

Water Cost Comparison Study

September, 2017



Objective of the study

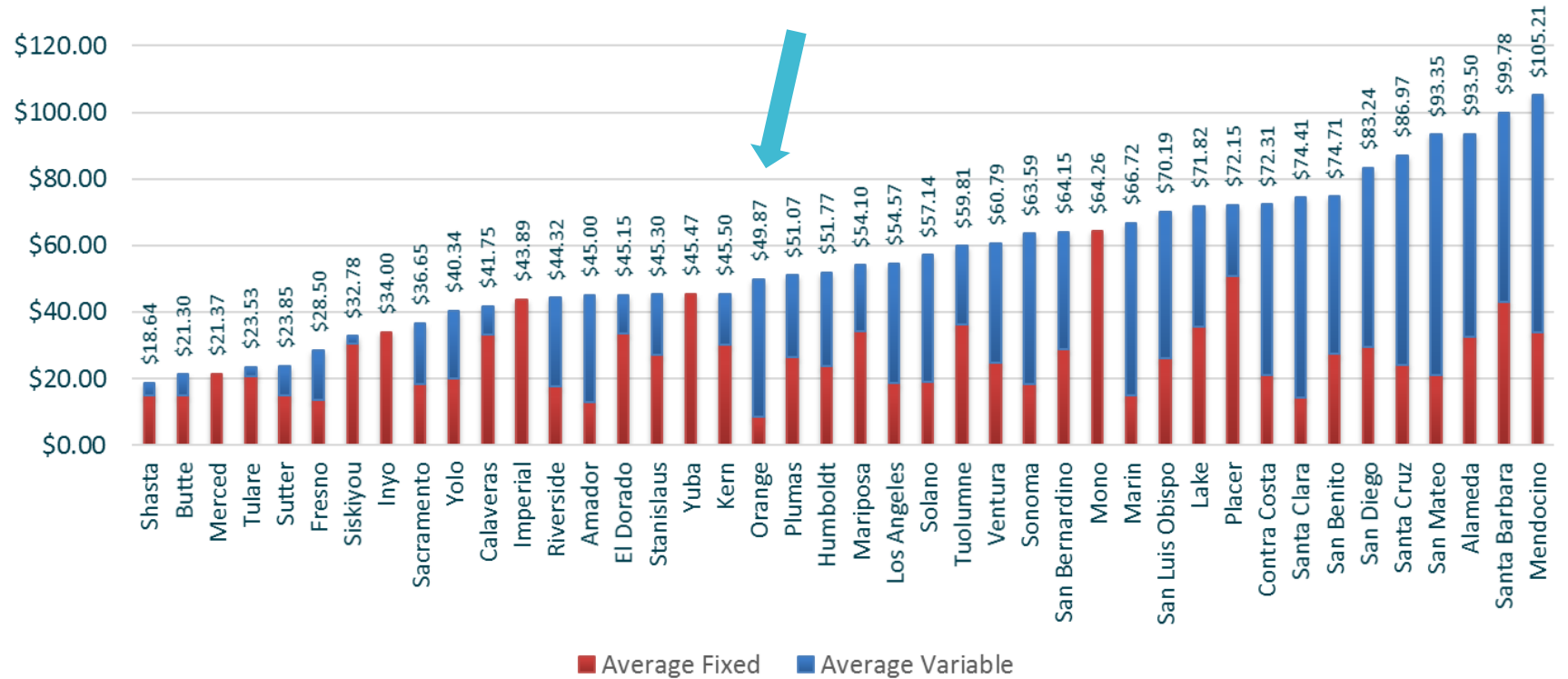
To develop a water cost comparison analysis with the intent of identifying a feasible methodology for measuring the operational efficiency of water districts within Orange County



Water rates comparison 2015



Average Monthly Water Charges Comparison by Counties - 2015



Data Source: 2015 California-Nevada Water and Wastewater Rate Survey, p11

Using water rates to measure operational efficiency



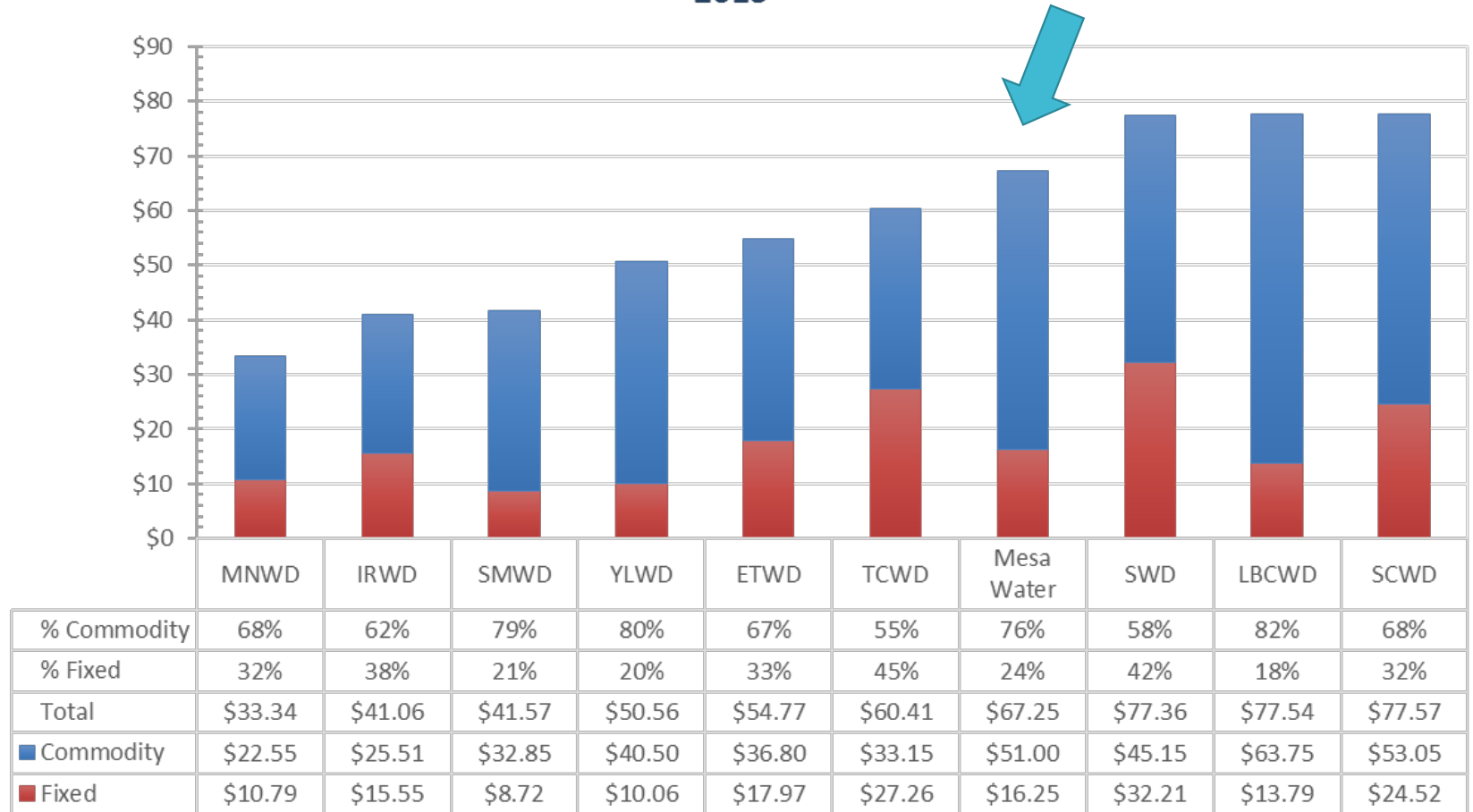
Challenges:

- Size of agency, geographic location, overall demand, etc.
- *Non Rate Revenues*
Many agencies receive non-rate revenues, i.e. property tax, which offset water costs and affects water rates

Sample water rates comparison 2015



Sample Water Rates - 3/4" SFR Customer 15 hcf Usage 2015

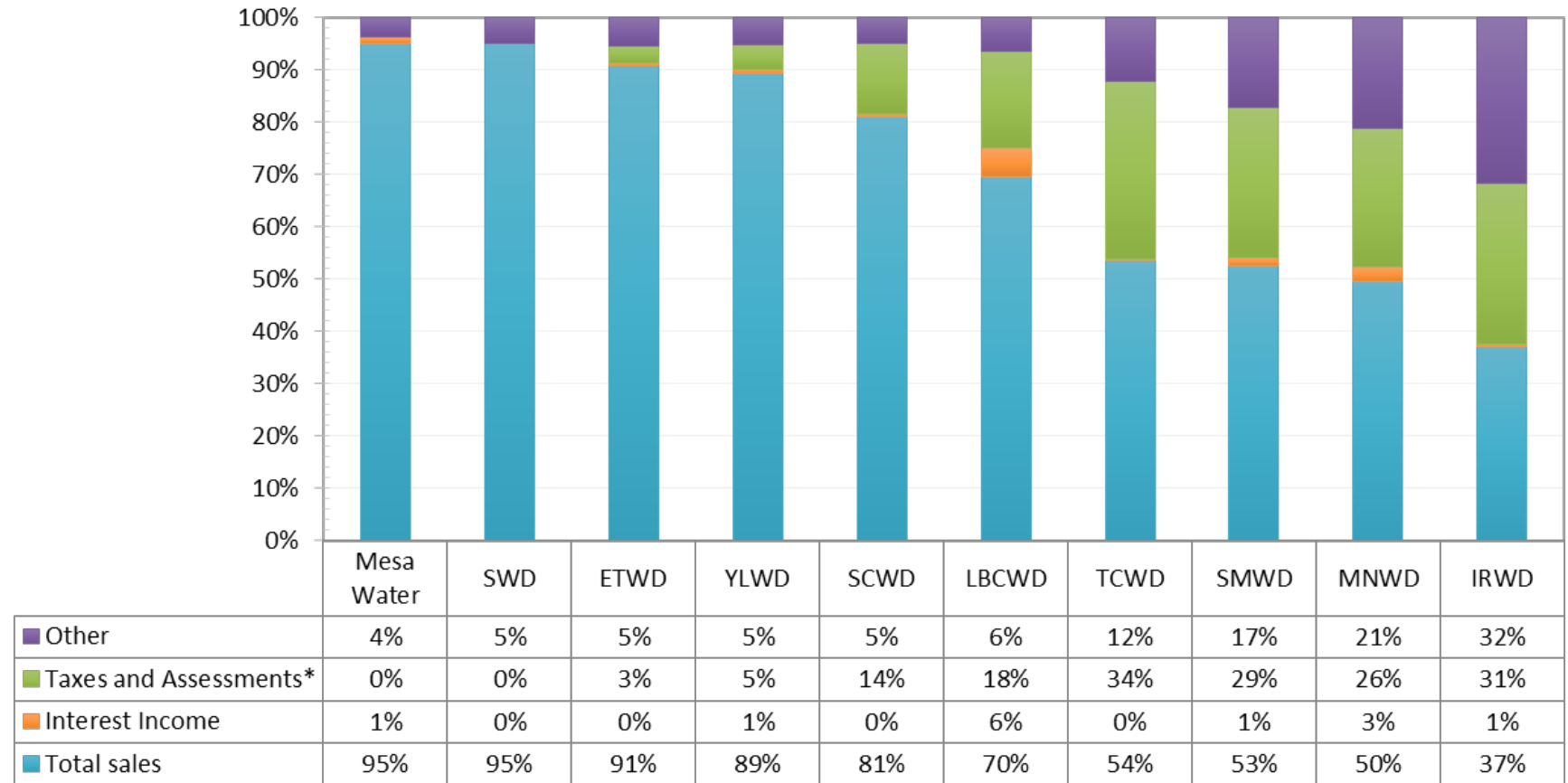


Data Source: RFC Rate Survey 2017

Sources of income 2015

