

Prepare for a New Normal: *Climate Emergencies and Their Impact on Schools*



April 26, 2024



⚡ UNDAUNTEDK12

Welcome



Ingrid Roberson

Assistant Director,
CCEE

- Recording & slides will be posted on [CCEE's website](#)
- Slides will be linked in the chat
- **Questions/Comments:** Please use the Q&A to elevate your questions and comments

Meet the Presenters



Nancy Magee

Superintendent of Schools,
San Mateo CSS



Joe Anderson

Emergency Services Team Manager,
California Department of Education



Tim Ware

Coordinator, School Safety and
Security Services, San Diego COE



Danielle Chapman

Emergency Services Coordinator,
CalOES

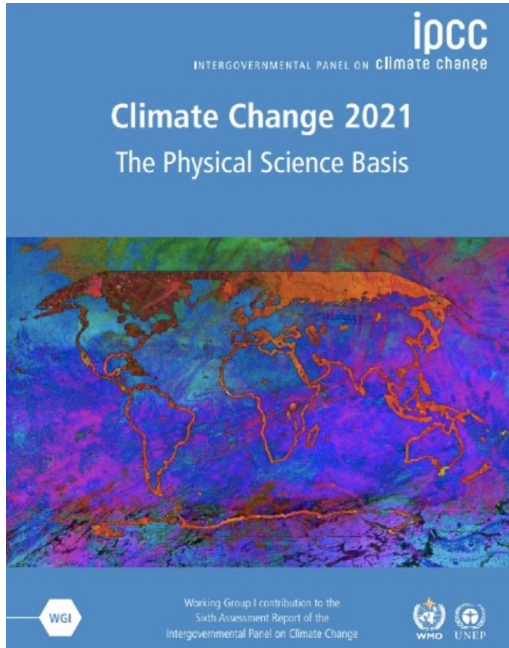


Climate Emergencies Overview



⚡ UNDAUNTED K12

Understanding the Climate Crisis



Report Released
August 2021

Three Key Findings:

- **Global warming is unequivocally caused by humans**
- **The impacts of the Climate Crisis are already here**, and are disproportionately impacting low-income, black, indigenous, and communities of color
- **Temperatures have already increased by 1.09°C since 1880, and will continue** to the 1.5°C mark in the next twenty years due to emissions from past decades.

Two Clear Calls to Action:

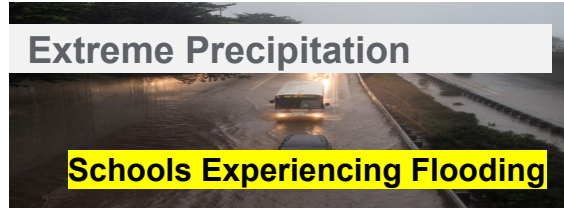
- If humans **act urgently to mitigate climate change**, temperatures could peak at that 1.5°C and then decline - stabilizing the planet.
- Communities must begin to **adapt to climate impacts**

Climate Impacts and Schools

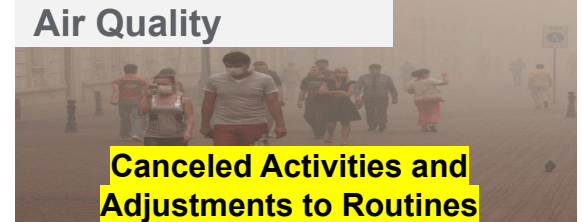
High Heat



Extreme Precipitation



Air Quality



Drought



Sea level rise



Wildfires



Climate Impacts:

- Threaten the Physical and Mental Health of Students and Staff
- Contribute to Lost Learning Time
- Are projected to increase in frequency and intensity throughout this decade and beyond

CAL MATTERS

A CALL TO ACTION

Climate Resilient
California Schools

Safeguarding Children's Health and Opportunity to Learn in TK-12

Focus for Today's Open Door



- Experiencing climate related emergencies and exploring data related to climate impacts can feel overwhelming - *You are not alone!*
- Adopting a *Climate Ready* mindset and climate resilience practices into emergency management will help your school communities adapt to the climate crisis.
- Climate Resilience for schools is possible!

