

Recommendation 4.2: Projected Water Savings from Codes, Standards, Ordinances and Transportation and Land Use Plans Affecting an Urban Water Supplier's Service Area-Voluntary

Plumbing codes, appliances standards, landscape ordinances as well as sustainable transportation and land use plans reduce water use and reduce the future demand for water. The 20x2020Water Conservation Plan estimated that the water savings from efficient codes and standards alone would account for a 4% reduction in per capita water use by 2020. Currently a few water suppliers account for these savings and demand reductions in their urban water management plan future water use projections. This recommendation would direct DWR to develop guidance for the estimation of water savings from codes, standards, ordinances and sustainability plans in the 2015 guidebook. This guidance would encourage more suppliers to account for these demand reductions in future water use projections.

Background:

Statewide average per-capita water use has decreased or remained constant since the early 1990s due to many factors including the statewide adoption of efficient water code, standards and regulations. Codes and standards increase efficiency by ensuring the installation of more efficient fixtures and appliances in new construction as well as in retrofits and replacements within existing buildings and structures. For example, since 1992 only ultra-low-flush toilets and low-flow showerheads have been available for sale in California. AB 715 (Laird, 2007) revised the 1992 code and requires only high-efficiency toilets and urinals to be sold or installed after January 1, 2014. SB 407 (Padilla, 2009) mandates replacement of all noncompliant plumbing fixtures by water-conserving plumbing fixtures when alterations or improvements are made to residential and commercial buildings after January 1, 2014. SB 407 also mandates replacement of all noncompliant plumbing fixtures with water-conserving fixtures in residential properties by 2017, and in multi-family residential and commercial properties by 2019. The California Green Building Standards Code that became effective in 2011 prescribes high efficiency indoor plumbing fixtures and fittings.

Regulatory mandates are in place to require unmetered connections be metered by 2025, and require new construction with significant landscaped areas be subjected to plan review to ensure compliance with the Model Water Efficient Landscape Ordinance provisions such as installation of efficient irrigation systems and usage of low water-using plants.

In addition to codes, standards and regulations, regional transportation plans and sustainable communities strategies might also influence urban water demand and water use through the implementation of coordinated land use plans that promote sustainable communities. The Sustainable Communities and Climate Protection Act of 2008 (SB 375, Steinberg) requires each of California's

metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan. These SCSs contain land use, housing, and transportation strategies to enable compliance with regional greenhouse gas emissions reduction targets. SB 375 requires consideration of open space and natural resource protection and supports accommodating new housing and commercial development within existing areas designated for urban growth. By promoting more compact development within existing urbanized areas and more multi-unit housing, urban per capita water demand is expected to decrease corresponding to a decrease in outdoor landscape irrigation needs.

Estimation of savings from codes, standards, regulations, and land use plans:

The 20x2020 Water Conservation Plan includes estimates of potential water savings driven by efficiency codes and regulations, and from the installation of meters on previously unmetered accounts.¹ Statewide averaged water savings in gallons-per-capita-day (GPCD) from codes and regulations is estimated at eight GPCD or four percent of the baseline GPCD. Although the best available information in 2008 was used in developing these estimates, the methodology for estimating these types of water savings inherently contain uncertainties such as device turnover rates and regulations implementation rates.

Urban Water Management Plan Future Water Use Projections

The Urban Water Management Planning Act requires water suppliers to estimate future water use projections in five year increments to 20 years in the future. The Act gives local suppliers the flexibility to calculate the water use projection as best fits their local circumstances. Some water suppliers account for future demand reductions from efficient codes, standards, ordinances and sustainable transportation and development plans. This recommendation would help water suppliers with the ability to capture such information to report it, thus paving the way for more accurate projections in future urban water management plans.

ITP Recommendation #_:

Department of Water Resources should begin an effort to include guidelines for the estimation of future urban water savings attributable to codes, standards, ordinances, and sustainability plans in its 2015 UWMP Guidebook, as schedules and availability of information permit. Such guidance may include acceptable state-wide default values and/or standardized calculators for entering locally-specific data.

¹ See Table 5, 2020 Efficiency code Water Savings – GPCD, 20x2020 Water Conservation Plan, February 2010.

Independent Technical Panel on Demand Management Measures: Draft Recommendations

Suggested statutory language: Modify Section 10631(e) of the Water Code with the addition of a new subsection (5), as shown in underlined and italicized text below:

(5) When available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, and transportation and land use plans identified by the urban water supplier as applicable to the service area. The urban water supplier shall provide citations of the various codes, standards, ordinances, and transportation and land use plans utilized in making the projections. Projections of water use that do not account for such savings shall be noted as such.