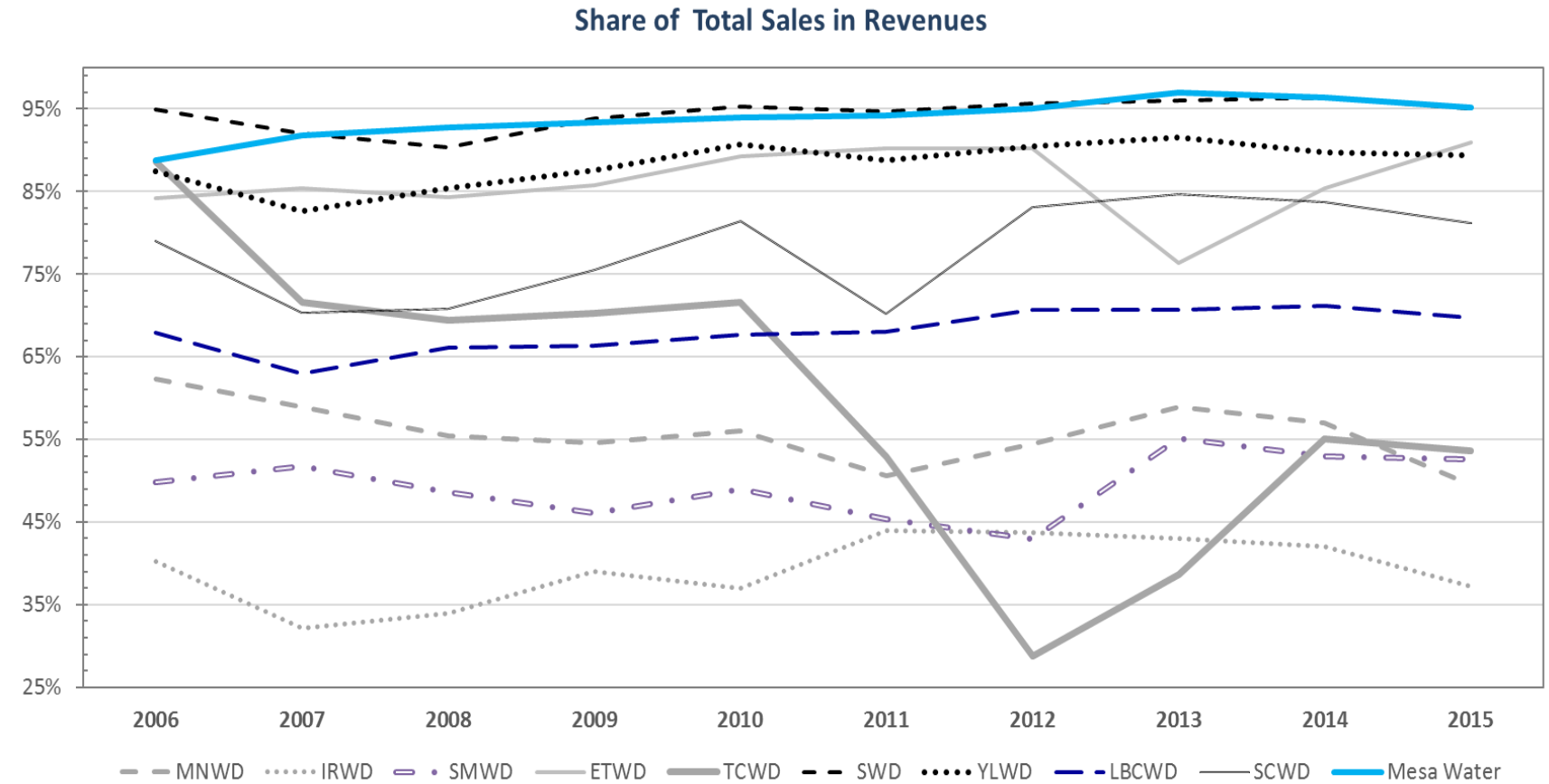


Sources of Income Comparison: 2015



Data Source: California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity

Share of sales in total revenues 2006-2015



Data Source: California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity

Total expenditure per capita



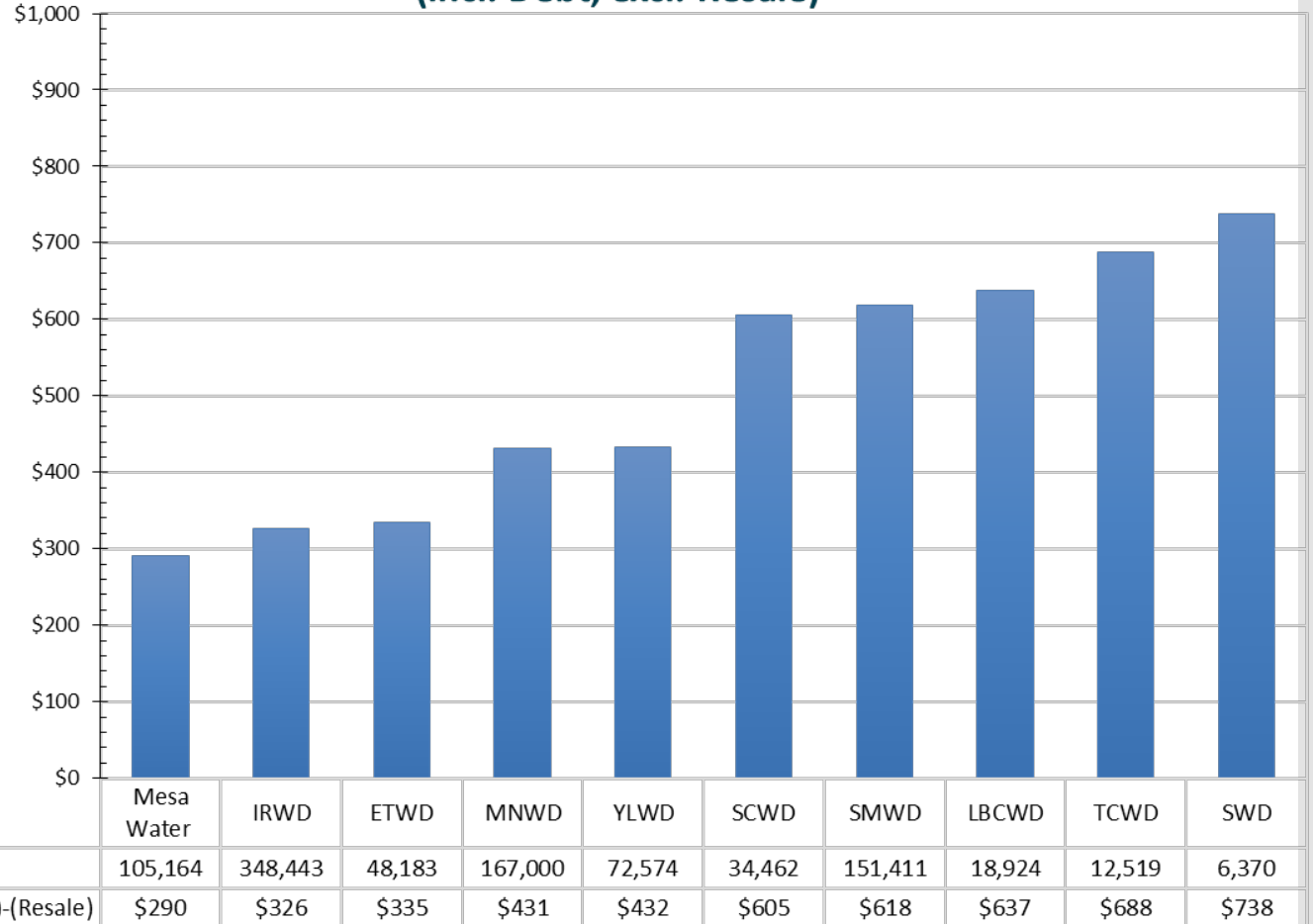
Total Expenditure Per Capita: Proxy to Measure Efficiency

