# State Water Resources Control Board

December 17, 2014

## Regional & Local Initiatives Addressing Drought, Increasing Water-Use Efficiency, Agency Finances and End-User Acceptance:

**The Problem**
**Solving for the Problem**
**State Legislation and Efficiency Standards**
**The Data & Tools to Support Agencies to Meet State Efficiency Goals**



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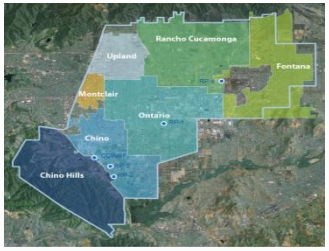
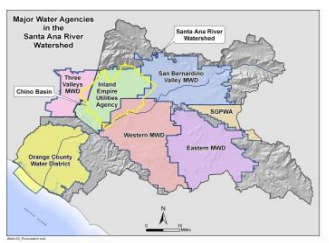
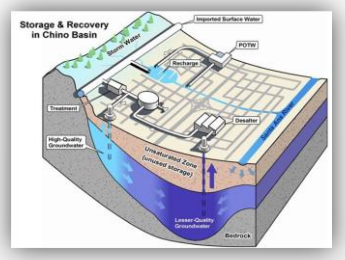
- MWD member wholesale agency
- 7 retail member agencies
- 850,000 population in service area
- $500 million in “local water” development over past 15 years

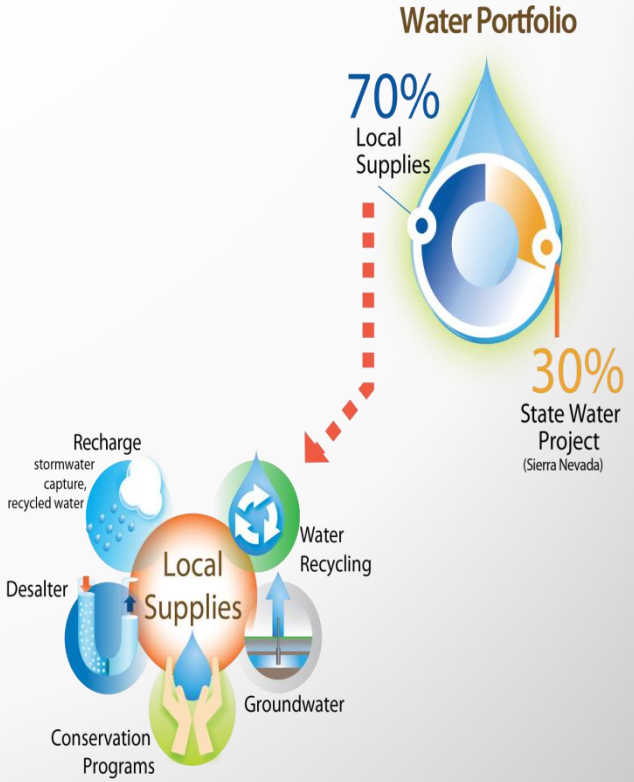
New Initiatives:

- Significant increase in WUE
- Assist member agencies with revenue and conservation in the form of new rate designs, data collection, tools, and public outreach
- Exceed current 20x2020 goal

