

Sustainable Water Resource Management

Michael Thomas, Assistant Executive Officer

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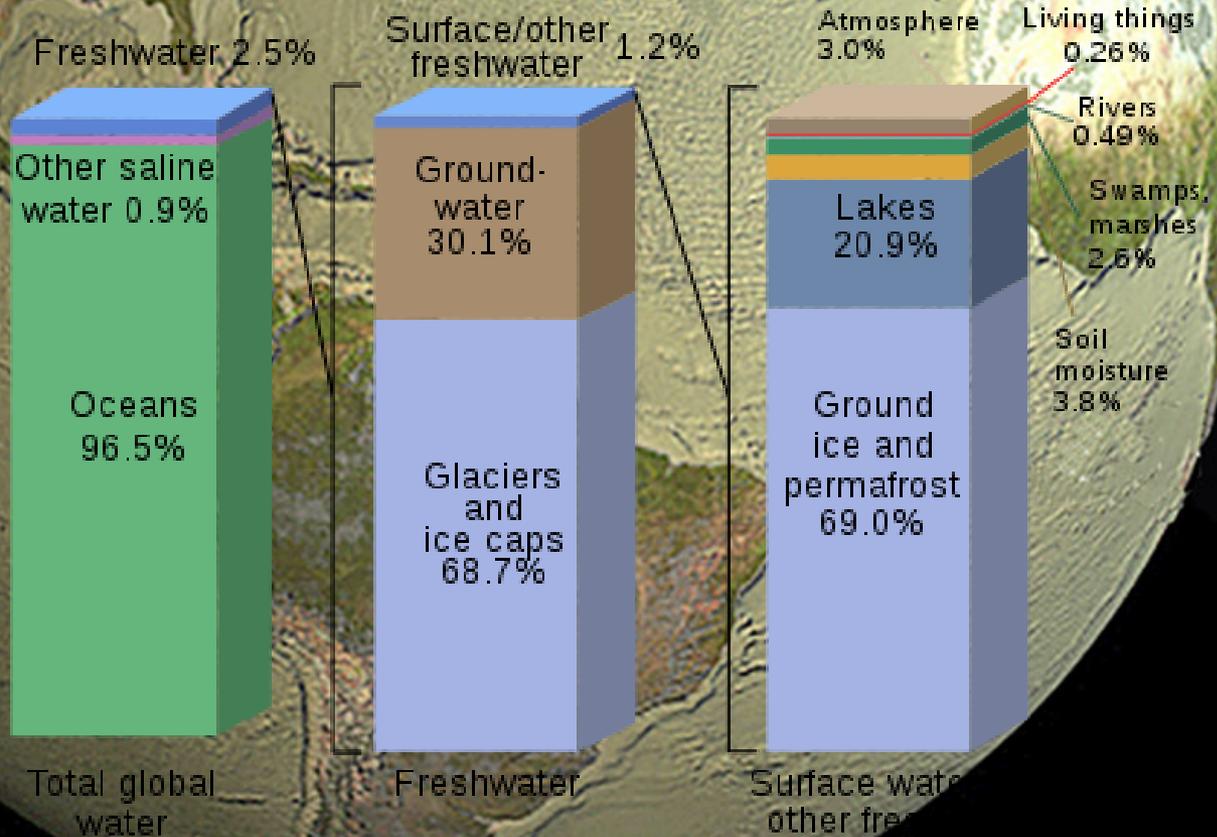
Central Coast Water Board Meeting

February 2018





Where is Earth's Water?

