a wonderful time to prioritize our collective well-being. Academic growth is only possible when our students feel supported and rested. I hope this season of brighter days allows your family more time to disconnect from screens and reconnect with one another. Whether it is a walk on the beach or a quiet moment together, these small acts of wellness build the foundation for our students to thrive.

Parent Square Survey Outreach 2

Thank you for being our partners in education. We are so proud of our students, and we remain their biggest champions.

With gratitude,
Dr. Hilda Maldonado
Superintendent

Investing in our Staff: A recap of Our District Professional Learning Day

On Monday, March 2nd, our schools were buzzing with a different kind of energy. While students had the day off, our dedicated teachers and staff across the district gathered for a full day of growth and collaboration.

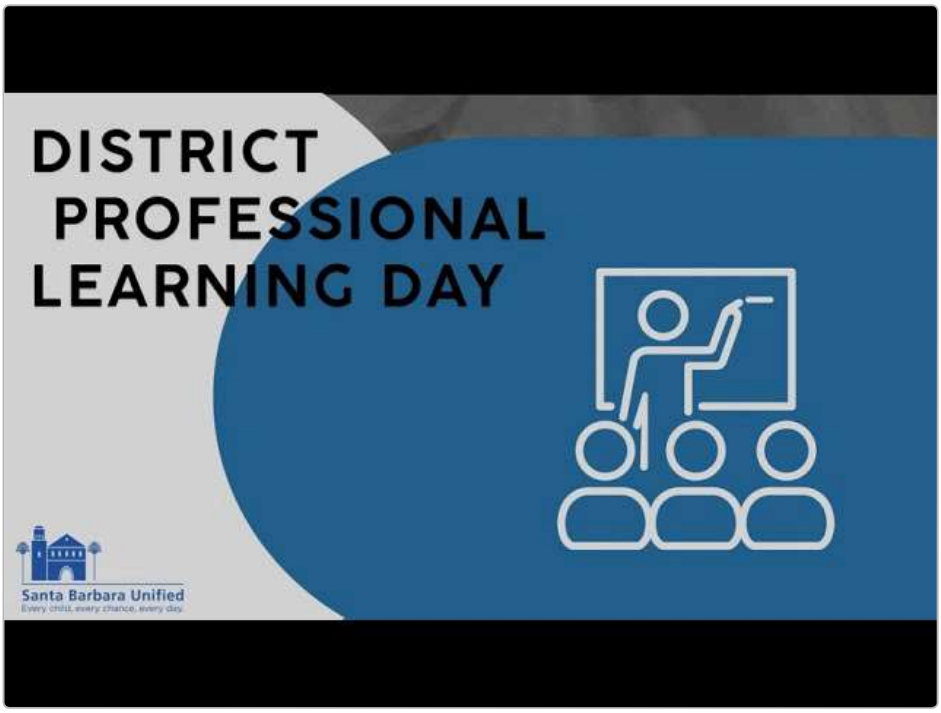


Click image to view video

Parent Square Survey Outreach 3

Our **District Professional Learning Day** was a fantastic success. At La Cumbre Junior High to San Marcos High School, our educators stepped into the role of students to enhance their practice. We focused on several key areas designed to directly impact your child's classroom experience:

- **Early Literacy:** Teachers in grades K–3 dived deep into *Fundations* training to support our youngest readers.
- **Math & Innovation:** Secondary teams collaborated on new curriculum strategies, while others explored specialized training in technology, literacy, and Language Development.
- **Student Support:** Staff participated in sessions focused on creating a culture of belonging and community in secondary classrooms and supporting students with behavioral challenges and enhancing procedures for our Special Education programs.



Click image to view video

One of the most inspiring parts of the day was seeing our own SB Unified staff lead the sessions. We believe that the best expertise often comes from within

Parent Square Survey Outreach 4

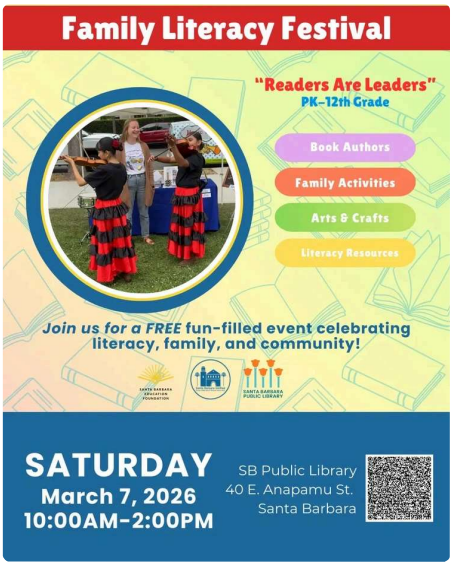
our own classrooms. Our educators left feeling re-energized and equipped with new tools to help every student thrive.

Thank you for your continued support as we take these days to ensure our team provides the highest-quality education for your children.



Click image to view video

Parent Square Survey Outreach 5





You're Invited: Family Literacy Festival - March 7, 2026

We are thrilled to invite you to the upcoming **Family Literacy Festival**, themed "Readers Are Leaders". This is a free, fun-filled event dedicated to celebrating literacy, family, and our wonderful community.

Designed for students from PK through 12th grade, this festival is the perfect way to spend a Saturday surrounded by books and creativity.

Event Details:

- **When:** Saturday, March 7, 2026
- **Time:** 10:00 AM to 2:00 PM
- **Where:** Santa Barbara Public Library, 40 E. Anapamu St., Santa Barbara

What to Expect: Come enjoy a variety of engaging activities, including visits from book authors, arts & crafts, family activities, and access to valuable

Parent Square Survey Outreach 6

literacy resources.

Thank You to Our Partners: This event is a collaborative effort to support "Every child, every chance, every day". We want to extend a special thank you to our partners for their dedication to literacy in Santa Barbara:

- Santa Barbara Education Foundation
- Santa Barbara Public Library

We look forward to seeing you there!

Dolly Parton Imagination Library- Free Books for Children Ages 0–5

SBUnified is excited to partner with First 5 Santa Barbara County and United Way of Santa Barbara County to bring the Dolly Parton Imagination Library to families in our community. This program provides free books delivered to your home every month for children ages 0–5 who live within Santa Barbara Unified School District boundaries.
The goal of the program is to support early phonics, literacy development, and a lifelong love of reading by giving young children access to high-quality books and encouraging families to read together at home.

If you have a child ages 0–5, we encourage you to enroll today and take advantage of this wonderful opportunity to build strong early literacy skills and joyful reading experiences for your child. For more information and to enroll, please see the flyer.

Santa Barbara Unified AI Task Force

As artificial intelligence tools become increasingly present in education and daily life, it is important that we approach this emerging technology with both curiosity and care.

Parent Square Survey Outreach 7

This spring, we will be convening a Superintendent's AI Taskforce to examine the implications of AI for our schools. The group will explore instructional opportunities, student safety considerations, academic integrity, and the development of clear guardrails to ensure responsible use.

In addition to partnering with the Santa Barbara Education Foundation, we will engage local experts, higher education partners, technology leaders, and neighboring school districts to help inform this work. Our goal is to ensure that any recommendations are grounded in research, practical experience, and the values of our community.

This is an exploratory process. No decisions have been made, and our focus is on thoughtful study, broad input, and responsible leadership. We will continue to keep families and staff informed as this work progresses.

