Economic and Fiscal Impact Statement (Form 399)

Attachment – SB 745 Regulations DRAFT

Amend the 2028 California Green Building Standards Code, CCR, Title 24, Part 11

BACKGROUND

This proposed action by the California Building Standards Commission (BSC) adopts mandatory and voluntary green building standards for occupancies within its authority, building upon a framework of mandatory and voluntary measures within CALGreen. BSC's proposed action will support the implementation of the Senate Bill 745, The Drought-Resistant Buildings Act (SB 745, Cortese. Chaptered October 2023), which requires the BSC to "research, develop, and propose building standards… …to reduce potable water use in new nonresidential buildings, including consideration of requiring installation of water reuse systems and consideration of requiring preplumbing of buildings to allow future use of recycled water, onsite treated graywater, or other alternative water sources."

The intent of the proposed regulation is to reduce potable water usage in new nonresidential buildings by elevating existing green building standards related to potable water usage reduction from the voluntary measures in CALGreen Appendix A5 to the mandatory requirements in Chapter 5. Like the current voluntary measures, the proposed mandatory requirements include several different options for compliance to accommodate the variety of project types and specific regional conditions that exist throughout California.

This attachment addresses and expands on specific responses shown in the STD-399 and contains information reflecting the cost impacts and benefits for building standards pursuant to SB 745 only. The numbering format in this attachment matches the numbering of the STD-399 form. Not all of the items in the STD-399 are applicable or have supporting information in this document, and as such the item numbering in this document may appear incomplete or nonsequential.

[BSC is developing the supporting cost information for regulations pursuant to SB 745. BSC is seeking any relevant cost information or additional considerations that are relevant to the content of this document. A template STD-399 form can be reviewed online for reference at the following location on the California Office of Administrative Law webpage: https://oal.ca.gov/publications/oal_forms_office_of_administrative_law/]

ECONOMIC IMPACT STATEMENT

Items:

A. **ESTIMATED PRIVATE SECTOR COST IMPACTS**

2. Estimate the economic impact of the proposed amendments:

   The proposed regulations contain seven options for systems to be provided in new nonresidential buildings. At least one option must be implemented to satisfy the proposed requirements. The options are as follows:

- Nonwater urinals.
- Indoor recycled water supply systems.
- On-site treated nonpotable water for indoor applications.
- Outdoor recycled water supply systems.
- Rainwater catchment systems.
- On-site treated nonpotable water irrigation system.
- Simple or complex gray water systems.

Cost estimates are included below for each type of system included as an option:

- **Nonwater urinals**: This compliance option requires replacement of all flushing urinals in a project with four or more urinals with nonwater urinals. The estimated average cost for a standard nonwater urinal unit and installation is $850.[1] This provides a cost savings as compared with the estimated average cost for a standard flushing urinal unit and installation of $1,450.[2] This savings may be the result of not needing to provide flush valve hardware for nonwater urinals. However, the California Plumbing Code (CPC) Section 412.1.3 requires that a water distribution line rough-in be provided to each nonwater urinal unit, so there is not a significant savings in the amount of water distribution pipe material and installation required for a nonwater urinal unit. Additionally, nonwater urinals have a higher ongoing maintenance cost than flushing urinals, as the liquid barrier sealant required to maintain a trap seal must be regularly replenished or replaced. The estimated average cost for annual maintenance and replacement of a cartridge or deodorizer system is $195.[3]
- **Indoor recycled water supply systems:** This compliance option requires projects which have access to a municipal recycled water supply to install a recycled water supply system for indoor uses. Section 1505.1.1 of the CPC indicates the following allowed indoor uses of recycled water: water closets, urinals, trap primers for floor drains and

[1] *Adnan Painting And Remodeling*. "Cost Of Waterless Urinals: Your Price Guide For Installation And Maintenance 2026 – Adnan Painting And Remodeling." June 30, 2026. https://partner.kurlon.com/news/cost-of-waterless-urinals-your-price-guide-for-installation-and-maintenance-2026-8211-adnan-painting-and-remodeling.html

[2] *Adnan Painting And Remodeling*. "Urinal Installation Cost Guide for U.S. Buyers – Adnan Painting and Remodeling." June 30, 2026. https://partner.kurlon.com/news/urinal-installation-cost-guide-for-us-buyers-8211-adnan-painting-and-remodeling.html

