ORDINANCE NO. 2022-0031

Adopted by the Sacramento City Council

December 13, 2022

An Ordinance Amending Section 15.24.030 and Adding Sections 15.24.040 and 15.24.050 to the Sacramento City Code to Adopt Local Amendments to the California Building Standards Code, Relating to Alternate Water Systems

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

SECTION 1.

In connection with the local amendments to the 2022 California Plumbing Code set forth below, and pursuant to California Health and Safety Code sections 17958, 17958.5, 17958.7, and 18941.5, the City Council finds and determines that:

A. The amendments are reasonably necessary because of local climatic, geological, or topographical conditions.

B. Under this adopting ordinance, specific amendments are established that are more restrictive than those adopted by the State of California under the State Buildings Standards Code, Title 24 of the California Code of Regulations.

C. Express Finding Number 1: Climatic

"Climate change is having a profound impact on California's water resources, as evidenced by greater weather extremes, reduced snowpack, higher sea level, and changes in river flows."[1] "Increases in temperature are already causing decreases in snowpack. The mountain snowpack provides as much as a third of California's water supply by accumulating snow during our wet winters and releasing it slowly during our dry springs and summers. Warmer temperatures will melt the snow faster and earlier, making it more difficult to store and use throughout the dry season. By the end of this century, California's Sierra Nevada snowpack is projected to experience a 48-65% loss from the historical April 1 average. This significant decrease in snowpack has a direct impact on water supply for Californians."[2]

[1] California Department of Water Resources, Climate Change Program, as of September 8, 2022, https://water.ca.gov/programs/all-programs/climate-change-program.

[2] California Department of Water Resources, Climate Change and Water, as of September 8, 2022, https://water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Change-and-Water.

"The last two decades underscore California's strong propensity for wet and dry periods, with a string of multi-year droughts punctuated by a few spectacular wet years."[3] "Under current water management operations, modeling indicates that the annual volume of water stored in Shasta and Oroville reservoirs, the two largest in the state, could shrink by one-third by the end of the century. This reduced storage could limit water supplies and thus lower resilience to droughts."[4]

"Historically, California has relied heavily on the Sierra Nevada snowpack. Runoff from melting mountain snow is captured and distributed throughout the state via an extensive network of aqueducts."[5] "Water managers may not, on average, be presented with less overall precipitation, but more of it will fall as rain instead of snow, and the snow that does manage to accumulate will melt earlier in the spring. Thus, climate change will jeopardize California's dependence on mountain snowpack as a natural water reservoir which stores water from winter storms and gradually releases it in spring and summer."[6] "Changes in precipitation, reduced snowpack, and more frequent droughts are likely to increase the demand on groundwater sources, risking overdraft, ground subsidence, and decreased water quality."[7] More intense droughts is one of the climate risks facing Sacramento.[8] "The Sacramento Valley is especially prone to water shortages and impaired water quality. Dehydration is a major risk factor for adverse health outcomes, especially during the warm season. The Central Valley will be more prone to droughts and floods arising from increased weather extremes. Extreme floods could pose especially large public health threats (Swain et al. 2015)."[9]

The City of Sacramento's 2020 Urban Water Management Plan and the recently completed American River Basin Plan acknowledge these general climatic trends. The City of Sacramento maintains high priority access to water supply that is stored and dedicated to the City of Sacramento for consumptive use. The City of Sacramento does not anticipate any localized shortages, though supply augmentation projects extend availability of infrastructure capacity. Supply augmentation and conservation programs also align with the goal of meeting long term conservation measures being developed by the State of California.

---

[3] Scripps Institution of Oceanography at UC San Diego, Climate Change Resources, FAQ: Climate Change in California, as of September 8, 2022, https://scripps.ucsd.edu/research/climate-change-resources/faq-climate-change-california.

[4] *Id.*

[5] *Id.*

[6] *Id.*

[7] California Department of Water Resources, Climate Change Basics, as of September 8, 2022, https://water.ca.gov/Water-Basics/Climate-Change-Basics.

[8] Houlton, Benjamin Jay Lund, (University of California, Davis) 2018. Sacramento Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-002, page 6.

[9] *Id.* at page 23.

The following building standards in the 2022 California Building Standards Code are amended or added based upon this express finding:

- 2022 California Plumbing Code section 1503.1.4 (requiring gray water systems for subsurface irrigation for new construction of buildings 10,000 square feet or greater).

- 2022 California Plumbing Code section 1503.3 (adding an exception to allow potable water to supplement a gray water system).

- 2022 California Plumbing Code section 1506.1.1 (requiring installation of a separate additional piping system that could be utilized for an on-site nonpotable gray water systems for new construction of buildings that are 50,000 square feet or greater).

- 2022 California Plumbing Code section 1506.4 (adding an exception to allow potable water to connect to a separate, additional piping system for an on-site treated nonpotable gray water system for water closets and urinals).

- 2022 California Plumbing Code Sections 205.0, 208.0, 209.0, 215.0 225.0 (implementing definitions).

SECTION 2.

A. Section 15.24.030 of the Sacramento City Code is hereby amended as follows:

1. Subsection D is hereby added to read as follows:

D. CPC section 1503.1.4 is added to read as follows:

1503.1.4 Subsurface Irrigation

For building permit applications filed on or after July 1, 2023, buildings that are 10,000 square feet or greater must include a gray water system to provide subsurface irrigation as provided in this chapter.