Strengthening Community: DEMLAC Connection and Purpose in Practice

In February, the District Emergent Multilingual Learner Advisory Committee (DEMLAC) continued to build momentum through intentional opportunities for connection and collaboration.

A DEMLAC Social Convening held on **February 11** brought members together to strengthen relationships, deepen team building, and reaffirm DEMLAC's shared purpose in advocating for emergent multilingual learners and their families. This gathering emphasized trust, collective voice, and the importance of community as a foundation for effective leadership.

Building on this spirit of collaboration, DEMLAC convened for its General Meeting on February 19, where members shared valuable input on the annual Needs Assessment, ensuring that the perspectives, experiences, and priorities of emergent multilingual learners and their families were meaningfully represented. DEMLAC's next meeting is on March 19 from 6:00–7:30 p.m., to strengthen advocacy, collaboration, and collective impact in support of all students.

Parent Square Survey Outreach 8

Special Education Advisory Committee (SEAC)

The Special Education Advisory Committee (SEAC) is a collaborative group of parents and district staff dedicated to supporting students with disabilities. SEAC provides input and guidance on all aspects of schooling that impact these students, working proactively with SBUSD staff to promote a culture of care, inclusion, and equity. The committee offers valuable feedback on the district's Special Education priorities, including academics, safety, and the social-emotional wellness of students with disabilities in Santa Barbara. Membership includes parents and guardians of children with disabilities, educators, representatives from community agencies, and other interested individuals or groups.

Need more information? Want to attend a meeting? Want to be a member?
Please Contact: Dr. Karla Curry, Director of Special Education, kvcurry@sbunified.org

Special Education Advisory Committee Meeting Dates (Spring 2026)
March 11, 2026 (6-7:30 pm), La Cumbre Junior High School, Library
May 13, 2025 (6-7:30 pm), San Marcos High School, Library
**Dinner and childcare will be provided.*

Your Feedback Needed: Local Hazard Mitigation Plan Survey

Santa Barbara Unified received a California Office of Emergency Services (CALOES) grant to create a Local Hazard Mitigation Plan (LHMP) for the District in 2025. This plan ensures continued eligibility for federal Hazard Mitigation Assistance (HMA) grants and helps reduce the long-term risk of natural disasters.

The grant requires local agencies to reassess and update their Hazard Mitigation Plan (HMP) every five years to reflect changes in enrollment, infrastructure, and disaster occurrences. This effort aims to reduce repetitive damage to community infrastructure and maintain access to federal mitigation funding.

Parent Square Survey Outreach 9



vey Flier English

Santa Barbara Unified
Every child, every chance, every day.

¡ÚNETE A LA CONVERSACIÓN!

REALIZAR LA ENCUESTA
PLAN DE MITIGACIÓN DE RIESGOS
DISTRITO ESCOLAR UNIFICADO DE SANTA BARBARA



MITIGATE HAZARDS
WWW.MITIGATEHAZARDS.COM

vey Flier Spanish

Survey & Results Documentation

Appendix B.3

Santa Barbara Unified School District 2025-2026 Local Hazard Mitigation Plan Update

Welcome and thank you for participating in this public survey! **Versión en español disponible aquí.**

This survey will help inform development of the Santa Barbara Unified School District Hazard Mitigation Plan (LHMP) 2025-2026 update. **Hazard mitigation** is the use of sustained, long-term actions to reduce the loss of life, personal injury, and property damage that can result from a natural disaster.

The overall purpose of the SBUSD's Hazard Mitigation Plan is to reduce the impacts of future natural and manmade hazard disasters on K–12 schools and other district-owned facilities within SBUSD. This **hazard mitigation plan** is an update to the 2009 plan.

It is important to note that completely eliminating risk to K–12 schools in Santa Barbara from future natural disasters is neither technologically possible nor economically feasible. However, we can substantially reduce the negative impacts of future disasters through ongoing implementation of risk reduction measures. School districts applying for a mitigation grant **must have an approved local hazard mitigation plan**

The survey should take approximately 5-10 minutes to complete is anonymous and designed to get your opinion about hazards the school district faces and what types of mitigation measures should be carried out by SBUSD to reduce risk. The information you provide will help us identify policies and coordinate projects focused on reducing the risk of injury or damage to property from hazard events (e.g. earthquakes, wildfire, flood).

Please provide your email if you would like to be entered into a drawing for an emergency kit for your home! View results and learn more about the planning process at our project website, **mitigatehazards.com/santabarbara-usd-hmp/.**

* Indicates required question

1. Please provide us with your email to be entered into emergency kit drawing. (Optional)

SBUSD HMP Survey 1

Please fill out **all of the survey questions** completely, we thank you for your participation!

2. Please select your affiliation or association with SBUSD? *

Mark only one oval.

- ◯ Parent (child or children attend a school within the SBUSD)
- ◯ Student (attends a school with the SBUSD)
- ◯ Faculty or Staff (work at one of the schools or facilities in the SBUSD)
- ◯ Other: ___

3. Do you believe areas within the school district are at risk from a natural disaster or hazard events?

Hazards include flooding, earthquakes, wildfires, extreme weather and other natural hazards.

Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ I do not know
- ◯ Other: ___

4. What is your age range? Dropdown

Mark only one oval.

- Under 18
- 18-30
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81 or older

5. Have you or your family been impacted by a particular natural hazard while living within or working at the SBUSD (check all that apply)?

Check all that apply.

- Earthquake
- Wildfire
- High Winds
- Extreme Heat
- Flooding
- Drought
- Landslide / Slope Failure / Stream Bank Failure
- Tsunami
- Coastal Storm Surge
- None of the above.
- Other: _____

SBUSD HMP Survey 3

6. How concerned are you about schools, facilities or people in the SBUSD being impacted by a natural disaster or hazard event? Dropdown

Mark only one oval.

- Extremely Concerned
- Somewhat Concerned
- Not Concerned

7. If a natural disaster or hazard event were to happen in my community, I would be most concerned about . . . *

Check all that apply.

- Damage to school district facilities.
- Loss of communication capabilities from/to SBUSD.
- Sheltering for me or my family after major disaster (e.g. earthqauke).
- Availability of resources from SBUSD (e.g. after school program, free lunch).
- Relocation from area to new school district.

8. Do you feel well informed about the dangers of natural disasters in this area? *

Mark only one oval.

- Yes
- No
- Somewhat

SBUSD HMP Survey 4

9. Given that school districts have limited financial resources, which one of these goals is the most important for addressing natural hazard risks to facilities or people in the SBUSD? *

Mark only one oval.

- ◯ Retrofit facilities to reduce the potential for property damage. (e.g. additional earthquake bracing)
- ◯ Ensure that K-12 schools and other facilities have redundant power and communications.
- ◯ Strengthen emergency operation facilities, equipment and staff.
- ◯ Provide better information about natural hazard risk within the school district.
- ◯ Educate school aged children through various school programs.
- ◯ Replace facilities to reduce natural hazard risk. (e.g. replace modular buildings)

10. Are there any other issues regarding natural hazards or disaster events that SBUSD Staff could assist with?

11. Thank you again for completing the survey! Please provide any additional questions, comments, or concerns that you may have regarding hazard mitigation and community protection against disasters.

