

# Credit for Drought-Resilient Water Supplies

Sustainable and Balanced Approach to  
Managing Droughts

Proposed Modification to Emergency  
Regulation Presented by:





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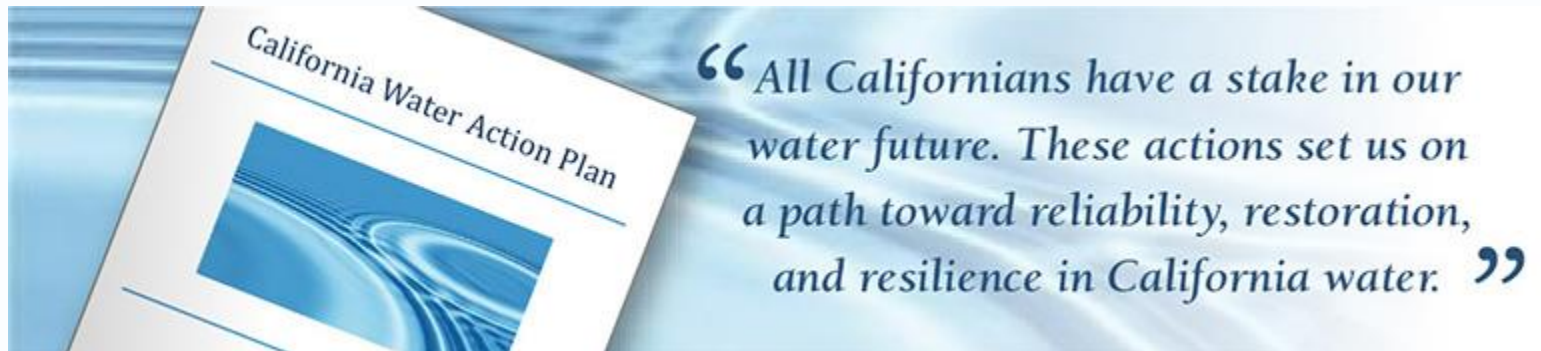
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Authority

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# Urban Water Suppliers are Implementing Governor Brown's Water Action Plan

Key Actions	Water Agencies Implementing?
Make conservation a way of life	
Increase regional self-reliance and integrated water management	
Manage and prepare for dry periods	
Expand water storage capacity and improve groundwater management	



# Urban Water Suppliers are Implementing State Law Requiring Reduced Reliance on the Bay-Delta

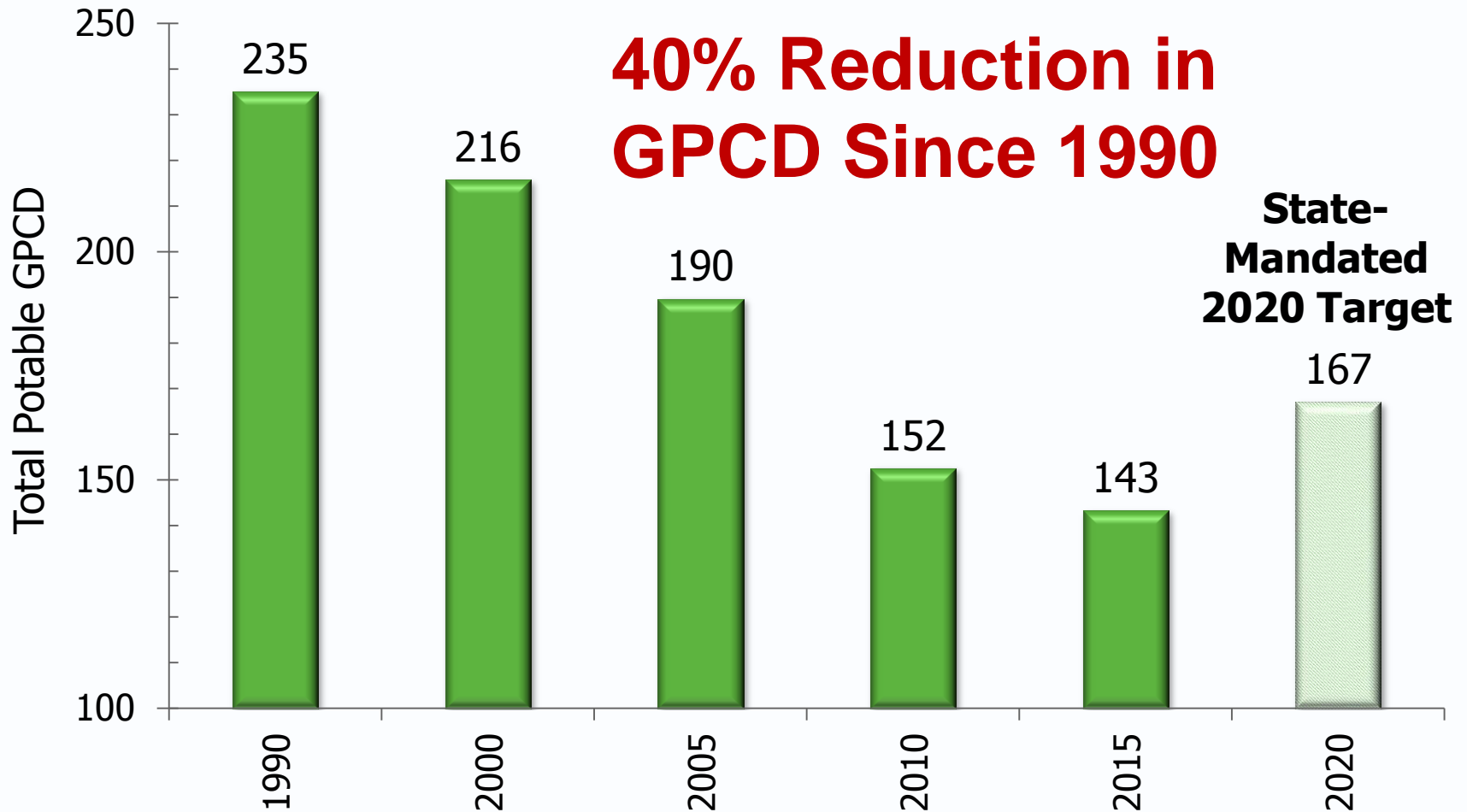
2009 Delta Reform Act (Water Code §85021):

