



**RESOLUTION NO. 22-647-3**

**A RESOLUTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS AFFIRMING A DROUGHT AND WATER SHORTAGE EMERGENCY IN THE SCAG REGION AND CALLING ON LOCAL AND REGIONAL PARTNERS TO JOIN TOGETHER TO ADOPT AN "ALL OF THE ABOVE" RESPONSE TO SUCH EMERGENCY, INCLUDING REDUCE-REDUCING WATER USE; IMPROVE-IMPROVING WATER CONSERVATION, REUSE, AND EFFICIENCY; ENHANCE-ENHANCING WATER SYSTEMS' HEALTH AND RESILIENCE; PURSUING AND POTENTIALLY IMPLEMENTING NEW WATER SUPPLY AND STORAGE OPPORTUNITIES; AND SUPPORTING INVESTMENTS IN WATER INFRASTRUCTURE AND CONSERVATION PRACTICES THAT SUPPORT THE REGION'S ECONOMIC AND POPULATION GROWTH AND FOSTERS PLANNING FOR THE REGION'S HOUSING NEEDS IDENTIFIED IN CONNECT SOCIAL**

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**WHEREAS**, the Southern California Association of Governments (SCAG) is the largest metropolitan planning organization (MPO) in the United States covering six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura), and serving approximately 19 million people within 197 jurisdictions pursuant to 23 USC § 134 et seq. and 49 USC § 5303 et seq.; and

**WHEREAS**, SCAG is responsible for bringing Southern California's diverse residents and local partners together with unifying regional plans, policies, and programs that result in healthy, livable, sustainable, and economically resilient communities; and

**WHEREAS**, clean, safe, affordable, and reliable water supply is central to Southern California's people, economy, and natural systems; and

**WHEREAS**, the conservation, ~~and~~ replenishment, and development of water supplies, mitigation of future water supply shortages, and investment in sustainable water infrastructure are essential to ensuring the health, safety, and welfare of communities, agriculture, and the environment, and to supporting the projected economic and population growth of the region; and

**WHEREAS**, investments in sustainable water infrastructure are required to support the 1.3 million units of housing required in the 6<sup>th</sup> cycle Regional Housing Needs Allocation (RHNA) including recycled water systems; greywater capture and reuse; groundwater recharge; and urban runoff capture; and

**WHEREAS**, climate change will continue to threaten California's water supply and water quality resulting from a combination of persistent and extreme drought conditions, increased volatility in precipitation, continued reductions in snowpack,

unsustainable use of groundwater, decreased soil moisture, and higher overall in-stream temperatures<sup>1</sup>; and

**WHEREAS**, higher temperatures associated with climate-related extreme heat conditions will continue to increase demand for water use, reduce available water supply and groundwater replenishment rates due to environmental factors<sup>2</sup>; and

**WHEREAS**, infill and multifamily development generally require less water than expansive regional development patterns, and the type of new development has a significant bearing on more water use to maintain lawns and other landscaping<sup>3</sup>; and

**WHEREAS**, in July 2020 the State released a Water Resilience Portfolio that includes a set of actions to meet California’s water needs through the 21st century, with principles that include prioritizing multi-benefit approaches that meet several needs at once; utilizing natural infrastructure such as forests and floodplains; embracing innovation and new technologies; encouraging regional approaches among water users sharing watersheds; and incorporating successful approaches from other parts of the world; and

**WHEREAS**, in August 2022 the State released a Water Supply Strategy that lays out a series of actions aimed at preparing for an estimated 10% decrease in California’s water supply by 2040 due to higher temperatures and decreased runoff by developing new water through recycling and desalination; capturing and saving more stormwater, above ground and below ground; reducing use of water in cities and on farms; and improving all water management actions with better data, forecasting, conveyance, and administration of water rights; and

#### **SUPPLY THREATS**

**WHEREAS**, on April 21, May 10, July 8, and October 19, 2021, Governor Newsom issued proclamations that a state of emergency exists statewide due to severe drought conditions and directed state agencies to take immediate action to preserve critical water supplies and mitigate the effects of drought<sup>4</sup>; and

**WHEREAS**, on January 18, 2022 and June 10, 2022, the State Water Resources Control Board adopted two emergency regulations to help conserve water as climate change continues to disrupt California’s water system<sup>5</sup>; and

**WHEREAS**, the Colorado River Basin supplies approximately 55–25 percent of Southern California’s water<sup>6</sup>, and, on August 16, 2021, the US Department of the Interior declared the first-ever

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<sup>1</sup> Governor’s Office of Planning and Research, California Energy Commission, and California Natural Resources Agency (2019). *California’s Fourth Climate Change Assessment Statewide Summary Report*.