Upcoming Features on Climate Adaptation

1) Open Doors

- Today: Prepare for a New Normal: Climate Emergencies and Their Impact on Schools
- May: Energy and Grid Resilience Adaptations
- Summer: High Heat and Schoolyard Adaptations



2) Spotlights

- April: Climate Change and Emergency Management in San Mateo County
- May: Energy and Grid Resilience
- Summer: Stormwater Management



3) Summary Report and Toolkit



California Department of Education (CDE)

Joe Anderson,
Staff Services Manager II
(Emergency Services)



California Office of Emergency Services (CalOES)

Danielle Chapman,
Emergency Services
Coordinator

Networking, Coordinating, and Support

- The CDE works closely with other state (and federal) agencies to represent the voices of schools for emergency coordination
- The CDE hosts the COE Emergency Management Staff Network
- The CDE supports direct emergency response to Local Education Agencies (LEAs) and their schools



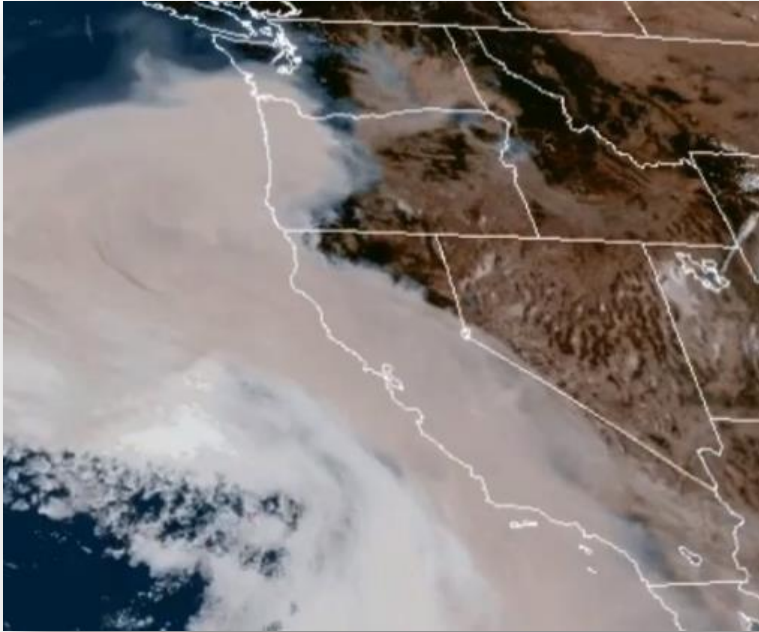
Wildfires

- 8 of the 10 largest wildfires in California history occurred in the last six years including the deadliest and most destructive fires.
- August Complex, 1,032,649 acres burned in August 2020 (Largest)
- Camp Fire, 18,804 structures destroyed and 85 deaths in November of 2018 (Most destructive and deadliest)



A photo from a school campus destroyed by the Camp Fire in Butte County, CA

School Impacts



- 241 schools have been damaged or destroyed over the past six years.
 - 23 different counties
 - 17 different events
- Schools were impacted by other disasters:
 - COVID-19
 - Public Safety Power Shutoffs
 - Wildfire Smoke
 - Evacuations/Sheltering Operations
 - Mudslides
 - Earthquakes
 - Storms

Coordination and Tools



CALIFORNIA EMERGENCY MANAGEMENT FOR SCHOOLS:

A Guide for Districts and Sites



[California Emergency Management for Schools - A Guide for Districts and Sites](#)



San Diego County Office of Education (SDCOE)

Tim Ware
Coordinator for School Safety and Security

January 2024 Flooding

- Flooding was unexpected and happened fast!
- Emergency Response was expedited because of established relationships with local partners
- Major facilities damage and disruptions to learning was minimized due to district leaders working with local, state and federal partners.
- The event was traumatic and that trauma has to be addressed in response and recovery



Workers remove wet carpet from a classroom at Bancroft Elementary in the La Mesa-Spring Valley School District on Feb. 2. (Alejandro Tamayo / The San Diego Union-Tribune)



Schools across San Diego County impacted by flooding

DEVELOPING STORY

SCHOOLS DAMAGED BY FLOODING

FOX 5
5:06 | 61°

Resilience Post-COVID

- COVID taught us a lot about organizing and forming partnerships across the county and municipalities
- We have maintained these local networks and partnerships which has been critical in both the response and recovery phase, and now in our efforts to do more with climate ready preparedness