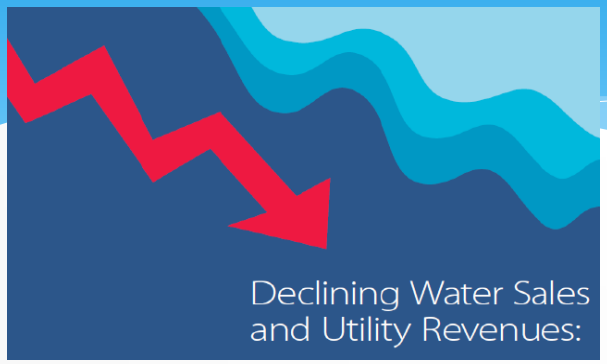


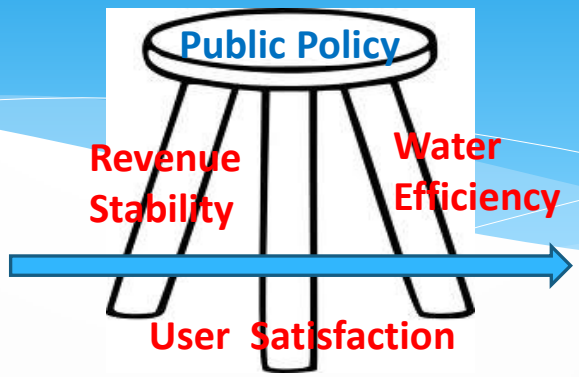



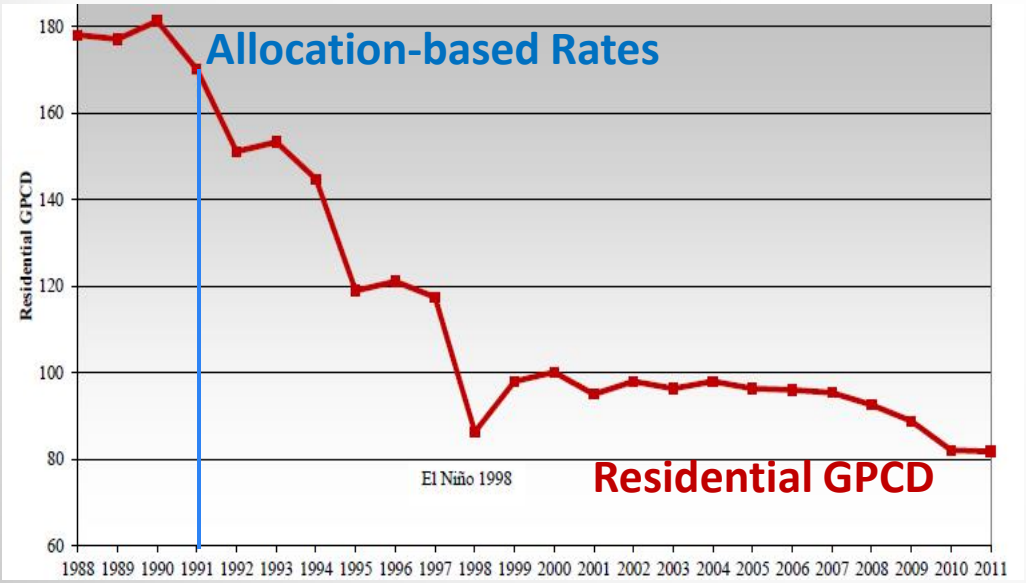



# The Problem:




# The Solution:




**"The most important rate design criteria are fiscal adequacy** (collection of the agency revenue requirement), **efficiency** (encouragement of economically efficient consumption and discouragement of waste), **and fairness to all customer classes."**

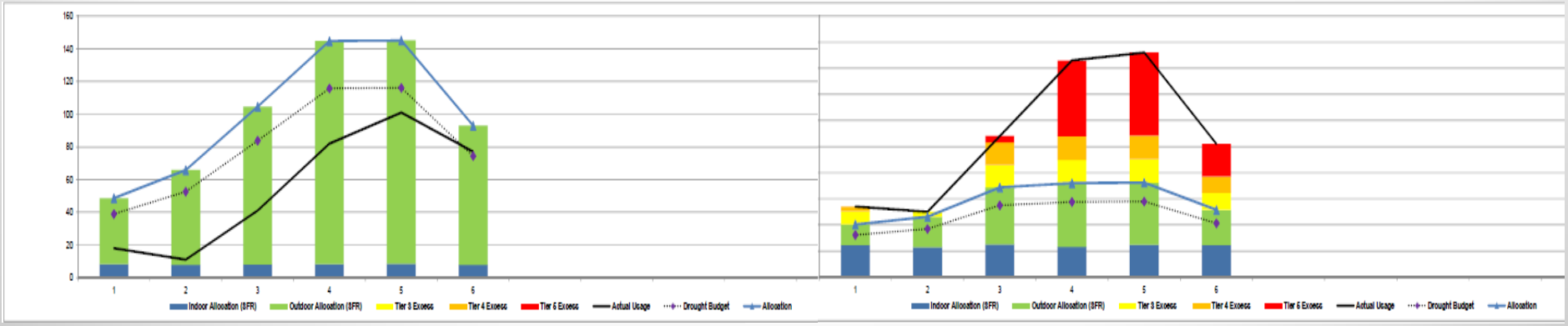
Scott Ruban, J.D.
National Public Policy Institute