SBUSD HMP Survey 5

Please select your affiliation or association with SBUSD?	Faculty or Staff (work at one of the schools or facilities in the SBUSD)
Do you believe areas within the school district are at risk from a natural disaster or hazard events?	Yes
What is your age range?	31-40
Have you or your family been impacted by a particular natural hazard while living within or working at the SBUSD (check all that apply)?	Wildfire, Extreme Heat, Flooding
How concerned are you about schools, facilities or people in the SBUSD being impacted by a natural disaster or hazard event?	Somewhat Concerned
If a natural disaster or hazard event were to happen in my community, I would be most concerned about . . .	Sheltering for me or my family after major disaster (e.g. earthqauke).
Do you feel well informed about the dangers of natural disasters in this area?	Yes
Given that school districts have limited financial resources, which one of these goals is the most important for addressing natural hazard risks to facilities or people in the SBUSD?	Replace facilities to reduce natural hazard risk. (e.g. replace modular buildings)
Are there any other issues regarding natural hazards or disaster events that SBUSD Staff could assist with?	
Thank you again for completing the survey! Please provide any additional questions, comments, or concerns that you may have regarding hazard mitigation and community protection against disasters.	

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Mitigation Strategy Prioritization Process Documentation

Appendix B.4



SBUSD Mitigation Strategy Prioritization Meeting



SBUSD Mitigation Strategy Prioritization Meeting

Santa Barbara Unified School District
Local Hazard Mitigation Plan

Planning Team Meeting #3
Read-Ahead Packet Attachment

Attachment D – Existing Mitigation Action Analysis
Santa Barbara School District

Review Instructions

1) The Consultant Team has inventoried and reviewed mitigation actions from the 2009 Hazard Mitigation Plan. Recommendations for deletions, revisions, and consolidations were made based on FEMA best practices and current district operations.
2) Please review the Consultant Team's work and make amendments or comments where appropriate. Your feedback will help ensure the updated mitigation actions accurately reflect the current district needs and capabilities. The Consultant has conducted a consolidation effort of "current" mitigation actions, our meeting will focus on the "mitigation gap" after collectively reviewing the state of current mitigation actions.
3) Enter your comments directly in the red "Validation Field" column of the Mitigation Action Table. You may also provide feedback during the breakout meeting or by emailing the Consultant Team.
4) When reviewing the existing Mitigation Actions, consider the following:
   a) Does the mitigation action still meet our operational needs and address relevant hazards?
   b) Are there any actions that are unnecessary or unrelated to a hazard problem area?
   c) Are there redundant actions or overlapping hazards that could be consolidated for efficiency or clarity?

Mitigation Actions by Hazard

All Hazard 2
Wildfire 3
Earthquake (incl. Liquefaction) 3
Slope Failure 4
Flood 4
Extreme Weather 4
Drought 4

Mitigation Action Feedback Form

Santa Barbara Unified School District
Local Hazard Mitigation Plan

EXISTING MITIGATION ACTION ANALYSIS

All Hazard

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
GEN-1	Continuity of Educational Operations Plan	No plan exists for continuity of educational operations if campuses are lost or inaccessible.	Develop a Continuity of Educational Operations Plan covering admin continuity, resource sharing, alternate locations, and mutual aid.	High (19)	Board of Education; Director of Facilities & Operations; Emergency Preparedness Committee	**Retain:** Still relevant; continuity of educational operations supports resilience and reduces vulnerability to disruptions. Update to align with current COOP and Continuity of Learning standards.	
GEN-2	Reverse 911 or Similar for Communication with Parents	No reliable system to communicate with parents/caretakers during emergencies.	Implement Reverse 911 or similar broadcast messaging to reach parents and teachers quickly.	High (16)	Facilities & Operations; IT; Barbara Keyani; Site Principals	**Revise:** Reverse 911 systems are now common; revise to focus on redundant, integrated parent communication and alert platforms.	
GEN-4	Conduct District-Wide Outreach	Mitigation not well understood by parents/faculty; need for outreach.	Develop and present mitigation overview presentations for PTA, faculty, and staff.	Medium (11)	School Principals; District Administration	**Revise:** Keep concept but frame as sustained education and outreach program supporting hazard awareness.	
GEN-10	Enhance Construction Techniques	Additional safety materials/techniques not always considered in construction.	Evaluate loss-reduction techniques for all new construction.	Low (6)	Facilities & Operations; District Architect; Project Managers	**Retain:** Remains valid; update to reflect resilient design and CALGreen/WUI standards.	
GEN-12	Disaster Damage Tracking via GIS	Lack of organized damage tracking for grant justification.	Partner with County to use GIS-based disaster damage tracking.	Low (3)	Facilities & Operations; County of Santa Barbara Public Works (GIS)	**Delete:** This is recovery not mitigation	
GEN-14	Evaluate Participation in County Mitigation Plan	Duplication of planning efforts with County/City HMPs.	Evaluate joining County MJHMP during next update cycle.	Low (2)	Facilities & Operations; Planning Department	**Delete:** This is not a mitigation action rather an administrative decision for next cycle. Integration with County MJHMP aligns with AB 2140 and FEMA coordination.	
GEN-11	Distribute Parent Mailing	Parents unaware of mitigation efforts; need for information sharing.	Distribute parent mailings summarizing the mitigation plan.	Low (5)	School Principals	**Delete:** Public outreach, not mitigation. Move to capability narrative.	
GEN-5	Develop Local Partnerships	Small safety projects delayed due to budget priorities.	Partner with local businesses for donations and "safety project days."	Medium (10)	Maintenance Manager; Site Administrators	**Delete:** Partnerships for small-scale mitigation projects remain best practice; expand to include campus hardening.	
GEN-8	Emergency Preparedness and Response Planning	Mitigation and preparedness efforts are not well coordinated.	Incorporate mitigation plan elements into emergency response and facility plans.	Medium (7)	Emergency Preparedness Committee Chair; School Principals	**Delete:** Overlaps with preparedness/response; not distinct mitigation. Move to preparedness coordination.	
GEN-3	Enhance Media Coordination	Limited coordination with local media for emergency/public messages.	Develop relationships with radio/print media, create schedules for messaging and regular meetings.	High (15)	Barbara Keyani	**Delete:** Ongoing public outreach function, not mitigation. Move to capabilities section.	
GEN-6	Incorporate Mitigation in Facilities Planning	Mitigation not consistently integrated into facility planning.	Include at least one mitigation project in all facility plans.	Medium (9)	Director of Facilities & Operations	**Delete:** Implementation activity, not a mitigation project. Should appear in plan maintenance/capabilities.	
GEN-15	Assess Accuracy of Asset Valuation	Replacement cost appraisals may be undervalued.	Coordinate during next appraisal to ensure accurate valuations.	Low (0)	Risk Management; Keenan Associates	**Delete:** Administrative/risk management task, not mitigation. Move to capability assessment.	
GEN-13	County Mitigation Committee Participation	Limited coordination with County hazard planning committees.	Participate in County Tsunami, Wildfire, and Mitigation Plan committees.	Low (3)	Planning Department; Emergency Preparedness Committee	**Delete :** This is plan implementation and not a mitigation action.	

Mitigation Action Feedback Form

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
GEN-9	Budgeting Matching Funds for Mitigation Grants	Lack of matching funds prevents leveraging FEMA mitigation grants.	Budget an annual line item for mitigation grant matching.	Low (6)	Board of Education; Director of Facilities & Operations	**Delete :** This is plan implementation and not a mitigation action.	
GEN-7	Maintenance Staff Training	Maintenance staff best know facility issues but need mitigation training.	Conduct staff training on mitigation techniques and solicit project ideas.	Medium (7)	Director of Facilities & Operations; Maintenance Manager	**Delete :** This is plan implementation and not a mitigation action.	

