Date of Hearing: March 21, 2022

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 2076 (Luz Rivas) – As Introduced February 14, 2022

SUBJECT: Extreme Heat and Community Resilience Program: Extreme Heat Hospitalization and Death Reporting System

SUMMARY: Establishes the Extreme Heat and Community Resilience Program (Program) to coordinate state efforts and support local and regional efforts to prevent or mitigate the impact of and public health risks of heat. Requires the Department of Public Health (DPH) to establish and maintain an Extreme Heat Hospitalization and Death Reporting System (Reporting System) for the purpose of assisting local interventions and identifying and protecting heat-vulnerable or other at-risk populations.

EXISTING LAW:

1) Requires the Natural Resources Agency (NRA) to update its climate adaptation strategy, the Safeguarding California Plan, by July 1, 2017, and every three years thereafter, by coordinating adaptation activities among lead state agencies in each sector.

2) Requires the state to continue its rigorous climate change research program focused on understanding the impacts of climate change and how best to prepare and adapt to expected impacts.

3) Requires the Office of Planning and Research (OPR) to establish a technical advisory group to help state agencies incorporate climate change impacts into planning and investment decisions.

4) Requires state agencies' planning and investment to be guided by the principles of climate preparedness, flexibility and adaptive approaches for uncertain climate impacts, to be protective of vulnerable populations, and to prioritize natural infrastructure solutions.

5) Establishes the Integrated Climate Adaptation and Resiliency Program (ICARP) within OPR to coordinate regional, local and state efforts to adapt to climate change. Requires ICARP to:

    a) Pursue an emphasis on climate equity across sectors and strategies that benefit both greenhouse gas (GHG) emissions reductions and adaptation efforts;

    b) Require program efforts including, but not limited to, working with and coordinating local and regional efforts for climate adaptation and resilience; and,

    c) Maintain a data clearinghouse on climate change and climate adaptation for the purposes of facilitating state and local policy decisions.

6) Establishes DPH, which oversees various programs related to public health and safety, including licensing health facilities, regulating food and drug safety, and monitoring and preventing communicable and chronic diseases.

7) Establishes the Administrative Procedure Act (APA), which establishes rulemaking procedures an standards for state agencies. APA requirements ensure that the public has a meaningful opportunity to participate in the adoption of state regulations and to ensure that regulations and clear, necessary, and legally valid.

THIS BILL:

1) Establishes the Program and requires OPR to administer the Program through ICARP.

    a) Requires the Director of Planning and Research to appoint a Chief Heat Officer (Officer) to coordinate state activities and funding to address heat and implement the Program. Requires the Officer to:

        i) Establish, convene, and supervise an Interagency Heat Taskforce (Taskforce), as specified.

        ii) Establish an Extreme Heat Advisory Council (Council) to advise the Officer and the Taskforce on actions to improve coordination and effectiveness of state and local efforts to address heat, as specified.

    b) Upon appropriation, requires the Program, in consultation with the Strategic Growth Council, to provide grants and technical assistance to eligible entities that support local and regional efforts to mitigate the impacts and reduce the public health risks of heat. Grants may be awarded for:

        i) Preparing and updating comprehensive heat action plans or components of another plan, including general plans, local coastal plans, and local hazard mitigation plans;

        ii) Implementing projects that mitigate the impacts of extreme heat, as specified;

        iii) Implementing projects that reduce the public health risks of, and improve community resilience to, heat, as specified; and,

        iv) Technical assistance for application development, project development, or project implementation.

    c) Requires that priority be given to projects that:

        i) Serve disadvantaged or vulnerable communities;

        ii) Demonstrate participation in a regional climate collaborative program;

        iii) Serve populations most vulnerable to the impacts of extreme heat; and,

        iv) Are components of a comprehensive heat action plan.

    d) Declares legislative intent that the Program fund projects in categories not eligible for funding in any preexisting program.

2) Defines terms used in the bill, including:

a) "Comprehensive heat action plan" as a community-driven, multielement plan adopted by a local or regional entity that includes activities that address extreme heat or the urban heat island effect in four or more of the following areas:

   i) Natural infrastructure;

   ii) Built infrastructure;

   iii) Social infrastructure;

   iv) Communications;

   v) Planning; and,

   vi) Policy.

b) "Eligible entity" as a nonprofit organization or collation of nonprofit organizations, community-based organization, community development corporation, community development financial institution, local government, regional agency, joint powers authority, or tribal government that demonstrates partnerships with multiple stakeholders in the development and implementation of a plan or project in urban or rural communities, or both.

c) "Extreme heat" as increasing temperatures and other meteorological conditions that could result in extreme heat waves, heat health events, heat watches or warnings, or states of emergency.

d) "Urban heat island effect" as increased temperatures in urban areas compared to outlying areas due to structures that absorb and reemit the sun's heat more than natural landscapes.

3) Requires OPR to review and consider the most recent California Climate Change Assessment, climate science research programs administered by the SGC, the most recent update to the Safeguarding California Plan, the California Adaptation Planning Guide, and resources in OPR's adaptation clearing house or any other climate science research that OPR deems relevant.

