

# Water System Overview

Presented to Alameda LAFCO

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# Agenda

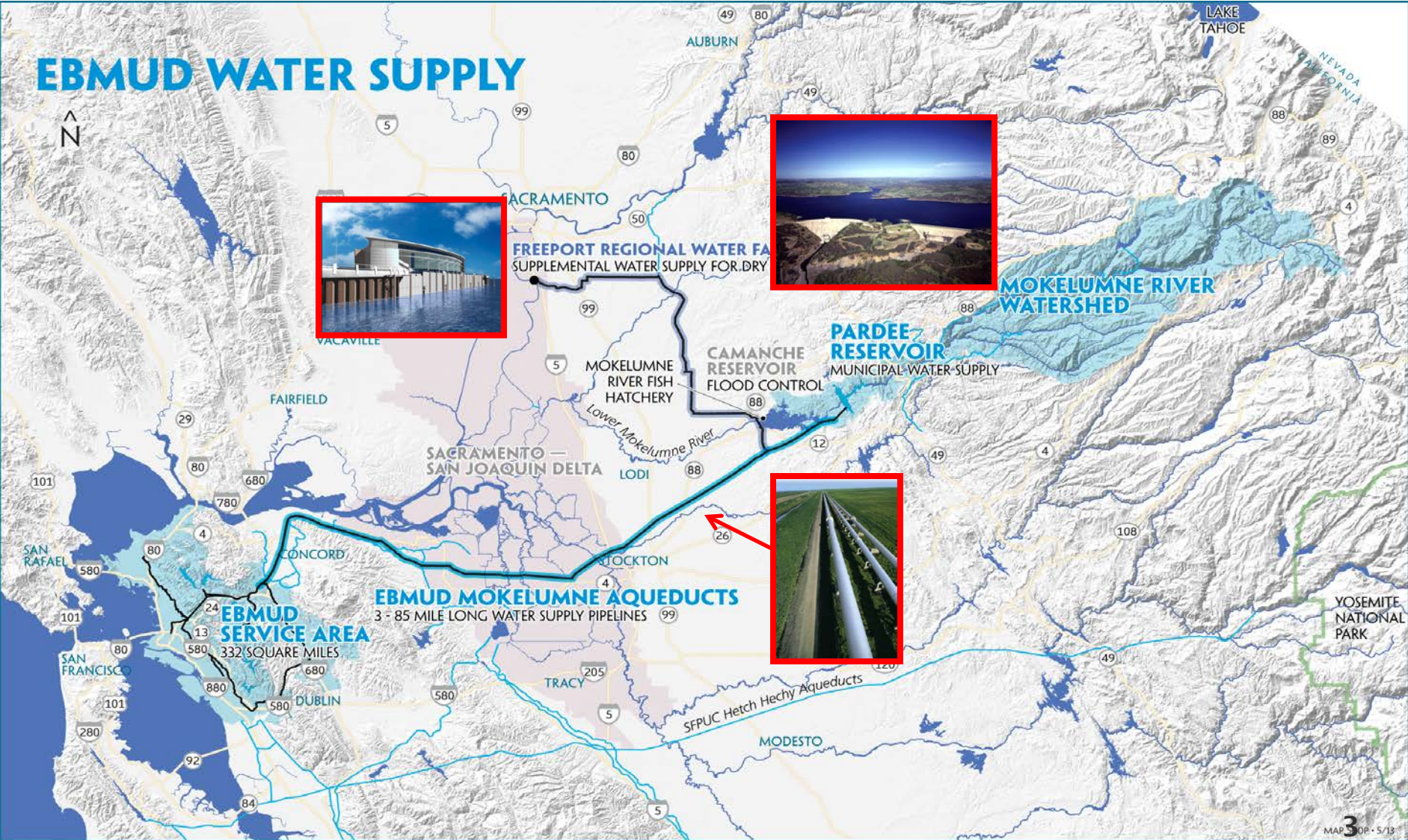


1. EBMUD system
2. Infrastructure status including water supply
3. Interconnections, drought prep, conservation
4. Rates, revenues, finance
5. Future opportunities and challenges

