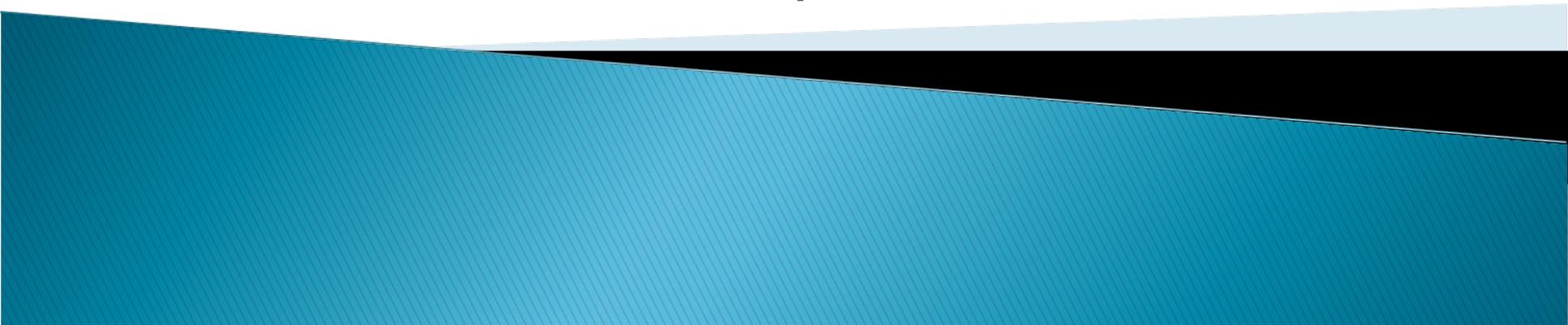


# Public Draft of Urban Water Use Target Technical Methodologies

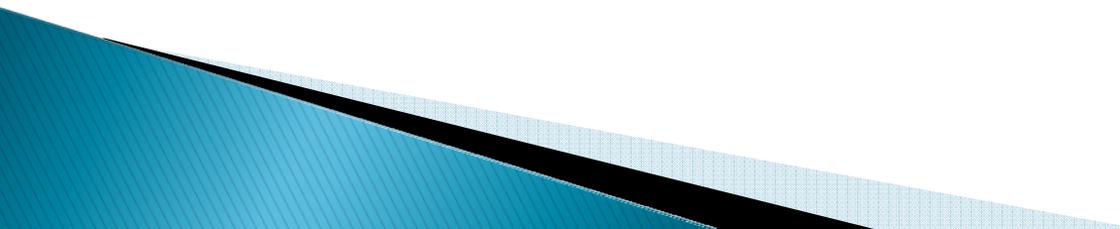
Peter Brostrom

California Department of Water Resources

Water Use and Efficiency Branch



# Background

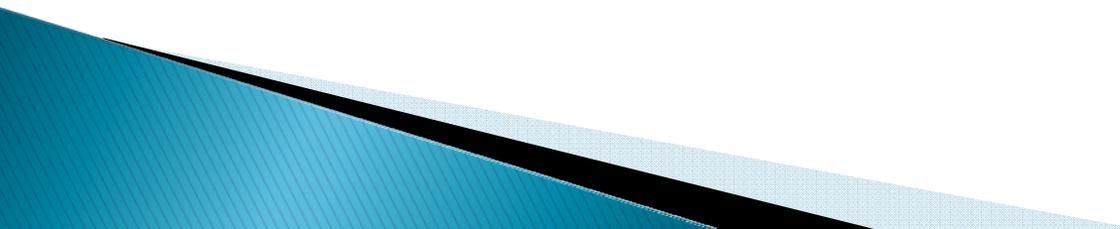
- March 2008. Governor Schwarzenegger includes a 20% per capita reduction goal in his Sacramento–San Joaquin plan.
  - April 2008. 20x2020 Agency Team formed. Release Draft Water Conservation Plan in April 2009 and Final Plan in February 2010.
  - November 2009. SBx7–7 signed into law includes urban and agriculture water conservation provisions.
- 

# SBx7-7 Provisions

## Urban

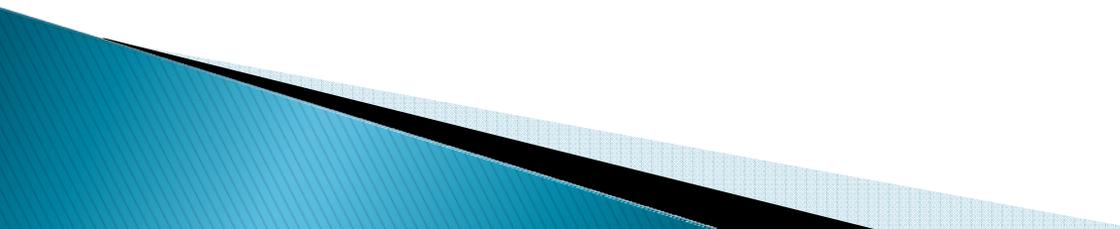
- Establishment of CII Task Force
- 2020 Urban Water Use Targets