- Total expenditures for special districts are gathered by the CA State Controller's *Special Districts Annual Report*
- Population service area is available from the last MWDOC rate survey

Expenditure comparison per capita 2015



FY 2015 Comparisons for Total Expenditures Per Capita (incl. Debt, excl. Resale)



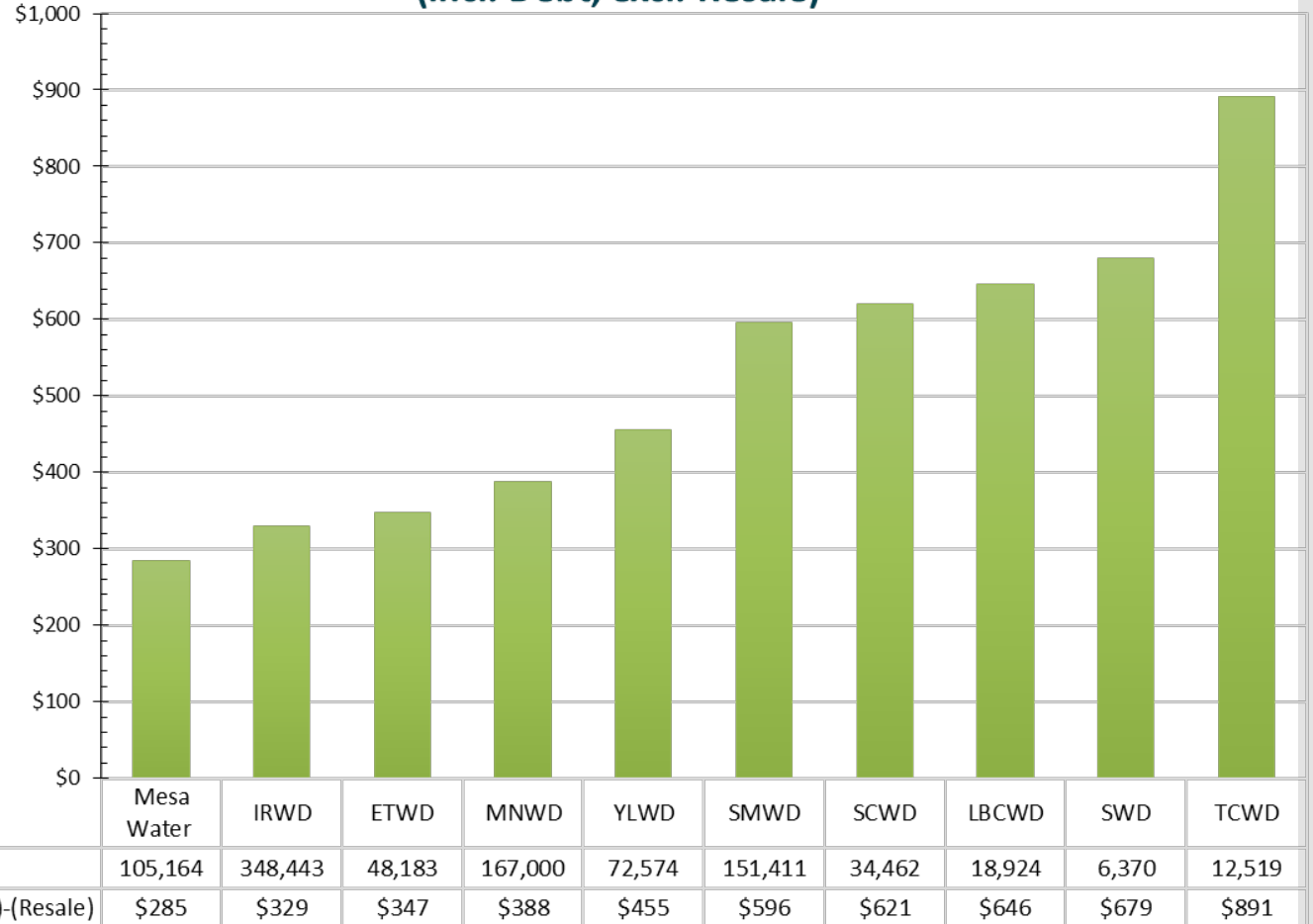
Data Sources:

California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity
 California State Controller's Office, Special Districts Long-term Debt Database
 Population from Orange County Water Suppliers - Water Rates & Financial Information (Updated as of Aug 2013)
 Mesa Water District – Cost Comparison Study

Expenditure comparison per capita 2014



FY 2014 Comparisons for Total Expenditures Per Capita (incl. Debt, excl. Resale)