# The State Has Set the Standards:

**Indoor Allocation**
(SBX7-7)

**Outdoor Allocation**
(AB 1881)

**Water Budget = (# Residents) (55gpcd) + (ET) (.80) (SF of Landscape) (DF)**



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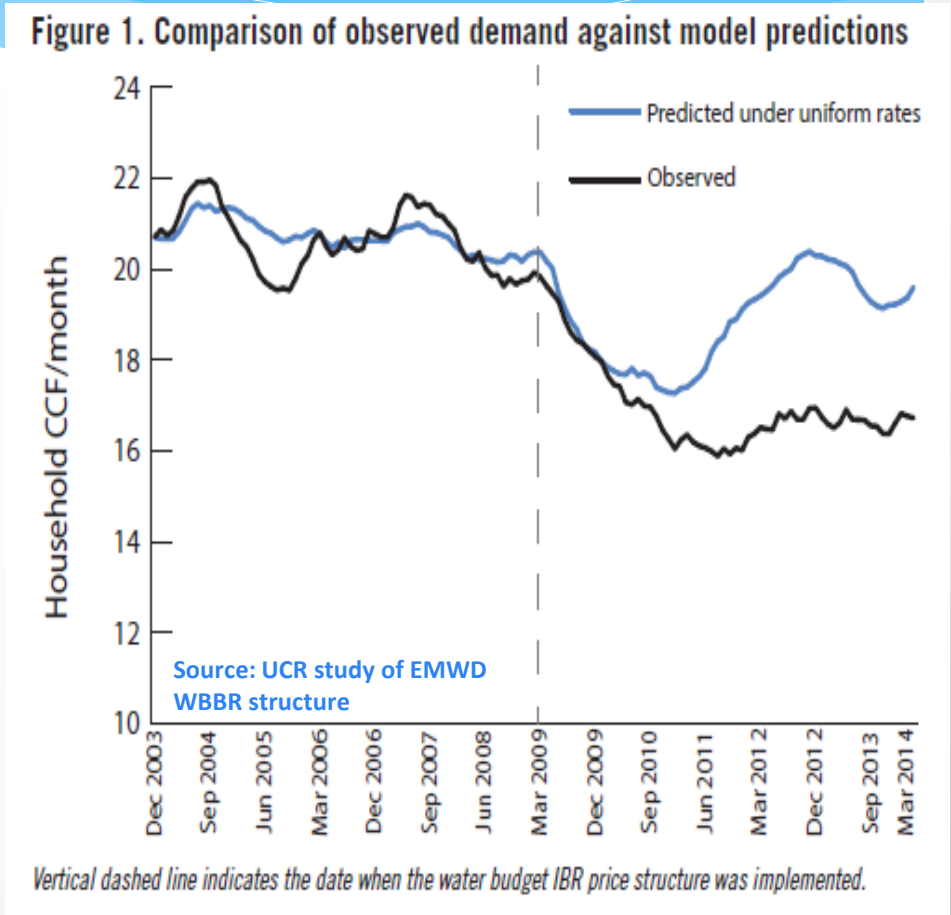
# Why a Water Budget Rate Design is Sustainable?

## Agency:

- Recover costs of service accurately while customers use less water
- **Accurately portrays what the agency really does (provides "reliable" water service)**
- Recognizes and rewards efficient users, penalizes water waste
- **Provides the retail agency with a new, independent source of funding for conservation programs (paid only by those who use water over State efficiency standards)**



# Regional & Local Agency Initiative

✓ **Collect Data**

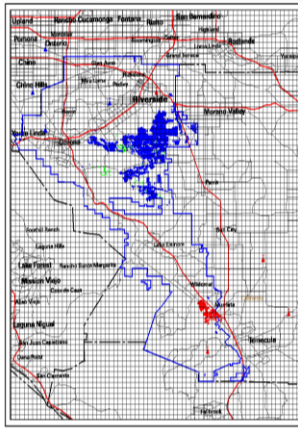
**(ET) (.80) (SF of Landscape)**

**Prop 84 Grant**

SAWPA

**Western Municipal WD**
**Eastern Municipal WD**
**San Bernardino Valley WD**
**Orange Co. Water District**
**Inland Empire Utilities Agency**







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# Use Data to Measure Efficiency