Wildfire

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
WDF-4	Vegetation Maintenance and Fuel Breaks	Inadequate vegetation maintenance and defensible space.	Annual vegetation maintenance and fuel break program.	Medium (8)	Principals; Facilities & Maintenance	**Retain:** Strong cost-benefit; maintain and align with PRC 4291 defensible space requirements.	
WDF-2	Fire-Resistant Building Techniques	Need to improve fire resistance in construction materials.	Evaluate fire-safe construction techniques for all new projects.	Medium (11)	Facilities & Operations	**Retain:** Maintain as valid; integrate with Chapter 7A and WUI code compliance. Need to update title to be more action oriented.	
WDF-3	Install Fire-Resistant Landscaping	Lack of fire-resistant landscaping around schools.	Evaluate and install fire-resistant landscaping at high-risk schools.	Medium (10)	Principals; Fire Services	**Retain:** Effective mitigation measure; continue using Fire Safe Council guidelines.	
WDF-1	Employ Firewise Techniques at High-Risk Campuses	Campuses at wildfire risk lack Firewise planning.	Train staff in Firewise; plan/implement at 5 high-risk campuses.	High (13)	Maintenance Dept	**Delete:** While Firewise approach remains best practice; continue and expand defensible space focus, this lacks detail enough to understand	

Earthquake (incl. Liquefaction)

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)
EQ-2	Earthquake Safety Program	Need for low-cost non-structural earthquake mitigation.	Develop volunteer-based nonstructural safety program.	Low (3)	Emergency Preparedness Committee; Principals	**Retain:** Nonstructural mitigation remains a FEMA priority; continue volunteer-based program.
EQ-1	Earthquake Retrofitting	Maintenance shops have unreinforced masonry; seismic risk.	Retrofit older/high-risk buildings.	Medium (10)	Facilities & Operations	**Retain:** Structural retrofit remains a priority mitigation action. Verify current compliance and residual risk.
EQ-3	Liquefaction Risk Analysis	Lack of liquefaction data for school properties.	Participate in County mitigation updates; pursue new data.	Low (2)	MAC Designee	**Revise:** Still valid; update to align with USGS/CGS mapping and current geotechnical data.

Mitigation Action Feedback Form

Santa Barbara Unified School District
Local Hazard Mitigation Plan

Slope Failure

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collobration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
LSD-1/2	Slope Stability Analysis	Slope instability threatens Monroe and McKinley Schools.	Conduct slope stability studies and implement recommendations.	Medium (8)	Facilities & Operations; Geotechnical Consultant	**Retain:** Necessary for campus safety; update with modern geotechnical standards.	

Flood

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
FLD-1	Grading Improvement Plan	Drainage-related flooding at several campuses.	Evaluate flooding issues and implement grading improvements.	High (16)	Facilities & Operations; Maintenance	**Retain:** Direct hazard reduction measure; update to reflect current stormwater and climate adaptation standards.	
FLD-3	Below-Grade Drainage Systems	Blocked/undersized below-grade drainage causing flooding.	Clean/upgrade drainage systems in below-grade areas.	Medium (7)	Maintenance Dept; Site Custodians	**Retain:** Relevant for flood reduction; integrate with routine maintenance.	
FLD-2	Roof Drainage Improvements	Roof drainage leaks causing interior flooding.	Evaluate and maintain roof drainage systems.	Medium (11)	Facilities & Operations; Maintenance	**Retain:** Simple, cost-effective mitigation measure; maintain.	
FLD-4	Street Drainage Improvements	Street drainage causes access/flooding at multiple schools.	Coordinate with City to complete drainage improvements.	Low (6)	School Principals; City of Santa Barbara	**Revise:** Valid concept but should be reframed as interagency coordination for flood mitigation.	

Extreme Weather

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)
TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Drought

Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION	Priority	HMPT Collaboration	VALIDATION FIELD (Retain, Revise, Delete)	COMPLETED (Y/N)

Mitigation Action Feedback Form



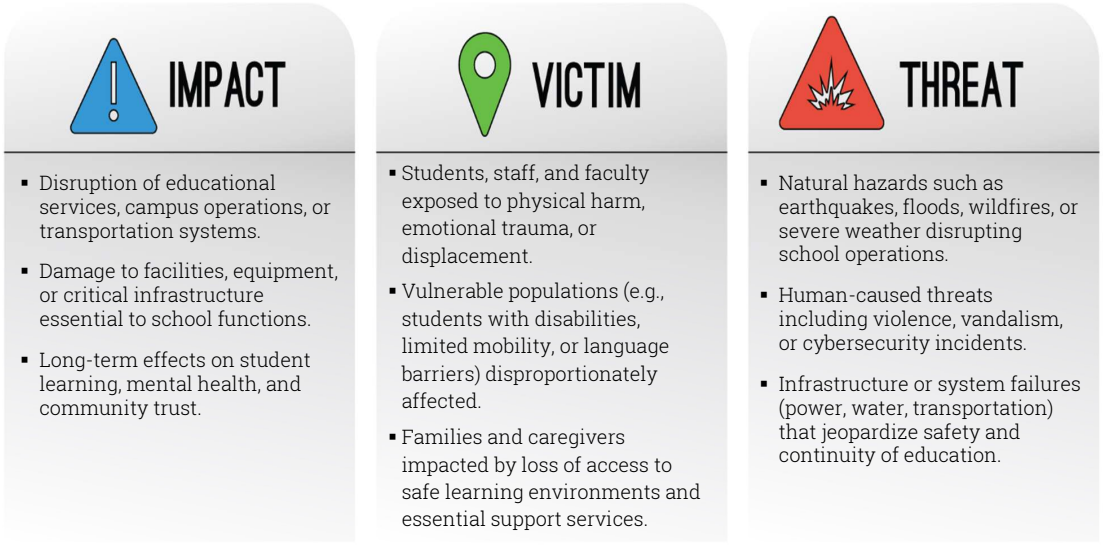
Mitigation Strategy PPT

AGENDA

- **Welcome and Introductions**
- **Brief Meeting #2 Recap**
- **Discuss Areas of Concern (AOC's) & Problem Statements**
- **Refine**
- **Review Outreach Progress & Next Steps**

Mitigation Strategy PPT

CHARACTERIZING AREAS OF CONCERN (AOCS)



Mitigation Strategy PPT

Flood AOCs

IMPACT

Problem ID (Existing ID or "New")	Description
FL-01	SBHS Multi-Arts Design Academy basement floods during heavy rain; drainage systems clogged or undersized.
FL-02	Franklin ES, Cleveland ES, and Washington ES experience ponding and inadequate runoff control.
FL-04	Flooding may damage classrooms, HVAC, and electrical systems.
FLD-1 (Existing)	Drainage-related flooding at several campuses.
FLD-2 (Existing)	Roof drainage leaks causing interior flooding.

VICTIM

Problem ID (Existing ID or "New")	Description
FL-05	Campuses in low-lying areas may experience inundation of classrooms, mechanical rooms, or access roads, posing safety risks to students and staff.
FL-06	Flooding can damage learning materials, electrical systems, and essential student services (food storage, IT rooms, restrooms), prolonging recovery time.
FL-07	Standing water and mold after flooding can create indoor air-quality hazards affecting student and staff health.

