



Economic Analysis of Proposed State Water Use Efficiency Standards



Charles Busslinger, Director of Engineering
 Joe Berg, Director Water Use Efficiency
 Municipal Water District of Orange County
 Presentation Date May 3, 2022

Genesis of Project

Board request to study economic impacts of proposed State WUE standards to Orange County

- Impact to demands as part of Reliability Study Update, and
- Economic impacts to water service providers and residents

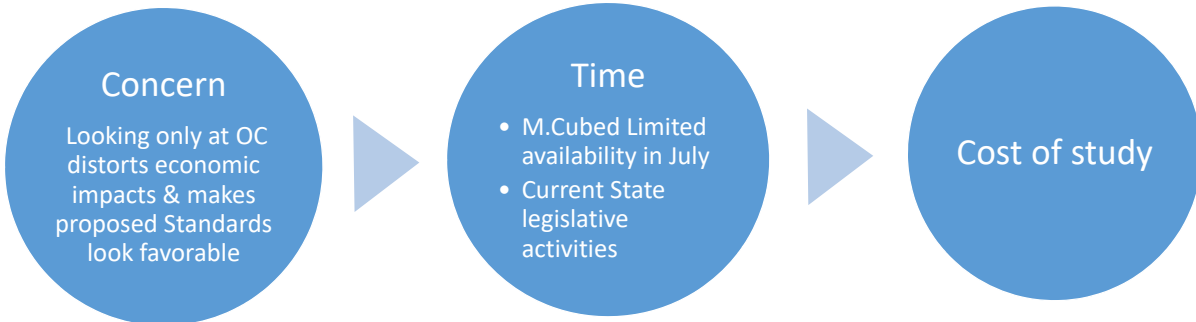
Feb. 18, 2022, SMWD Strategic Planning Workshop

- SMWD Board expressed similar interest & approved \$25,000 toward study
- Cited study by M.Cubed on 2015 Governor's EO as an example
- Urged MWD OC to participate



Through MWD OC On-Call Technical Services slate brought in:
 Water Systems Consulting & Sub-consultant M. Cubed (David Mitchell)

Constraints



3

AB 1668 and SB 606

Sets Urban Water Use Standards for:

- Indoor Residential Water Use
- Outdoor Residential Water Use
- Non-Residential Landscape Water Use
- Distribution System Water Loss

Creates Water Use Objective (Target) for each Retail Urban Water Supplier

Establishes Compliance Timeline, Reporting Requirements, and State Enforcement Authorities



4

Project Objectives

Evaluate proposed Standards in terms of water use reduction requirements, compliance cost, and feasibility

Assess impacts of Standards on Water Service Affordability, with focus on Disadvantaged Communities (DACs)

Provide analytical tools to assist Orange County suppliers with evaluation and assessment of their proposed Water Use Objective



DWR Urban Water Use Objective Analyzer

Originally developed by M.Cubed for DWR to evaluate proposed standards

DWR to publicly release model

Customized version of model will provide the analytical engine for this project

Optional Task to web-enable model will significantly increase its analytical value to urban water suppliers



DWR Urban Water Use Objective Analyzer, Version 1

Residential Water Use Standard

Indoor (GPCD) INI Buffer %
Outdoor (ET Factor) Eff Precip Max %

Landscape Water Use Standard

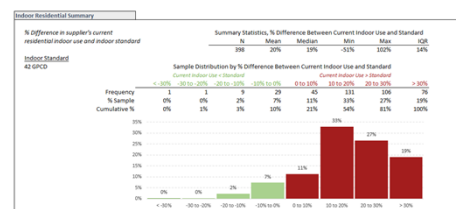
Standard assumed to reduce metered landscape use by:

CII Performance Standards

CII performance standards assumed to reduce CII use by:

Water Loss Standard

Alternative compliance pathway for existing low loss
Maximum reduction in real loss from baseline:



0

Scope of Work

Task 1: Urban Water Use Objective Analysis

- Develop/Customize Analytical Tools
- Estimate Water Use Reduction Requirements
- Estimate Compliance Costs

Task 2: DAC Impact Assessment

- Assess
 - Required Reduction vs DAC Prevalence
 - Compliance Cost vs DAC Prevalence
 - Impact on Orange County Water Service



Scope of Work

Task 3: Summary Report & Documentation

- Summarize project findings
- Document data and methods
- Provide guidance documentation for analytical tools

Optional Task: Prototype Web Interface

- Allow suppliers to review/update their service area data used to analyze impacts
- Provide suppliers with web-accessible summary of expected impacts in terms of a) required water use reduction, b) ranking of impact relative to other suppliers, c) net compliance cost



Schedule

2-3 months to completion

Final schedule contingent on Notice to Proceed date



Thank you for your attention.
Please **let us know** if you have questions.