<sup>2</sup> Ibid.

<sup>3</sup> SCAG (2020). *Connect SoCal, Sustainable Communities Strategy Technical Report*,

<sup>4</sup> State Water Resources Control Board (May 24, 2022). *Resolution 2022-0018 TO ADOPT AN EMERGENCY REGULATION TO REDUCE WATER DEMAND AND IMPROVE WATER CONSERVATION* State Water Resources Control

<sup>5</sup> State Water Resources Control Board (2022). *Water Conservation Portal, Water Conservation Emergency Regulations*.

<sup>6</sup> [Metropolitan Water District of Southern California. Our Foundation: Securing Our Imported Supplies.](#)

water shortage declaration in history for the Colorado River Basin as water flows and reservoir levels have dramatically declined due to climate change; and

**WHEREAS**, groundwater is a critical resource that accounts for 40 percent of California’s total annual water supply in normal years and almost 60 percent in drought years when surface water is less available, but California’s current groundwater levels are strained with approximately 63 percent of monitoring wells at historic lows<sup>7</sup> and groundwater overdraft has led to land subsidence and damage to infrastructure, drying up of local wells, depletion of streamflows, and decreased water quality<sup>8</sup>; and

#### **ECONOMIC THREATS**

**WHEREAS**, recent analysis from University of California, Davis estimates that the 2016 drought in California resulted in over \$600 million in direct economic damages (annual losses) and resulted in the loss of 4,700 jobs<sup>9</sup>; and

**WHEREAS**, pressures from climate change, sanitation and water quality needs, and necessary infrastructure upgrades are placing increasing strain on water prices. Estimates of the cost to replace aging infrastructure in the United States are projected to be over \$1 trillion dollars in the next 20 years to replace outdated systems and could triple the cost of household water bills<sup>10</sup>; and

**WHEREAS**, California spends about \$37 billion annually on its water system, with 84 percent of funding coming from local water bills and taxes, and urban utilities must raise funds to replace aging infrastructure, comply with requirements, and update infrastructure to adapt to climate change<sup>11</sup>; and

**WHEREAS**, projected increases in water rates over the next five years estimate that the percentage of U.S. households who will find water bills unaffordable could triple from roughly 12 percent to over 35 percent<sup>12</sup>; and

**WHEREAS**, monthly water bills have been growing two to three times faster than inflation in California’s urban areas and lower-income households across California face growing affordability challenges as water bills increase, with nearly 13 percent statewide of single-family households with water bills that exceed 2 percent of their annual incomes<sup>13</sup>; and

**WHEREAS**, water bills have been rising faster than inflation in many parts of California to cover rising costs and State Water Board estimates that 21 percent of California’s water systems have water

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<sup>7</sup> State of California Department of Water Resources. *California’s Groundwater Live Current Groundwater Conditions*.

<sup>8</sup> Cooley, H. et al.( Apr. 2022). *The Untapped Potential of California’s Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture*.

<sup>9</sup> Medellín-Azuara, J. et al. (2016). *Economic Analysis of the 2016 California Drought on Agriculture*.20.

<sup>10</sup> Mack, E, and Wrase, S (2017). *A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States*.

<sup>11</sup> Chappelle, C. et al. (May 2021). Public Policy Institute of California. *Paying for California’s Water System*.

<sup>12</sup> Ibid.

