

2019 AAEES West Coast Event Water and Wastewater Agencies Adaptation and Resiliency

- ▶ Los Angeles Region Framework for Climate Change Adaptation and Mitigation
- ▶ Jim Stahl, P.E., BCEE
- ▶ Member of the Los Angeles Regional Water Quality Control Board



Los Angeles Regional Water Quality Control Board

Potential Regulatory Adaptation and Mitigation Measures

April 2019



Note: This framework is intended to foster discussion among the Los Angeles Water Board, the regulated community, and other stakeholders as well as help inform work plan development within the Los Angeles Water Board's programs. The framework does not establish new policies or requirements.

Los Angeles Region Framework for Climate Change Adaptation and Mitigation

Potential Regulatory Adaptation and Mitigation Measures

This report is available online at:
[https://www.waterboards.ca.gov/losangeles/
water_issues/programs/climate_change/](https://www.waterboards.ca.gov/losangeles/water_issues/programs/climate_change/)

Los Angeles Regional Water Quality Control Board

The Los Angeles Water Board started considering climate change issues in 2014 and included the development of a regional climate change strategy as a priority project for the 2014-2016 triennial review. Overall, the objective of this strategy is to protect beneficial uses and water quality under a changing climate, while achieving the following goals:

- ▶ Improve ecosystem resilience,
- ▶ Protect coastal and inland infrastructure and prevent it from failing,
- ▶ Promote groundwater recharge and water recycling,
- ▶ Promote a sustainable watershed approach,
- ▶ Expand monitoring and research to track the effects of climate change and effectiveness of mitigation measures, and
- ▶ Protect vulnerable communities

Vulnerability of Stream Biological Communities in Los Angeles and Ventura Counties to Climate Change Induced Alterations of Flow and Temperature



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SCCWRP Technical Report #1084

Adaptation / Mitigation Measures

Dischargers are required to prepare a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan), including an assessment of short and long term vulnerabilities of the facility(ies) and operations, as well as plans to mitigate vulnerabilities of collection systems, facilities, treatment systems, and outfalls for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

Executive Order N-10-19

WHEREAS, water is a human right, and is central to California's strength and vitality; and

WHEREAS, we face a range of existing water challenges, including unsafe drinking water across the state, major flood risks that threaten public safety, severely depleted groundwater aquifers, agricultural communities coping with uncertain water supplies, and native fish populations threatened with extinction; and

WHEREAS, climate change is having a profound impact on water and other resources, making the climate warmer and more variable, which reduces mountain snowpack, intensifies drought and wildfires, and drives shorter, more intense wet seasons that worsen flooding; and

WHEREAS, California continues to grow, with our population projected to grow to 50 million over the next several decades and our economic activities expanding as the world's fifth largest economy; and

WHEREAS, the future prosperity of our communities and the health of our environment depend on tackling pressing current water challenges while positioning California to meet broad water needs through the 21st century; and

WHEREAS, many state programs, policies and investments are being implemented, such as the Sustainable Groundwater Management Act and new urban water efficiency standards, that can be built upon to meet these evolving challenges; and

WHEREAS, providing clean, dependable water supplies to communities, agriculture, and industry while restoring and maintaining the health of our watersheds is both necessary and possible; and

WHEREAS, achieving this goal requires a broad portfolio of collaborative strategies between government, sovereign tribes, local communities, water agencies, irrigation districts, environmental conservationists, academia, business and labor leaders, and other stakeholders.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power and authority vested in me by the Constitution and the statutes of the State of California, do hereby issue this Order to become effectively immediately.

- ▶ Signed April 29, 2019
- ▶ Directs California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), and California Department of Food and Agriculture (CDFA) to:
- ▶ Prepare a water resilience portfolio that meets the needs of California's communities, economy, and environment
- ▶ Expand and/or reassess the priorities in the California Water Action Plan

PLANNING FOR 2050



**50 million
Californians
(+10 Million)**



**Water
Supply
Certainty**



**5 degrees
warmer on
average from
2050-2100**



Ongoing Challenges

- ▶ CEC' s: PFAS; Microplastics
- ▶ Residuals: Brine: Biosolids
- ▶ Water Reuse: Project(s) Implementation; Raw Water Augmentation Regulations
- ▶ Stormwater: MS4; Measure W
- ▶ Funding: Cost & Cost Effectiveness

