



WATER-SMART HOUSING DEVELOPMENT

Addressing Sprawl and Affordability Concerns through Water and Land Use Integration



Local
Government
Commission

Leaders for Livable Communities

As California communities grow and build housing to meet increasing demand, where and how we choose to build has significant implications for our natural resources, particularly our water.

California is in the midst of a housing crisis. There are simply not enough homes for the state's growing population. In total, the state is estimated to have a housing gap of approximately 3.5 million homes through 2025.¹ California is not currently keeping up with the pace needed to accommodate our expected population growth of 4 million residents by 2030.² While developers and planners throughout the state are attempting to provide housing to serve the growth, experts are weighing in on other housing-related factors such as climate change, sprawl, social inequity, and access to resources. Simultaneously, disparities in water access are closely intertwined with the housing affordability crisis.

Overcoming both water and development challenges requires better coordination between community advocates, local governments, state agencies, and policymakers across the state.

1 Woetzel, Jonathan, et al. "A tool kit to close California's housing gap: 3.5 million homes by 2025." McKinsey Global Institute (2016): 307-329.

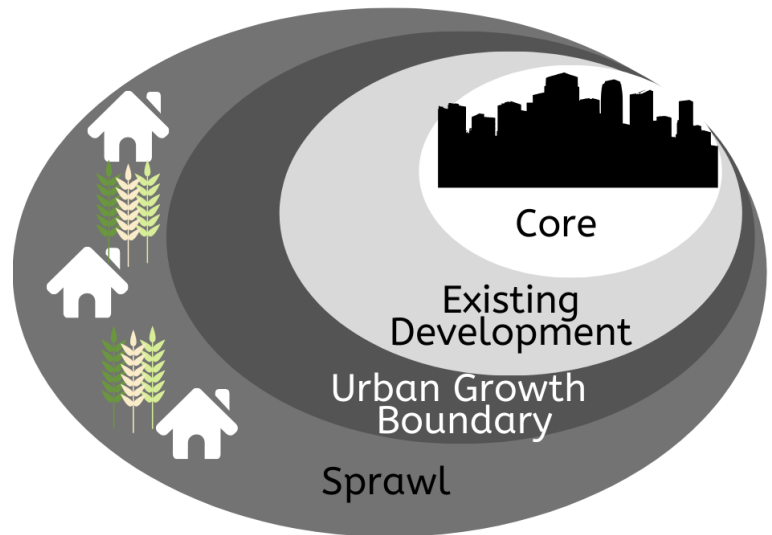
2 Johnson, H., Cuellar Meja, M., & Hill, L. (2019). California's Future: Population. Public Policy Institute of California. San Francisco.; Dixon, J. A., Easter, K., & Hufschmidt, M. M. (1986). Watershed resources management: an integrated framework with studies from Asia and the Pacific. No.556.18 WAT.

The Consequences of Historic Development

Conventional development of sprawl, and a preference toward low density, single-family homes contribute to unintended consequences — longer commute times, poor air quality, increased flood risk from stormwater runoff, and higher water costs. Census data shows that two-thirds of the residences in California are single-family homes. According to a residential land-use survey conducted by the Turner Center from 2017 to 2018, between half and three-quarters of the developable land in much of the state is zoned for single-family housing only.

Additionally, 60% of new homes built in California, Oregon, and Washington since 1990 are in the Wildland Urban Interface.³ According to the Construction Industry Research Board, five large wildfires of the past two years have destroyed more than 85% of new housing built in the counties where the fires were. Dispersed housing limits the viability of public transit, biking, or pedestrian options, further exacerbating unaffordability for low-income communities.

As the state strives to meet housing demand, there is significant risk that new development will follow historic patchwork patterns and further sprawl, limiting resilience and equity across California.



Similarly, water resource infrastructure development has followed a path of disconnected growth. Organizations, agencies, and departments bifurcated to manage single components of the water system — from flood control to wastewater treatment — each sector became increasingly specialized and isolated from the system as a whole. The lack of connection between water management structures—both physical and institutional infrastructure — poses a significant barrier to working toward shared goals and resilience, such as water reuse and conservation.