Exceptions:

(1) Gray water systems are not required for any buildings or parts of a building with a California Building Code, Chapter 3 R-2, R-2.1, R-3, R-3.1, or R-4 occupancy classification.

(2) Gray water systems are not required for additions and improvements, including tenant improvements, in existing buildings as defined in the California Building Code.

(3) Gray water systems are not required for a child-care center; grocery store to be constructed in a food desert; mini storage, locker building; or warehouse, distribution center.

2. Subsection E is hereby added to read as follows:

E. Exception (3) is added to section 1503.3 to read as follows:

(3) A potable water supply may supplement a gray water system to provide subsurface irrigation through the use of an air gap as specified in Table 603.2.

3. Subsection F is hereby added to read as follows:

F. CPC section 1506.1.1 is added to read as follows:

1506.1.1 Installation of separate, additional piping system for on-site treated nonpotable gray water systems

For building permit applications filed on or after July 1, 2023, buildings that are 50,000 square feet or greater must include installation of a separate, additional piping system for an on-site treated nonpotable gray water system for water closets and urinals.

Exceptions:

(1) Installation of a separate, additional piping system for an on-site treated nonpotable gray water system is not required for any buildings or parts of a building with a California Building Code, Chapter 3 R-2, R-2.1, R-3, R-3.1, or R-4 occupancy classification.

(2) Installation of a separate, additional piping system for an on-site treated nonpotable gray water system is not required for additions and improvements, including tenant improvements, in existing buildings as defined in the California Building Code.

(3) Installation of a separate, additional piping system for an on-site treated nonpotable gray water system is not required for a child-care center; grocery store to be constructed in a food desert; mini storage, locker building; or warehouse, distribution center.

4. Subsection G is hereby added to read as follows:

   G. Exception (3) is added to Section 1506.4 to read as follows:

   (3) A potable water supply may be connected to a separate, additional piping system for an on-site treated nonpotable gray water system for water closets and urinals through the use of a reduced pressure principle backflow prevention assembly as specified in Table 603.2. Upon introduction of an on-site treated nonpotable water source to the separate piping system, an air gap shall be installed pursuant to Table 603.2.

5. Subsection H is hereby added to read as follows:

   H. The following definition is added to California Plumbing Code section 205.0:

   Child-care Center. "Child-care center" has the same meaning as defined in California Building Code section 202.

6. Subsection I is hereby added to read as follows:

   I. The following definition is added to California Plumbing Code section 208.0:

   Food Desert. A census tract that has (i) a median household income at or below 80% of the Sacramento County median household income and (ii) at least 33% of the census tract's population living more than one mile from an existing grocery store.

7. Subsection J is hereby added to read as follows:

   J. The following definition is added California Plumbing Code section 209.0:

   Grocery Store. A building or a portion of a building with a California Building Code, Chapter 3, Section 309, Group M occupancy classification with more than 50% gross floor area devoted to the sale of non-taxable merchandise.

8. Subsection K is hereby added to read as follows:

   K. The following definition is added to California Plumbing Code section 215.0:

   Mini storage, locker building. A building that offers individually secured units or surface space for the storage of goods, other than hazardous materials, for rental to the public, each of which is accessible only by the renter of the individual unit or space.

9. Subsection L is hereby added to read as follows:

L. The following definition is added to California Plumbing Code section 225.0:

Warehouse, distribution center. A building used primarily for the long-term or short-term storage of goods and materials awaiting transportation or distribution, and not generally accessible to the general public. Incidental storage, repair, and maintenance of trucks associated with the distribution of goods from the warehouse are allowed.

B. Except as amended in subsections A above, section 15.24.030 of the Sacramento City Code remains unchanged and in full effect.

SECTION 3.

Section 15.24.040 is hereby added to the Sacramento City Code to read as follows:

15.24.040 User-supervisor declaration.

Before the issuance of a certificate of occupancy for a building that includes a gray water system; an on-site treated nonpotable gray water system; or a separate, additional piping system for an on-site treated nonpotable gray water system for water closets and urinals, the building owner shall execute a user-supervisor declaration on a form prescribed by the director of utilities or designee. The user-supervisor declaration must identify the person responsible for the avoidance of cross-connections during the installation, operation, and maintenance of a gray water system; an on-site treated nonpotable gray water system; or a separate, additional piping system for an on-site treated nonpotable gray water system for water closets and urinals.

SECTION 4.

Section 15.24.050 is hereby added to the Sacramento City Code to read as follows:

15.24.050 Operation of gray water system.

At no time during the operation of a gray water system may gray water be used in spray irrigation, be allowed to pond or runoff, or be discharged directly into or reach any storm sewer system or any surface body of water.

Adopted by the City of Sacramento City Council on December 13, 2022, by the following vote:

Ayes: Members Guerra, Harris, Jennings, Loloee, Schenirer, Valenzuela, Vang, and Mayor Steinberg

Noes: None

Abstain: None

Absent: None

Attest: Mindy Cuppy 12/16/2022

Mindy Cuppy, City Clerk

The presence of an electronic signature certifies that the foregoing is a true and correct copy as approved by the Sacramento City Council.

Passed for Publication: November 29, 2022
Published: December 2, 2022
Effective: January 1, 2023