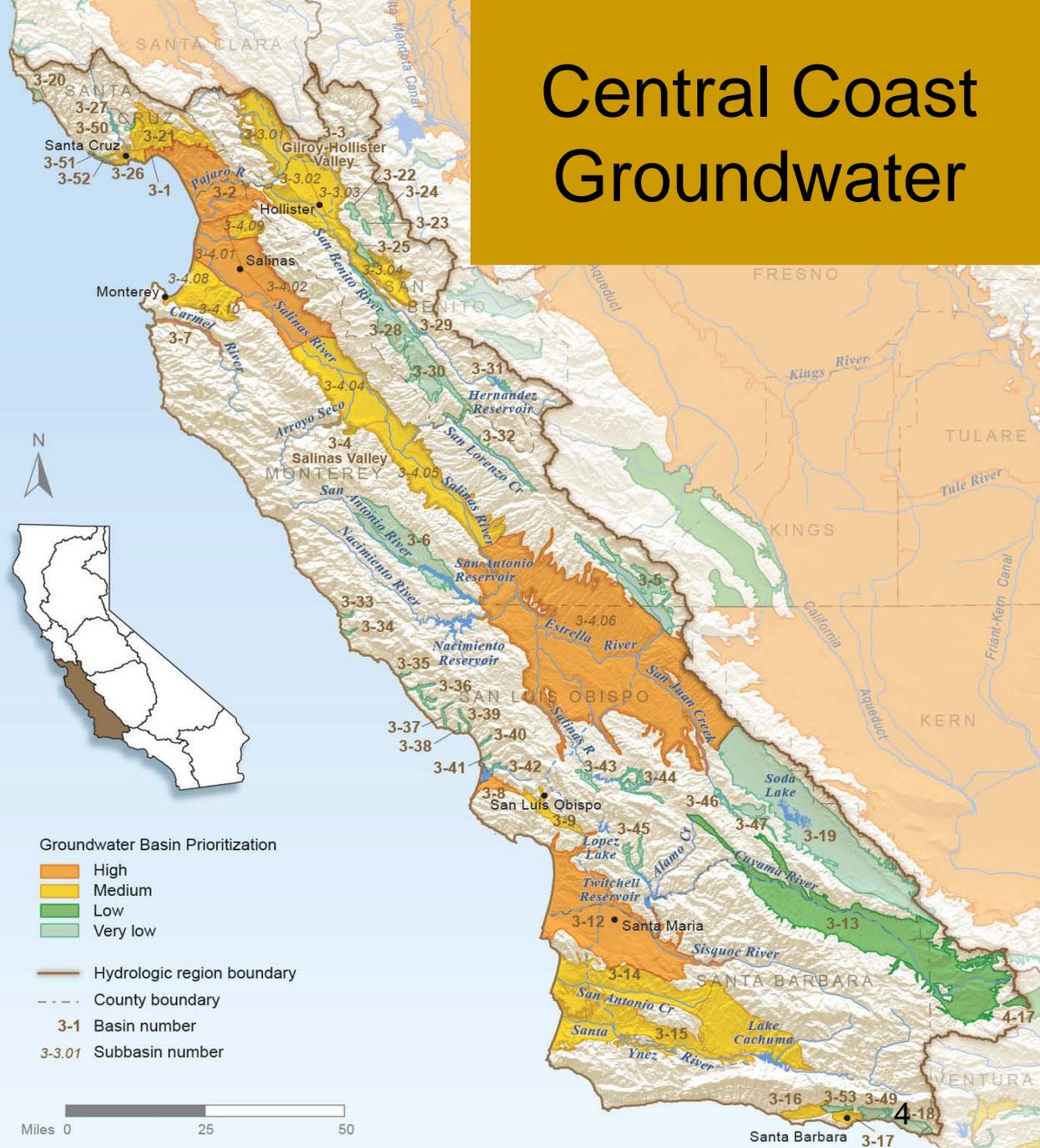


Central Coast Groundwater

Groundwater supplies about 86% of all use (DWR 2005-2010 data)

Highest dependence in the state

Many communities depend on groundwater for 100% of supply



Average Annual Groundwater Supply by County and by Type of Use (2005-2010)

<u>County</u>	Ag GW Use	Urban GW Use
Santa Cruz	98%	71%
San Benito	74%	70%
Monterey	99%	100%
San Luis Obispo	97%	74%
Santa Barbara	87%	48%
Ventura	73%	16%

Source: Table CC-14 and SC-9 from CA Water Plan Update 2013 Public Review Draft.



