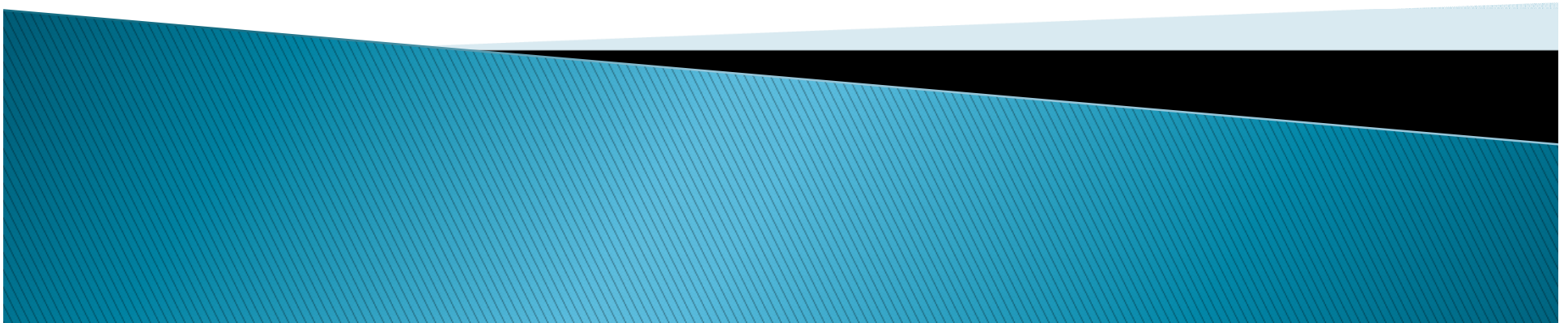
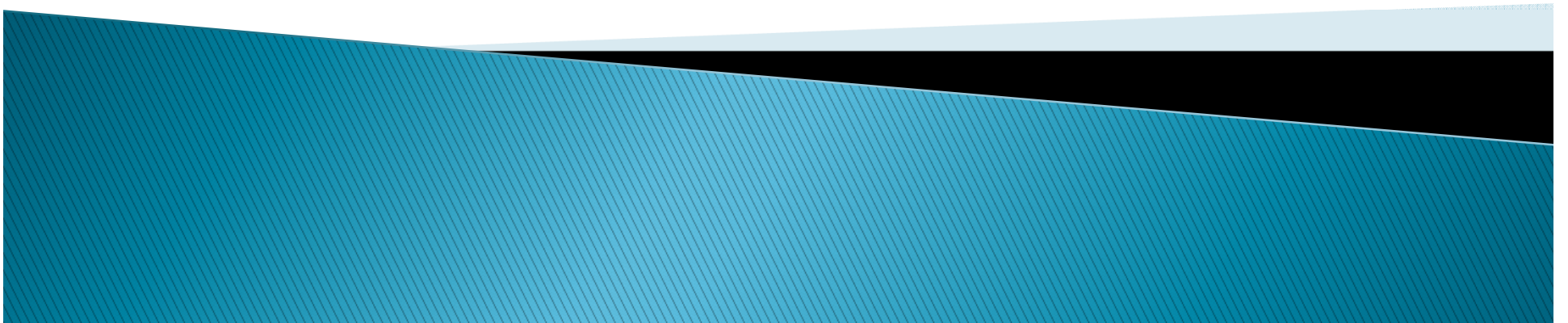


Supply–Demand Based Emergency Regulation Framework

State Water Resources Control Board
Public Workshop
April 20, 2016

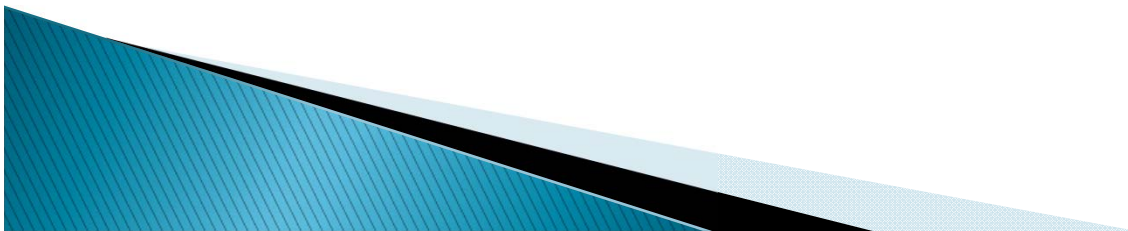


Modified Emergency Regulation



Emergency Regulation Goals

- ▶ Ensure California has an adequate water supply to support the population and economy, in balance with environmental needs
- ▶ Effectively prevent water waste
- ▶ Balance available supplies with projected demands
- ▶ Set demand reductions based on supply limitations



