

SECTION 7: COMPLEMENTARY POLICIES & REGULATIONS

RECOMMENDATION #4: Piloting Connection Charges that Promote Landscape Efficiency

Background

In the single-family residential sector, landscape water use is a major factor in the capacity required to provide water service to a new home. In turn, landscape water use drives the peak season demand for nearly all urban water suppliers in California. The 2015 revisions to the Model Water Efficient Landscape Ordinance (MWELO) reduce Evapotranspiration Adjustment Factor (ETAF) by over 20%, which should have the effect of reducing the requirements for capacity to serve new MWELO-compliant homes. Landscapes installed and maintained to better-than-MWELO standards should provide even greater savings.

Most public water suppliers have a set of one-time charges for a new dwelling to connect to the public water system. Some small portion of these charges may relate to the cost of a meter, a short service lateral, and costs associated with adding a new customer account. The majority of these charges, however, are typically for the recovery of the costs of water system capacity – capital costs associated with supply, transmission, treatment, and distribution of water – that are assigned to new connections as a matter of equity with existing customers. These one-time charges for system capacity are separate from the recurring charges for water service. Any differentiation in these charges is typically based upon meter size categories, with connections requiring larger meters facing a higher charge.

In California, connection charges range from modest to quite high.¹ The average water connection charge for single-family homes reported in the 2013 survey by the Cal-Nevada Section of AWWA was \$3,656, while the highest was \$28,600. The forthcoming 2015 survey is likely to show even higher figures.

The Independent Technical Panel received a presentation at its April 2015 meeting by Western Resource Advocates (WRA)² on a forthcoming report (subsequently released) on the role that water connection charges can play in encouraging water efficiency in new growth.³ Based on an examination of four case studies, the report found that meter size alone is an imprecise predictor of the capacity requirements imposed on the system, when dwellings served by comparable meters can have substantially different peak season water demand profiles. Case studies found strong interest by homebuilders in bringing to market, new homes that qualify for lower connection charges based on *locally determined* water efficiency criteria.

The WRA report recommended that:

¹ One exception: Investor-owned water companies that are regulated by the California Public Utilities Commission are not authorized to assess connection charges.

² http://www.water.ca.gov/calendar/materials/incentivizing_water_conservation_with_connection_fees_nuding_18966.pdf

³ A. Nuding, S. Leurig, J Hughes, *Water Connection Charges: A Tool for Encouraging Water-Efficient Growth*, Western Resource Advocates, University Of North Carolina Environmental Finance Center, and Ceres. August 2015. Available for download at <<https://www.ceres.org/resources/reports/water-connection-charges-a-tool-for-encouraging-water-efficient-growth/view>>.

- Utilities should consider refined, multi-factor connection charges to encourage water efficiency of new developments and capture the true costs of new development.
- Utilities should consider putting in place mechanisms to ensure longevity of water savings.
- Utilities should invite customers and developers into the connection charge design process.
- Local policymakers and planners should recognize the importance of connection fees in shaping future water demand and development patterns, and in managing costs of this fundamental service.

In essence, connection charges that are differentiated based on the construction of new homes and landscapes that effectively shrink the capacity footprint of a new customer represent ***an alignment of interests between the homebuilder, the water supplier, and the new occupants***. When new homes and landscapes are built to standards that *ensure* lower peak demand than business-as-usual construction, real savings are created and an opportunity exists for ***shared savings*** among all stakeholders.

In California, MWELO 2015 and the incorporation of landscape standards into the mandatory portion of the CALGreen state building code signify a potential sea change in outdoor water use in new development. The benefit of this change can be readily monetized if water suppliers with connection charges take these new regulations into account when connection charges are next reviewed. MWELO 2015 lowers the ETAF for new residential landscapes from 0.7 to 0.55, a reduction of 21%. So the standards are more stringent and the enforcement of these standards should improve. DWR should assist water suppliers to evaluate the impact of MWELO on peak demand and system capacity, and water suppliers may take this into account when setting or revising their connection charges.

Additionally, water suppliers willing to explore this concept should be supported through state financial assistance to consider landscape design or performance standards of the water suppliers' own devising that would define a *better-than-code* landscape that would be sufficiently *more* water-conserving that it would allow for a specific reduction in the connection charge that applies to all code-minimum connections. This would be designed by the water supplier, and would have to be durable enough to give the agency confidence that a lower connection charge is warranted.

Purpose Statement

Connection charges that are based on a reasonably predictable reduction in peak demand of new buildings and landscapes are a new concept in California, but represent a strategy with unknown potential to achieve further reductions in water use. The purpose of this proposal is to secure assistance to local water suppliers that are willing to 1) identify the demand-reducing effects of 2015 MWELO and CALGreen revisions; and, 2) explore the development of better-than-code landscape criteria that would support a differentiated connection charge for eligible new homes.

The Independent Technical Panel Recommends That:

1. The Department of Water Resources (DWR) should develop and test one or more methods for relating improvements in the water efficiency of new landscapes required by MWELO 2015 with the peak demand and system capacity requirements of new buildings and landscapes connecting to a water system.

2. DWR should develop a grant solicitation specifically to fund innovation in differentiated connection charges. Specifically, grant funds should be made available to cover a portion of the discount from standard connection charges that are offered to new homes and landscapes meeting locally-developed better-than-code installation and durability criteria for water efficiency.