The dis-integration of both the housing development and water management sectors limits the ability of each to work together toward addressing the housing-affordability, water-accessibility nexus.

³ Ahearn, Ashley. "We're Putting Homes On Wild Lands And In The Path Of Wildfires." Oregon Public Broadcasting, OPB/EarthFix, 16 Aug. 2018.

The Implications of the “Human Right to Water” for Housing Development

One of the unintended consequences of California’s fractured water management system is a widespread lack of access to safe and affordable drinking among the state’s most vulnerable communities.

Following the 2010 UN Declaration, California was the first state in the nation to legislatively acknowledge the “Human Right to Water.” Assembly Bill 685 requires safe, clean, affordable, and accessible drinking water and sanitation for the state’s nearly 40 million residents. Though state law recognizes this basic human right, it does not codify how it will meet the needs of the more than one million residents currently lacking access to safe and reliable drinking water or the 1.7 million Californians who do not have complete plumbing facilities.⁴



California’s housing deficit is particularly difficult for low-income community members. As cost-of-living rises for housing, transportation, food, and other basic needs, many residents can no longer afford to live in the communities they call home.

Economic gentrification leads to displacement for many, and homelessness among our most underserved community members. Today, there are an estimated 130,000 individuals experiencing homelessness in the state of California.⁵

Californians without shelter lack reliable access to water for drinking, cooking and sanitation, making them vulnerable to a wide range of otherwise preventable health risks and contributing to broader public health and safety concerns for communities at large. Without adequate access to sanitation facilities, those experiencing homelessness have to rely on public bodies of water for these purposes, contaminating waterways and causing public health risks. The lack of sanitation facilities for Sacramento County’s more than 5,000 unhoused residents led to an E. Coli outbreak along the American River. This issue is not isolated; many of California’s big cities have pollution issues from homelessness, which quickly move downstream and impact the entire watershed.

4 Feinstein, Laura, and Gabriel Daiess. “Plumbing the Depths: Californians Without Toilets and Running Water.” Pacific Institute. July 2019.
5 Cuellar Mejia, Marisol, and Vicki Hsieh. “A Snapshot of Homelessness in California.” Public Policy Institute of California, 13 Aug. 2019.

Access to safe, affordable water intersects with the need to provide affordable housing for California’s burgeoning population. Communities cannot expand affordable housing stock to accommodate population growth without ensuring access to safe and affordable water for that new housing stock and growing population.

Building With Water in Mind

Despite the connection between water and housing, local governments are provided few incentives to pursue affordable housing solutions in tandem with improving water access and reliability.

With mounting pressure to grow and minimal guidance how this growth should be pursued, it is critical for local and regional planning authorities to use strategies that will tackle their water and housing goals concurrently.



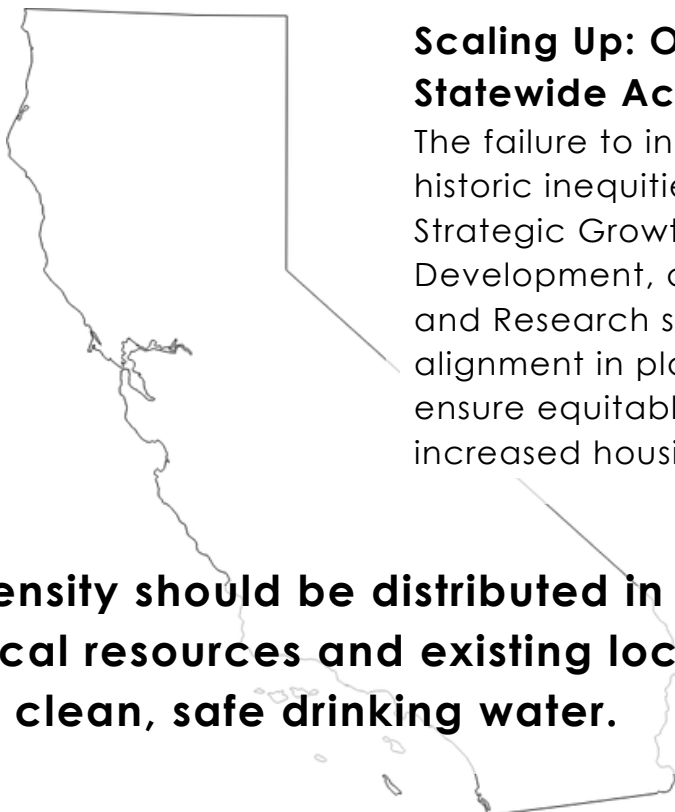
One solution is incentivizing developers to secure a long-term sustainable water supply before building new homes. Current legislation requires developers to do water supply assessments and/or get verifications from water agencies that they can supply adequate water for the new development⁶. However, these requirements do not ensure alignment among plans and also do not require the water agency to explicitly state how it will provide the requested water, where it will come from, and or what it will cost. Development that identifies long-term, sustainable water supply for new residents can shelter households from water rate hikes due to high-cost imported water or infrastructure expansion. In conjunction with ensuring adequate supply, developers and homeowners can adopt efficiency and conservation measures, respectively, to manage the impact of housing growth on water demand. Large scale water conservation and efficiency measures can play a significant role in decreasing both local and regional demand, particularly in rapidly growing areas of the state.