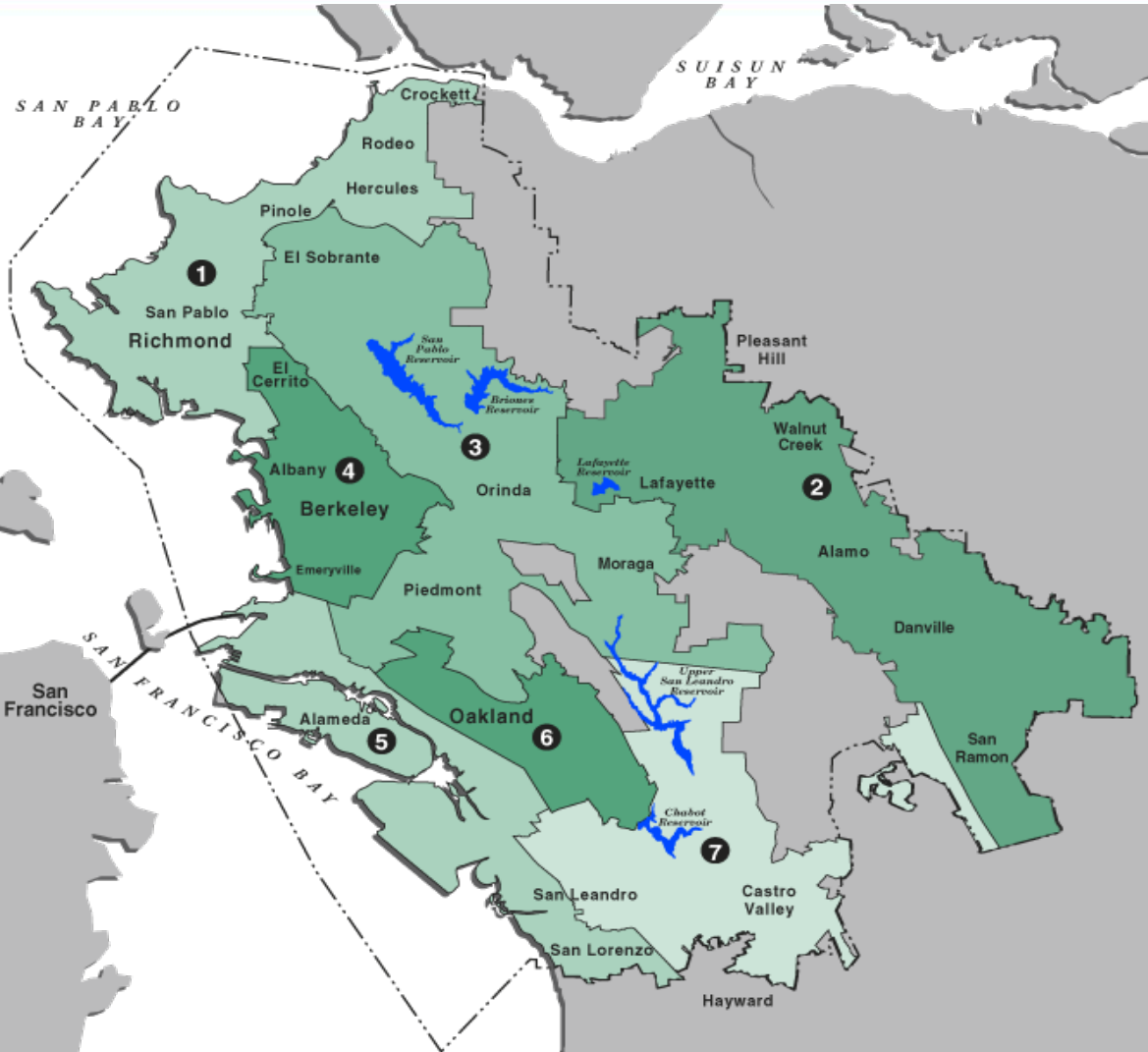
# 1. EBMUD System



## EBMUD WATER SUPPLY



# 1. EBMUD Service Area



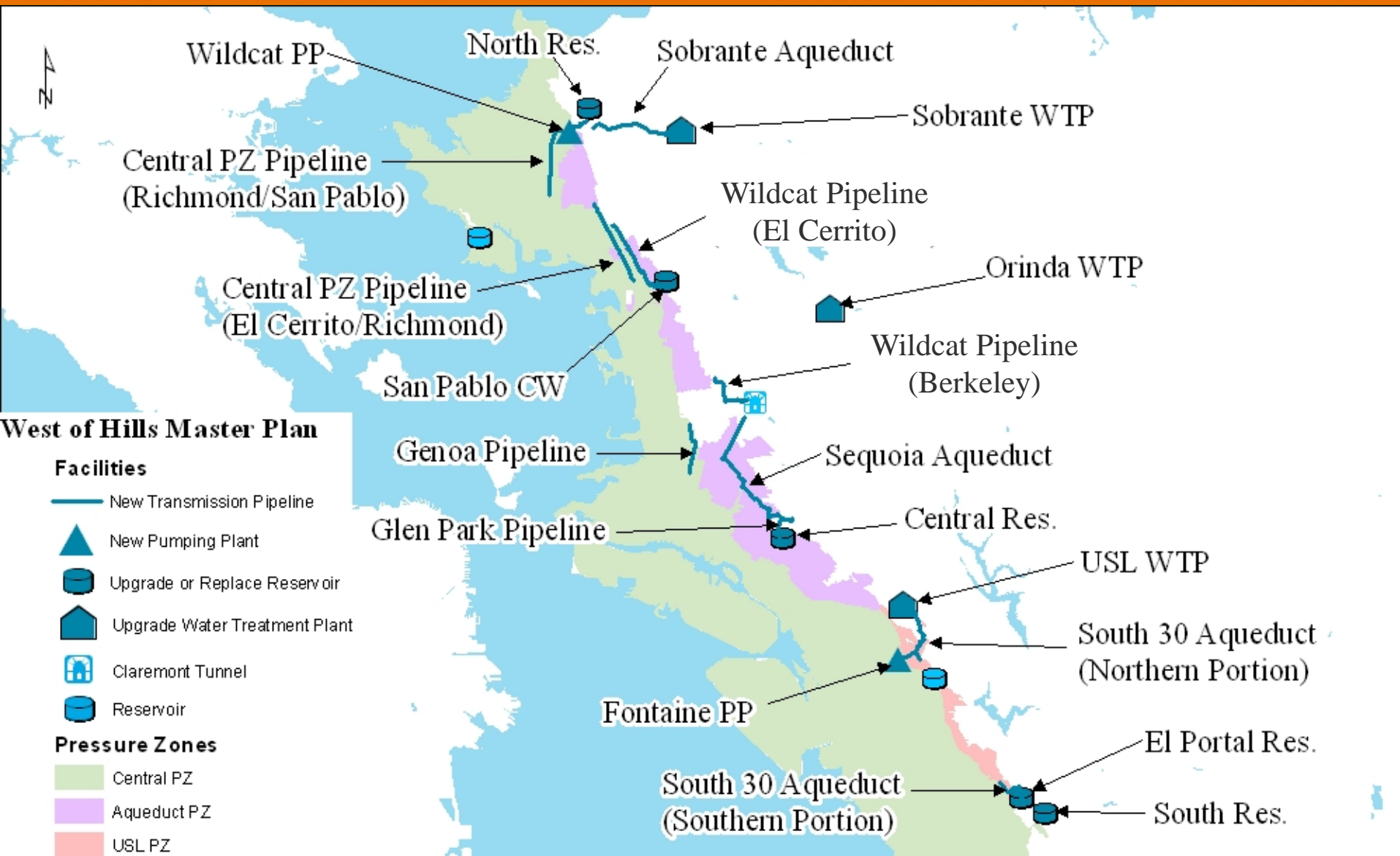
## WATER SYSTEM

- Retail provider
- 6 Water Treatment Plants
- 136 Pumping Plants
- 167 Distribution Reservoirs
- 4,000 miles of pipe

## WASTEWATER SYSTEM

- Wholesale provider
- 1 Wastewater Treatment Plant
- 5 Intercepting Sewer Lines
- 14 Wastewater Pumping Plants
- 4 Wet Weather Treatment Plants