THREAT

Problem ID (Existing ID or "New")	Description
FL-03	Drainage infrastructure districtwide is aging and undersized for atmospheric river events.
FLD-4 (Existing)	Street drainage causes access/flooding at multiple schools.

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Santa Barbara Unified School District
Local Hazard Mitigation Plan

Mitigation Strategy PPT

Earthquake AOCs

Liquefaction

IMPACT

Problem ID (Existing ID or "New")	Description
EQ-03	Strong shaking could render multiple facilities inoperable.
EQ-02	Utilities and gas lines at older campuses vulnerable to rupture or ignition.

VICTIM

Problem ID (Existing ID or "New")	Description
EQ-04	Students and staff may be injured by falling objects, unsecured fixtures, or ceiling failures during seismic shaking in classrooms and common areas.
EQ-05	Older school buildings constructed before modern seismic codes may not provide adequate protection during a major earthquake, increasing the risk of structural collapse or injury.
EQ-06	Special education classrooms and medically fragile students may face higher injury risk or delayed evacuation during and after an earthquake.

THREAT

Problem ID (Existing ID or "New")	Description
EQ-1 (Existing)	Maintenance shops have unreinforced masonry.
EQ-01	Thirteen buildings built before Field Act remain un-evaluated for retrofit.
EQ-2 (Existing)	Need for low-cost non-structural earthquake mitigation.
EQ-02	Utilities and gas lines at older campuses vulnerable to rupture or ignition.
EQ-3 (Existing)	Lack of liquefaction data for school properties.

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Local Hazard Mitigation Plan

Mitigation Strategy PPT

SBSD Buildings constructed prior to the Field Act (2009 HMP)

Site	School Name	Buildings	YearBuilt/Construction Type
5	**Peabody Charter Elementary School**	Building#1, Admin, Multi-Purpose, Classroom 6-15	1928 - Masonry
7	**La Cumbre Junior High**	Building#1 Main Building 101- 111, 121-123	1931 - Masonry
8	**Harding Elementary**	Building#5 Admin & Classroom Building 10-23	1928 - Masonry
11	**McKinley Elementary**	Building#1, Admin, Library, Multipurpose	1930 - Masonry
12	**Roosevelt Elementary**	Building#1, Admin, Multipurpose, Library	1923 -Wood
13	**Santa Barbara Junior High**	Building#1, Admin, Auditorium, Classrooms	1931 - Masonry
		Building#3, Physical Education Building	1931 -Wood
14	**Santa Barbara High**	Building# 1, Admin, Auditorium, Classrooms	1923 - Masonry
		Building#3, Lacuesta School, Building 91-94	1923 - Masonry
		Building#19, Fieldhouse 1-3	1932 -Wood
		Building#20, Gymnasium and Lockers	1932 - Masonry
19	**Parma Children's Center**	Administration, Classroom Building 1-3	1931 -Wood
21	**District Offices**	General Office and Warehouse	1936-Wood



Slope Failure AOCs

IMPACT

Problem ID (Existing ID or "New")	Description
SF-02	Landslides could block emergency routes or damage utilities serving hillside schools.

VICTIM

Problem ID (Existing ID or "New")	Description
SF-03	Campuses near steep slopes or unstable terrain may be exposed to slope failure, rockfall, or soil movement threatening classrooms, playgrounds, and parking areas.
SF-04	Stormwater runoff and erosion near retaining walls or slopes adjacent to schools could compromise facility safety and access routes.

THREAT

Problem ID (Existing ID or "New")	Description
SF-01	Slope instability and erosion behind La Colina JHS and McKinley ES threaten retaining walls and paths.

Mitigation Strategy PPT

Wildfire AOCs

IMPACT

Problem ID (Existing ID or "New")	Description
WF-03	Wildfire smoke and PSPS (power shutoffs) could close campuses and interrupt instruction; limited air-filtration and backup-power capability.

VICTIM

Problem ID (Existing ID or "New")	Description
WF-04	Schools located within or near wildland-urban interface zones face risks from advancing wildfire, embers, and smoke exposure to students and staff.
WF-05	Poor air quality and smoke infiltration can force school closures and lead to respiratory illness among sensitive students.
WF-06	Outdoor athletic and extracurricular activities may need to be cancelled or relocated during wildfire smoke events, affecting student health and engagement.

THREAT

Area of Concern	Problem ID (Existing ID or "New")	Description
Threat	WDF-3 (Existing)	Lack of fire-resistant landscaping around schools.
Threat	WDF-4 (Existing)	Inadequate vegetation maintenance and defensible space.
Threat	WDF-2 (Existing)	Need to improve fire-resistant construction materials.
Threat	WF-01	Vegetation and slope fuels adjacent to La Colina JHS, McKinley ES, and Roosevelt ES increase ignition potential; defensible-space maintenance inconsistent.
		Lack of coordinated vegetation

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Santa Barbara Unified School District
Local Hazard Mitigation Plan

Mitigation Strategy PPT



Extreme Weather AOCs

IMPACT

Problem ID (Existing ID or "New")	Description
EW-03	High wind and rain events cause tree damage and temporary closures.
EW-06	Portable classrooms and temporary structures are particularly vulnerable to wind damage and may not provide adequate protection during extreme weather.

VICTIM

Problem ID (Existing ID or "New")	Description
EW-04	High winds and heavy rain can cause roof, canopy, or window damage at school sites, creating unsafe conditions and disrupting instruction.
EW-05	Power outages during storms can disrupt classroom instruction, heating, and communication systems, leaving students and staff without safe shelter or lighting.

THREAT

Problem ID (Existing ID or "New")	Description
EW-01	≈ 90 % of classrooms lack air conditioning; heat events create unsafe conditions.
EW-05	Limited backup power capacity leaves IT and communication systems vulnerable to outages.

Mitigation Strategy PPT



Drought AOCs

IMPACT

Problem ID (Existing ID or "New")	Description
DR-04	Extended drought conditions increase irrigation and maintenance costs as turf and landscaping deteriorate, leading to degraded outdoor learning and play environments.
DR-07	Loss of tree canopy and vegetation around school campuses reduces shade and increases surface temperatures, compounding heat exposure risks for students and staff.

VICTIM

Problem ID (Existing ID or "New")	Description
DR-01	Reduced water supply may limit sanitation, irrigation, and fire-suppression capability on campuses, impacting daily health and safety.
DR-02	Water restrictions may affect cafeteria operations, cleaning, and student hydration access.
DR-03	Drought-related vegetation die-off can increase fire susceptibility around school grounds.

THREAT

Problem ID (Existing ID or "New")	Description
DR-03	No formal water reuse strategy; cistern or harvesting projects unimplemented.
DR-01	Extended drought threatens landscape health and increases fire fuels.
DR-08	Drought-driven vegetation die-off increases wildfire risk on and around campuses, raising maintenance costs and safety hazards.