Water Resource Stressors

Climate Change

Population

Pollution

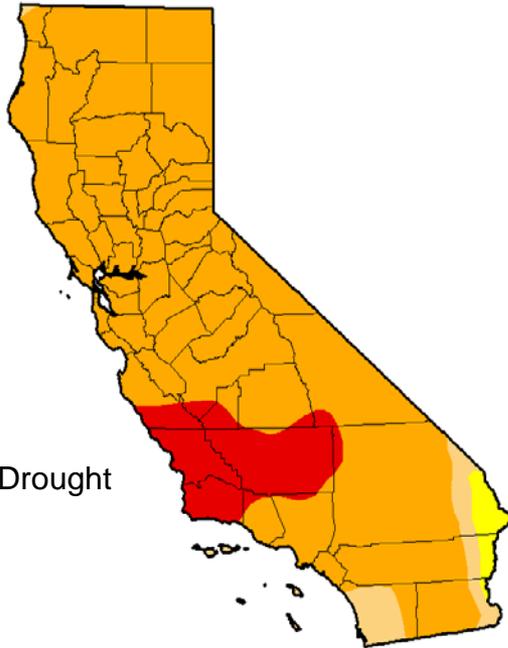


Drought Map Legend

-  None: No Drought
-  D0: Abnormally Dry
-  D1: Moderate Drought
-  D2: Severe Drought
-  D3: Extreme Drought
-  D4: Exceptional Drought