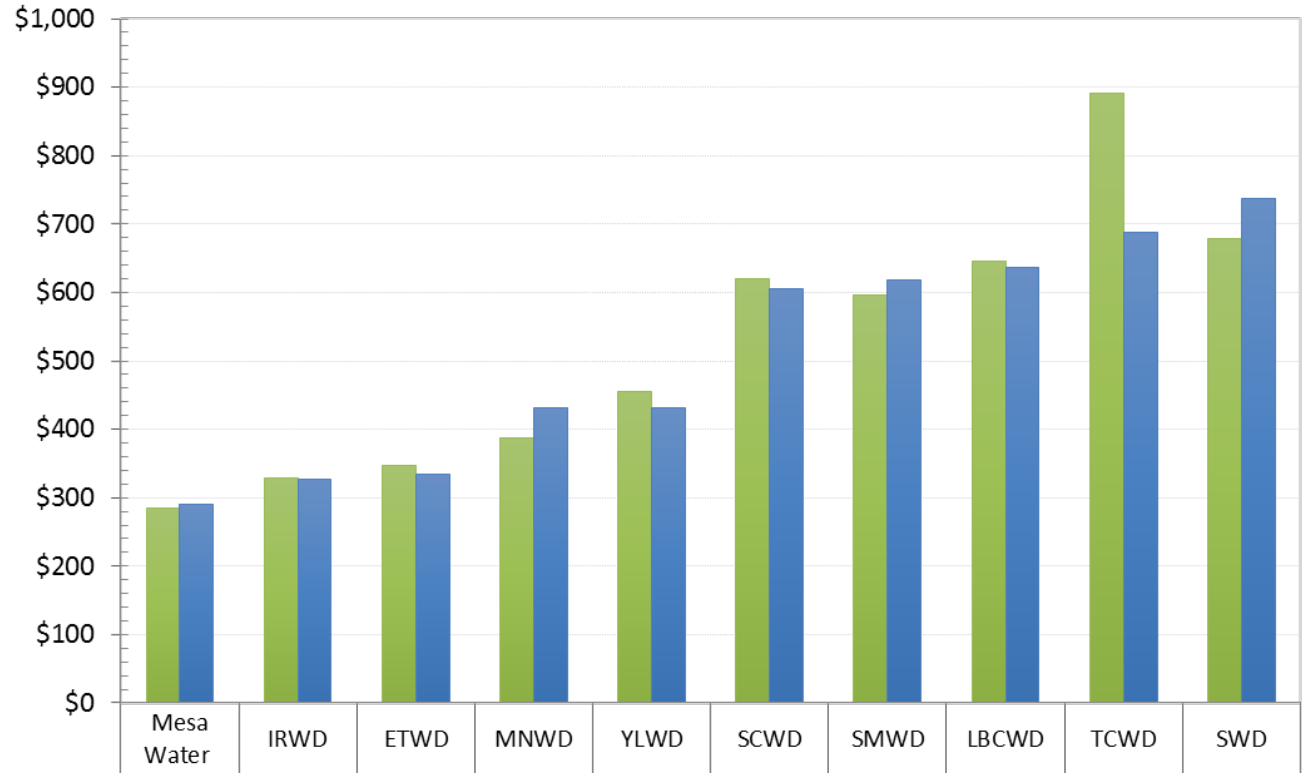
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Expenditure comparison 2015 VS 2014



FY 2014/2015 Comparisons for Total Expenditures Per Capita (Incl. Debt, excl. Resale)



■ 2014	\$285	\$329	\$347	\$388	\$455	\$621	\$596	\$646	\$891	\$679
■ 2015 Expenditures Per Capita + (Debt)-(Resale)	\$290	\$326	\$335	\$431	\$432	\$605	\$618	\$637	\$688	\$738

Data Sources:

California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity

California State Controller's Office, Special Districts Long-term Debt Database

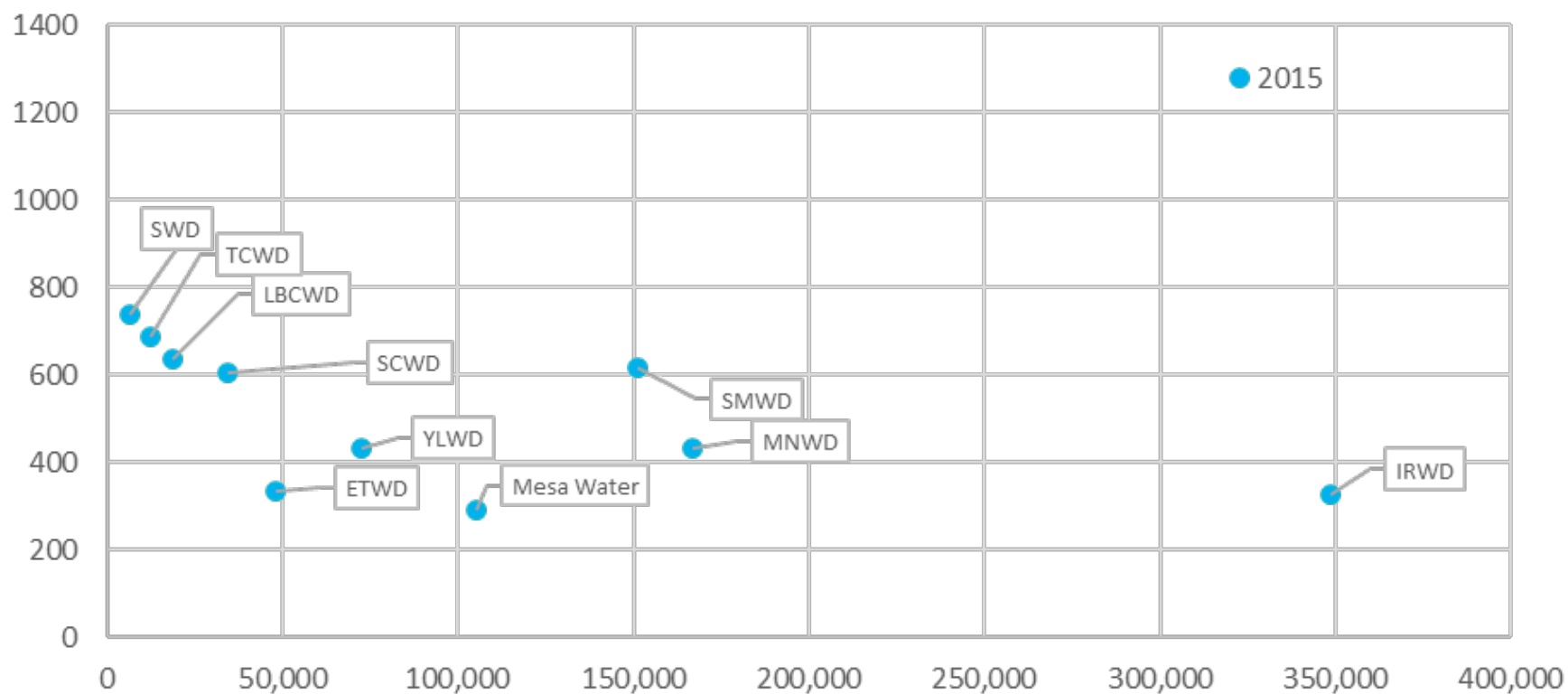
Population from Orange County Water Suppliers - Water Rates & Financial Information (Updated as of Aug 2013)