Mitigation Strategy PPT

SAMPLE OF 2009 HIGH PRIORITY MITIGATION ACTIONS AND POSSIBLE IMPROVEMENTS

Action ID	Hazard	Action Title (Current)	Issue	Reason for Improvement	New Title	Improved Version
GEN-3	All Hazard	Enhance Media Coordination	*Too limited in scope and not measurable.*	*Focused only on public outreach; does not include coordination with emergency partners or quantifiable communication outcomes.*	***Emergency Communication and Public Messaging Integration***	*By 2026, implement a unified emergency communications strategy linking the District's alert system, website, and social media with County OES messaging protocols. Conduct two annual media coordination exercises.*
GEN-2	All Hazard	Reverse 911 or Similar for Communication with Parents	*Outdated technology reference and lacks measurable delivery or testing.*	*Reverse 911 systems are now common; needs to address redundancy, system testing, and integrated communication platforms.*	***Redundant Parent and Staff Notification System***	*Develop and deploy a redundant, multi-platform emergency notification system (text, voice, email, and app-based) by 2026. Include quarterly system tests and staff training.*
FLD-1	Flood	Grading Improvement Plan	*Too general and lacks scope or milestones.*	*Current action doesn't specify which campuses, what improvements, or how outcomes will be tracked.*	***Campus Drainage and Stormwater Resilience Program***	*Conduct stormwater assessments for all campuses by 2025 and design grading and drainage improvements for the top five high-risk sites by 2027, aligned with stormwater and climate-adaptation standards.*
WDF-1	Wildfire	Employ Firewise Techniques at High-Risk Campuses	*Lacks detail, measurable outcomes, or timeline.*	*Focuses only on Firewise awareness; doesn't address defensible space or smoke protection for facilities.*	***Defensible Space and Air Quality Protection Program***	*By 2026, implement defensible-space treatments around high-risk campuses, train maintenance staff in vegetation management, and retrofit HVAC systems with MERV-13 filters or higher.*

Mitigation Strategy PPT

LET'S WORK ON THE NEXT MITIGATION ACTION:

WDF – 2: FIRE-RESISTANT BUILDING TECHNIQUES

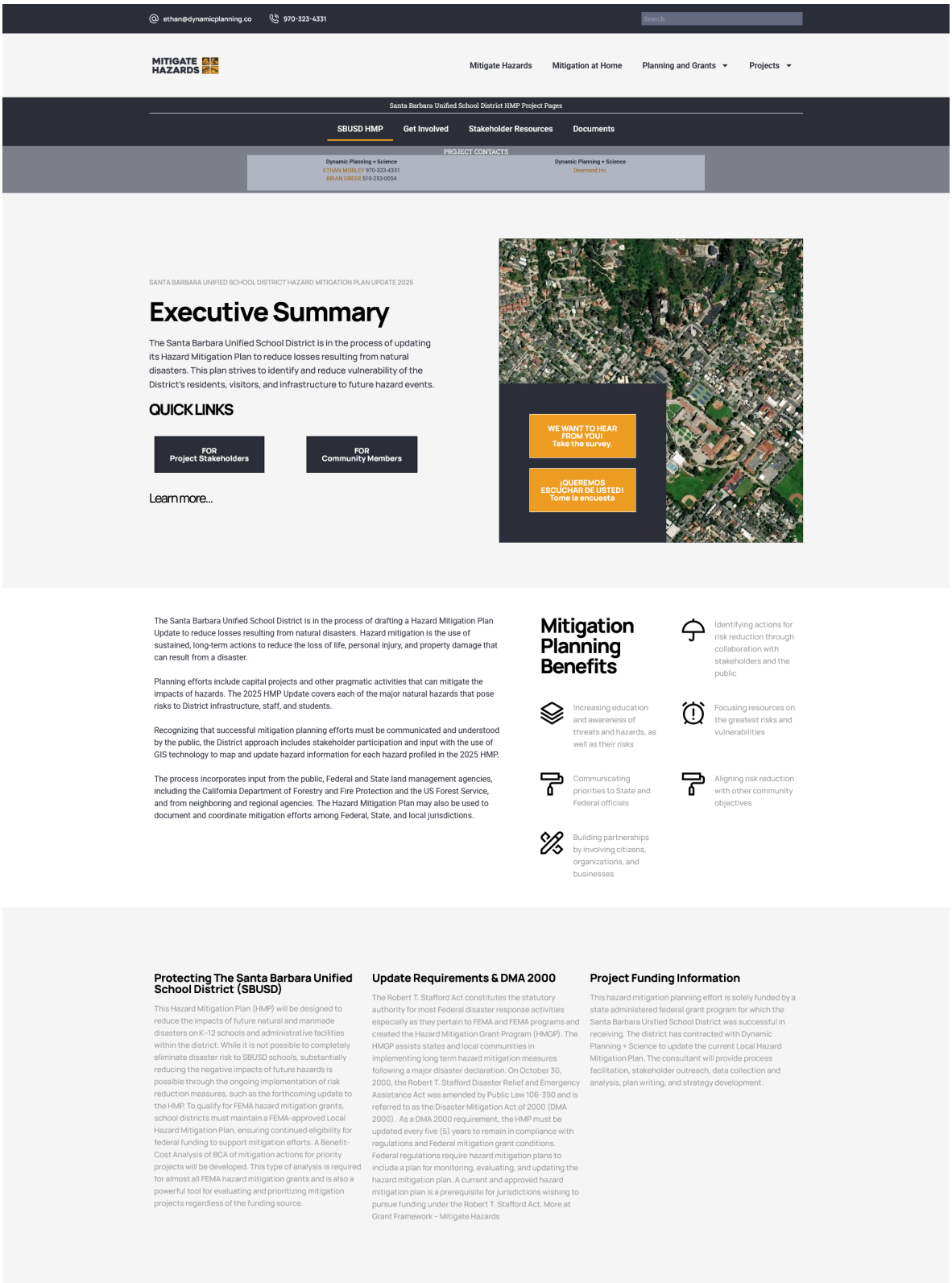
Hazard	Action ID (Existing ID or "New")	Action Title	Problem Addressing	IMPLEMENTATION
Wildfire	**WDF-2**	Fire-Resistant Building Techniques	Need to improve fire resistance in construction materials.	Evaluate fire-safe construction techniques for all new projects.

Why does the mitigation Action Fall Short?

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Website Documentation

Appendix B.5



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Search

MITIGATE HAZARDS

Mitigate Hazards | Mitigation at Home | Planning and Grants | Projects

Santa Barbara Unified School District HMP Project Pages

SBUSD HMP | Get Involved | Stakeholder Resources | Documents

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Dynamic Planning + Science
Desmond Ho

SANTA BARBARA UNIFIED SCHOOL DISTRICT HAZARD MITIGATION PLAN UPDATE 2025

Executive Summary

The Santa Barbara Unified School District is in the process of updating its Hazard Mitigation Plan to reduce losses resulting from natural disasters. This plan strives to identify and reduce vulnerability of the District's residents, visitors, and infrastructure to future hazard events.

QUICK LINKS

FOR Project Stakeholders

FOR Community Members

Learn more...

WE WANT TO HEAR FROM YOU! Take the survey.

¡QUEREMOS ESCUCHAR DE USTED! Tome la encuesta

The Santa Barbara Unified School District is in the process of drafting a Hazard Mitigation Plan Update to reduce losses resulting from natural disasters. Hazard mitigation is the use of sustained, long-term actions to reduce the loss of life, personal injury, and property damage that can result from a disaster.

Planning efforts include capital projects and other pragmatic activities that can mitigate the impacts of hazards. The 2025 HMP Update covers each of the major natural hazards that pose risks to District infrastructure, staff, and students.