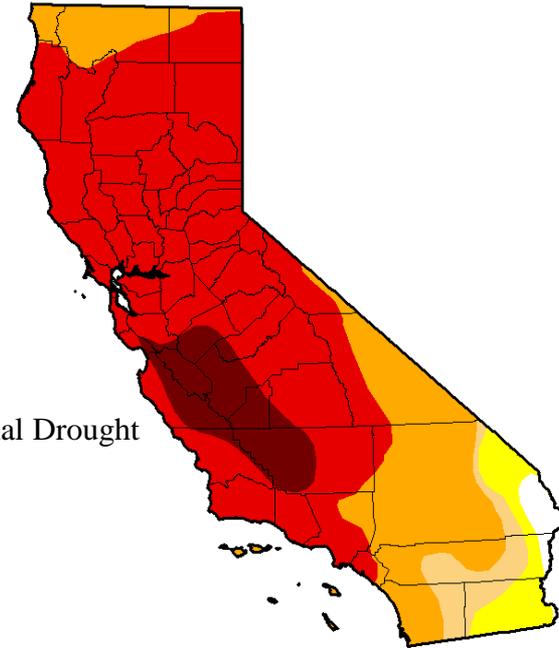
Stressor: Climate Change

August 13, 2013



Extreme Drought

January 28, 2014

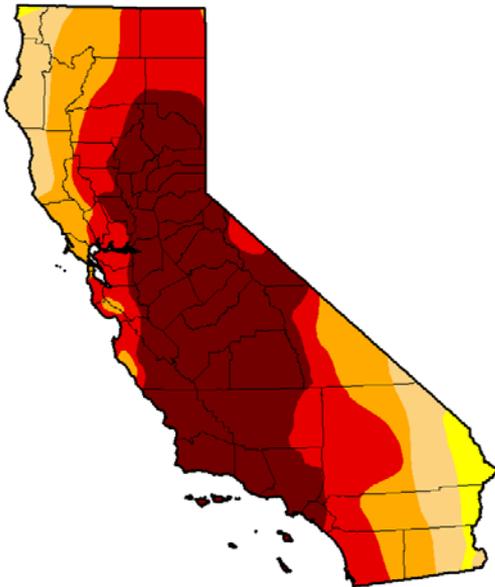


Exceptional Drought

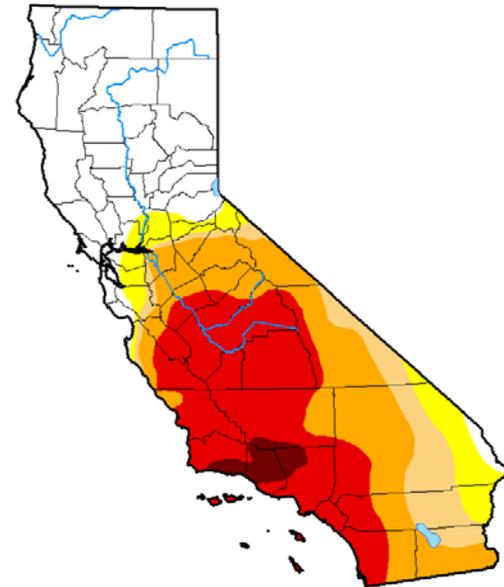
Drought Map Legend

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January 19, 2016



January 10, 2017

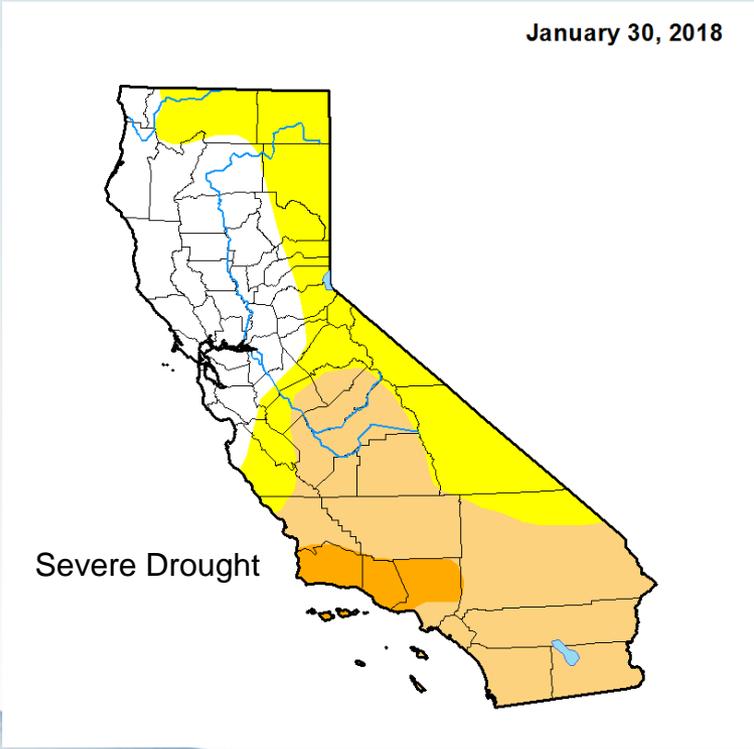
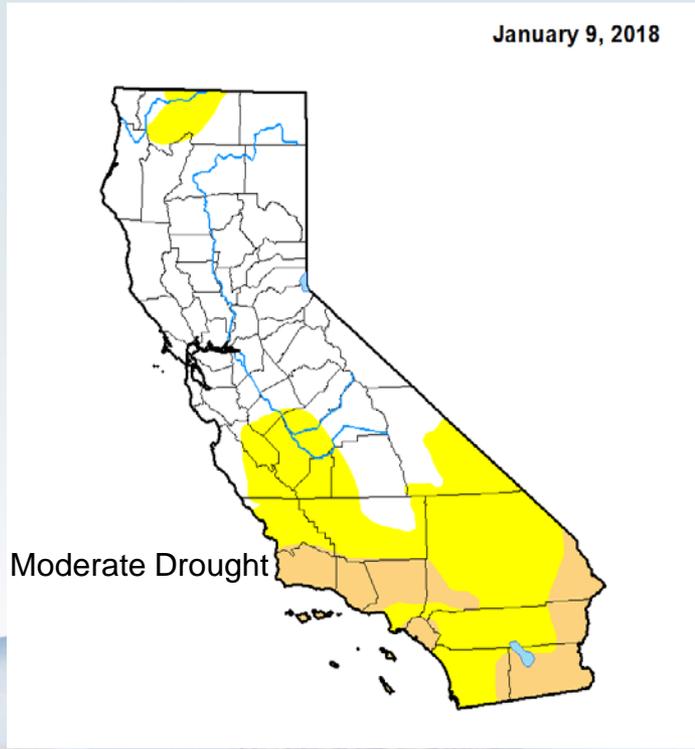