[3] *Adnan Painting And Remodeling*. "Cost Of Waterless Urinals: Your Price Guide For Installation And Maintenance 2026 – Adnan Painting And Remodeling." June 30, 2026. https://partner.kurlon.com/news/cost-of-waterless-urinals-your-price-guide-for-installation-and-maintenance-2026-8211-adnan-painting-and-remodeling.html

floor sinks, industrial or commercial cooling or air conditioning and other uses as generally allowed in Title 22, Div. 4, Chap. 3, which include commercial laundries, commercial car washes where the public is excluded from the washing process, and industrial processes. Alternatively, where a municipal recycled water supply will become available to the project, this compliance option requires pre-plumbing for future use of recycled water with dual piping. The cost of a recycled water supply system may vary considerably given the intended use and size of the system, annual maintenance costs, and the cost of recycled water from the municipal purveyor. Dual plumbing for the 260,000 square foot City of Austin Permitting and Development Center, a commercial building completed in Austin, Texas in 2020 cost $145,000.[4] In this example alternate water sources were used for toilet flushing and cooling towers. This would indicate a cost of $0.56 per square foot for dual plumbing for this project but is not representative of all scenarios or costs.

- **On-site treated nonpotable water for indoor applications:** This compliance option requires installation of an on-site treated nonpotable water system for indoor applications. Section 1506.1 of the CPC indicates the following allowed indoor uses of on-site treated nonpotable water: water closets, urinals, trap primers for floor drains and floor sinks, and other uses approved by the authority having jurisdiction. Alternatively, where an on-site treated nonpotable water supply will become available to the project, as in the case of a phased multi-building project, this compliance option requires pre-plumbing for future use of on-site treated nonpotable water with dual piping. The cost of an on-site treated nonpotable water system may vary considerably depending on the size and type of treatment system, types of water sources, ongoing maintenance costs, and the intended use of the nonpotable water. An on-site treated graywater system providing nonpotable water for toilet and urinal flushing was installed in the 838,000 square foot DGS Natural Resources Building completed in 2021 at a construction cost of $300,000 (estimated) and annual operational and maintenance costs of $3,500 (estimated).[5] This would indicate a cost of $0.36 per square foot for this on-site treatment system but is not representative of all scenarios or costs.

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[4] *San Francisco Public Utilities Commission.* "Onsite Water Recycling - An Innovative Approach to Solving an Old Problem." January 2022. https://www.sfpuc.gov/construction-contracts/new-developments/onsite-water-reuse

[5] *San Francisco Public Utilities Commission.* "Onsite Water Recycling - An Innovative Approach to Solving an Old Problem." January 2022. https://www.sfpuc.gov/construction-contracts/new-developments/onsite-water-reuse

- **Outdoor recycled water supply systems:** This compliance option requires projects which have access to a municipal recycled water supply to install a recycled water supply system for outdoor irrigation.
- **Rainwater catchment systems:** This compliance option requires installation of a rainwater catchment system for landscape irrigation. The estimated low-end cost of a commercial/large-scale rainwater harvesting system is $8,000, while the high end is $50,000+.[6] System costs will vary based on size, construction, and intended use. There may be additional maintenance costs associated with this type of system, but these may be offset by reduced utility costs due to reduction in use of potable water.
- **On-site treated nonpotable water irrigation system:** This compliance option requires installation of an on-site treated nonpotable water system for landscape irrigation.
- **Simple or complex gray water systems:** This compliance option requires project to install simple gray water system complying with Section 1503.1.2 of the CPC or a complex gray water system complying with Section 1503.1.3 of the CPC to supply irrigation using gray water collected from bathtubs, showers, bathroom wash basins and laundry water.

3. Enter the total number of businesses impacted:

   Unknown.

   Describe the types of businesses impacted (Include nonprofits):
   The types of businesses impacted by the proposed regulations are businesses developing or managing commercial real estate, architecture/engineering/construction businesses, sustainability consultants, plumbing material/product manufacturers, and the plumbing maintenance/inspection businesses.

   Enter the number or percentage of total businesses impacted that are small businesses: Unknown.

4. Enter the number of businesses that will be created/eliminated:

   Unknown/None.