- **“reduce reliance on the Delta”**
- **“invest in improved regional supplies”**
- **“improve regional self-reliance”**
- **“invest in conservation, and water use efficiency”**
- **“invest in advanced water technologies”**

# Implementing Gov. Brown's Water Action Plan

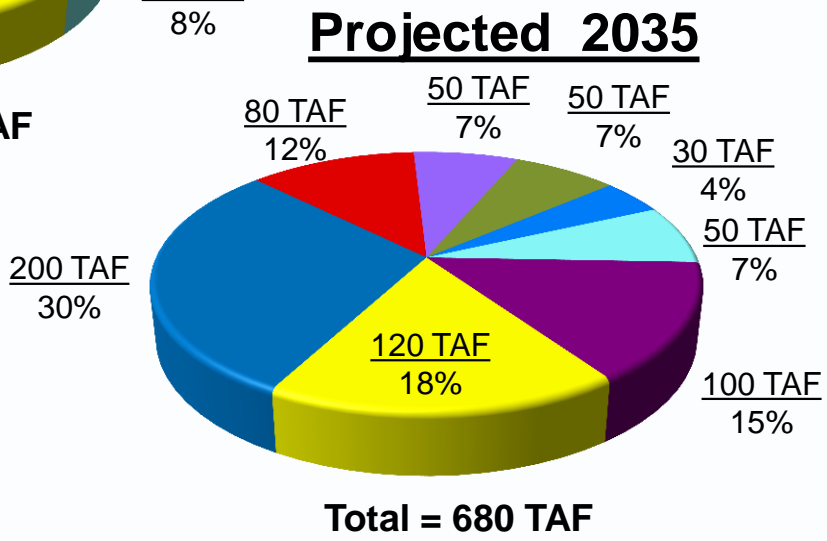
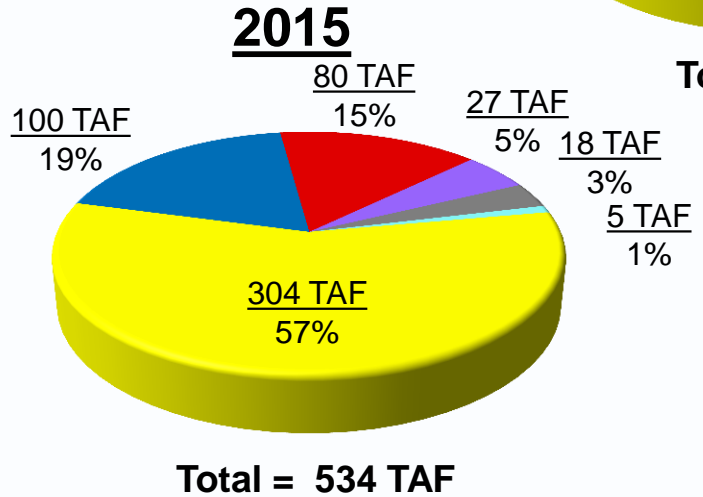
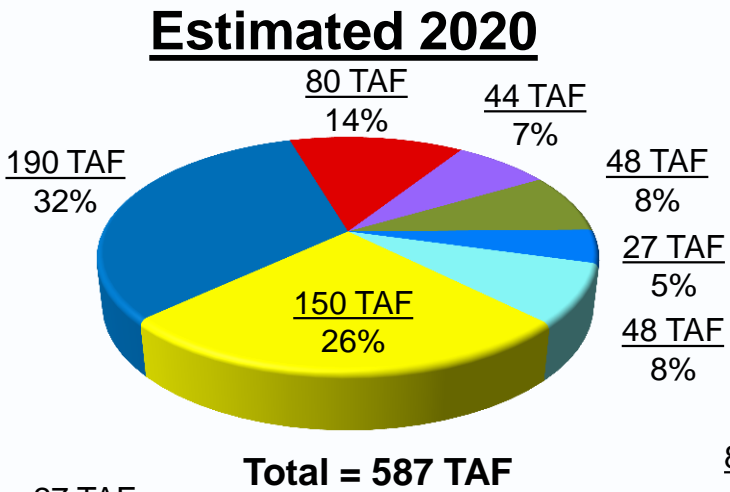
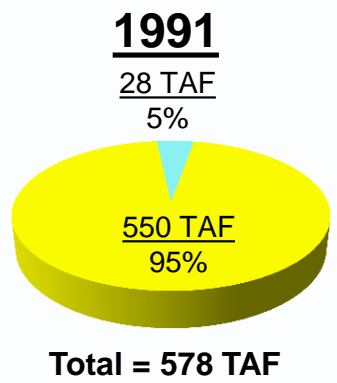
## Making Conservation a Way of Life