<sup>13</sup> Hanak, E. et al. (Mar. 2014). Public Policy Institute of California. *Paying For Water in California*.

rates that are unaffordable (i.e., cost 1.5 percent or more of median household income) for basic needs<sup>14</sup>; and

**WHEREAS**, renters and low-income households are less likely to participate in water conservation and efficiency programs<sup>15</sup>; and

#### **AGRICULTURE/NATURAL LAND/HEAT THREATS**

**WHEREAS**, agriculture is an invaluable asset to the SCAG region but agricultural production is increasingly vulnerable to drought impacts, water shortages, and over-reliance on groundwater to withstand droughts<sup>16</sup>; and

**WHEREAS**, the direct economic impacts of prolonged drought on water quality and agriculture at national level are estimated to be greater than \$3 billion annually<sup>17</sup>; and

**WHEREAS**, the 2021 drought directly cost the California agricultural sector \$1.2 billion and approximately 8,745 jobs<sup>18</sup> and the total impacts including other economic sectors are estimated at \$1.7 billion and 14,634 jobs; and

**WHEREAS**, climate change related increases in extreme heat days reduce available water supply through evapotranspiration, and can lead to deadly pathogens in freshwater sources<sup>19</sup>; and

**WHEREAS**, low water storage levels and water right curtailments as a result of drought reduced surface water deliveries to farms in 2021 and water shortages led to an additional estimated 395,000 acres of idled land and an estimated \$1.1 billion in crop revenue losses and increased pumping costs due to deficit irrigation<sup>20</sup>; and

**WHEREAS**, the Colorado River is the Imperial Valley's only source of water and the Imperial Valley has been using less water, conserving over 7 million acre-feet of the Colorado River and California's water supplies<sup>21</sup>; and

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<sup>14</sup> Chappelle, C. and Hanak, E. (May 2021). Public Policy Institute of California. *Water Affordability in California Fact Sheet*.

<sup>15</sup> Pierce, G. et al. (Mar. 25, 2021). *Solutions to the problem of drinking water service affordability: A review of the evidence*.

<sup>16</sup> Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency (2019). *California's Fourth Climate Change Assessment Statewide Summary Report*.

<sup>17</sup> Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency (2019). *California's Fourth Climate Change Assessment Statewide Summary Report*.

<sup>18</sup> Medellín-Azuara, J. et al. (2022). *Economic Impacts of the 2021 Drought on California Agriculture. Preliminary Report*.

<sup>19</sup> UNICEF (Mar. 18, 2022). *Water and the global climate crisis: 10 things you should know*. W

<sup>20</sup> Escriva-Bou, A. et al. (Apr. 2022). Public Policy Institute of California. *Policy Brief: Drought and California's Agriculture*.

<sup>21</sup> Hanks, J. (Jun. 16, 2022). *IID Board President Issues Statement on Federal Hearing Examining Solutions to Extreme Drought in Western U.S.*

**WHEREAS**, in June 2022, the Federal Bureau of Reclamation requested that states and Tribes in the Colorado River Basin, including California and the Imperial Valley that depends on water from the Colorado River, will need to collectively conserve between 2 to 4 million-acre feet in 2023<sup>22</sup>;

**WHEREAS**, extreme heat increases demand for potable drinking water to offset certain heat-related health impacts<sup>23</sup>; and

#### **OPPORTUNITIES**

**WHEREAS**, conserving water and local water supplies can support climate change mitigation and adaptation, as saving water and replacing imported water with water reuse and stormwater capture requires less energy and reduces greenhouse gas emissions<sup>24</sup>; and

**WHEREAS**, water systems that rely on groundwater tend to have lower rates, as treatment and delivery costs are relatively low<sup>25</sup>; and

**WHEREAS**, natural areas play an important role in groundwater recharge, protecting watershed and riparian areas, and ensuring clean drinking water for the region, and on October 7, 2020, Governor Newsom issued the Nature-Based Solutions Executive Order N-82- 20, that committed California to the goal of conserving 30 percent of our lands and coastal waters by 2030<sup>26</sup>; and

**WHEREAS**, water conservation is the easiest, most efficient, and most cost-effective way to quickly reduce water demand and extend limited water supplies<sup>27</sup>; and

**WHEREAS**, within Metropolitan Water District of Southern California’s service area, the percentage of local water supplies has increased, providing over 50 percent of the water used in 2020 through use of groundwater, local surface water, recycled water, and recovered groundwater<sup>28</sup>; and