## ✓ Build Tools

### Water Efficiency Calculator - SFR

*Enter input data in the orange cells.*

| | | |
|---|---|---|
| Customer No. | 40597-2 | |
| Zone | 1280 | |
| Meter Size | 5/8-in | |
| **Indoor Consumption** | | |
| Number of Residents | 2.8 | Persons |
| Daily Indoor per Person Allocation | 55 | Gallons |
| **Outdoor Consumption** | | |
| Landscape Factor | Turf Coefficients | |
| January | 0.61 | |
| February | 0.64 | |
| March | 0.75 | |
| April | 1.04 | |
| May | 0.95 | |
| June | 0.88 | |
| July | 0.94 | |
| August | 0.86 | |
| September | 0.74 | |
| October | 0.75 | |
| November | 0.69 | |
| December | 0.6 | |
| Landscape Area (Square Feet) | 13098 | |
| **Drought Factor** | 20 | % |

REFRESH AFTER UPDATING ALL INPUTS

| Cust. No | Average Usage as Percentage of Water Budget |
|---|---|
| 42527-1 | 260.1% |
| 41617-1 | 259.4% |
| 40726-1 | 256.0% |
| 42525-1 | 252.9% |

**Most inefficient users, top drought response targets**

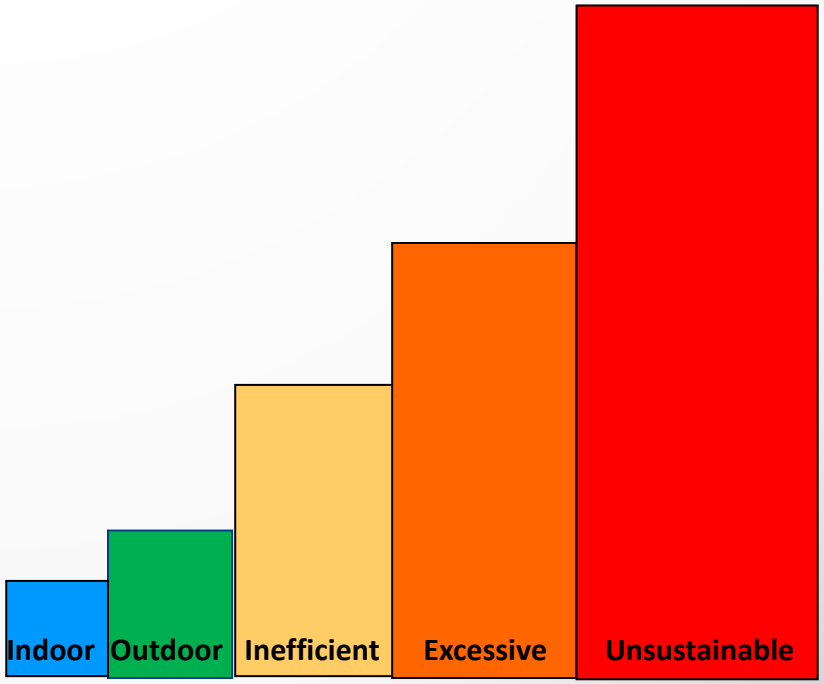
| Cust. No | Average Usage as Percentage of Water Budget |
|---|---|
| 40688-1 | 35.3% |
| 40035-1 | 34.0% |
| 40107-1 | 33.0% |
| 40935-1 | 31.5% |

**Efficient customers not included in drought outreach**

| Consumption | % of Customers |
|---|---|
| At or below allocation | 74.1% |
| Greater than 100% up to 125% of allocation | 17.6% |
| Greater than 125% up to 150% of allocation | 5.1% |
| More than 150% of allocation | 3.2% |

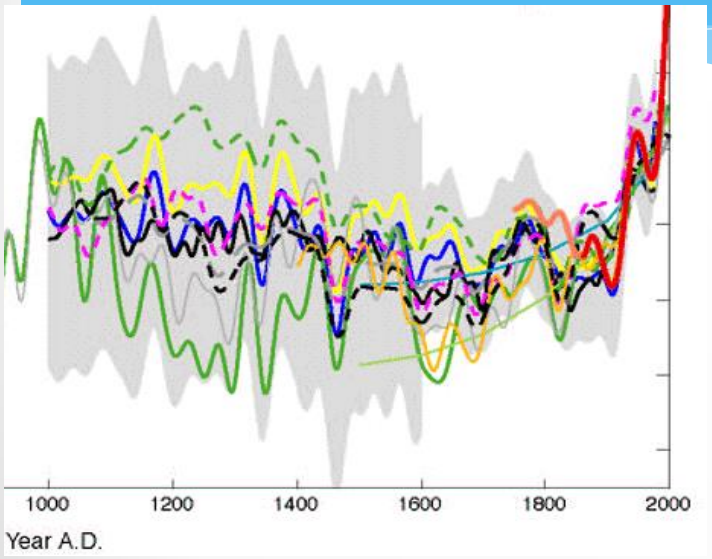
# How Would Data be Used?