# 2. Some Upcoming Infrastructure Projects in Alameda County



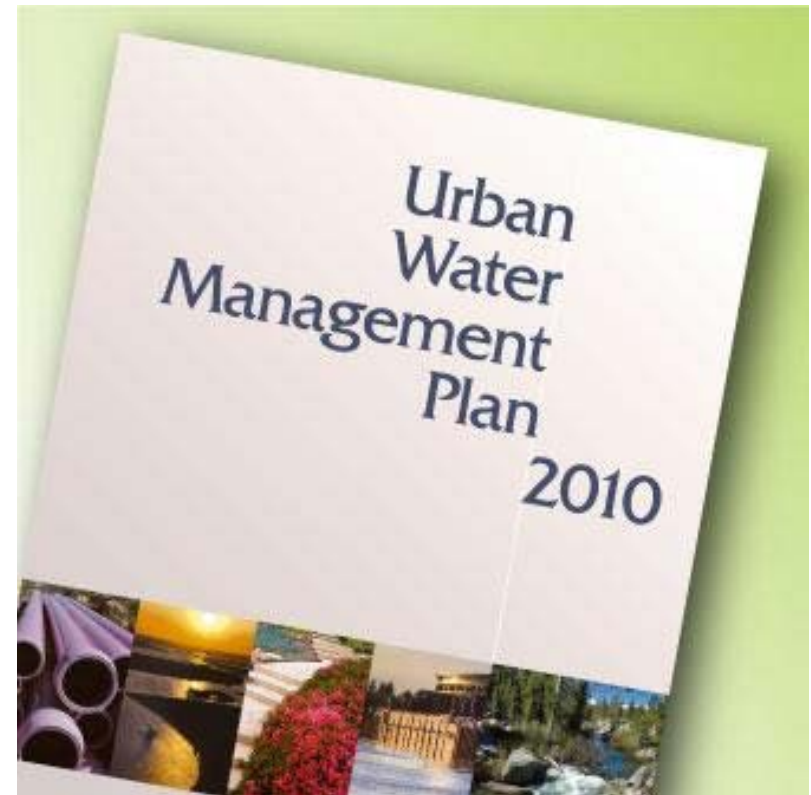
# 2. Supply & Demand



## *Urban Water Management Plan*

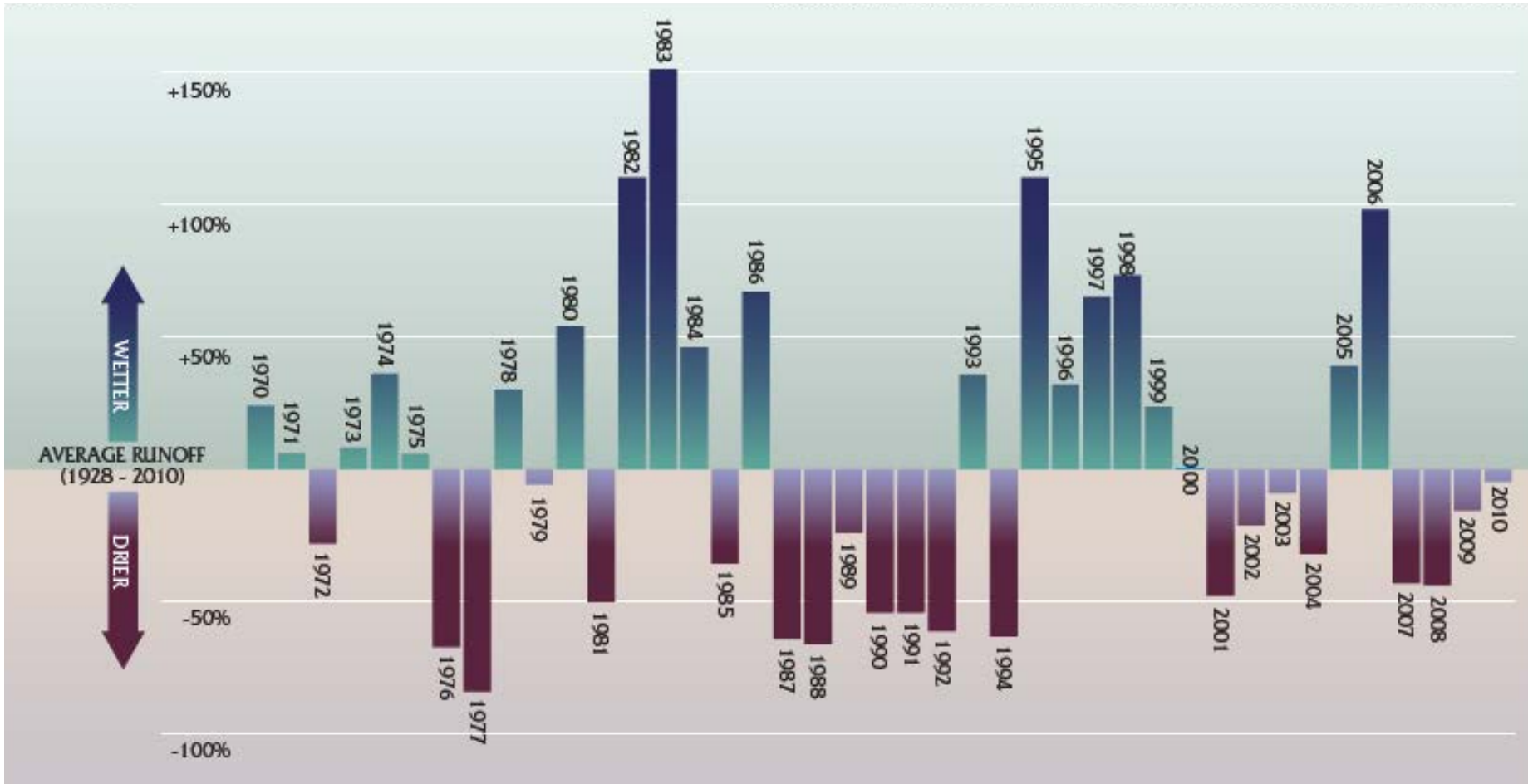
Plan assesses:

- Current and future demands
- Water supplies
- Recycling program
- Conservation program



<http://www.ebmud.com/water-and-wastewater/water-supply/urban-water-management-plan>