Recognizing that successful mitigation planning efforts must be communicated and understood by the public, the District approach includes stakeholder participation and input with the use of GIS technology to map and update hazard information for each hazard profiled in the 2025 HMP.

The process incorporates input from the public, Federal and State land management agencies, including the California Department of Forestry and Fire Protection and the US Forest Service, and from neighboring and regional agencies. The Hazard Mitigation Plan may also be used to document and coordinate mitigation efforts among Federal, State, and local jurisdictions.

Mitigation Planning Benefits

- Identifying actions for risk reduction through collaboration with stakeholders and the public
- Increasing education and awareness of threats and hazards, as well as their risks
- Focusing resources on the greatest risks and vulnerabilities
- Communicating priorities to State and Federal officials
- Aligning risk reduction with other community objectives
- Building partnerships by involving citizens, organizations, and businesses

Protecting The Santa Barbara Unified School District (SBUSD)

This Hazard Mitigation Plan (HMP) will be designed to reduce the impacts of future natural and manmade disasters on K–12 schools and administrative facilities within the district. While it is not possible to completely eliminate disaster risk to SBUSD schools, substantially reducing the negative impacts of future hazards is possible through the ongoing implementation of risk reduction measures, such as the forthcoming update to the HMP. To qualify for FEMA hazard mitigation grants, school districts must maintain a FEMA-approved Local Hazard Mitigation Plan, ensuring continued eligibility for federal funding to support mitigation efforts. A Benefit-Cost Analysis of BCA of mitigation actions for priority projects will be developed. This type of analysis is required for almost all FEMA hazard mitigation grants and is also a powerful tool for evaluating and prioritizing mitigation projects regardless of the funding source.

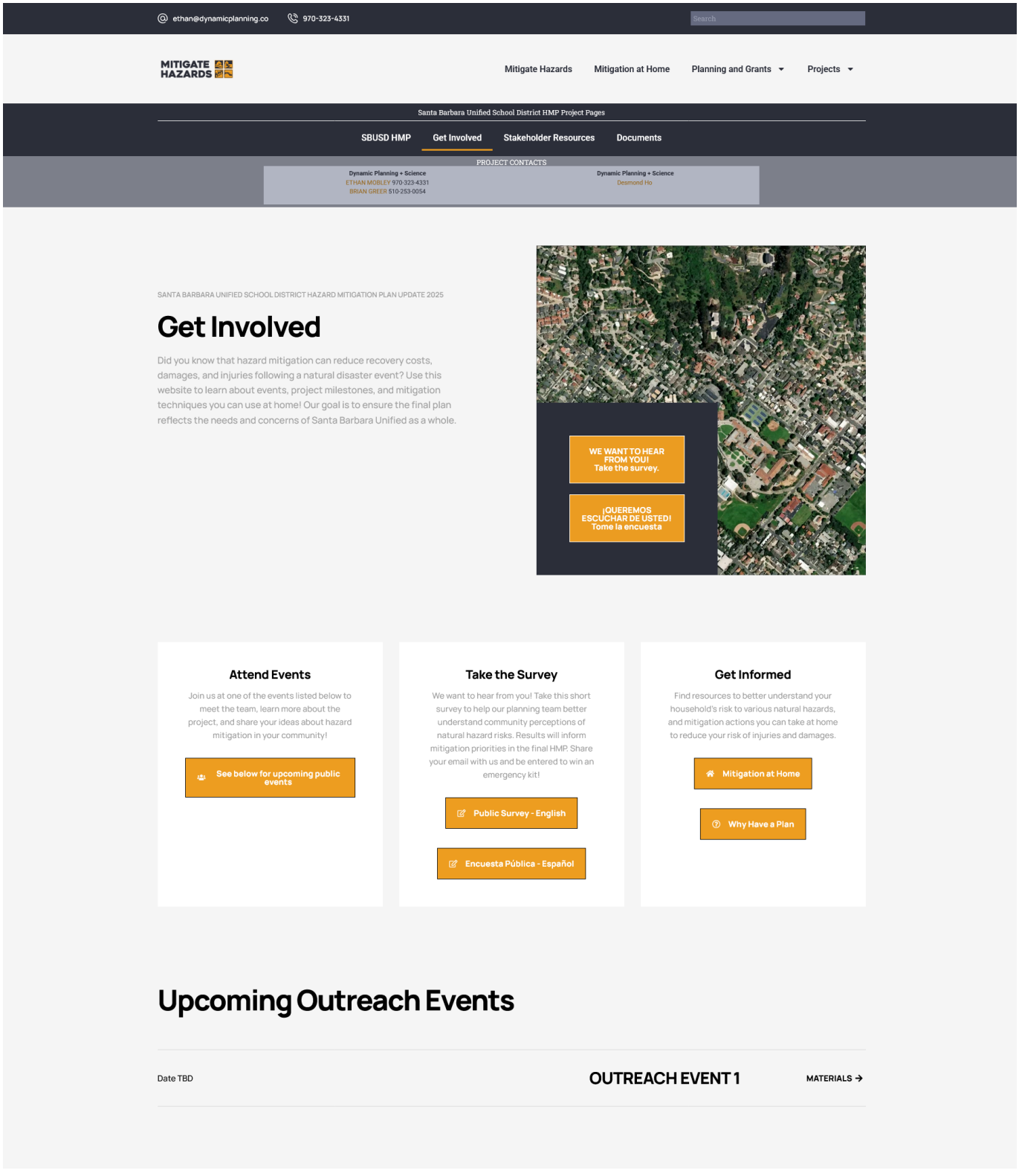
Update Requirements & DMA 2000

The Robert T. Stafford Act constitutes the statutory authority for most Federal disaster response activities especially as they pertain to FEMA and FEMA programs and created the Hazard Mitigation Grant Program (HMGP). The HMGP assists states and local communities in implementing long term hazard mitigation measures following a major disaster declaration. On October 30, 2000, the Robert T. Stafford Disaster Relief and Emergency Assistance Act was amended by Public Law 106-390 and is referred to as the Disaster Mitigation Act of 2000 (DMA 2000). As a DMA 2000 requirement, the HMP must be updated every five (5) years to remain in compliance with regulations and Federal mitigation grant conditions. Federal regulations require hazard mitigation plans to include a plan for monitoring, evaluating, and updating the hazard mitigation plan. A current and approved hazard mitigation plan is a prerequisite for jurisdictions wishing to pursue funding under the Robert T. Stafford Act. More at Grant Framework – Mitigate Hazards