Mesa Water District – Cost Comparison Study

Population and total expenditure 2015



Population and Total Expenditures Per Capita



Data Sources:

California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity

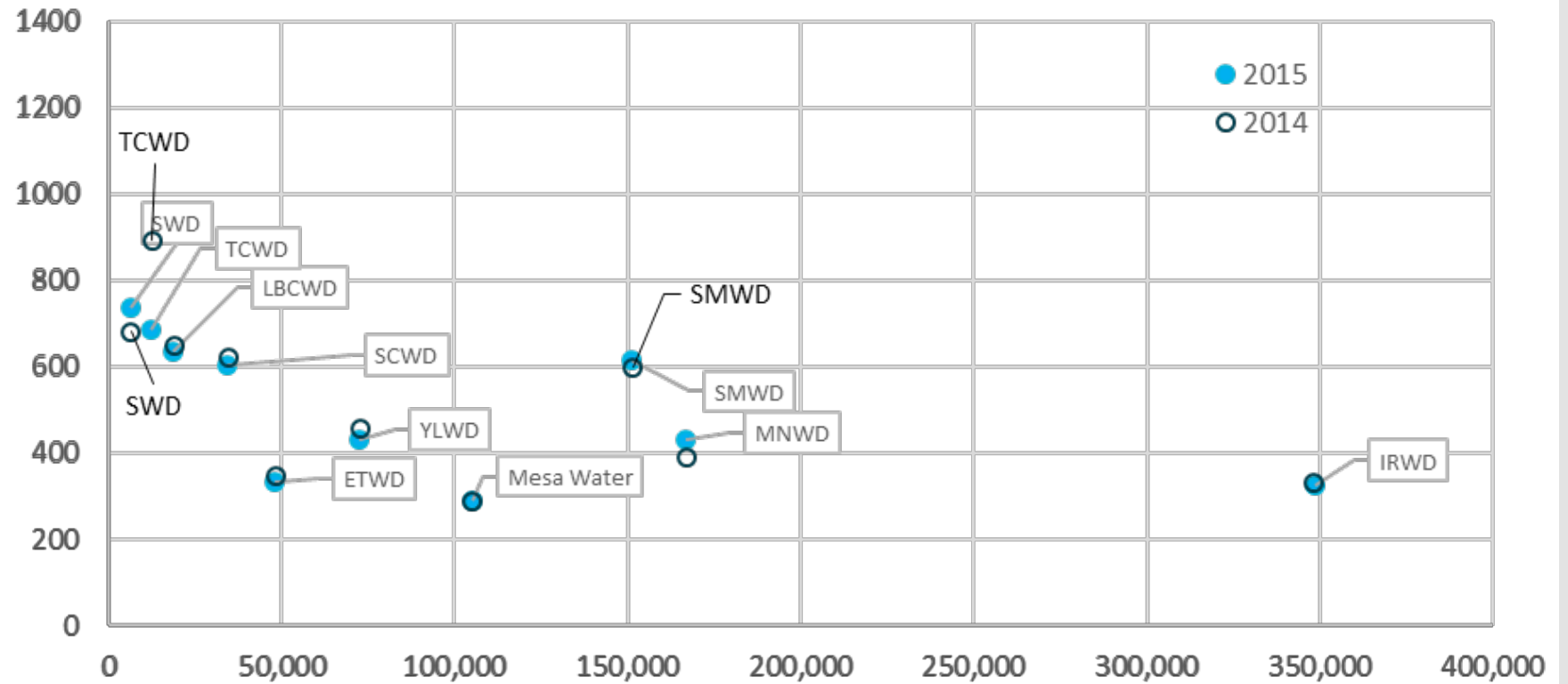
California State Controller's Office, Special Districts Long-term Debt Database

Population from Orange County Water Suppliers - Water Rates & Financial Information (Updated as of Aug 2013)

Population and total expenditure 2014 vs 2015



Population and Total Expenditures Per Capita



Data Sources:

California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity

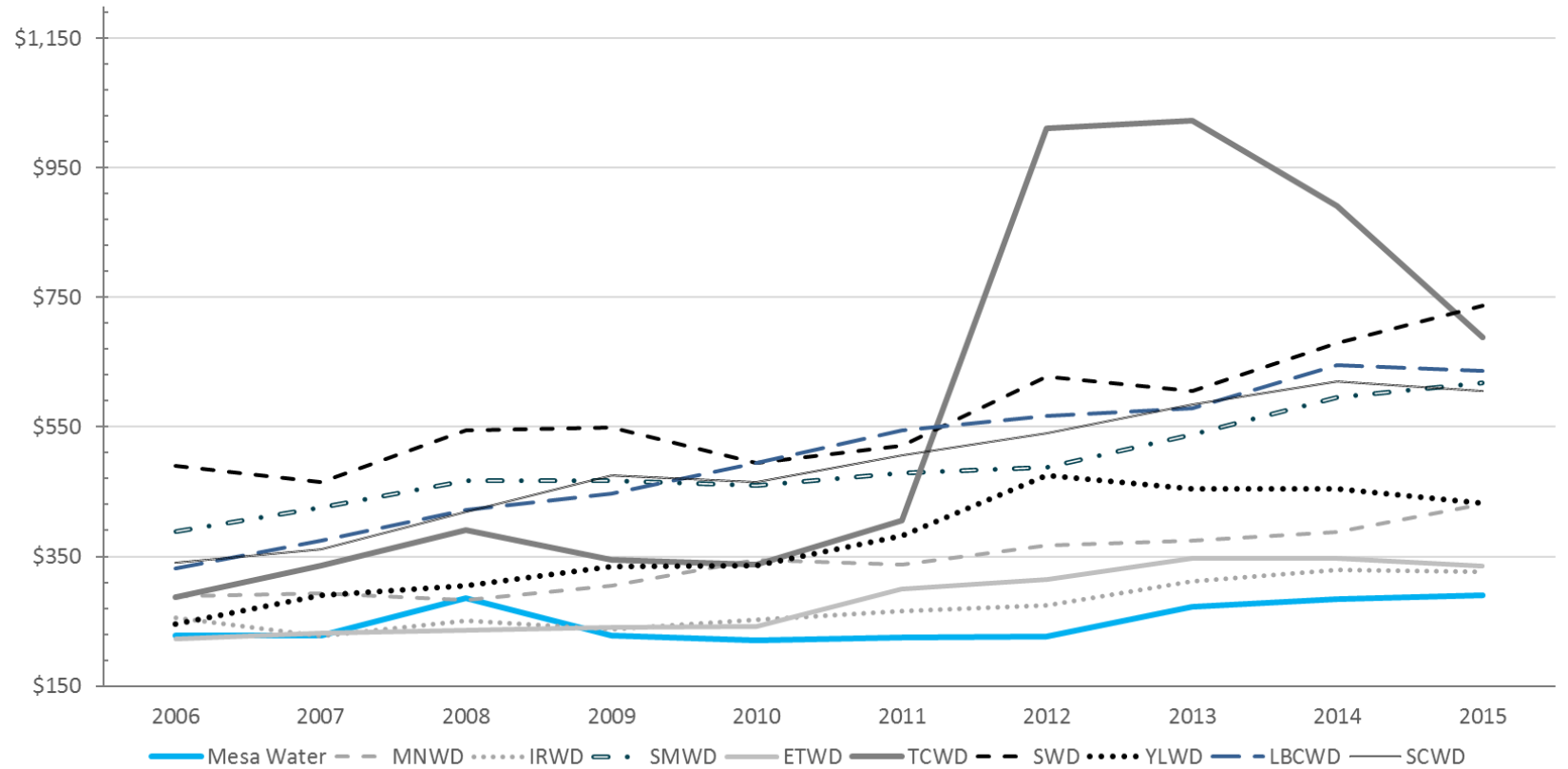
California State Controller's Office, Special Districts Long-term Debt Database