COUNTY OF SAN DIEGO
**OFFICE OF EMERGENCY
SERVICES**

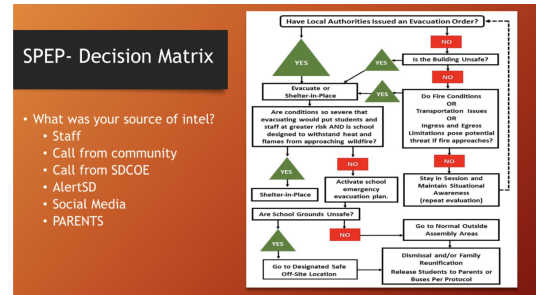


Climate Ready Paradigm for Preparedness

- Data and Vulnerability Assessments are helping us shift our paradigms about when to evacuate and when to shelter
- Establishing and maintaining networks with local emergency partners and school districts has become a priority, and focus has expanded beyond just wildfires



Multi-Jurisdictional Hazard Mitigation Plan





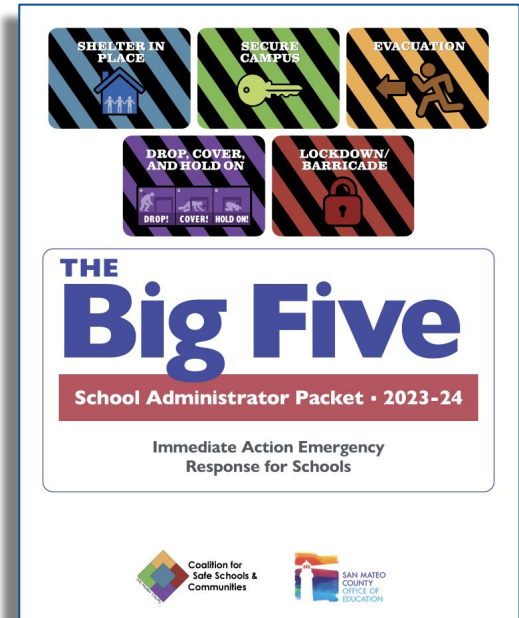
San Mateo County Office of Education (SMCOE)

Nancy Magee
County Superintendent of Schools

County Coordination is a Critical Foundation for Resilience

Coalition for Safe Schools and Communities

- Multi-agency group supported by SMCOE
- Developed [The Big Five](#), immediate action responses and other protocols
- Adopted by all San Mateo County school districts and law enforcement agencies
- Allows county to pivot quickly to support schools during an emergency



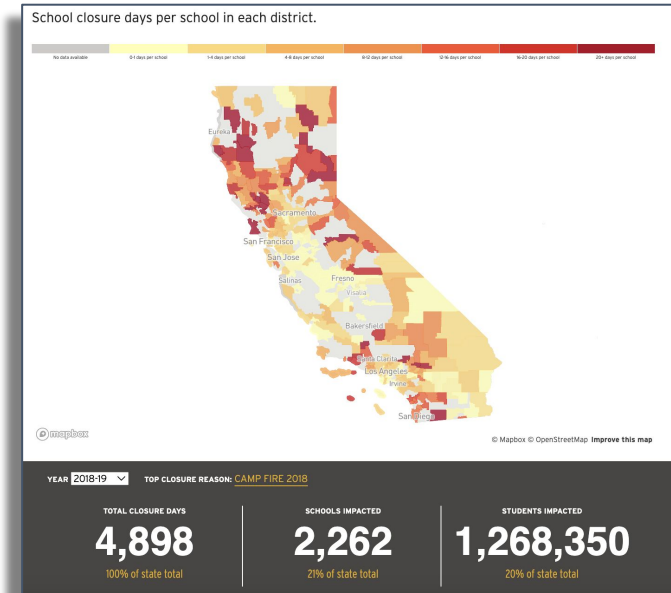
Prioritizing Climate Action is Necessary

CalMatters [Disaster Days](#) report on instructional time lost each year due to natural disasters, unsafe conditions, and other emergencies was pivotal

SMCOE built on its existing environmental literacy work and partnerships with county agencies

Integrated climate-ready mindset into emergency preparation work of the Coalition and SMCOE

Recently hired Director, Sustainable Construction & Facilities, to help districts make their facilities climate-ready



Shared Protocols, Toolkits, and Resources

SMCOE provides support to districts, coordinates with county and state, and posts information on school closures during emergencies

Coalition has developed [air quality](#), [fire watch](#), and [school closure decision-making](#) resources help schools navigate climate-related emergencies

SMCOE staff provide districts with assistance in integrating climate readiness into their facilities planning and connect them with partners who can provide technical assistance and funding support

Guidance Concerning Air Quality

Poor air quality caused by wildfire smoke and other pollutants can irritate your lungs, cause inflammation, affect your immune system, and make you more prone to being infections. Learn how you can track air quality and prepare your family and school for days when air quality is poor.