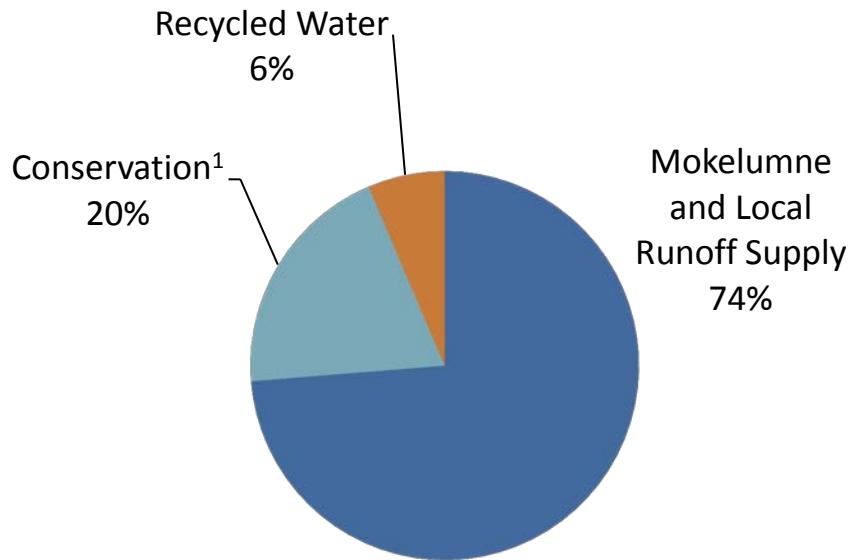
# 2. Water Supply Variability



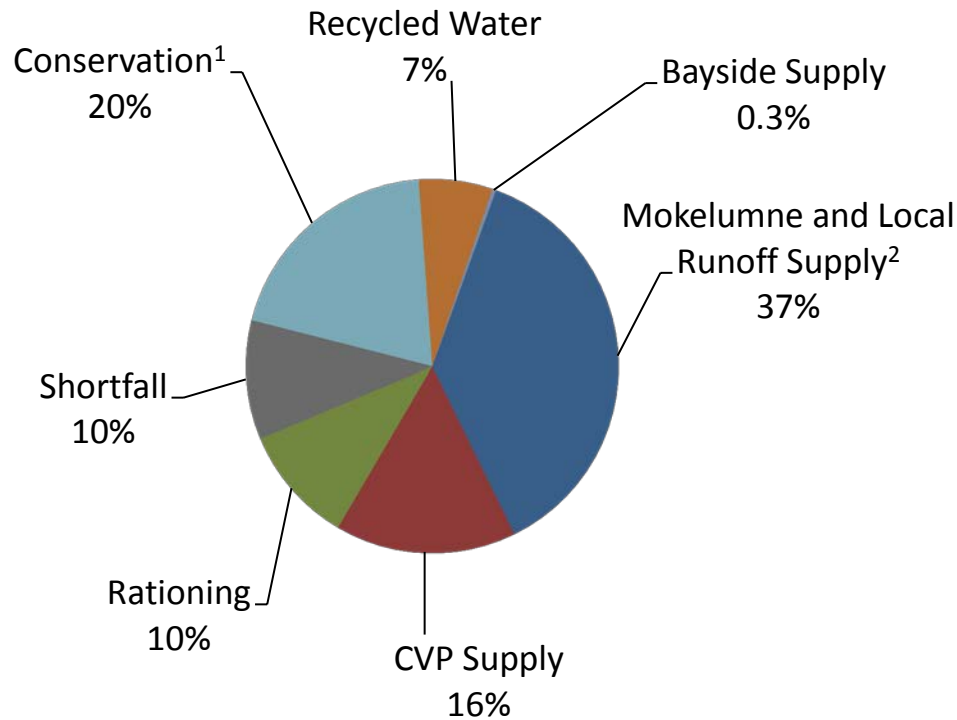
# 2. Water Supply — 2040



### Normal Year Projected (2040) Water Supply



### Three Year Drought - Average Year Projected (2040) Water Supply



<sup>1</sup> Conservation - Water conservation savings due to implementation of EBMUD's Water Conservation Program.

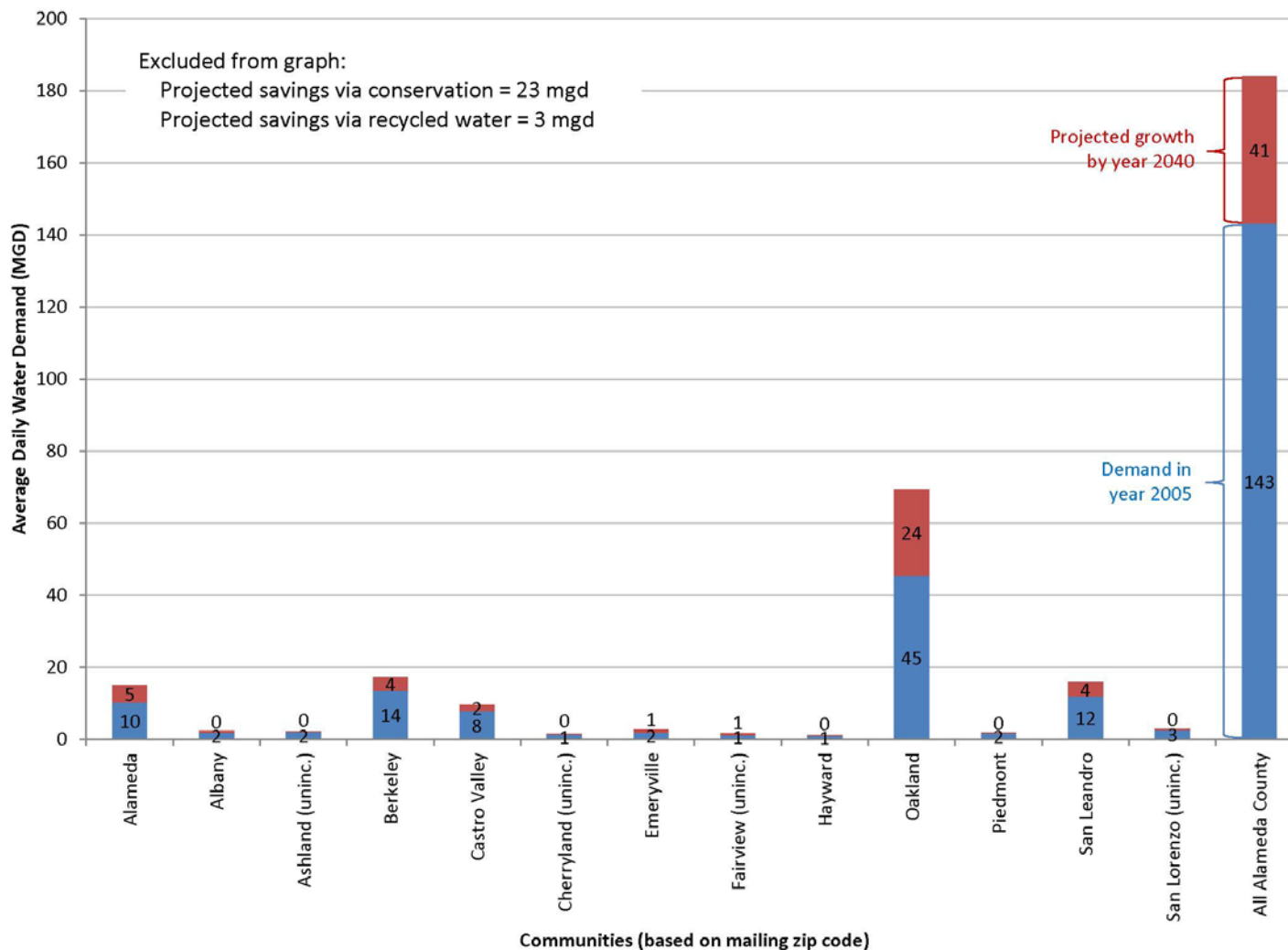
<sup>2</sup> Zero Local runoff assumed in the drought period.