Resilient growth patterns are characterized by development that is compact, infill, walkable and close to transit, and preserves permeability and green spaces. Green infrastructure mimics and enhances our natural environment, contributing to water resilience by retaining water resources onsite and recharging local aquifers.



Low-impact development methods that utilize green infrastructure for stormwater management are cost-effective for developers and local governments, and also increase property value. Water-smart development emphasizes the revitalization of existing neighborhoods. By investing and redeveloping in areas that have suffered from disinvestment, local governments avoid costs associated with constructing new infrastructure and preserve open space by slowing the conversion of undeveloped land.

Each of California's cities, counties and communities faces its own unique housing-related challenges due in part to variations in population density, development patterns, microclimates, and cultural preferences. To meet each region's growing population, adequate housing solutions need to include high density development. Equitable implementation calls for new housing to accommodate a range of income levels and to prevent displacing existing residents. While this balance will vary from region to region according to each locality's specific characteristics and housing needs, developers across the state need to prioritize housing that is both financially and environmentally sustainable.



Scaling Up: Opportunities for Regional and Statewide Action

The failure to integrate planning efforts perpetuates historic inequities in development and investment. The Strategic Growth Council, Housing and Community Development, and the Governor's Office of Planning and Research should provide guidance for regional alignment in planning and housing development, to ensure equitable and sustainable distribution of increased housing and growth.

Density should be distributed in accordance with available local resources and existing local context, including access to clean, safe drinking water.

To best serve their communities, elected officials need to understand the nexus between water and land use issues. Equitable water pricing and housing affordability strategies such as low-income rate assistance and income-based rent structures will greatly assist overburdened residents in their region. Affordability evaluations must include not only direct costs, but also the ability of community members to pay. Those community members who already face disadvantages and are historically underrepresented in decision-making must be effectively engaged to ensure their needs are understood and met.

Cities have an opportunity to ensure equitable water-smart development through stronger incentives and tighter constraints within general plans and zoning codes. For instance, the City of Los Angeles' Measure JJJ provides generous financial incentives and streamlines permitting for priority redevelopment and infill areas, as well as green infrastructure projects and transit-oriented features.

California as a whole must change its relationship with both water management and the housing sector at every scale in response to both a changing climate and a growing population.

While local and regional approaches are important, it is up to the state to provide guidance to ensure that each region has the resources necessary to implement these approaches. The state departments can lead by example through cross-sector collaboration. In turn, they can develop guidance for communities and regions to align planning and development in a manner that is cost-effective, sustainable, equitable, and integrative. Technical assistance to help local jurisdictions conduct analyses of development codes and regulations will assist with streamlining permitting processes to meet the housing demands of a growing population.

The opportunities to integrate sustainable water management into our development needs are endless. With the right leaders and a willingness to shift paradigms, **California is a position to make lasting change** that will serve our regional and statewide needs in the coming years, and serve as a national model. We are at a juncture and now is the time to decide if we are up for the challenge.