

REPORT OF THE CHIEF LEGISLATIVE ANALYST

DATE: May 2, 2022

TO: Honorable Members of the Energy, Climate Change, Environmental Justice and River Committee

FROM: Sharon M. Tso 
Chief Legislative Analyst

Council File No: 21-1277
Assignment No: 21-11-0871

SUBJECT: **ESTABLISHMENT OF A CITY CHIEF HEAT OFFICER**

RECOMMENDATIONS

That the City Council:

1. REQUEST the City Attorney to prepare and present a draft ordinance which amends the Administrative Code (Ord. No. 187126, Sect. 22.362) to designate the Executive Director of the Climate Emergency Mobilization Office (CEMO) as the City's Chief Heat Officer with the CEMO having the responsibility of developing and regularly updating a Heat Action Plan, which at minimum includes the establishment of an early warning system, interagency emergency response plan and opportunities to reduce exposure from extreme heat events using long-term strategies to protect communities, especially in the City's most vulnerable areas, through collaboration with other City departments, local agencies, and non-governmental partners.
2. INSTRUCT the CEMO to prepare and submit a budget request to the City Administrative Officer (CAO) for resources needed during Fiscal Year 2022-23 to effectively perform the duties and tasks associated with the Chief Heat Officer function, and DIRECT the CAO, with assistance from Personnel Department, to report to the City Council with recommendations regarding the reallocation of existing position authorities, new position authorities, account appropriations and source of funds on said budget request.

SUMMARY

On November 10, 2021, City Council adopted the Motion (Krekorian – O'Farrell; C.F. 21-1277) to establish a City of Los Angeles Chief Heat Officer (CHO), among other instructions, to be responsible for developing the City's plan and response to extreme heat weather events and other opportunities to reduce long-term exposure, and related matters.

The Motion (Krekorian – O'Farrell), in addition to instructing the Chief Legislative Analyst (CLA) and the City Administrative Officer (CAO) to report on establishing a CHO, includes related matters that other City departments are requested to develop in collaboration with this position, as follows:

- The Department of Water and Power (DWP) is requested to report on mitigating the impacts of extreme heat on the power system that analyzes demand response and energy efficiency programs, and an expansion of the tree distribution program for eligible customers.
- The Department of Emergency Management (EMD), with Recreation and Parks (RAP) and the Climate Emergency Mobilization Office (CEMO) are instructed to report on improving the network of cooling centers through public-private partnerships and facilities of religious partners to protect the vulnerable from the heat.
- The Bureau of Street Services (BSS) to report with recommendations for expanding the comprehensive Cool Streets LA program, in particularly in the San Fernando Valley.
- The Department of City Planning (DCP) to report on strategies to expand access to cool spaces, and increase tree canopy cover, and require access to more green spaces and shade hubs within neighborhoods.

This report is restricted to addressing the main moving clause on establishing a Chief Heat Officer in the City of Los Angeles. Other responses from departments instructed in the motion will be submitted to the City Council under separate cover by respective departments.

Currently, governance relative to climate change, global warming and all matters concerning environmental issues are led by the Mayor's Office, City Council, and various Board-led departments (e.g. Los Angeles World Airports, Harbor, Water and Power, Public Works, etc.). The City has taken a leadership role in developing the local mitigation policies for climate change. Aside from the above agencies' ongoing work towards understanding the impacts of climate emergencies, the City's efforts include creating the Climate Resilience Officer (CRO), Chief Sustainability Officer (CSO), City Forestry Officer (CFO), and the Climate Emergency Mobilization Office (CEMO). In addition, the City Council continues to deliberate on policies for departments to address impacts on the environment, human health, safety, and the economy.

BACKGROUND

The City Council's action instructs the CLA and the CAO to report on the establishment of a City Chief Heat Officer (CHO) to plan for extreme heat events through a Heat Action Plan that includes interagency emergency response planning and the development of an early warning system. Based on analysis by the California's Fourth Climate Change Assessment Report, conducted by the state's Natural Resource Agency, Energy Commission and the Governor's Office on Planning and Research, weather in the Los Angeles region will gradually increase by four to five degrees over the next few decades; and by five to eight degrees by late century if current trends continue.

EXTREME HEAT IMPACTS WITHIN THE CITY

The City of Los Angeles is a developed urban center with a large portion of the population living in a built environment that is paved, includes large buildings, and has non-reflective roofs and other surfaces within the urban landscape that absorb heat from the sun instead of reflecting it back into the atmosphere. Heat becomes trapped within this manufactured environment and the overall climate becomes hotter. This phenomenon is labeled the urban heat island effect. Recognized science maintains that the urban heat island effect threatens the health and sustainability of communities.