**WHEREAS, even with greater conservation, our region will remain dependent to some degree on imported water, and it is therefore important for SCAG to join with water suppliers, local jurisdictions, and other agencies in efforts to protect and maintain these imported supplies; and**

**WHEREAS**, many Southern Californians and water suppliers have made progress in reducing water use and improving efficiency; however, water use is outpacing water replenishment and reducing

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<sup>22</sup> Unites States Bureau of Reclamation (June 14, 2022). Colorado River Basin. *Commissioner Touton asks Basin States and Tribes to conserve an additional 2-4 million acre-feet of water in 2023.*

<sup>23</sup> Gisolfi, C. (1993). *Water Requirements During Exercise in the Heat.*

<sup>24</sup> Davis, M. (Jun. 2, 2022). *SCAG Energy and Environment Committee, The Evolving Role of Water in Regional Resilience Planning.* 96.

<sup>25</sup> Chappelle, C. and Hanak, E. (May 2021). Public Policy Institute of California. *Water Affordability in California Fact Sheet.*

<sup>26</sup> Executive Department State of California (Oct. 7, 2020). *Executive Order N-82-20.*

<sup>27</sup> State Water Resources Control Board (May 24, 2022). *Resolution 2022-0018 TO ADOPT AN EMERGENCY REGULATION TO REDUCE WATER DEMAND AND IMPROVE WATER CONSERVATION.*

<sup>28</sup> Davis, M. (Jun. 2, 2022). *SCAG Energy and Environment Committee, The Evolving Role of Water in Regional Resilience Planning.* 92.; Cooley, H. et al.(Apr. 2022). *The Untapped Potential of California’s Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture.*

water supply at unsustainable rates, and additional conservation actions and water supply sources are needed to address the region’s water challenges<sup>29</sup>; and

~~WHEREAS, California could further reduce water use by more than 30 percent in cities and suburbs by investing in measures to use water more efficiently; and~~

**WHEREAS**, water is necessary to support growth in Southern California and build much-needed housing for the region, and a compact development pattern and the building of infill housing, along with development of thoughtfully conceived master planned communities that afford a variety of housing types, allows for less water consumption, greater water-efficiency, and lower infrastructure costs<sup>30</sup>; and

**WHEREAS**, Senate Bill 222 establishes the Water Rate Assistance Fund in the State Treasury to help provide water affordability assistance, for both drinking water and wastewater services, to low-income residential ratepayers<sup>31</sup>; and

**WHEREAS**, the United States Conference of Mayors adopted a resolution in June 2022 clarifying that current state and federal funding of Metropolitan Planning Organizations (MPO) primarily supports transportation planning and related land use, stormwater and air quality considerations, and restricts use of funds for planning and technical assistance on many water related issues, which inhibits MPOs from holistically planning for water systems, including groundwater resources and associated infrastructure, resulting in a missed opportunity to integrate the program funding more effectively<sup>32</sup>; and

**WHEREAS**, SCAG has adopted mitigation measures for its most recent long-range plan, Connect SoCal 2020, related to coordinating and working with local jurisdictions and water agencies; encouraging regional-scale planning for improved stormwater management, groundwater recharge, wastewater and stormwater management, water quality management, pollution prevention, and drainage patterns; and fostering the implementation of urban greening, greenbelts, and community separator land use strategies that promote improved water quality, groundwater recharge, watershed health, reduced urban runoff, stormwater and rainwater collection<sup>33</sup>; and

**WHEREAS**, SCAG is developing a Regional Resilience Framework to help local agencies adapt to persistently arid and drought conditions in the region, with guidance and policy direction from the Resilience & Conservation Subcommittee and Energy & Environment Policy Committee;

**NOW, THEREFORE, BE IT RESOLVED** that the Regional Council of SCAG affirms a commitment to support implementing agencies plan for reduced water use; improved water conservation, reuse, and efficiency; enhanced water systems’ health and resilience; and investments in sustainable water

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<sup>29</sup> Mount, J., Ellen Hanak, et. al. (May, 2019). *Water Use in California*. Public Policy Institute of California.