Population from Orange County Water Suppliers - Water Rates & Financial Information (Updated as of Aug 2013)

Total expenditures per capita 2006-2015



Total Expenditures per Capita (Incl. Debt, excl. Resale)



2006-2015	MNWD	IRWD	SMWD	ETWD	TCWD	SWD	YLWD	LBCWD	SCWD	Mesa Water
% change	50%	28%	59%	50%	139%	51%	76%	92%	78%	27%
\$ change	\$143	\$72	\$230	\$112	\$400	\$248	\$187	\$306	\$265	\$62

The value of water and water conservation

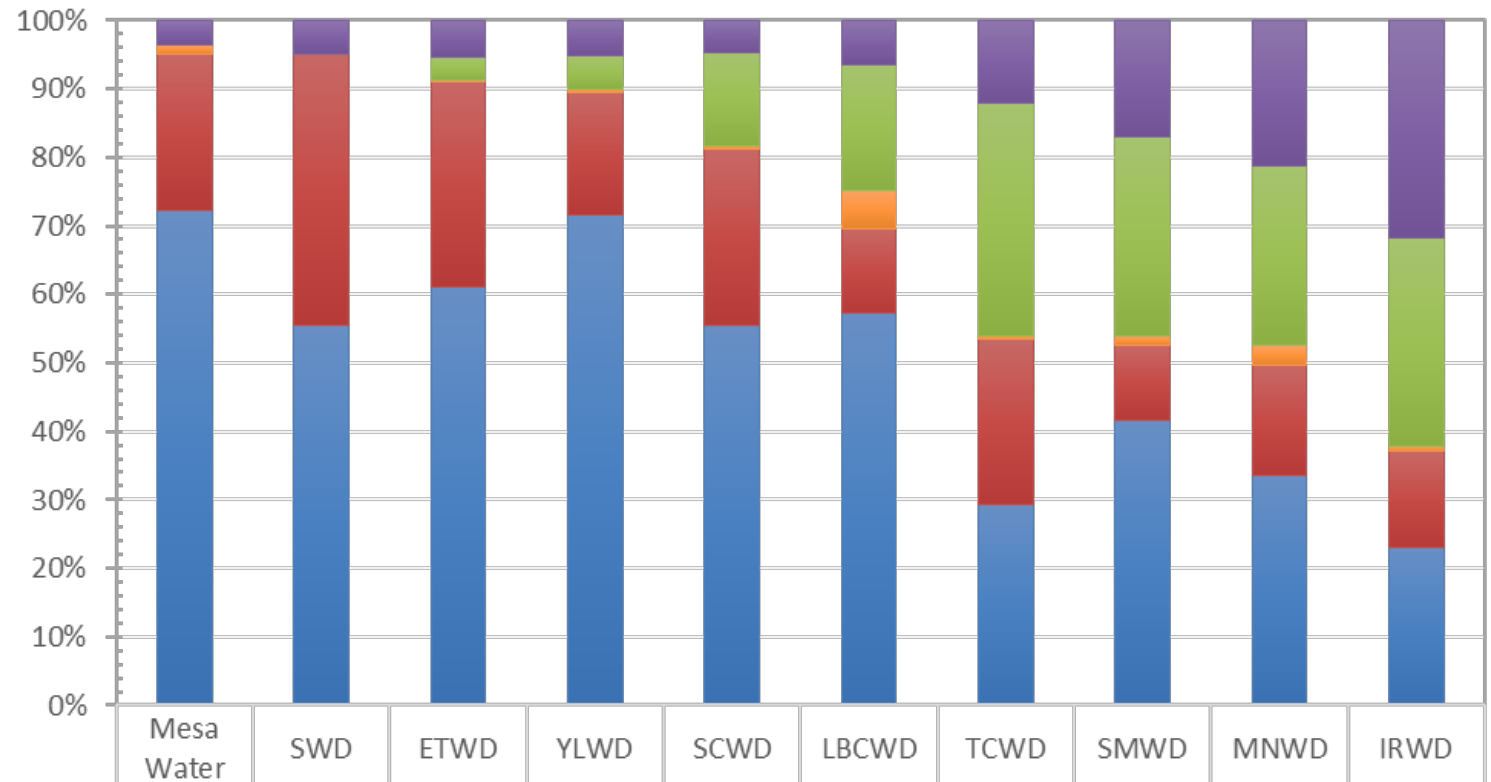


Higher percentages of revenue from commodity rates are more likely to educate customers on the value of water and promote conservation.