As such, extreme heat is the deadliest climate risk to Los Angeles. Extreme heat can lead to heat-related illnesses, and is exacerbated with comorbidities like diabetes and heart disease. Approximately, 30 percent of Los Angeles households with an income of less than \$50,000 a year do not have an air conditioning system, and the most vulnerable either struggle with extreme heat events or have to rely on a network of City-sponsored cooling centers to stay safe on hot days.

The City has a coordinated response among several departments to extreme heat events. The response to such events primarily includes the activation of cooling centers throughout the most impacted geographic areas based on a number of triggering criteria. The criteria to initiate an activation of services is based in part on information from the National Weather Service (NWS) definitions and data, and the Los Angeles County Department of Public Health which defines the standard for an Adverse Weather Condition for Heat Alerts. The cause of most activations of cooling centers are based on weather conditions where the Heat Index Temperatures are at or above 95 degrees for 2 days in the Los Angeles Basin, or temperatures at or above 100 degrees for 2 days in the Valleys/Deserts/Mountains that are not mitigated by a drop in nighttime temperatures within the same time period. Other factors include forecasted temperatures, the number of vulnerable populations impacted, and significant disruption in power services.

The agencies of Emergency Management Department, Recreation and Parks, Climate Emergency Mobilization Office, and the Los Angeles Public Library, among others coordinate the appropriate City response measures by assessing and determining the locations to activate cooling centers, gather needed resources, and develop a common message to be distributed in the impacted areas for the public to be informed of the available resources.

Climate change affects all residents and is predicted to worsen in the coming years, contributing to extreme heat, persistent droughts, rain storms, mudslides, wildfires and poor air quality. With the rise of extreme heat events, some cities have created a position of CHO to raise awareness, set goals, collect data and establish metrics that properly track impacts.

HEAT MITIGATION EFFORTS IN OTHER JURISDICTIONS

Miami-Dade County, Florida

The rise of extreme heat events are increasing around the globe and nationally. Local governments are creating policies that will help mitigate these events and counteract the impacts of climate change. The leaders of Miami-Dade County, Florida recorded some of the hottest temperatures on record without relief even when the sun went down during the past few summers. As a result, Miami-Dade created a first-of-its-kind position, the Chief Heat Officer, to bring awareness and a proper local government response to extreme heat events. Based on weather data, it is estimated that the region will see an increase in the number of days where the heat index will reach over 105 degrees. Miami-Dade County appointed a Chief Heat Officer within their governance structure to raise awareness to the public but to also collaborate with the County's departments and local agencies and non-governmental partners to create policies aimed at reducing extreme heat events.

Phoenix, Arizona

The City of Phoenix, Arizona reported that in 2020 there were nearly 200 deaths related to extreme heat. Its local leaders decided to increase the resources necessary to mitigate climate change and the effects of extreme heat on its community. The City created a Chief Heat Officer position to

lead the Office of Heat Response & Mitigation to plan City responses and deploy technology to address the growing hazards of urban heat.

LOCAL EFFORTS TO ADDRESS CLIMATE CHANGE

The City has made significant commitments to addressing the ill-effects of climate change from its water consumption and usage to reducing the pollution causing items that go into landfills by adopting Zero Waste policies. The City has adopted other initiatives to address climate change by creating the Climate Resilience Officer (CRO), Chief Sustainability Officer (CSO), City Forestry Officer (CFO), and the Climate Emergency Mobilization Office (CEMO).

These offices in general collect data, plan responses, promote inter-agency collaboration, and engage the community to inform the City of policy impacts associated with their respective responsibilities.

Climate Emergency Mobilization Office (CEMO)

The Climate Emergency Mobilization Office and accompanying Commission were created in June 2021 to help the City deal with prevalent climatic events. The CEMO and Commission are collaborating with communities to plan, coordinate, and provide a meaningful and equitable stakeholder engagement and emergency-level mobilization to respond to climate crisis' that disproportionately harm disadvantaged communities.

Chief Resilience Officer

The Chief Resilience Officer (CRO) position was created in 2014 by the Mayor to organize the City to be better prepared for, withstand, and recover from man-made or natural disasters. Emergency experts recognize that an initial disaster-event can cause acute shock and stress and City departments can be the first line of assistance for many citizens. The role of the CRO is to plan and organize the City's reaction to a disaster, and to spearhead recovery efforts as soon as possible. The goal is to equitably protect the infrastructure system such as communication or water conveyance and to have the system continue to work during an event, or comeback online as soon as possible.

Chief Sustainability Officer

City of Los Angeles

The Chief Sustainability Officer (CSO) for the City is housed within the Office of the Mayor and was created as part of the Los Angeles Green New Deal, launched in 2019. The CSO is leading the climate impact charge based on the following four principles: 1) uphold the Paris Climate Agreement; 2) deliver environmental justice and equity; 3) ensure an inclusive green economy; and, 4) lead by example within City government. The role of the CSO is specifically to lead policy on cutting water use, promoting and installing electric vehicle chargers and addressing building efficiency and zero emissions within the City.

