

DROUGHT MANAGEMENT **WORKSHOP**

Santa Clara Valley Water District
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Presentation Summary

- Water Agencies define and cope with drought and water shortages based on their unique circumstances and specific conditions.
- Managing water shortages requires a broader definition of drought to include “Regulatory Drought”, reflecting current realities and conditions
- Key Features of District Contingency and Drought Planning and Management
- We’re in a new era and have to rethink the way we use water, not just during a drought but as we move ahead.



**Today, one local agency
manages the water
resources for the
entire county**

- **serves 13 local water retailers, 15 cities;
population of 1.8 million**
- **Our role is assess water supply conditions
and levels of conversation needed**
- **District coordinates and works closely with
local water retailers and cities to achieve
goals**

District Water Supplies

Variety of water supply sources for Santa Clara County

Imported

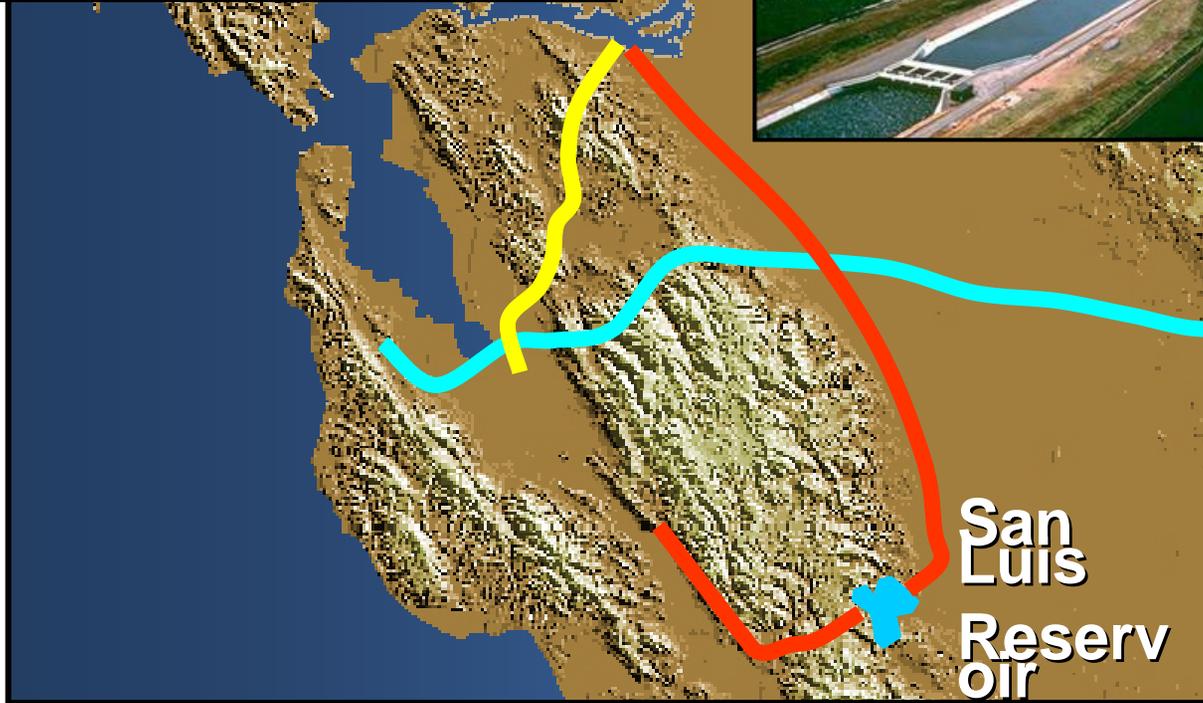


Local surface and groundwater

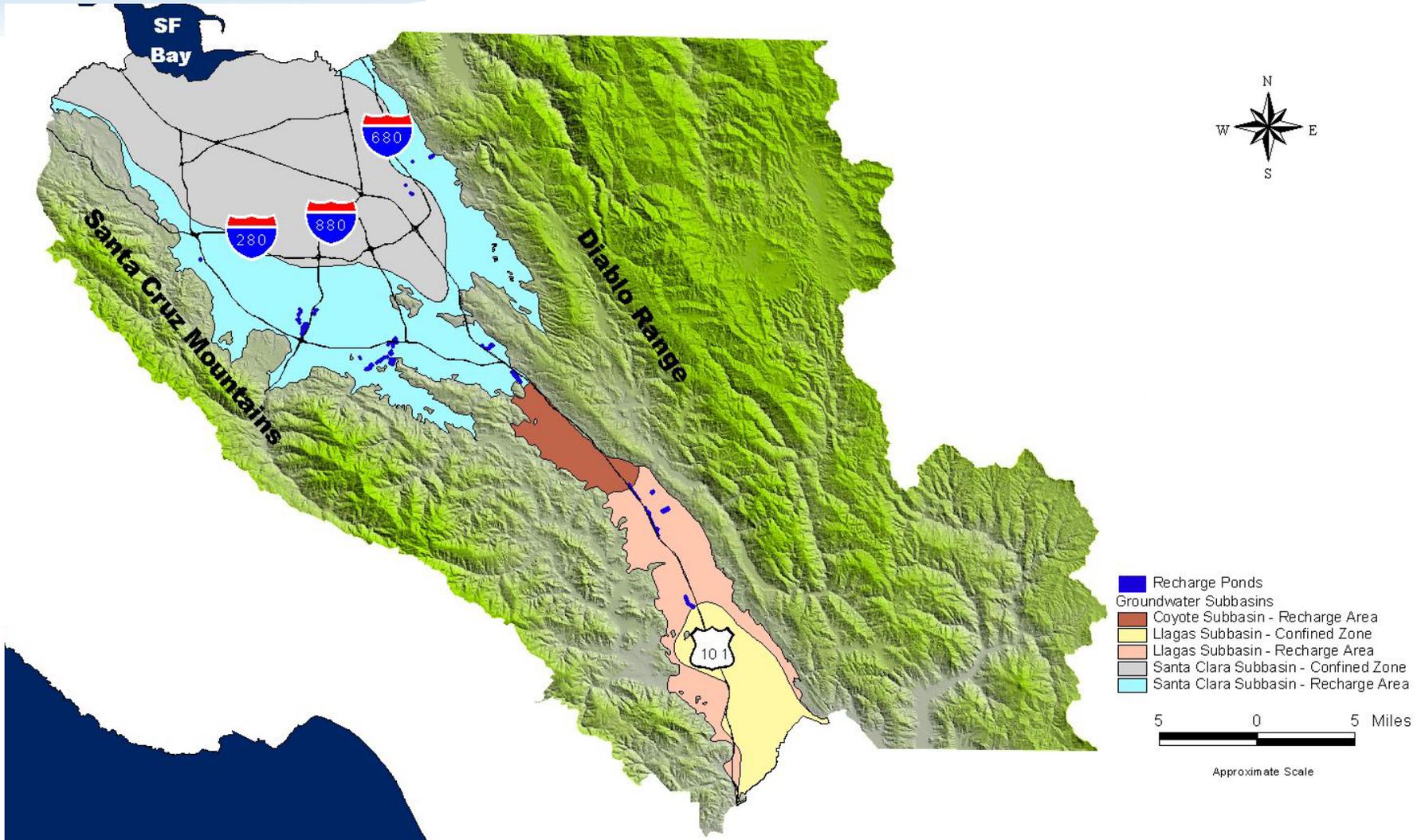
Recycled



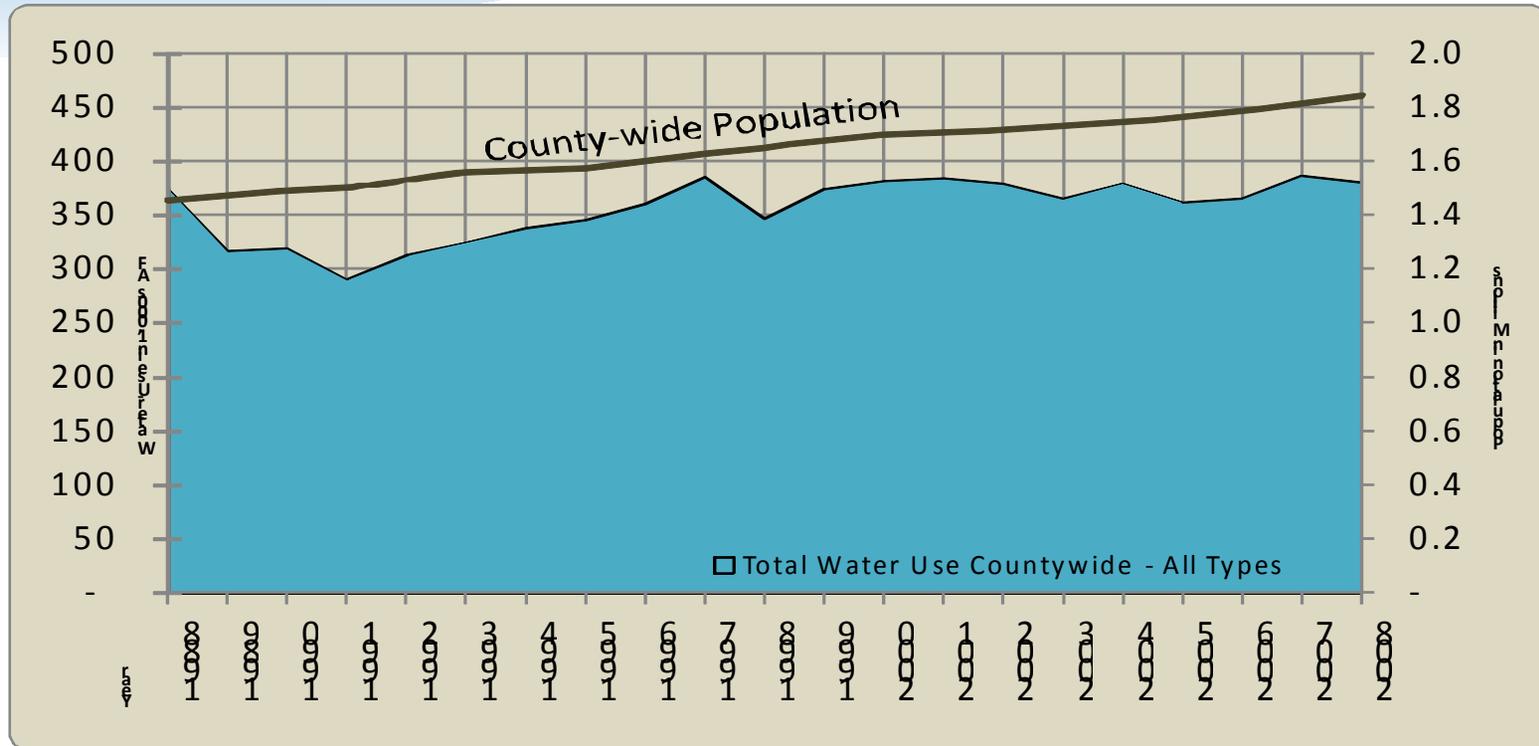
Imported Water Supplies



We Rely on Groundwater Reserves



Historical Water Use & Population



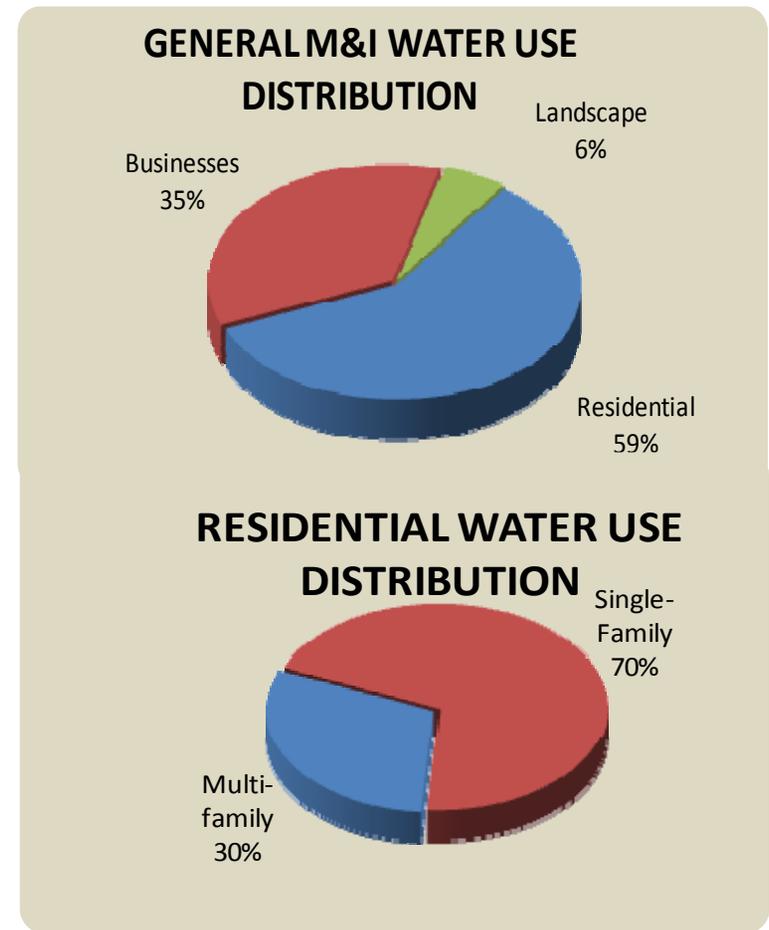
Population increased **27%**, yet water use has remained flat due to water conservation.