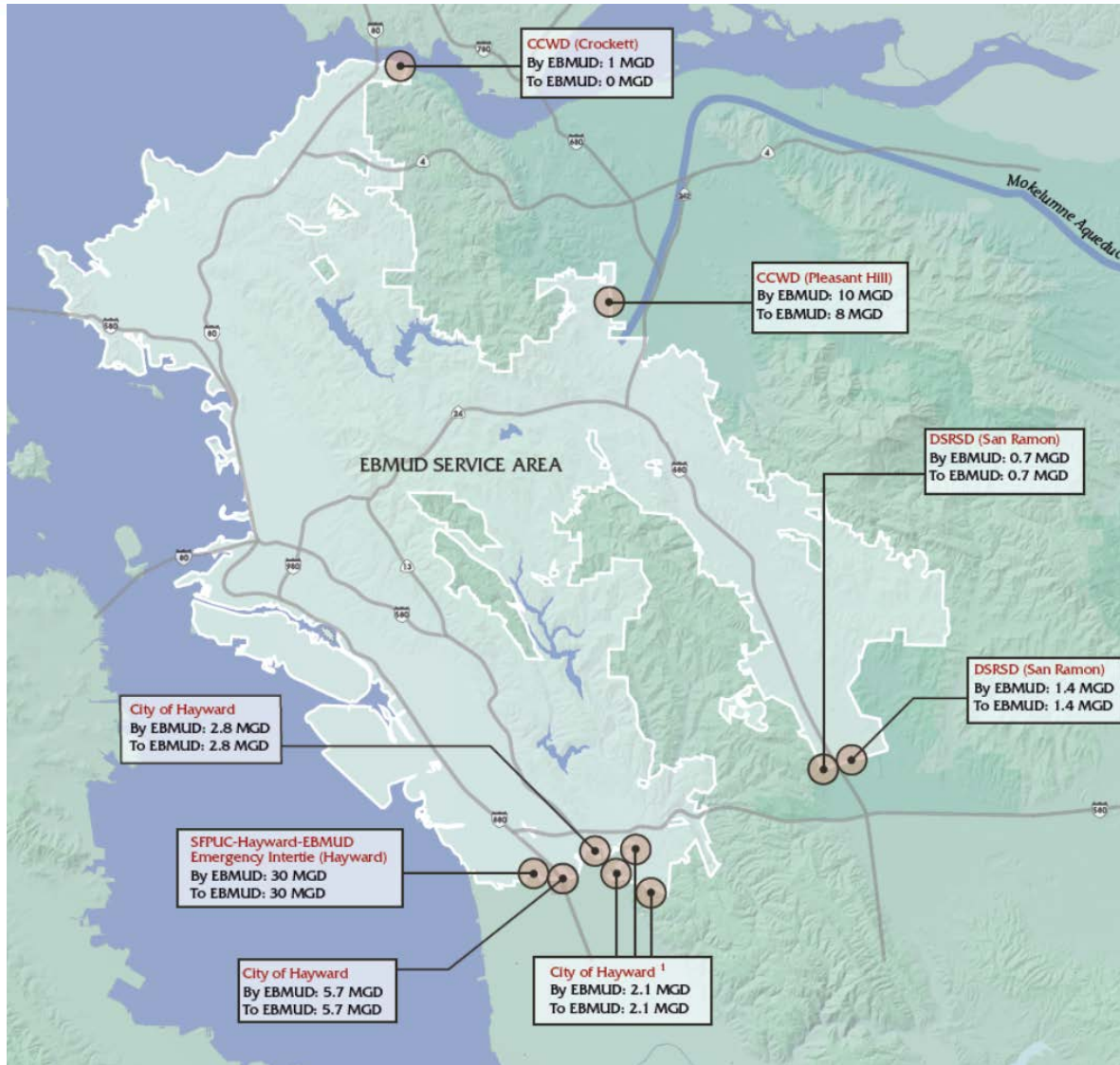
# 2. Future (2040) Demands in Alameda County