County of Los Angeles

The County of Los Angeles established the Chief Sustainability Office which coordinates policy support for the Los Angeles County Board of Supervisors and the unincorporated areas as well as

the region for a more livable and resilient economy and community. The County's two major initiatives include the adoption of the Single Use Plastic Food Service Ware Ordinance, which is meant to address plastic waste management. The second, and related project, is the release of the October 2013 countywide Climate Vulnerability Assessment (CVA) which identifies those socially and physically vulnerable to climate hazards of heat, wildfire, and flooding.

City Forestry Officer

In 2019, the Mayor created the City Forestry Officer (CFO) within the Board of Public Works, Office of City Forest Management, which is responsible for the trees and plants that are in the public right-of-way. Trees are an integral part of the City's mitigation against rising climate change. The urban forest can change the look and feel of neighborhoods and protect vulnerable populations. The CFO coordinates the City's resources to develop an Urban Forest Management Plan (Plan) with City departments and community partners working from integrated data with a mission to equitably implement the Plan. The goals of the CFO are to plant 90,000 trees and increase tree canopy by at least 50 percent by 2028 in areas with the least shade.

Emergency Management Department

In June 2000, the City authorized the establishment of the Emergency Preparedness Department, which was subsequently renamed the Emergency Management Department (EMD). The work assigned to EMD, among other responsibilities, involves understanding the impacts of climate emergencies. The purpose of the department is to ratify the existence of a local emergency and maintain liaisons with other governmental agencies, and to disseminate information for the public's health and safety.

PROPOSED GOVERNANCE STRUCTURE FOR THE CHIEF HEAT OFFICER

The Climate Emergency Mobilization Office (CEMO) consistently addresses the work and goals outlined in the Motion (Krekorian – O'Farrell) regarding the establishment of a Chief Heat Officer. The CEMO staff has extensive education in public health and data analysis which are crucial components of establishing a proper urban heat response. At its inception and articulated in the Administrative Code pertaining to CEMO (Ord. No. 187126), the Office is responsible for preparing strategic implementation plans, measuring and tracking greenhouse gas emissions, developing emergency and non-emergency climate mitigation plans, developing annual climate emissions and pollution budgets, and coordinating public education and stakeholders in the community. CEMO has commenced work to address the serious climate risks of extreme heat on population's with comorbidities such as heart disease and asthma. The Office is currently working on a systemic approach to the City's various mitigation responses.

Additionally, CEMO is collaborating with Los Angeles County and its public health and sustainability offices to participate in the development of a Climate Vulnerability Assessment that aims to address heat issues and hazard mitigation of smoke on both people and buildings.

CEMO is also currently establishing meaningful ties to the public through the development of a series of Community Assemblies, where it will invite environmental professionals, advocates, and interested citizens to meet and review collected data and jointly develop responses to inform the area's policy-makers.

Finally, CEMO is working with the EMD to secure funding opportunities with the State to build capacity in climate emergency preparedness, and is considered a finalist for the funding.

CONCLUSION

Based on the analysis of the roles of all the potential agencies and their specific missions, it is recommended that a City Heat Officer (CHO) function be established within CEMO and to integrate its responsibilities with the Executive Director of CEMO; thereby designating the Executive Director of CEMO as the CHO. There, the tasks and purpose of the CHO can be included into the CEMO mission with continued collaborative work with EMD, City Planning, other departments, and the public in order to achieve the City's climate impact mitigation objectives.

The CHO would be tasked with setting metrics and tracking data on urban heat and on extreme cold and wet weather events. In addition to spearheading the formulation of the Urban Heat Action Plan, it would be charged with engaging the community to plan a proper governmental response, and develop inter-agency policies that utilize common marketing and public education strategies.

Ordinance Amendment/Recommended Position Authority/CEMO Resources

In order to designate the Executive Director of CEMO as the CHO, in addition to its existing responsibilities, it is recommended that the City Council request the City Attorney to prepare a draft ordinance which amends the Administrative Code (Ord. No. 187126) to that effect. In addition, it is recommended that the City Council instruct the CEMO to prepare and submit a budget request to the City Administrative Officer (CAO) for resources needed during Fiscal Year 2022-23 to effectively perform the duties and tasks associated with the Chief Heat Officer function, as well as direct the CAO, with assistance from Personnel Department, to report to the City Council with recommendations regarding the reallocation of existing position authorities, new position authorities, account appropriations and source of funds that said budget request from CEMO may require.

The CLA has discussed these recommendations with CEMO, and CEMO is supportive of integrating the CHO function within its operations. The CEMO recognizes the strong correlation between its mission and the CHO's core function.

FISCAL IMPACT

There is no fiscal impact associated with approval of this report's recommendations. The fiscal impact of creating the CHO function within CEMO would be discussed in the subsequent report from CAO on this matter.