SLO County whiplashes back into drought as hot, dry winters return

Telegram Tribune, February 1, 2018

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Cachuma Lake
2014

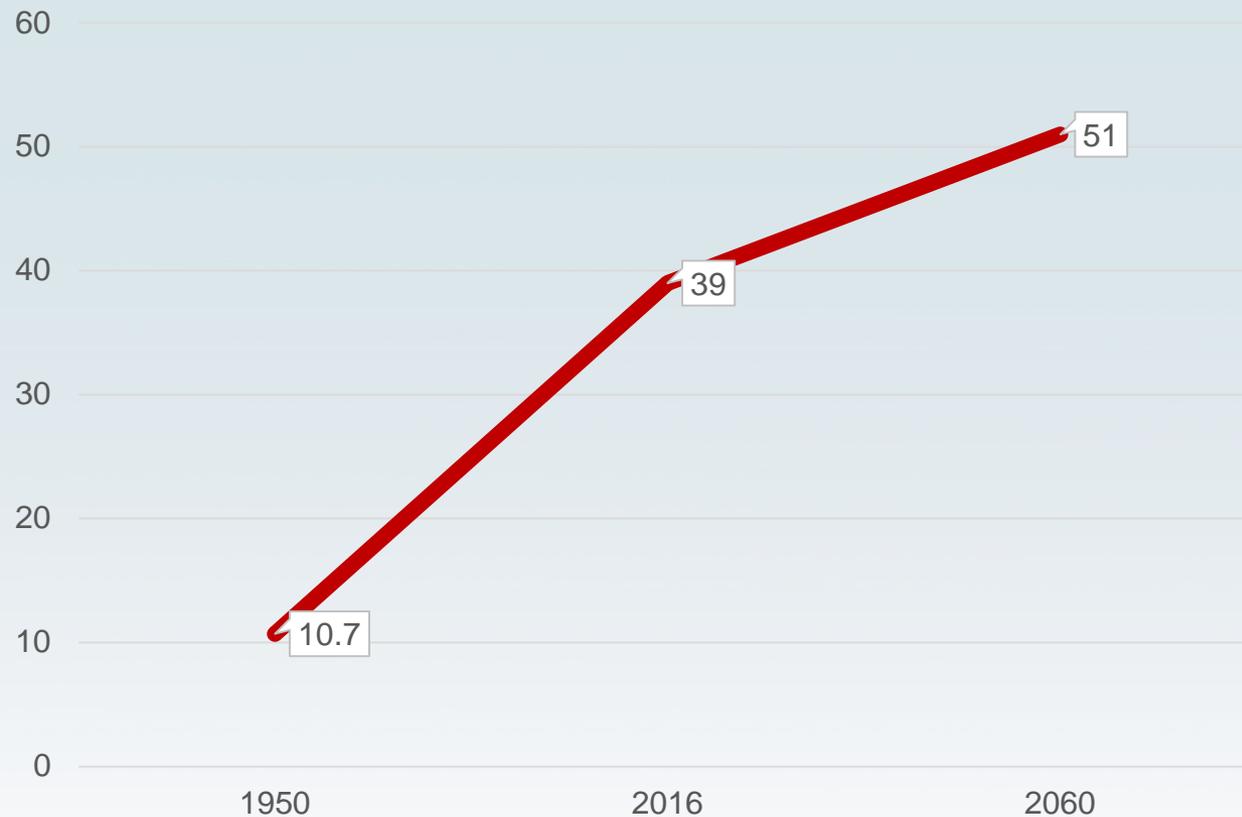


Cachuma Lake
2016





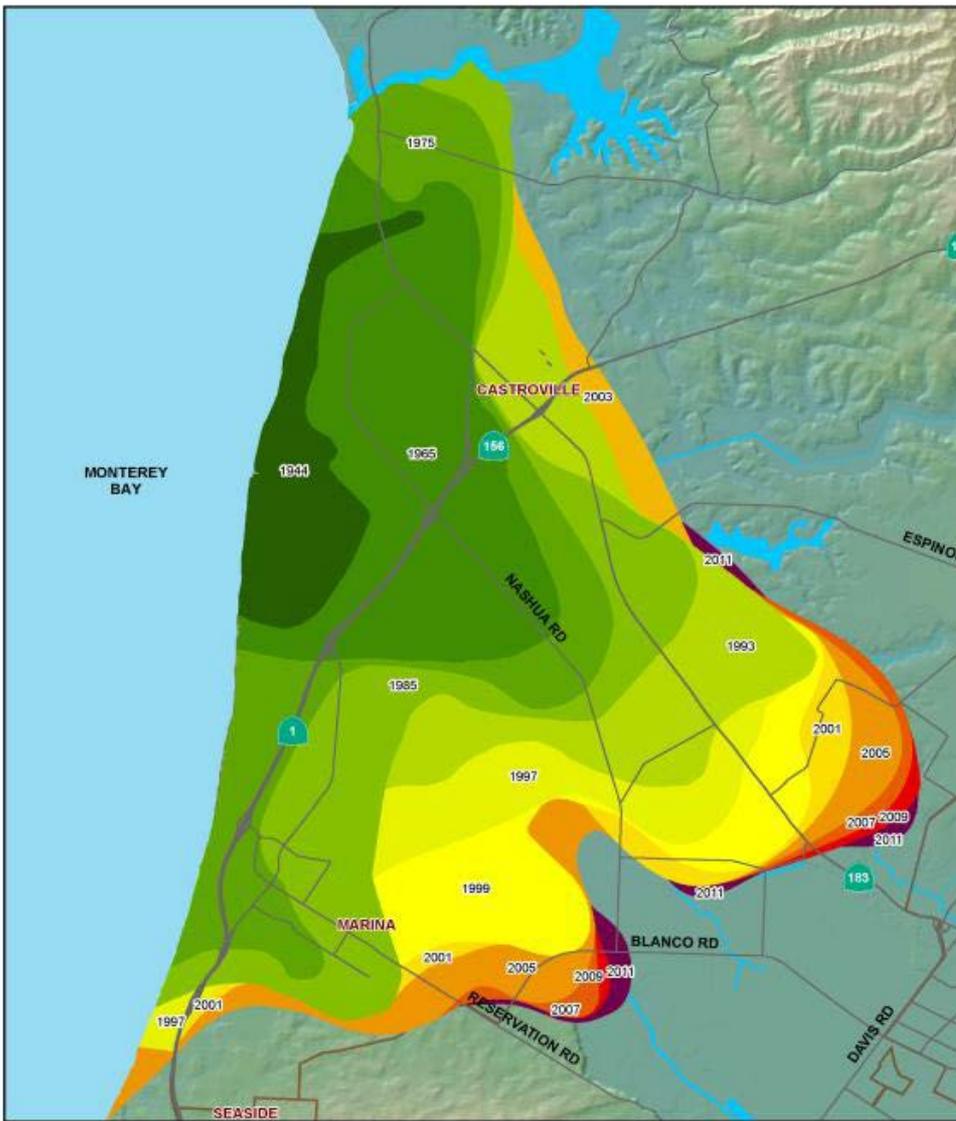
Stressor: California Population



Source: California Department of Finance

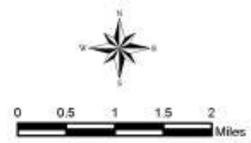
Stressor: Pollution



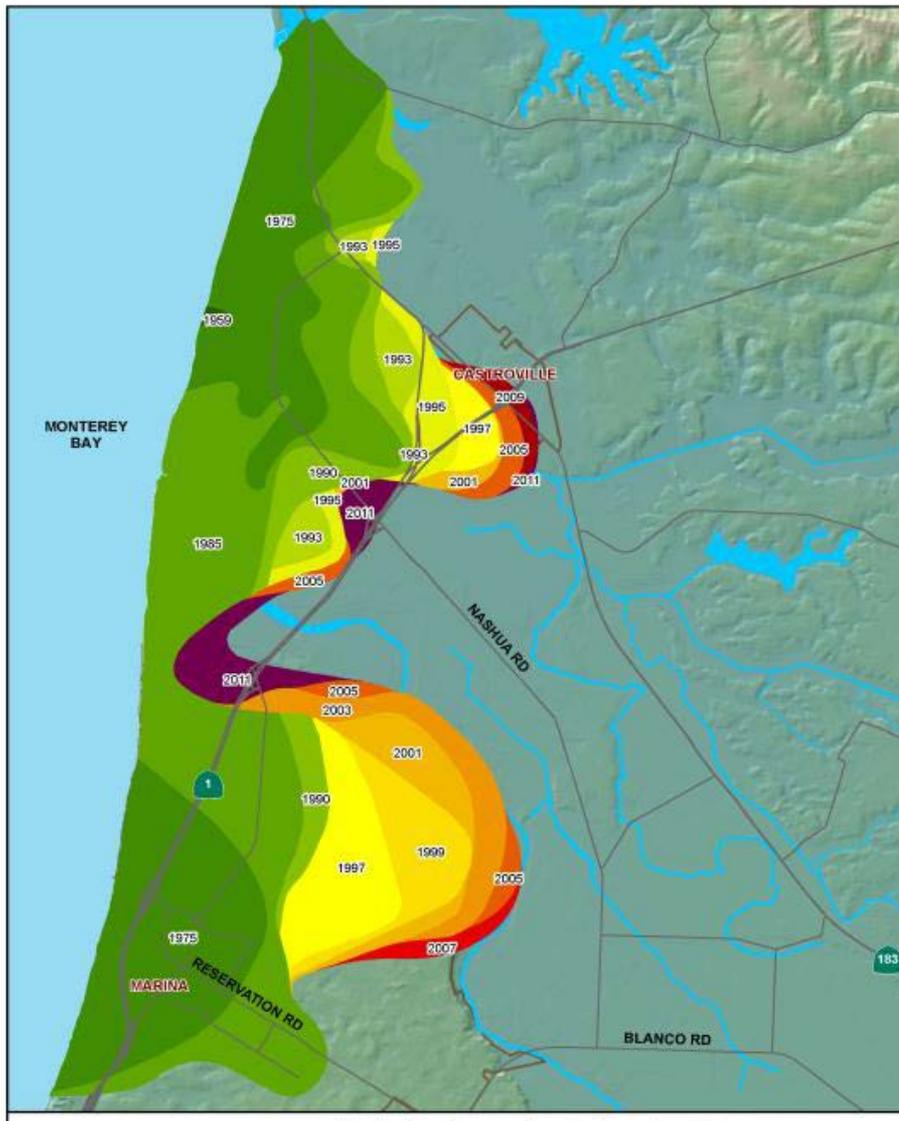


Historic Seawater Intrusion Map
 Pressure 180-Foot Aquifer - 500 mg/L Chloride Areas

- Legend**
 Seawater Intruded Areas By Year
- 1944
 - 1965
 - 1975
 - 1985
 - 1993
 - 1997
 - 1999
 - 2001
 - 2003
 - 2005
 - 2007
 - 2009
 - 2011
- Cities