AQI SCALE KEY:

GREEN 0-50 Good	YELLOW 51-100 Moderate	ORANGE 101-150 Unhealthy for Sensitive Groups	RED 151-200 Unhealthy	PURPLE 201-300 Very Unhealthy	MAROON 301-500 Hazardous
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Keep Track of Air Quality

The Bay Area Air Quality Management District website (BAAQMD) has local information and projections. The EPA's AirNow website provides a quick update on air quality. Here are links to pages covering South and North San Mateo County.

The County Office of Education and San Mateo County Health use these official BAAQMD and AirNow sites to track data because they rely on professional quality monitors that are regularly maintained, independently audited, and have high standards for quality assurance and quality control.

Adjust Activity Based on Air Quality

School Air Quality Activity Recommendations

This document, developed with content from the California Department of Education and the California Department of Public Health (CDPH), is geared toward schools. However, it also provides families with insight into how schools might address differing levels of air quality.

All Children Are Included in Sensitive Group

According to the CDPH, all children are considered "sensitive individuals" and may be impacted by air quality in the Moderate (yellow - 51-100) and Unhealthy for Sensitive Groups (orange - 101-150) levels.

School Response



When air quality dips to Unhealthy for Sensitive Groups levels (orange - 101-150), schools in San Mateo County should have all students exercise indoors and limit vigorous outdoor activities.

When air quality dips to Unhealthy levels (red - 151-200), schools in San Mateo County should practice the Big Five Shelter in Place protocol, which includes keeping all activities indoors, limiting physical activity, and minimizing the opening and closing of doors. Regular classroom instruction continues during Shelter in Place.

The Coalition for Safe Schools and Communities believes that schools are the best place for students to be when air quality is poor as they are well-supervised, can be kept indoors, and are able to continue to learn. However, if air quality becomes Hazardous (maroon - 301-500) and schools do not have the ability to keep outdoor air from easily entering the school, then a school may decide to close. Schools make this decision based on equity and access to education for all students and their own local factors.

To learn more about the Coalition for Safe Schools and Communities' recommendations for preparing for unhealthy air quality, see pages 10-12 of its Facilities Report. For guidance on school closures, refer to the Decision Making Guide for School Closures.

Updated November 16, 2023



Moving Forward

The Coalition is developing resources addressing additional climate impacts, including high heat and flooding

With funding from the California Legislature, SMCOE is developing free, trauma-informed climate change and environmental justice curriculum with Ten Strands for all grades

Districts are engaging: there is a waiting list for Climate-Ready Symposium on April 30 and growing requests for support



CLIMATE-READY SCHOOLS SYMPOSIUM
LEADERSHIP FOR COLLECTIVE ACTION

Learn and share promising practices to improve environmental literacy, meet legislative requirements, and build sustainable operations and facilities.

Breakouts will address strategies, funding sources, and regional resources to help education leaders create climate-ready schools. Programming will include three strands: leadership, facilities and operations, and environmental literacy.

AUDIENCE

- Superintendents
- School Board Trustees
- Chief Business Officials
- Food Service and Maintenance and Operations Leads
- Principals
- Teacher Leaders

Register:
bit.ly/3TAiKsd

TUESDAY, APRIL 30
8:30 AM - 1:30 PM

San Mateo County Office of Education
101 Twin Dolphin Drive
Redwood City, CA 94065

Questions? Contact:
Julie Hilborn
jhilborn@smcoe.org

Sustainable and Climate-Ready Schools Challenge awards will be presented at the event.

IN PARTNERSHIP WITH:
PENINSULA CLEAN ENERGY

SAN MATEO COUNTY OFFICE OF EDUCATION



Discussion: Question and Answer

Question and Answer

- **Questions/Comments:** Please use the Q&A or “Raise Hand” features
- **Questions:** Specify if your question is for one of the guest speaker or all of the guest speakers



Closing and Follow-Up

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Thank You

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Feedback Survey:

<https://bit.ly/3811111>