The value of water and water conservation



Comparison of Revenue Sources 2015



	Mesa Water	SWD	ETWD	YLWD	SCWD	LBCWD	TCWD	SMWD	MNWD	IRWD
Other	4%	5%	5%	5%	5%	6%	12%	17%	21%	32%
Taxes and Assessments*	0%	0%	3%	5%	14%	18%	34%	29%	26%	31%
Interest Income	1%	0%	0%	1%	0%	6%	0%	1%	3%	1%
Fixed Rate Revenue	23%	40%	30%	18%	26%	12%	24%	11%	16%	14%
Commodity Rate Revenue	72%	55%	61%	72%	56%	57%	29%	42%	34%	23%

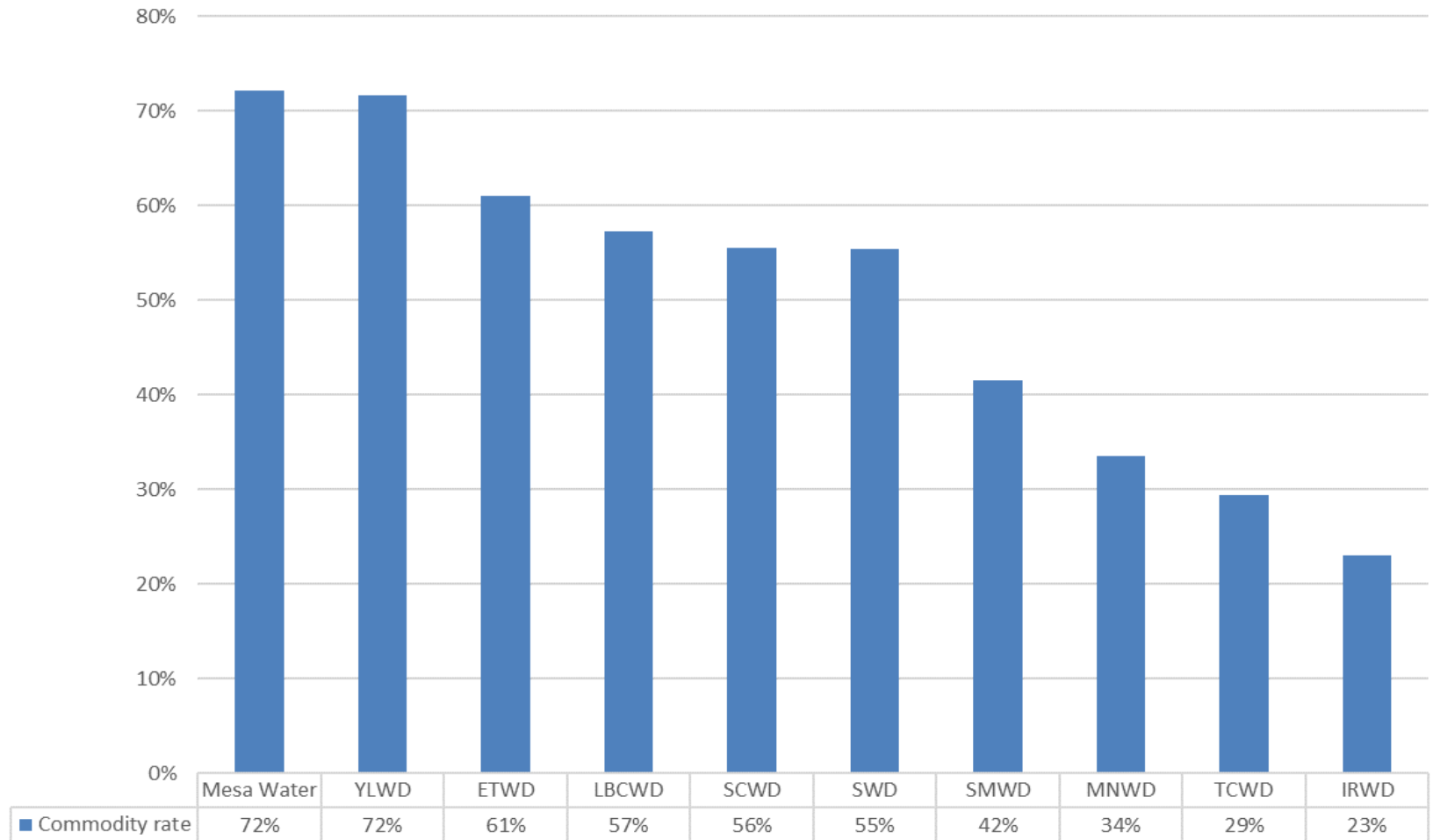
Data Sources:

California State Controller's Office, Special Districts Water Enterprise - Revenues, Expenses and Changes in Fund Equity
Commodity/Fixed rate revenue shares – RFC Rate Survey 2015

The value of water and water conservation



Comparisons of Revenue from Commodity Rates (% Total Revenues)
2015



Data Sources: California State Controller's Office, Special Districts Water Enterprise – Revenues, Expenses and Changes in Fund Equity Database; For Rate Structure – RFC Rate Survey 2015

Data availability note and assumptions



MWDOC decided to discontinue the “Orange County Water Suppliers - Water Rates & Financial Information” (aka. MWDOC Rate Survey) which was used to provide data on rates structure (incl. fixed vs commodity rates) and on population served by the water districts.

This will hinder our ability to precisely report future Expenditure Per Capita figures.

Slides 9-14: population in 2013, 2014 and 2015 is the same as in 2012 (last MWDOC survey as of Aug 2013)



Q&A

RFC Rate Survey Data Sources



			Website
1	<i>El Toro Water District</i>	<i>ETWD</i>	http://etwd.com/
2	<i>Irvine Ranch Water District</i>	<i>IRWD</i>	http://www.irwd.com/
3	<i>Laguna Beach County Water District</i>	<i>LBCWD</i>	http://www.lbcwd.org/
4	<i>Mesa Consolidated Water District</i>	<i>Mesa Water</i>	https://www.mesawater.org/
5	<i>Moulton-Niguel Water District</i>	<i>MNWD</i>	https://www.mnwd.com/
6	<i>Santa Margarita Water District</i>	<i>SMWD</i>	http://www.smwd.com/
7	<i>Serrano Irrigation District</i>	<i>SWD</i>	http://www.serranowater.org/
8	<i>South Coast Water District</i>	<i>SCWD</i>	https://www.scwd.org/
9	<i>Trabuco Canyon Water District</i>	<i>TCWD</i>	http://www.tcwd.ca.gov/home
10	<i>Yorba Linda Water District</i>	<i>YLWD</i>	https://www.ylwd.com/
11	<i>CIMIS Stations</i>		http://www.cimis.water.ca.gov/Stations.aspx