ACR-109 Extreme heat: state response. (2021-2022)

Assembly Concurrent Resolution No. 109

CHAPTER 101

Relative to extreme weather.

[Filed with Secretary of State July 12, 2022.]

LEGISLATIVE COUNSEL'S DIGEST

ACR 109, Eduardo Garcia. Extreme heat: state response.

This measure would declare the California Legislature's recognition of extreme heat as a serious and urgent threat and would call on the state's agencies and departments to invest resources in increasing resilience to extreme heat, with priority given to communities that are most at risk and vulnerable, and to develop strategies to mitigate urban heat island effects, enhance building resilience, and evaluate the effectiveness of measures to improve protection in the face of continually rising temperatures, as specified.

Fiscal Committee: no

WHEREAS, There were several record-breaking heat waves in 2021, including one of the worst heat waves in history that killed hundreds of people throughout the Pacific Northwest in just one weekend; and

WHEREAS, Extreme heat waves in 2020 caused rotating blackouts that left many Californians without power and fueled some of the most catastrophic and deadly wildfires that the state has ever experienced; and

WHEREAS, Extreme heat events, which pose a serious threat to public health, infrastructure, agriculture, and water and energy security, are certain to become longer, more widespread, more frequent, and more severe as climate change continues; and

WHEREAS, Extreme heat is the leading cause of weather-related mortality in the United States. The Centers for Disease Control and Prevention (CDC) estimates that over 600 Americans die and thousands more are hospitalized from extreme heat each year. Further, the CDC emphasizes that its estimate is a significant undercount of actual numbers; and

WHEREAS, California's Fourth Climate Change Assessment ranks extreme heat as one of the most costly impacts of climate change, ranging from $50.3 billion to $84.8 billion per year by 2050. Further, this assessment estimated that high temperatures could lead to 6,700 to 11,300 premature deaths per year by midcentury; and

WHEREAS, The impacts of extreme heat are likely to be magnified in California, which is the only place in the United States where heat-related deaths occur during winter months, and where many homes lack air conditioning and adequate tree canopy to reduce ambient temperatures; and

WHEREAS, Extreme heat does not affect all people equally. People without homes are entirely unsheltered from the heat, and lower income communities and communities of color often live in older residences or mobilehomes that are less able to resist

extreme heat, are least equipped to cope with extreme heat, and are often located in the hottest neighborhoods in cities across the country, where urban green infrastructure is sparse. Consequently, disadvantaged or minority communities are disproportionately exposed to the risk of heat-related illnesses and death; and

WHEREAS, The CDC has found that farmworkers, who are disproportionately Latino, at risk of living in poverty, and less likely to have health insurance, die of heat-related illnesses at roughly 20 times the national rate; and

WHEREAS, The Occupational Safety and Health Appeals Board has adopted a heat illness prevention standard applicable to outdoor worksites and additional requirements meant to protect employees working in industries associated with exposure to extreme temperatures, such as agriculture and construction. However, the board has not finalized a heat illness prevention standard for indoor workers despite documented occurrences of heat-related illnesses; and

WHEREAS, Heat-related illnesses are disproportionately found in industries with many lower income workers. The bottom 20 percent of the lowest paid workers in the state suffer five times as many heat-related illnesses as those who are among the top 20 percent of the highest paid workers, according to recent data compiled by researchers at the University of California, Los Angeles. This disparity results in both lost wages and significant medical bills for affected workers, which widens existing economic disparities; and

WHEREAS, Children, especially those who attend schools in urban areas that are built with heat-retaining materials, that are ill-equipped to shelter students from extreme heat, or that are in desert environments that lack greenspace and trees that provide shade are at heightened risk of suffering from heat-related illnesses and poor health outcomes. Excessive heat also can interrupt outdoor activity and exercise; and

WHEREAS, A working paper issued by the National Bureau of Economic Research in May 2018 and revised in November 2019 entitled “Heat and Learning” estimates that, absent mitigation measures like air conditioning, there is a negative correlation between increased temperature during a school year and student learning. This correlation disproportionately impacts minority students because hot school days account for approximately 5 percent of the racial achievement gap; and

WHEREAS, The United Nations Intergovernmental Panel on Climate Change projects that even a rise of 1.5 to 2 degrees Celsius in the global temperature could result in significantly more heat-related deaths, increased poverty, and slowed economic growth; and

WHEREAS, Extreme heat events contribute to and compound other climate and resource challenges, including uncontrolled wildfires, the degradation of air quality due to wildfires and increases in ozone pollution, drought, and increased stress on the electric grid from elevated power demand and degraded transmission line performance; and

WHEREAS, Effective nature-based strategies to minimize the effects of extreme heat events, such as urban forestry and increasing vegetation through strategic management and restoration of parks and riparian zones in urban areas can be easily implemented; and

WHEREAS, Trees and greenspaces help mediate temperatures in urban areas, and have been associated with dramatic reductions in heat-associated health impacts; and

WHEREAS, A 2015 study published in the peer-reviewed journal Urban Forestry & Urban Greening titled “Urban forestry and cool roofs: Assessment of heat mitigation strategies in Phoenix residential neighborhoods” examined tree canopy coverage in a particular area and found that an increase in coverage from 10 percent to 25 percent resulted in an average daytime cooling benefit of up to 3.6 degrees Fahrenheit in residential neighborhoods at the local scale; and

WHEREAS, A 2021 study published in the peer-reviewed journal Energy & Buildings entitled “Passive cooling designs to improve heat resilience of homes in underserved and vulnerable communities” suggests that passive cooling strategies, including adding roof insulation when reroofing, installing solar control window films, and using cool walls, could markedly reduce the exposure of residents of disadvantaged communities in the Central Valley to uncomfortably or dangerously hot conditions in their homes; and

WHEREAS, Increasing resilience to the acute and chronic impacts of climate change is a state priority, and investments are being made to mitigate sea level rise, wildfires, and other climate-related events; and

WHEREAS, Extreme heat is just as deadly as other climate impacts, and failing to deploy strategies that address, mitigate, and build resilience to it early will undoubtedly result in thousands of avoidable deaths; now, therefore, be it

Resolved by the Assembly of the State of California, the Senate thereof concurring, That the Legislature recognizes extreme heat as a serious and urgent threat; and be it further

Resolved, That the Legislature calls upon California’s public agencies and departments to invest resources in increasing resilience to extreme heat, with priority given to communities that are most at risk and vulnerable; and be it further

Resolved, That the Legislature calls on California's public agencies and departments to work with researchers and communities to develop strategies to mitigate urban heat island effects, enhance building resilience, including in existing housing and commercial stock, and evaluate the effectiveness of measures to improve protection in the face of continually rising temperatures; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the author for appropriate distribution.