General M & I Water Use Distribution

Over half of the county water use is residential.

About 70 percent of residential use is from single family homes.

Outdoor water conservation can go a long way in reducing county wide water use



DESIGN WATER **SHORTAGE**

It's Not Just a Drought Plan

We Face Dual Problems

- Water Shortages due to extended dry periods:
HYDROLOGIC DROUGHT
- Water Shortages due to environmental and operational regulations:
REGULATORY DROUGHT

Regulatory Uncertainty: Imported Water Supply Restrictions



Harvey O. Banks Pumping
Plant Entry to Pumps View

2009 regulatory uncertainty:
Recent listing of longfin smelt
and Biological Opinion for
salmon could further reduce
water supplies

Delta pumping restrictions
cut state and federal water
supplies by as much as
30% to protect delta smelt



Skinner Fish Facility Salvages Fish
Before Entering Pumps

Local Water Supply



Many local reservoirs and streams are operated for steelhead.

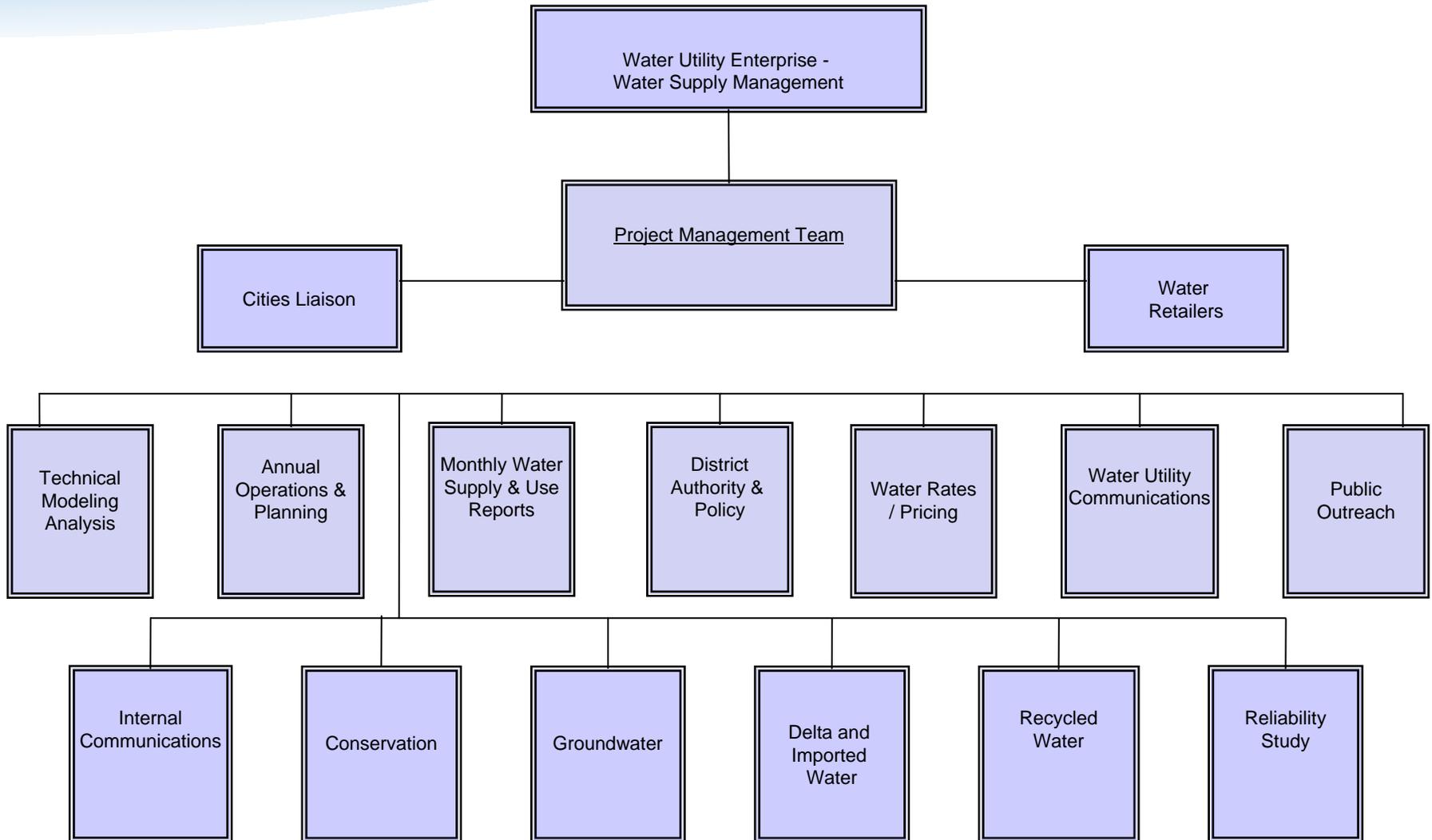
The District is forced to reduce storage in local reservoirs because of California Division of Dam Safety Requirements