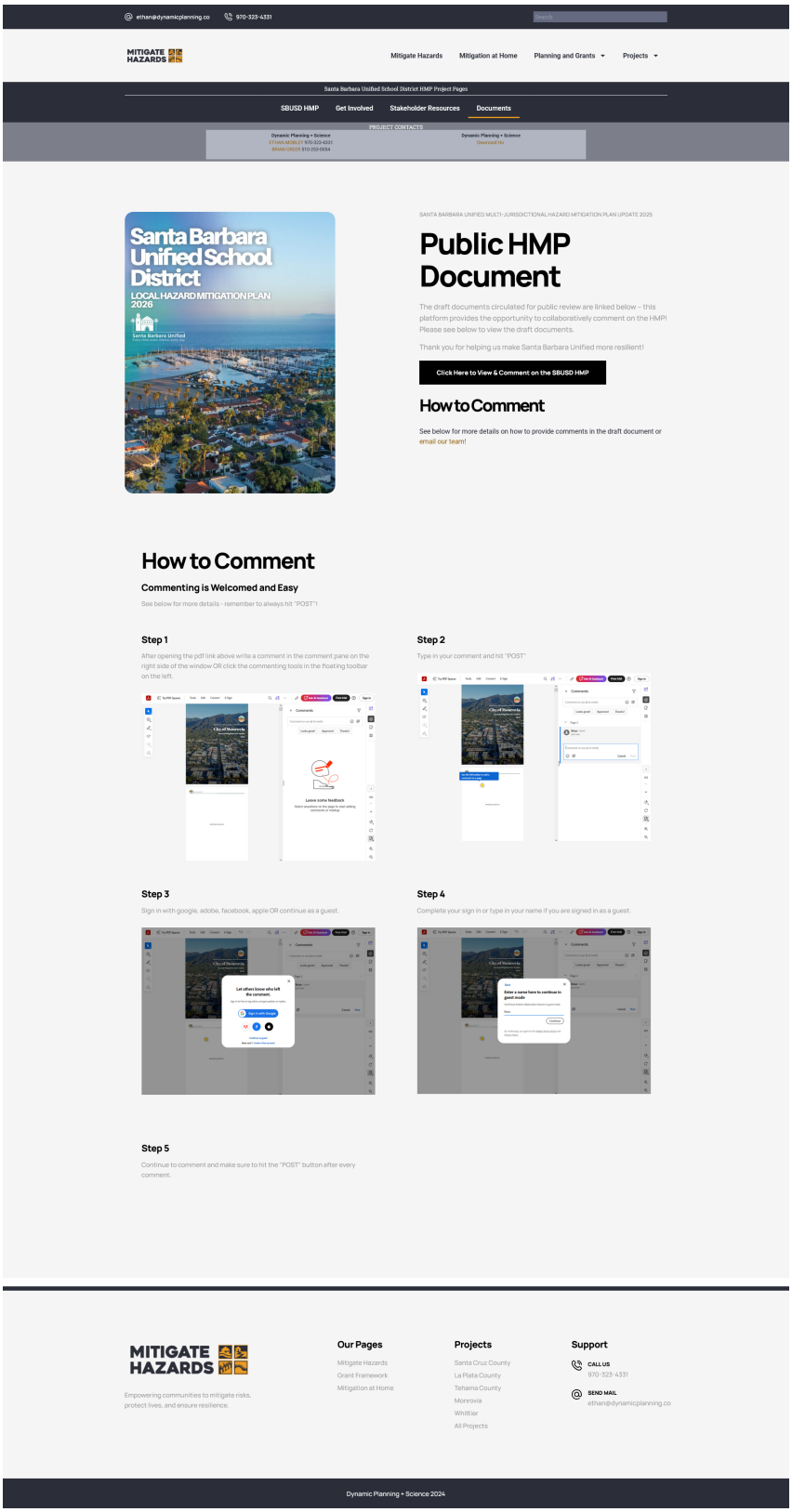
Project Funding Information

This hazard mitigation planning effort is solely funded by a state administered federal grant program for which the Santa Barbara Unified School District was successful in receiving. The district has contracted with Dynamic Planning + Science to update the current Local Hazard Mitigation Plan. The consultant will provide process facilitation, stakeholder outreach, data collection and analysis, plan writing, and strategy development.

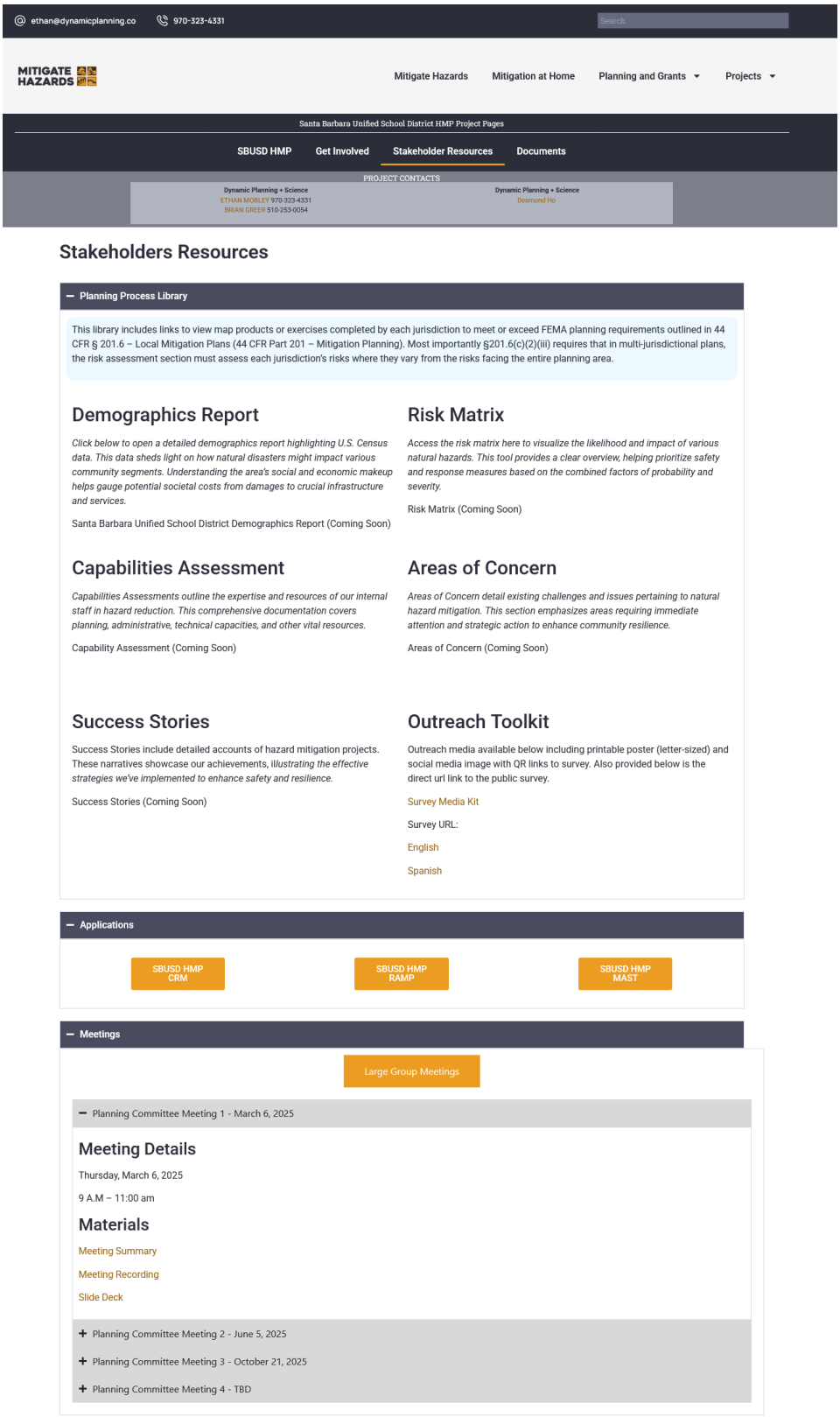
Mitigate Hazards Executive Summary



Mitigate Hazards Get Involved



Mitigate Hazards Documents



Mitigate Hazards Stakeholder Resources

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