Projected Demand for Communities in Alameda County



# 3. Interconnections



# 3. Drought & Conservation



- Normal conservation program includes:
  - Outreach & education
  - Water saving devices
  - Home water use reports
  - Conservation rebates
- With the drought, additional measures:
  - 10% voluntary reduction
  - More outreach
  - Fix-a-leak campaign

A screenshot of a web browser displaying the EBMUD website. The browser's address bar shows the URL 'www.ebmud.com/water-and-wastewater/latest-water-supply-4'. The website header features the EBMUD logo and navigation links for 'customers', 'recreation', 'water &amp; wastewater', 'business', and 'about'. The main content area is titled 'Latest Water Supply Update' and contains a news article. The article's headline reads: 'In one of the driest years ever, EBMUD asks the East Bay to stretch its water supplies.' The text explains that due to dry conditions in the Mokelumne River watershed and a pessimistic forecast, EBMUD is asking customers to reduce water use by ten percent. It also notes that EBMUD monitors precipitation and reservoir levels daily, and as of March 10, 2014, had 482,360 acre feet of water stored in all its reservoirs combined. A photograph of a mountain range is included, with a caption stating: 'NEARLY ALL OF EBMUD'S WATER SUPPLY ORIGINATES IN THE MOKELUMNE RIVER WATERSHED.' The article concludes with information about historical water rationing and current measures to cope with drought, including the possibility of purchasing additional water from the Sacramento River.

# 4. Rates and Finance (Water system only)

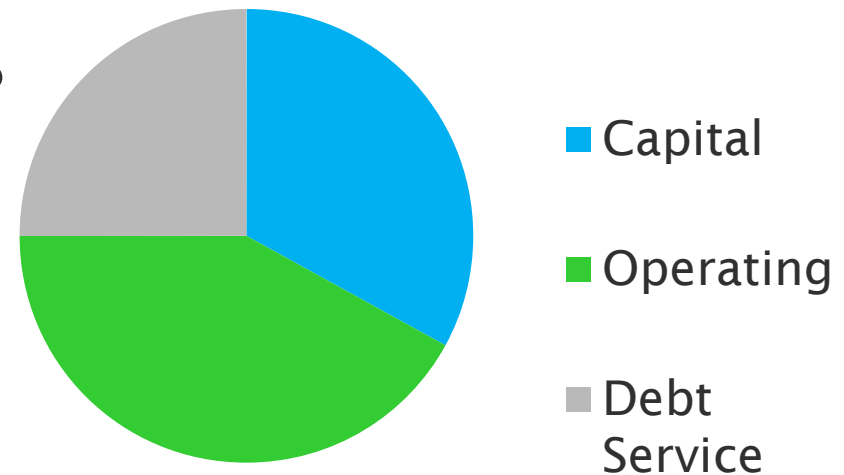


FY14 Budget  
breakdown

\$438M FY13 revenues

\$714M FY14 budget

\$1 B capital program  
FY14-18



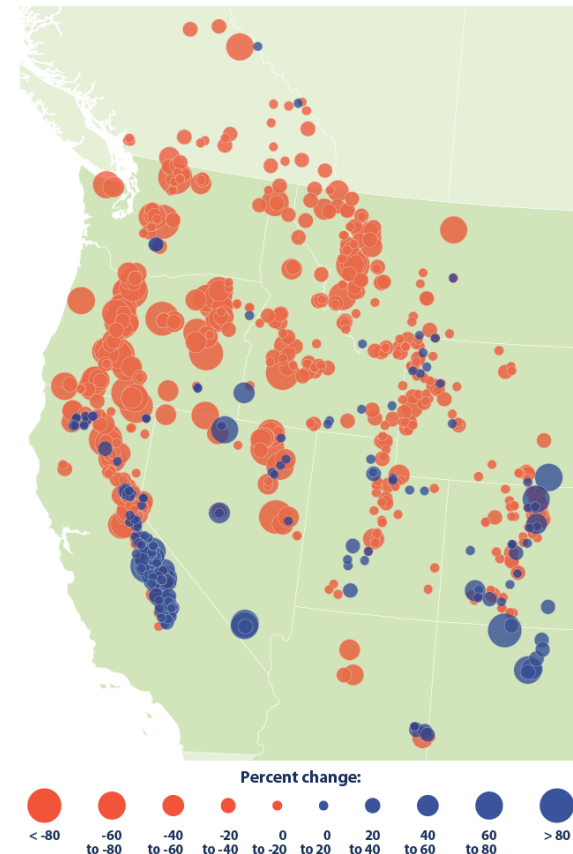
# 5. Future Challenges



Aging infrastructure will require increasing investment.

Climate change may result in more frequent droughts.