## Agriculture

- Development of an Agriculture Water Use Efficiency Quantification Methodology
  - Agricultural Water Measurement Regulations
  - Update Efficient Water Management Practices
- 

# SBx7-7 Provisions (cont.)

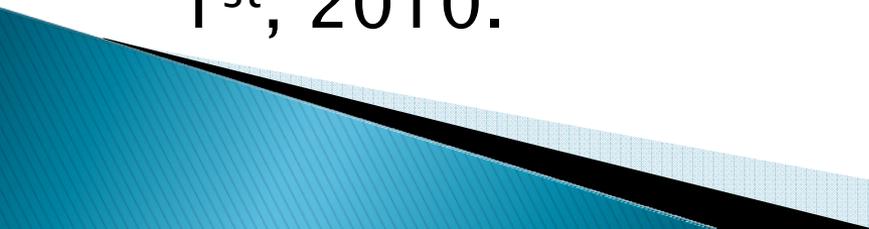
## Both Ag and Urban

- Development of a Standardized Water Use Reporting Form
  - DWR with SWRCB shall increase incentives and decrease barriers for regional water resource management
  - DWR shall propose new or revised statewide targets for regional water management practices.
- 

# Urban Stakeholder Committee

- ▶ An Urban Stakeholder Committee (USC) was formed to provide advice and input to DWR on SBx7-7 Implementation
- ▶ USC members were selected to represent a wide range of interests:
  - Regional Representation
  - Agency Size
  - Wholesalers and Retail Suppliers
  - Academic
  - Environmental

# Public Draft Development

- Started March 2010.
  - DWR has held 2 listening sessions and 4 USC meetings on the methodologies.
  - This document represents the third draft of the methodologies that has been prepared and revised based on stakeholder and public comment.
  - DWR will revise this Public Draft and present it to the stakeholders at the end of the month. The final document will be released October 1<sup>st</sup>, 2010.
- 

# Urban Retailer Water Supplier Target Setting Process

*Applies to urban retail water suppliers who are required to submit urban water management plans*

1. Calculate baseline per capita use
2. Pick one of 4 target methods
  1. 80% of base daily per capita use
  2. Target calculated based on efficiency standards for indoor residential, landscape area water use and baseline CII
  3. 95% of 20x2020 Water Conservation Plan Hydrologic Region Target
  4. To be developed by DWR
3. Calculate target
4. Calculate compliance year per capita use in 2015 and 2020

# Urban Water Use Target Technical Methodologies

- SBx7-7 directed DWR to develop 8 methodologies and a set of criteria for consistent implementation of urban water use targets.
  1. Gross Water Use
  2. Service Area Population
  3. Base Daily per Capita Use
  4. Compliance Daily per Capita Use
  5. Indoor Residential
  6. Landscape Area Water Use
  7. Baseline Commercial, Industrial and Institutional
  8. Criteria for Compliance Year Adjustment

DWR developed a ninth methodology on regional compliance

# 1. Gross Water Use

- Law allows retailers to exclude
  - Recycled Water
  - Water put into long-term storage
  - Water transferred to another supplier
  - Water delivered for agricultural use
  - Process if shown to be substantial
- Methodology provides guidance on how to define a retailers distribution system and a step by step approach to calculating the amount of water to be included in the urban water use targets calculations.
- USC Comment: Agencies be allowed to calculate the recycled groundwater deduction for indirect potable reuse based on the agency's groundwater model time frame and accounting.

## 2. Service Area Population

- Allows different sources and population calculation methods as long as they are consistent with the Department of Finance or Census Bureau.
- Appendix A provides persons per connection calculation method.
- **USC Comment:**
  - Restructure Service Area Population Methodology to make the persons per connection calculation method more prominent.
  - Consideration of possible revisions in 2015 based on 2010 Census.

# 3. Base Daily per Capita Use

- Calculation is gross water use divided by service area population.
- Methodology explains:
  - How to select the years used in baseline calculations
  - How to handle distribution systems changes due to mergers, annexations and contraction in the baseline years
  - Minimum water use reduction calculation
- **USC Comment:**
  - Broaden the annexation adjustment to cover any annexed areas without existing data not just areas on groundwater.

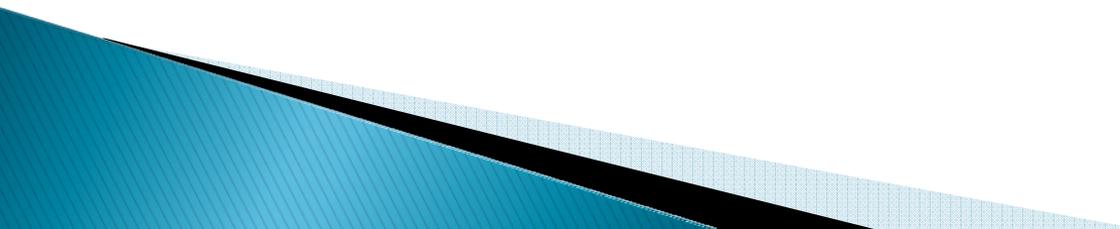
# 4. Compliance Daily per Capita Water Use

- Calculation is the same as the Base Daily per Capita Water Use Calculation except it is done for the compliance years, 2015 and 2020.
- Methodology provides guidance on how to adjust the calculations for changes in distribution system area between baseline period and compliance years.
- **USC Comment:**
  - Clarify compliance for agencies that incorporate annexed areas.