Modified Emergency Regulation

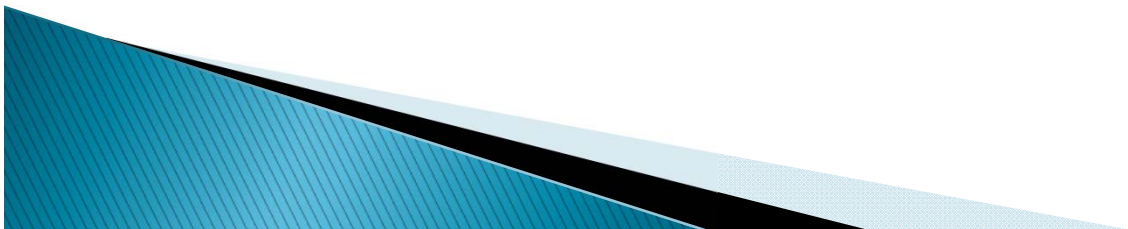
Three Components:

1. Basic requirements
2. Modified demand reduction targets based on availability of supplies to meet demands
3. Sustainability assessment for two additional years



1. Basic Requirements

- ▶ Mandate water waste restrictions and end user requirements that apply to all Californians
- ▶ Monthly reporting to the State Board
 - Total potable water production
 - Residential gpcd
 - Water Shortage Contingency Plan stage
 - Mechanisms to prevent water waste
- ▶ Water supplier demonstrates ability to implement mandatory use reductions, if necessary



Modified Emergency Regulation

Three Components:

1. Basic requirements
2. Modified demand reduction targets based on availability of supplies to meet demands
3. Sustainability assessment for two additional years



2. Modify Demand Reduction Targets

- ▶ Modify Conservation Standards for the period of the Emergency Regulation
- ▶ Supplier evaluates and self-certifies its availability of supplies to meet demands
- ▶ Implement demand reduction targets based on supply shortages identified by supplier



Demand Reduction Targets

Supply Deficiency	Target Demand Reduction
0-5%	0-5%
5-10%	5-10%
10-15%	10-15%
15-20%	15-20%
20% or more	20% or more



Modified Emergency Regulation

Three Components:

1. Basic requirements
2. Modified demand reduction targets based on availability of supplies to meet demands
3. Sustainability assessment for two additional years



3. Sustainability Assessment for Two Additional Years

- ▶ Evaluate supply condition under two additional years of dry conditions
- ▶ Demand can be met through:
 - Supply management
 - New supply augmentation
 - Conservation actions