We factor these conditions in our contingency and drought planning

District Contingency and **Drought Planning and** **Management**

Contingency & Drought Management Team



Coordination with Local Water Retailers

- **Quarterly Retailers Meetings -**
building on Urban Water
Management Plans for today's
conditions
- **Retailer Subcommittees -**
more frequent meetings
 - Groundwater
 - Conservation –includes cities
 - Water Supply

Input to Contingency & Drought Plan

- **Periodic updates to District Board**
- **Board Advisory Groups**
 - Water Commission – elected officials
 - Landscape Advisory Committee –advise on outdoor water use
 - Environmental Advisory Committee
 - Agricultural Advisory Committee – agriculture is half the water use in south Santa Clara County.

Key Features of the Plan: Objectives

- **Maintain an On-Going Coordinated Effort with Retailers and Cities to Encourage Efficient Water Use and Focus on Reducing Non Essential Uses**
- **Avoid and Limit Shortage Impacts to the Economy, Jobs, and Environment**
- **Protect Water Supplies for Public Health and Safety Needs**

Questions to Consider:

Reliability, Risk and Cost?

- **With Different Stages, How Often and How Much Will Customers be Asked to Reduce Water Use?** (Reliability)
- **How Low Will Water Levels Get?** (Risk)
- **And, What are the Costs Associated With Different Drought Response Strategies?**