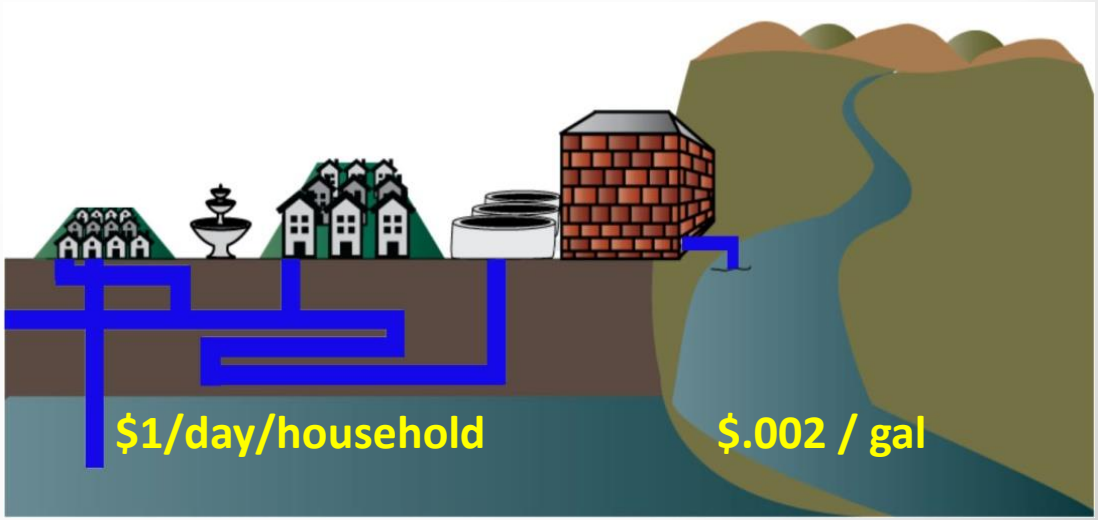
- **To build a *"Water Efficiency Calculator"* to rank and sort accounts by efficiency**
- **To direct conservation funds for the most cost-effective use**
- **To build a "water budget rate modeling tool"**
- **To populate retail agency billing systems to support water budget based rate structures**



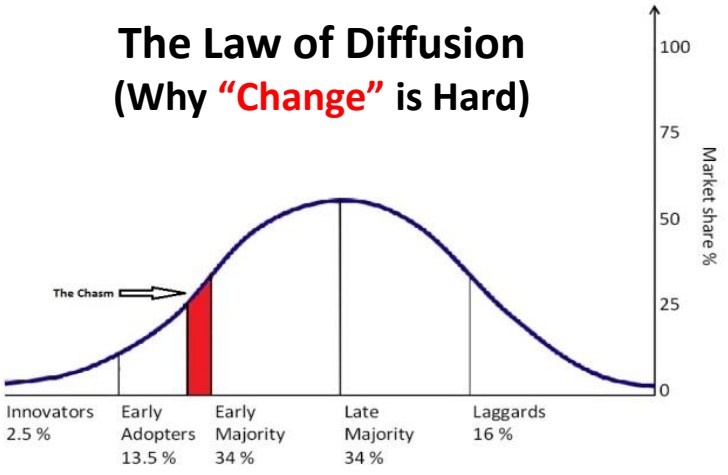
# The Cost of Not Changing?

## Economic, Environmental & Political


**The Law of Diffusion**
**(Why "Change" is Hard)**



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# Recommendations:

- Expand Board support for allocation-based rates building on the "Alternative compliance" mechanism as described in the July *Emergency Regulations*."
- Require agencies to report the % of users who meet State water efficiency standards.
- Conduct State-wide training on the technologies necessary to measure water-use efficiency.

- ✓ Be clear about State efficiency standards; Help us build the tools that incentivize market-based, fiscally responsible water rate structures that incorporate State efficiency standards.
- ✓ GPCD comparisons have limitations; reporting % of accounts meeting efficiency standards is equitable across agencies and helps to target water waste.
- ✓ Consider how to make the technology and/or data available to agencies across the State.

# Questions?

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