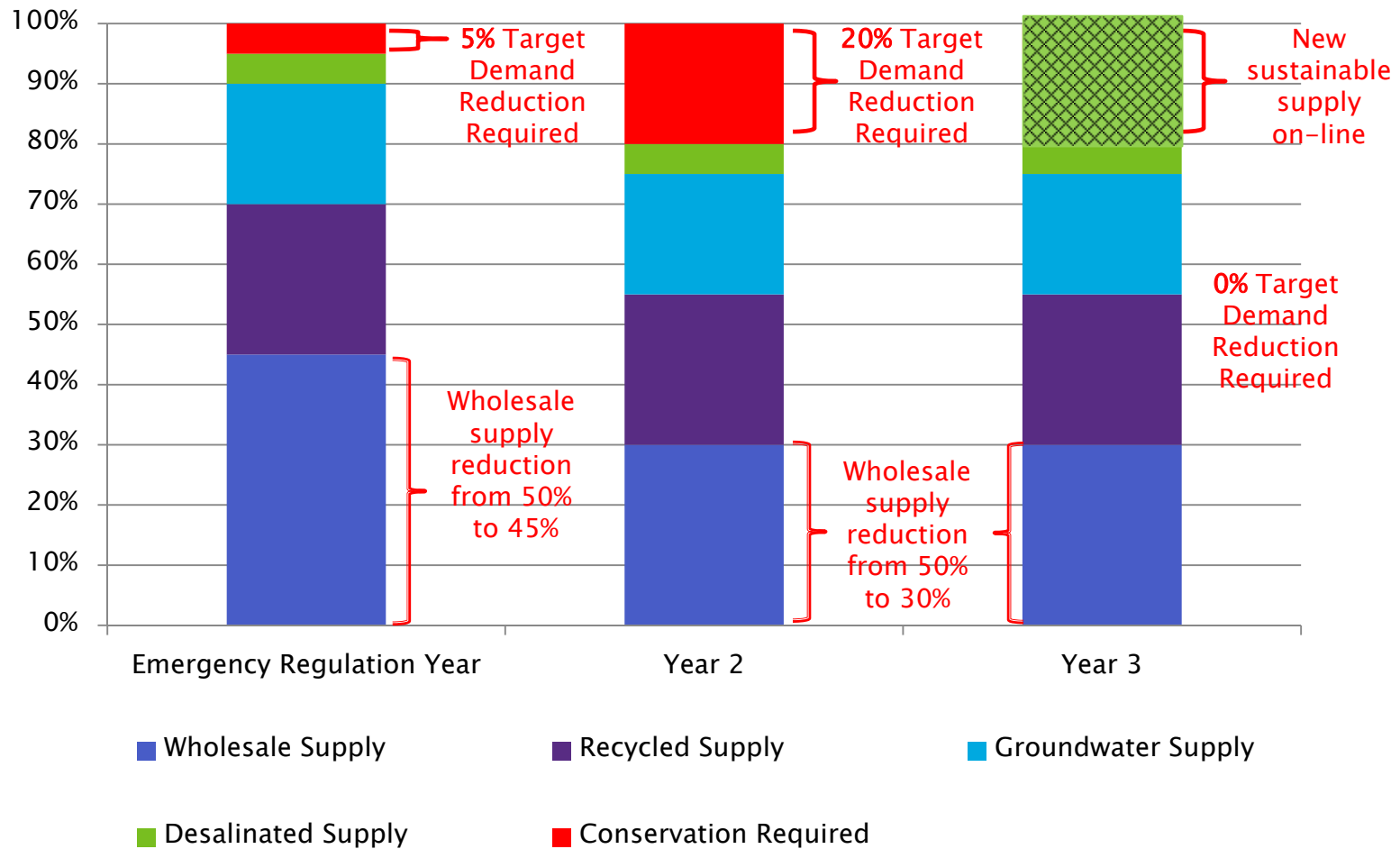


Supply–Demand Evaluation Example

- ▶ **Retailer Supply Sources**
 - Wholesale supplies
 - Groundwater
 - Desalinated water
 - Recycled water
- ▶ **Retailer Demands**
 - Based on three–year average
- ▶ **Hydrologic Conditions**
 - Year 1: Dry
 - Year 2: Severely Dry
 - Year 3: Severely Dry
- ▶ **Projected New Sustainable Supplies**
 - Year 3 – new desalination plant on–line



Supply-Demand Evaluation Example

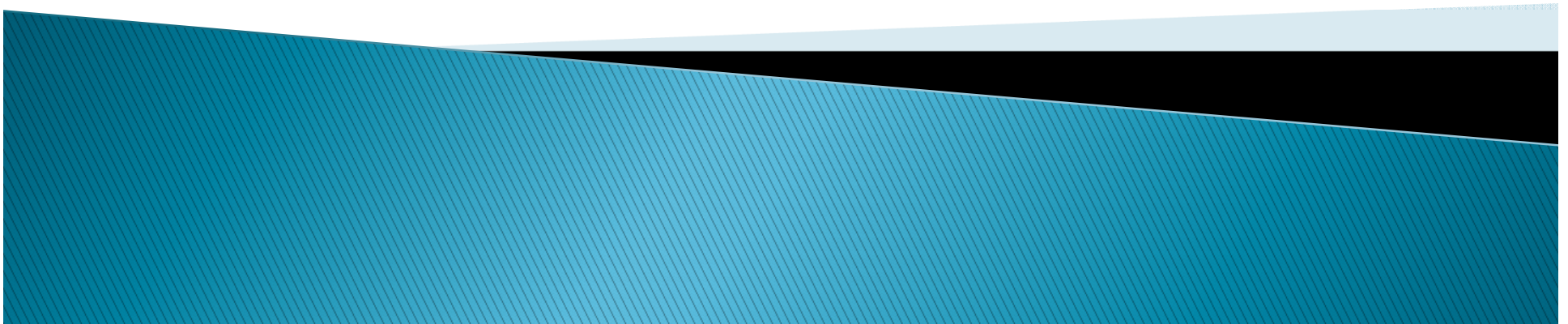


Benefits of Supply–Demand Approach

- ▶ Reflects water supplier's total integrated water resources planning portfolio
- ▶ Calibrates demand reductions to the severity of shortage for each supplier
- ▶ Provides strong incentive for local agencies' continued investments into developing sustainable supplies and water efficiency
- ▶ Automatically incorporates and accounts for regional differences and previous investments
- ▶ Reduces water waste through implementation of water waste restrictions
- ▶ Easy to implement, eliminates the need for credits and adjustments



Emergency Regulation Considerations



Emergency Regulation Intent

- ▶ Requires an assessment of hydrologic conditions and impacts to water availability
- ▶ Target demand reductions based on availability of supplies to meet demands
- ▶ Incorporate mandatory measures to prevent water waste during a statewide emergency for all Californians



Need for Assessing All Water Supply Conditions

- ▶ Significant snowpack and precipitation
 - Above average in watersheds for major water supplies
- ▶ Reservoirs
 - Replenishment of storage
 - Releases for flood control in some regions
- ▶ State Water Project Allocation: 45%
- ▶ CVP: 55% Initial Allocation
- ▶ Colorado River: Full Apportionment
- ▶ Local sustainable supply investments



Summary

- ▶ Modified Emergency Regulation
 1. Basic requirements
 2. Modified demand reduction targets based on availability of supplies to meet demands
 3. Sustainability assessment for two additional years
- ▶ Emergency Regulation should consider all water supply conditions