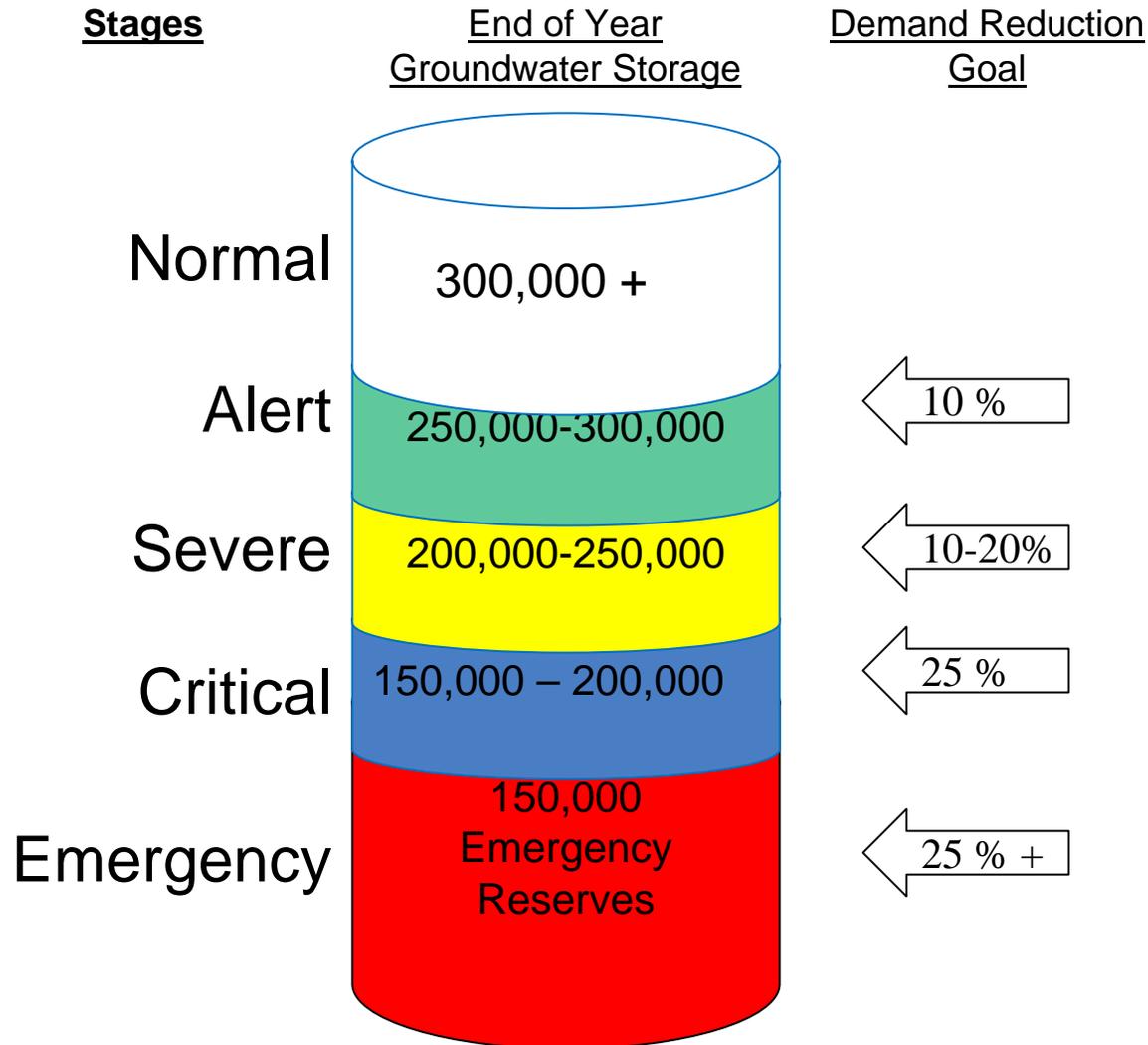
DESIGNING WATER SUPPLY STAGES:

How to Minimize Impacts?

- Maintain sufficient reserves for public health and safety
- Recognize Greater Hardships to the Economy and Quality of Life in Santa Clara When We Have to Call for Larger Demand Reductions.
- Design Stages Not to exceed 25%, Except for Catastrophic Emergencies.
- Address the Trade-offs Associated with Early Versus Delayed Actions.

2009 Contingency & Drought Planning

Guidelines



2009 Actions/Costs to Respond to Shortages

- **Water Banking Program (\$4.5 million)**
- **Water Reduction Programs in Conservation outreach, education, marketing (media campaign \$2 million)**
- **Draw on local reserves (not quantified yet)**
- **Pursue Other Supplies Through Transfers and State Drought Bank. (\$5 million)**
- **Reduction in water use = loss of revenue**

Communications Plan

How to Minimize Impacts?



Once it's on it's gone.

California is in a drought. Unless we all pitch in and conserve, mandatory restrictions may be the next step.

Valley Water is calling for an immediate 10% voluntary cutback.

Conservation Programs

Santa Clara Valley Water District is implementing over 20 water conservation programs....

- 💧 10 Residential Programs**
- 💧 10 Commercial, Industrial, Institutional Programs**
- 💧 2 Agricultural Program**
- 💧 Extensive Outreach/Education**



Water Wise House Call



CIMIS station at vineyard in Saratoga

We Have to Rethink the Way We Use Water

- Challenges locally and statewide are greater today than during the 1987-92 drought.
 - Population growth
 - Multiple uses of water
 - Climate Change
 - Financial constraints
- Stretch and Develop Local Supplies through Water Use Efficiency Programs: Improve system operation, Conservation, Recycling, Desalination
- Need a more resilient statewide system for water supply and environmental purposes