<sup>30</sup> Decker, N. et al. (2020). *Right Type Right Place, Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030*. Terner Center for Housing Innovation.

<sup>31</sup> California Legislative Information (September 1, 2022). *SB-222 Water Rate Assistance Program*.

<sup>32</sup> United States Conference of Mayors (June 2022). *Breaking Silos to Use the BIL Funding for Transportation, Land Use, and Water Planning*.

<sup>33</sup> SCAG (May 2020). *Connect SoCal Certified Final Program Environmental Impact Report*.

infrastructure, supply and storage, and conservation practices that support the region's economic and population growth and fosters planning for the region's housing needs identified in Connect SoCal.

**BE IT FURTHER RESOLVED:**

1. SCAG shall support best practices in resource conservation as well as an integrated planning approaches to help local jurisdictions meet housing production needs in a drier environment.
2. SCAG shall continue to work with local jurisdictions to encourage planning for context sensitive infill, ~~and~~ multifamily, and master planned community housing development to reduce, ~~which shows lower~~ per capita water consumption rates ~~than alternative housing types~~<sup>34</sup>.
3. SCAG shall, through the Resilience & Resource Conservation Subcommittee, further explore regional water challenges and solutions and report findings for consideration by SCAG's Energy & Environment Committee.
4. SCAG's Energy & Environment Committee shall make recommendations to SCAG's Legislative Communications & Membership Committee to support legislative advocacy for increased affordability for low income retail customers, including consideration and funding of a state low-income rate program and state distribution of federal funds through an equity lens, and increased resources for water infrastructure, including investments in repairs, modernization, and enhancements of the region's aging infrastructure and related imported water supply infrastructure, that can serve the community and regional needs of Southern California and ensure effectiveness, efficiency, and resiliency of the region's water systems
5. SCAG shall coordinate with local jurisdictions, water agencies and organizations, the State, and other stakeholders, including social and environmental justice organizations, housing and business groups, and public health organizations, to foster adoption of alternative groundwater recharge technologies, such as permeable pavements, surface infiltration, and well injection systems, and best practices to increase and maintain a sustainable water supply for the region.
6. SCAG will explore opportunities to support implementation of green infrastructure, greywater usage systems and policy, including the development of model ordinances and training and education programs, as well as urban cooling infrastructure with a focus on improving groundwater recharge and reducing water usage in urban areas.
7. SCAG shall hold an Industry Forum and seek national expertise on investments in sustainable water infrastructure that support housing production goals identified in the region's 6<sup>th</sup> Cycle Housing Elements.

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<sup>34</sup> ~~Keifer, J. and Krentz, L. (2018). *Water Use in the Multi-Family Housing Sector*.~~

8. SCAG shall identify, recommend and integrate into Connect SoCal 2024 policies and strategies to align investments in water infrastructure with housing needs and the adopted growth forecast and development pattern.
9. SCAG shall advocate with partners such as the United States Conference of Mayors, the National Association of Regional Councils, and other stakeholders for additional flexibility in the use of state and federal resources to support integrated planning and technical assistance for groundwater resources and associated infrastructure along with transportation, land use, energy, stormwater and air quality, as well as advocate for projects that expand water resources and infrastructure.
10. SCAG staff shall prepare a white paper on the state of water in the region that addresses multiple sectors; addresses issues related to water acquisition, storage, supply, demand and quality; identifies challenges and opportunities to support sustainable and resilient regional development as well as local jurisdictions in developing and implementing water planning efforts in an increasingly arid environment; explores the feasibility and cost-effectiveness of a wide range of strategies under an all-of-the-above approach to addressing the region's water challenges; and includes recommendations for practical ways to support implementing agencies.
11. SCAG staff shall periodically update the Energy & Environment Policy Committee and seek guidance on the implementation of these aforementioned actions.

**PASSED, APPROVED AND ADOPTED** by the Regional Council of the Southern California Association of Governments at its regular meeting this 6<sup>th</sup> day of October, 2022.



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Jan C. Harnik  
President, SCAG  
Riverside County Transportation Commission

Attested by:

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Kome Ajise  
Executive Director

Approved as to Form:

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Michael R.W. Houston  
Chief Counsel