### San Diego County Reduction in Per Capita Water Use



# Implementing Gov. Brown's Water Action Plan

## Increasing San Diego County's Regional Self-Reliance



	Metropolitan Water District		Recycled Water		Local Surface Water
	Imperial Irrigation District Transfer		Seawater Desalination		Potable Reuse (Includes conceptual and planned projects)
	All American & Coachella Canal Lining		Groundwater		

# Groundwater Replenishment System

## Indirect Potable Reuse

- Operational since January 2008
- Creates 100 million gallons per day (103,000 acre-feet per year) of new water supply for Southern California
- Treating sewer water and purifies it to near-distilled quality for groundwater recharge
- Reduces imported water need for Southern California
- Provides a new source of water—enough for nearly 850,000 people
- \$623 million capital cost



SINCE 1933



# Regulations Must Account for Potable Reuse Projects

- Identical benefit to “Purple Pipe” non-potable reuse projects – should also receive credit in Regulation
- Potable reuse projects are more efficient as they avoid dual plumbing issues
- Reduces TDS concentration of local water supplies
- Not including potable reuse projects disincentives development of new projects
- More sustainable local supplies reduces imported water need and the frequency of drought events
  - Actions consistent with Governor Brown’s Water Action Plan

# Drought-Resilient Supply Credit

## *Basis and Rationale*

1. Provides a sustainable approach to managing California's Drought
  - Combination of conservation and drought-resilient supplies
2. Protects California's economy
  - Approach doesn't just rely on reduction mandates, which can stymie economic growth





# Drought-Resilient Supply Credit *Basis and Rationale (cont.)*

3. Allows agencies to realize the benefits from drought-resilient supplies
  - Consistent with Governor's Action Plan to increase self-reliance and reduce demands on Bay-Delta
  - Provide incentive for agencies to develop sustainable supplies



Desalination



Conserved Water Transfers



Potable  
Reuse



# Drought-Resilient Supply Credit

## *Alternative Path to Compliance*

- Simple and straightforward approach
- Urban water supplier conservation standard remains the same – no impact to other suppliers
- Reduction target is met through combination of conservation and drought sustainable supplies
- Include conservation savings floor of 8% to ensure balanced approach to managing droughts
  - Consistent with range included in current emergency regulations

# Drought-Resilient Supply Credit

## *Alternative Path to Compliance (cont.)*

- Applies to potable reuse, desalination, long-term transfers of conserved water or other potable drought-resilient supplies
- Urban agency must provide written proof that identifies long-term availability of supply
  - Written agreements, contracts or other guarantee
- Wholesaler has the ability to assign its sustainable supplies to agencies it serves

# Proposed Alternative Path to Compliance

## *Illustrative Example (Figures in AF)*

		Agency A	Agency B
A	2013 Base Period Month	3,000	3,000
B	Conservation Standard	20%	20%
<b>C=A*B</b>	<b>Total Reduction Target</b>	<b>600</b>	<b>600</b>
<i>Reduction target may be met through conservation and sustainable supplies</i>			
D	Drought-resilient supplies available	200	500
E=C-D	Conservation savings	400	100
F=E/A	Does savings drop below 8%?	13% (no)	3% (yes)
<i>Determine sustainable supplies and conservation applied to reduction target, assuming 8% conservation floor</i>			
G=A*.08	Conservation required with 8% floor	400	240
H=C-G	Adjusted drought-resilient supplies applied to reduction target	200	360

# Conclusion

## Drought-Resilient Supply Credit

1. Provides a sustainable, balanced approach to managing California's Drought
2. Protects California's economy
3. Allows agencies to realize the benefits from investments in drought-resilient supplies
  - Consistent with Governor's Action Plan to increase self-reliance and reduce demands on Bay-Delta



Desalination



Water-Use Efficiency



Potable Reuse