4) Requires OPR to seek to minimize GHG emissions and electricity grid stress, avoid maladaptation, and maximize job growth and other cobenefits.

5) Requires OPR to adopt guidelines to administer the grant program within six months of an appropriation by the Legislature, as specified.

6) Exempts any procedures, forms, and guidelines adopted by OPR for administration of the Program from the APA.

7) On or before July 1, 2023, requires OPR, in collaboration with the Taskforce, to prepare an Extreme Heat Framework (Framework) to promote comprehensive, coordinated, and effective state and local government action on heat. Requires OPR to update the Framework every two years, as specified.

8) Establishes the Extreme Heat and Community Resilience Fund (Fund) to be used, upon appropriation, to administer the Program. Declares the intent of the Legislature that the Fund be composed of moneys transferred from the General Fund.

9) On or before July 1, 2024, requires DPH, in consultation with the Officer and upon appropriation, to establish and maintain the Reporting System for the purpose of assisting local interventions and identifying and protecting heat-vulnerable or other at-risk populations. Requires the Reporting System to:

   a) Receive notice and data from state and local health departments on emergency room visits and deaths resulting from extreme heat;

   b) Publish the data on DPH's website; and,

   c) Include data identifying neighborhoods or other groups in need of priority intervention.

10) States related legislative findings and declarations.

FISCAL EFFECT: Unknown

COMMENTS:

1) **Author's statement**:

> The climate crisis is here. Year after year, our state faces record-breaking heat waves that have left local governments to grapple with how best to protect residents from these life-threatening weather events. As one of the gravest hazards resulting from climate change, extreme heat causes more emergency room visits and deaths annually than any other weather-related disaster in the nation.
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> Extreme heat is not just a public health threat. Higher temperatures tend to have a cascading effect leading to more intense wildfires, rolling power outages, damage to critical infrastructure, and increased air pollution. These impacts disproportionately harm low-income families, people of color, agricultural workers, people with preexisting health conditions, and other vulnerable populations in both urban and rural parts of the state. To protect the public and property, the state must ensure proper mitigation and response strategies.
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> AB 2076 establishes the Extreme Heat and Community Resilience Program to coordinate all the heat related activities of the state and incentivize the development of local comprehensive heat action plans to protect communities from the dangers of extreme heat. AB 2076 will accomplish these goals by establishing a Chief Heat Officer, an Extreme Heat Advisory Council, and an Interagency Heat Task Force under the Governor's Office of Planning and Research. Finally, the bill will establish the Extreme Heat Hospitalization and Death Reporting System to better understand where extreme heat illnesses and deaths are occurring.

2) **Climate change impacts in California**. California's climate is generally expected to become hotter, drier, and more variable over the coming decades, increasing the risk of extreme

weather, including heat, catastrophic wildfires, droughts, floods, biodiversity loss, and sea level rise. These changes will impact California's residents, water supply, ecosystems, and economy. California's Fourth Climate Assessment estimates the economic cost to California will exceed $100 billion annually by 2050. The scale and type of impacts will vary across regions. People who are already vulnerable, including lower-income and other marginalized communities, have lower capacity to prepare for and cope with extreme weather and climate-related events and are expected to experience the greatest impacts.

Average temperatures have increased since 1895, with the fastest relative increase beginning in the 1980s. Every decade since 1980 has been warmer than the previous decade. The seven warmest years on record have all occurred after 2015, and the top three are 2016, 2019, and 2020. Southern California, in particular, was hit with a series of heat waves in August and September 2020, breaking records. Emergency room visits climbed to 10 times their normal numbers.

The state has become drier over time, with the most extreme drought since 1895 recorded between 2012 and 2016. Taken together, these conditions have led to decreased snow pack and shrinking glaciers, which impacts water availability across the state. Hotter and drier conditions have also increased wildfire frequency and intensity. Since 1900, the mean sea level has generally increased statewide, with an increase of seven inches in San Francisco and six inches in La Jolla. A 2018 study by researchers at UC Berkeley and the University of Arizona updated sea level rise projections to include loss of land surface elevation due to subsidence, demonstrating that flood risk due to rising seas is likely to be higher than originally expected. The study estimates that between 48 to 166 square miles in the San Francisco Bay area will flood under average conditions, and the authors expect substantially more land area to be affected during storm and king tide events. Further, ice sheets in Greenland and West Antarctica are melting more rapidly than initially expected, which underscores the need to proactively undertake efforts to protect communities and ecosystems from catastrophic flooding.

3) **Extreme heat**. Increasing temperatures pose a direct threat to public health; however, there is surprisingly little information available about the number of heat-related deaths. Moreover, heat-related deaths are underreported. Between 2010 and 2019, the official data from death certificates attributes 599 deaths to heat exposure, but an analysis by the Los Angeles Times found that the true number is closer to 3,900, six times the official number. A 2020 study in Environmental Epidemiology found that an average of 5,608 deaths were attributed to heat annually in the United States, substantially higher than the Centers for Disease Control and Prevention estimate of 658 people per year. According to the Los Angeles Times, "it is common for doctors and coroners to write that a person suffered a heart attack or kidney failure without knowing whether extreme heat played a part."

