SENATE COMMITTEE ON HOUSING
Senator Scott Wiener, Chair
2023 - 2024 Regular

Bill No:	SB 597	**Hearing Date:**	4/18/2023
Author:	Glazer		
Version:	3/21/2023		
Urgency:	No	**Fiscal:**	Yes
Consultant:	Aiyana Cortez		

SUBJECT: Building standards: rainwater catchment systems

DIGEST: This bill requires the Department of Housing and Community Development (HCD) to develop and propose the development of mandatory building standards for the installation of rainwater catchment systems in newly constructed residential dwellings.

ANALYSIS:

Existing law:

1) Requires a state agency to adopt specific building standards and to publish editions of the California Building Standards Code in its entirety once every 3 years.

2) Establishes the Building Standards Administration Special Revolving Fund, and makes the moneys in the fund available, upon appropriation, to state entities to carry out various related provisions, as specified.

3) Establishes the California Building Standards Commission (CBSC) within the Department of General Services (DGS) and sets forth its powers and duties, including approval and adoption of building standards and codification of those standards into the California Building Standards Code.

4) Requires any building standard adopted or proposed by state agencies to be submitted to, and approved or adopted by, the CBSC prior to codification.

5) Requires the HCD to propose to the commission the adoption, amendment, or repeal of building standards for, among other things, the installation of recycled water systems for newly constructed single-family residential and multifamily residential buildings, as specified.

6) Establishes, within the California Environmental Protection Agency (Cal-EPA), the State Water Resources Control Board (SWRCB) for the purposes of orderly and efficient administration of the state's water resources.

7) Establishes the Department of Water Resources to manage the State Water Project, statewide water resources plaining, sustainable groundwater management, water use efficiency, drought planning, and more.

8) Establishes the Department of Public Health to protect public health through infectious disease control and prevention, environmental health, and more.

This bill:

1) Requires HCD to conduct research to assist in the development of mandatory building standards for the installation of rainwater catchment systems in newly constructed residential dwellings.

2) Requires HCD to develop these standards in consultation with:

   a) SWRCB
   b) Department of Water Resources
   c) State Department of Public Health
   d) Local water agencies and districts
   e) And other interested parties.

3) Requires HCD research for these standards to include, but not limited to:

   a) The costs, benefits, and feasibility of including some or all of the provisions of the California Plumbing Code regulating nonpotable rainwater catchment systems.
   b) The rainwater catchment system mandates in other states or local jurisdictions.
   c) The cost and feasibility of installation and the overall benefit to be gained.

4) Requires HCD to submit these proposed standards for consideration during the next regularly scheduled triennial code adoption cycle that commences on or after January 1, 2025.

5) Authorizes amendments or repeals of these standards as necessary in subsequent code adoption cycles.

6) Authorizes the expenditure of funds from the Building Standards Administration Special Revolving Fund for the requisite activities.

COMMENTS:

1) *Author's statement*. "California's current storm water capture systems are inadequate, resulting in the loss of trillions of gallons of water during recent atmospheric rivers. According to the US Bureau of Reclamation, 95% of the water flowing into the state's delta went into the Pacific Ocean, while severe flooding claimed several lives. Developing better methods to collect storm water can reduce the risk of flooding and help the state meet its water needs. Furthermore, landscaping accounts for roughly half of all residential and urban water use, making it a significant area for possible water savings. Capturing storm water can help ease water needs for landscaping, as well as be used for other purposes such as irrigation and toilet flushing. Therefore, the bill proposes mandatory installation of rainwater capture systems on new homes in California that meet certain requirements to address these inadequacies and reduce water demand for landscaping."

2) *Climate change, drought, and water shortages*. Climate change is undeniable and models indicate it will drive temperatures higher in the future. Climate change will stress water resources and its management like no other time in recorded history. California's predominantly Mediterranean climate has always posed challenges for water management in the state. This climate is characterized by hot, dry summers and wet, moderately-cool winters. Annual precipitation varies greatly across the state with the majority of precipitation falling north of Sacramento. Year-to-year variability in precipitation is another hallmark of California's climate with swings between prolonged wet and dry periods.

