

## Agenda Item 5d INDOOR PLUMBING FIXTURE FLOW RATES

- **Statement of specific purpose, problem, rationale and benefits:**

In most nonresidential buildings, the water used in restrooms accounts for the largest indoor water use. In recent years, advances in technology have resulted in plumbing fixtures that use less water while maintaining the same high-quality performance users expect. This proposal recommends updating the water efficiency standard for urinals. This section also provides a brief summary of the proposed code changes. See the addendum for more detailed information about these proposed code changes.

### Urinal Efficiency Standard

This proposal recommends that the mandatory urinal efficiency standard in CALGreen be modified from a maximum flush volume of 0.5 gallons per flush (gpf) to a maximum flush volume of 0.125 gpf. The City of Los Angeles has had a 0.125 gpf urinal standard in effect since 2010 without experiencing problems.<sup>1</sup> (City of Los Angeles 2009).

As of August 26, 2014, 84 models of WaterSense urinals from 12 of 19 brands of WaterSense compliant urinals offer fixtures with no more than 0.125 gpf; and 8 of 9 brands of the WaterSense urinal valves offer valves rated at 0.125 gpf with 46 models available (MaP 2014).<sup>2</sup> The quantity and variety of high-efficiency urinals available for sale is an indication that qualifying products are readily available in California and throughout the United States.

During the first year the proposed urinal efficiency standard would be in effect, it would result in an annual water savings of 9.3 million gallons. After the standard is in effect for 10 years, the cumulative water savings from all urinals installed in new construction since the effective date would be 657 million gallons (2016 acre feet). The associated embedded electricity savings would be 6.6 GWh.

- **Proposed code language for the 2015 Triennial Code Adoption Cycle**

LEGEND FOR EXPRESS TERMS

1. New California amendments: All such language appears underlined and in italics.
2. Repealed text: All such language appears in strikeout.

## NONRESIDENTIAL MANDATORY MEASURES

### SECTION 5.303 INDOOR WATER USE

**5.303.3.2 Urinals.** The ~~effective~~ flush volume of urinals shall not exceed ~~0.5~~ 0.125 gallons per flush.

<sup>1</sup> City of Los Angeles, California. 2009. "Water Efficiency Requirements for New Development and Renovations of Existing Buildings." Ordinance Number 180822.

<sup>2</sup> Maximum Performance Testing. "Maximum Performance (MaP) Testing. "Database of High-efficiency Urinals (HEU)." Accessed November 24, 2014. <http://www.map-testing.com/downloads.html>.