   In addition to the lack of accurate data regarding heat-related deaths, the information that is available lags, sometimes by years, making it impossible for public agencies to respond to heat-emergencies in a timely manner. The state does not collect real-time data on heat illness from hospitals or require counties to track and report incidents of heat illness. Among the counties that do track, the findings are concerning. The Los Angeles County Department of Public Health figures show that emergency room visits have risen throughout the county since it began tracking heat illnesses in 2005. San Diego County has found a similar pattern since 2006. In Imperial County, hospitals reported almost as many cases of heat-related

illness over six weeks in the summer of 2020 as were reported in all of 2015.

While heat related deaths in some parts of the country have fallen, likely due to increased access to air conditioning and better awareness of the dangers heat poses, especially to the elderly, heat-related deaths have increased in the Southwestern United States, especially among adults over 45. Heat-related health impacts almost exclusively affect lower income and disadvantaged communities. Wealthier Californians who drive air conditioned cars, live in air conditioned homes, and work in air conditioned offices, do not generally suffer the effects of extreme heat.

4) **State actions**. In 2013, the state issued guidance and recommendations for responding to extreme heat. The report included more than 40 recommendations to better prepare the state to weather extreme heat events, including a recommendation to "improve the timeliness and completeness of heat illness and death surveillance activities in order to understand the impact of heat events and guide real time public health planning and responses." Yet for nearly a decade, the state did little to implement the recommendations.

   Last year, the state renewed its efforts to combat the impacts of extreme heat. The 2021 Climate Adaptation Strategy includes an Extreme Heat Action Plan (Plan), which serves as an update to the 2013 report. The Plan includes "strategic and comprehensive" state actions that can be taken to address extreme heat, including:

   - Implementing a statewide public health monitoring system to identify heat illness events early, monitor trends, and track illnesses and deaths;
   - Cooling schools in heat-vulnerable communities and support climate smart planning;
   - Accelerating heat readiness and protection of low-income households and expanding tree canopy in communities most impacted by extreme heat;
   - Protecting vulnerable populations through increased heat risk-reduction strategies and codes, standards, and regulations;
   - Building a climate smart workforce through training partnerships and apprenticeships in jobs and careers that address extreme heat;
   - Increasing public awareness to reduce risks posed by extreme heat;
   - Supporting local and regional extreme heat action;
   - Protecting natural systems, including fish and wildlife, from the impacts of extreme heat.

   The state adopted a $15 billion climate package in 2021 to combat the climate crisis, including $800 million over three years to address the impacts of extreme heat and $300 million over two years to support the implementation of the Plan. Programs to address the impacts of extreme heat include urban greening, energy assistance for low-income families, community resilience centers, and low-income weatherization. The Governor's proposed 2022-23 budget includes approximately $175 million in second year of investments for extreme heat programs.

   A 2021 study by UCLA's Luskin Center for Innovation identified significant policy gaps and fragmented state regulation of extreme heat. The authors point out that there is no state entity responsible for managing extreme heat, and little coordination of the various departments that administer the state's extreme heat policies. The study notes that in

addition to the obvious health impacts, heat also affects mental health, makes it harder to students to learn, and harder for workers to do their jobs safely. The report's main findings include:

- Most existing California heat-exposure standards are inadequate or have limited compliance;
- Most existing state programs do not make investments that explicitly target heat-vulnerable places or quantify heat risk-reduction benefits;
- Local planning efforts may not prepare cities adequately for extreme heat; and,
- Improving thermal comfort in public spaces and reducing urban heat island effects rely largely on voluntary state guidance.

5) **Ensuring coordination and accountability**. This bill addresses some of the gaps in the state's response to extreme heat. The bill establishes the Program to ensure coordination and accountability among the state's extreme-heat efforts. This bill also establishes the Reporting System to better track and respond to heat-related illnesses and to identify patterns so the state can respond appropriately.

6) **Suggested amendments**:

   a) Specify that only the guidelines adopted by OPR are exempt from the APA.

   b) Require OPR to update the existing Extreme Heat Action Plan, rather than creating a new Extreme Heat Framework. The Action Plan is currently in draft form, but is expected to be finalized before this bill becomes effective.

   c) Clarify legislative intent that the bill's provisions be funded by existing allocations for extreme heat purposes.

   d) Make related technical and clarifying changes.

7) **Previous and related legislation**:

   AB 2238 (L. Rivas) requires the California Environmental Protection Agency, in coordination with the ICARP and the California Department of Insurance, to develop a statewide extreme heat ranking system. This bill is also scheduled to be heard in this committee on March 21.

   AB 585 (L. Rivas, 2021) bill would have established the Extreme Heat and Community Resilience Program through the ICARP to coordinate the state's efforts to address extreme heat and the urban heat island effect and to provide financial and technical assistance to local or regional entities for improving resilience to extreme heat and urban heat island effects. This bill was held in the Senate Appropriations Committee.

8) **Double referral**. This bill has also been referred to the Assembly Health Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

California Labor Federation, AFL-CIO
California Urban Forests Council
Climate Resolve

Opposition

None on file

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