6. Enter the number of jobs created/eliminated:

   Unknown/None.

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?

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[6] Martin, Cooper. "*Rainwater Harvesting 101: How to collect, store, and use rainwater [2026].*" *Rainplan LLC*. February 17, 2026. https://myrainplan.com/blog/rainwater-harvesting-101/

Yes. The regulation will increase the cost to construct and operate commercial facilities in the short-term, as described in Item A.2. In the long-term, the regulations are intended to reduce potable water usage needs for these facilities and provide additional drought-resistance throughout the state, which may provide an overall cost savings to produce goods and services in California over time.

B. ESTIMATED COSTS

1. Estimated Statewide Dollar Costs for Businesses and Individuals.

The proposed regulation requires compliance with one of seven options:

a) Costs to Small Business:

Due to the various types of businesses that may be affected by this regulation, and due to the compliance options provided, it was not possible to determine how many affected small businesses exist and which compliance method they may choose. Therefore, the initial costs, ongoing costs, and years affected for a small business cannot be determined.

b) Costs to Typical Business:

Due to the various types of businesses that may be affected by this regulation, and due to the compliance options provided, it was not possible to determine an exact dollar amount for initial and ongoing costs of a typical business.

c) Cost to an Individual:

There are no direct costs to an individual imposed by the proposed regulations.

d) Describe other economic costs that may occur:

Unknown.

2. If multiple industries are impacted, enter the share of total costs for each industry**:**

Unknown.

5. Are there comparable Federal regulations?

No.

Explain the need for State regulation given the existence or absence of Federal regulations: The recent legislative mandate of SB 745 asserts the need for updated regulations “to reduce the designed potable water demand of new buildings and to minimize the use of potable water for nonpotable uses” in order to prepare for “Hotter and drier weather conditions from climate change [which] are projected to reduce California's overall water supply by up to 10 percent by the year 2040."

C. ESTIMATED BENEFITS

1. Explain the estimated benefits to be derived from this proposal:

   The benefits of the proposed regulations include a reduction in potable water use in new nonresidential construction throughout the state.

2. Are the benefits the result of specific statutory requirements?

   This proposal is in response to Senate Bill 745, The Drought-Resistant Buildings Act (SB 745, Cortese. Chaptered October 2023), which requires the BSC to "research, develop, and propose building standards... ...to reduce potable water use in new nonresidential buildings, including consideration of requiring installation of water reuse systems and consideration of requiring preplumbing of buildings to allow future use of recycled water, onsite treated graywater, or other alternative water sources."

3. What are the total statewide benefits from this regulation over its lifetime?

   Unknown.

4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation.

   As a result of the proposed regulations, additional plumbing, water collection, and/or water treatment systems may be provided in new construction throughout the state. As a result, there may be an expansion of businesses in California responsible for the design, installation, and maintenance of these systems.

D. ALTERNATIVES TO THE REGULATION

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

   Unknown.

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

   There are seven compliance options for this regulation. BSC cannot predict which option an owner/developer might choose and cannot forecast a cost to the regulated community.

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs?

No.

FISCAL IMPACT STATEMENT
Items:

A. FISCAL EFFECT ON LOCAL GOVERNMENT

6. Other. Explain.

Currently, local government building departments are responsible for enforcing the California Green Building Standards Code, Title 24, Part 11. There should not be any major fiscal effect on local governments to enforce this regulation. However, if there is a minor increase of costs to local governments to review and check plans for compliance, any increase in costs can be recovered from increases in permit fees. Local governments may also retain up to 10% of what is due to the Building Standards Administration Special Revolving Fund pursuant to Health and Safety Code Section 18931.6 to cover administrative costs, training, and code enforcement.

Some local governments may incur additional costs when they construct new buildings. If a local government constructs a new building subject to this regulation, costs similar to those described in Item A.2. may be incurred based on the compliance option selected, the project size, and intended use.

B. FISCAL EFFECT ON STATE GOVERNMENT

4. Other. Explain.

With some exceptions, all new non-residential buildings in California will be subject to the proposed regulations. As a result, California government agencies may incur additional costs when constructing new non-residential buildings. If an agency constructs a new building subject to this regulation, costs similar to those described in Item A.2. may be incurred based on the compliance option selected, the project size, and intended use.