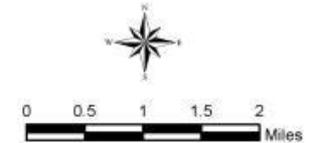



 Note: The scale and configuration of hereon are approximate and are not for conveyance or design work. Contours are best available data.
 Map Date: Aug



Historic Seawater Intrusion Map
 Pressure 400-Foot Aquifer - 500 mg/L Chloride Areas

- Legend**
 Seawater Intruded Areas By Year
- 1959
 - 1975
 - 1985
 - 1990
 - 1993
 - 1995
 - 1997
 - 1999
 - 2001
 - 2003
 - 2005
 - 2007
 - 2009
 - 2011
- Cities



Note: The scale and configuration of hereon are approximate and are not for conveyance or design work. Contours are best available data.
 Map Date: Aug

Scope of the Project

Scope 1: Subjects

Recycling

Groundwater Recharge

Pollution Reduction

Scope 2: Implementation

Direct Authority

Indirect Authority

Influence



Implementation

- Direct Authority
 - Enforceable
 - Requirements
 - Time Schedules to reduce pollution and achieve water quality objectives
 - Prohibitions
- Indirect Authority
 - Discharge is a privilege, not a right
 - Discretion to issue a permit
- Influence
 - Financing
 - Expectations
 - Education

Conclusion

- Sustainable water management is critical to our future
- The Board drives the project
- No staff resources assigned yet
 - New staff, restructuring effort
- Discussion is just beginning
- Additional scoping sessions 2018
- Questions:
 - Are we on the right track?
 - Is the scope reasonable so far?
 - Are we missing key elements?