# 5. Indoor Residential

- Calculation of indoor residential water use is not required.
- SBx7-7 requires that DWR submit a report on the indoor residential efficiency standard in 2015

# 6. Landscape Area Water Use

- Calculation only required if retail water supplier chooses target method 2.
  - Requires the agency to measure the area of all landscape irrigated through residential or dedicated meters
  - Landscape water use is calculated using the Model Water Efficient Landscape Ordinance standards for the year the landscape was installed
  - Landscape can be measured through remote sensing and/or ground based measurements.
  - Landscape area on parcels less than 24,000 sq. ft. can be estimated with a ratio developed by sampling.
- 

# 6. Landscape Area Water Use (cont.)

- USC Comment:
  - Provide an adjustment for agencies that cannot separate multi-family accounts from CII.
  - Make the landscape area method less prescriptive by requiring an accuracy standard for landscape measurement.

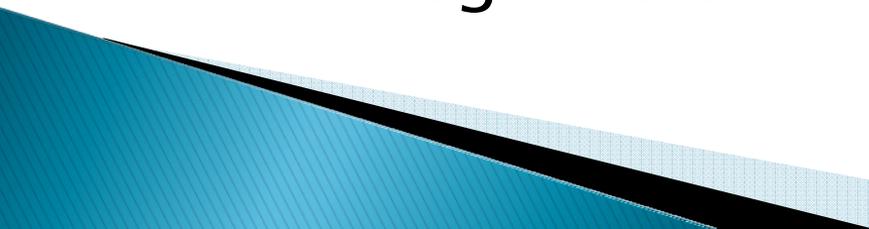
# 7. Baseline Commercial, Industrial, Institutional Water Use

- Calculation only required for urban retail water suppliers who use target method 2.
- Calculated on a per capita basis

# 8. Criteria for Compliance Year Adjustment

- The Act allows retailers to adjust compliance year (2015, 2020) per capita water use for:
  - Differences in rainfall and evapotranspiration
  - Substantial changes to commercial, industrial or institutional water use
- DWR has delayed developing the criteria as the criteria is not needed by suppliers to complete their 2010 urban water management plans and more time is needed to develop the weather normalization model.

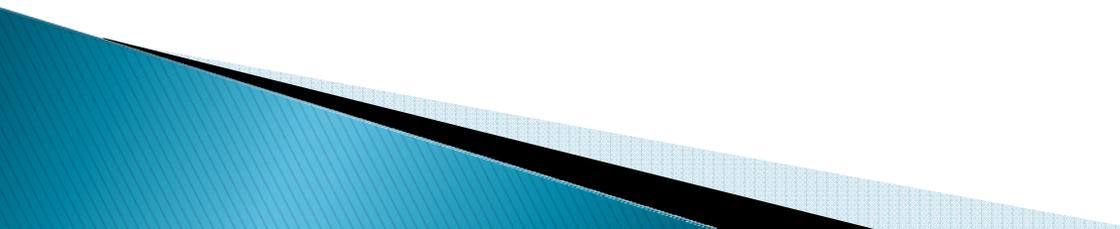
# 9. Regional Compliance

- SBx7-7 allows suppliers to meet it's urban water use target either individually or through a regional group. DWR has named these groups "regional alliances."
  - Suppliers can have both an individual target and a regional target.
  - Regional targets are calculated by taking the population weighted average of the regional members individual targets.
  - Supplier's are permitted to join or withdraw from regional alliances at anytime.
- 

# Regional Compliance (Cont.)

- A large percentage of the stakeholders strongly encouraged DWR to allow individual agencies to be in more than one alliance
  - Stakeholders also encouraged DWR to not limit the percentage of suppliers with GPCD below 100 in an alliance
  - Stakeholders commented that individual agencies should not be required to report all of the regional alliance water use target data.
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# Schedule

- Thursday, August 12<sup>th</sup> Written Comments on Public Draft Due
  - Thursday, August 26<sup>th</sup>, Revised Draft presented to Urban Stakeholder Committee
  - September 2010, further revisions made with DWR Review
  - October 1<sup>st</sup>, 2010 Final Version Released
  - Guidebook Workshops Nov. 2010 and January and February 2011
- 

# Comments

- Comments can be emailed to:
  - [wue@water.ca.gov](mailto:wue@water.ca.gov)
- Or mailed to:

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