   Evidence overwhelmingly reveals that the modern California climate is different today than the climate of a century ago when California's water law first developed. Since the beginning of the 21st century, average temperatures have risen almost 3°F in California with the hottest six years on record occurring since 2014.[1] Likewise, California has experienced its two most severe dry periods on record since 2000 (2012–16 and 2020–present) and researchers now report that the state has, in fact, been experiencing a "megadrought" since the turn of the century. This "megadrought" appears to be the worst such drought since the year 800, and its severity is due, in large part, to climate change.[2]

[1] Frankson et al. California State Climate Summary 2022. NOAA Technical Reports. https://statesummaries.ncics.org/chapter/ca/
[2] Williams et al. Large contribution from anthropogenic warming to an emerging North American megadrought. 2020. DOI: 10.1126/science.aaz9600

3) *California's water supply strategy for building drought resiliency*. In August 2022, Governor Newsom released this strategy to address a projected 10% decrease in water supply by 2040 due to climate change. To address this shortfall, the strategy sets targets and outlines actions for increased water recycling, desalination, rainwater and stormwater capture, and water conservation, as well as an expansion of surface and underground storage. A 2022 report from the Public Policy Institute of California highlights the requirement for more than just individual conservation efforts to protect Californians from the ongoing effects of climate change –continued investments in drought resilient infrastructure, including the diversification of water sources, capturing storm runoff, and water reuse and recycling projects.[3]

4) *Where are rainwater catchment systems already*? According to the United States Department of Energy Efficiency and Renewable Energy, rainwater capture systems can be used for landscape irrigation, toilet flushing, vehicle washing, and ornamental pond and fountain filling. Two US cities, Tucson, Arizona and Santa Fe, New Mexico, already mandate installation of rainwater capture systems for select construction. Across the globe, cities in India, Australia, Belgium, and Bermuda have established requirements for rainwater harvesting on all new construction.

5) *Benefits and costs of rainwater capture.* In a state with growing water scarcity rainwater is increasingly seen as an opportunity for augmenting water supplies and enhancing resilience. Reducing demand for potable water and keeping more water in storage helps reduce pressure to import water from other watersheds. A 2022 report from the Pacific Institute estimates California's rainwater capture potential from just single-family urban households utilizing rain barrels to be 4,700 acre-feet per year.[4] While rainwater capture in single-family households represents a small fraction of the available stormwater in California and household non-potable demand, they report rainwater capture systems saves households money, reduces runoff that carries pollution into nearby waterways, and supports green space in and around homes. Consideration of the impact of installation on housing development costs should be made. Rainwater catchment systems can range from a few hundred dollars to tens of thousands of dollars depending on the size and storage options.[5] *The author may wish to consider including language allowing for the exemption of affordable and high-density multifamily housing.*

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[3] Mount et al. Priorities for California's Water. PPIC. 2022. https://www.ppic.org/publication/priorities-for-californias-water/
[4] Cooley et al. The Untapped Potential of California's Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture. Pacific Institute. 2022. https://pacinst.org/publication/california-urban-water-supply-potential-2022/
[5] Kissam. Rainwater Collection System Cost by Type. 2022. https://www.angi.com/articles/rain-collection-systems-cost.htm

6) *Establishing building standards.* The legislature typically offers guidelines, or directs agencies to consider specific standards, in order to provide flexibility. After the proposal of building standards by state agencies, the standards undergo a public vetting process. A code advisory committee, composed of experts in a particular scope of code, reviews the proposed standards, followed by public review. The proposing agency considers feedback and may then amend the standards and re-submit them to the CBSC for consideration. The codes are updated every three years with an intervening cycle every 18 months. The next code adoption cycle is currently underway and set to become effective in 2026.

7) *Opposition.* California Building Officials (CALBO) are opposed SB 597 unless amended. According to CALBO, "By requiring new mandatory building standards without research behind best practices and the implications of these new requirements to developers, there could be significant economic implications that may further exacerbate California's housing crisis." They recommend changing the requirement to submit proposals for adoption of new mandatory standards to language that is less prescriptive.

RELATED LEGISLATION:

AB 836 (Gabriel, 2021) — would have required all newly constructed nonresidential buildings be constructed with dual plumbing and provide for the collection, onsite treatment, and reuse of available onsite rainwater, amongst other things. *This bill died in the Assembly Environmental Safety and Toxic Materials committee*.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

POSITIONS: (Communicated to the committee before noon on Wednesday, April 12, 2023.)

SUPPORT:

A Voice for Choice Advocacy
Mono Lake Committee

OPPOSITION:

California Building Officials

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