Trends in April Snowpack in the Western United States and Canada, 1950–2000



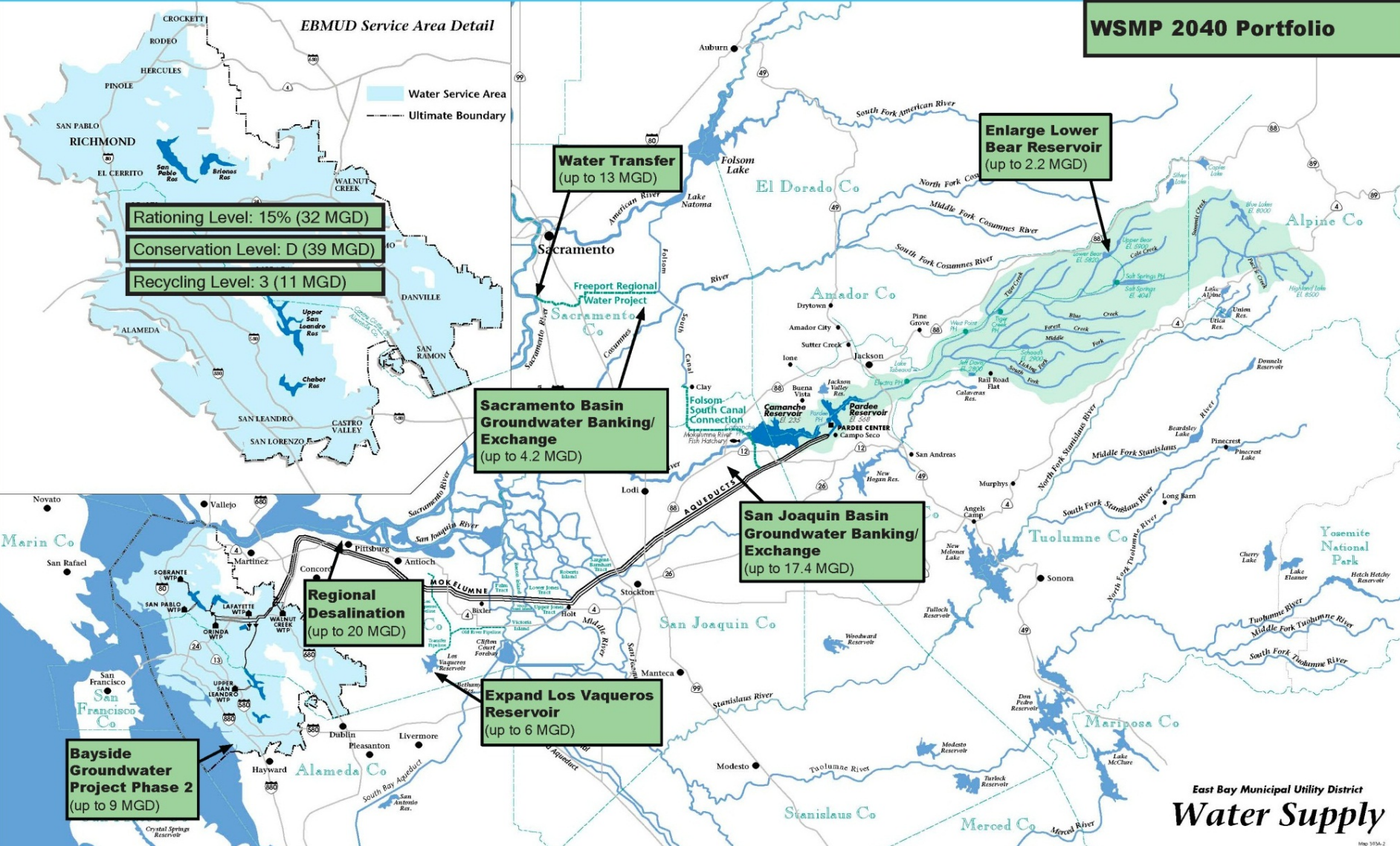
Data source: Mote, P.W. 2009 update to data originally published in: Mote, P.W., A.F. Hamlet, M.P. Clark, and D.P. Lettenmaier. 2005. Declining mountain snowpack in Western North America. *Bull. Amer. Meteor. Soc.* 86(1):59–69.

For more information, visit U.S. EPA's "Climate Change Indicators in the United States" at [www.epa.gov/climatechange/indicators](http://www.epa.gov/climatechange/indicators).

# 2. Water Supply Management Plan 2040



## WSMP 2040 Portfolio



# 4. Financial Management



	Water	Wastewater
Outstanding Debt	\$2.6 billion	\$463.7 million
Moody's	Aa1	Aa2
Fitch	AA+	AA+
S&P	AAA	AAA

- Recognized by Government Finance Officers Association
  - Distinguished Budget Presentation (13 years)
  - Excellence in Financial Reporting (8 years)

# 4. History of Rate Increases



Fiscal Year	Water	Wastewater
2000	3.50%	0.00%
2001	4.00%	4.25%
2002	3.75%	4.50%
2003	3.75%	3.75%
2004	3.75%	3.75%
2005	3.75%	3.75%
2006	3.75%	3.75%
2007	3.75%	3.75%
2008	5.00%	4.00%
2009	5.00%	3.75%
2010	7.50%	5.00%
2011	7.50%	5.00%
2012	6.00%	6.00%
2013	6.00%	6.00%
2014	9.75%	9.00%
2015	9.50%	8.50%
<b>Average</b>	5.39%	4.67%

17 %  
drop in  
sales  
volume

- 2007-2009 drought
- Global recession
- Efforts to mitigate rate impacts
- FY 2014 and FY 2015—address growth assumptions, deferred maintenance and aging infrastructure