

# Moulton Niguel Water District

Period Ending  
December 31, 2016



**SECTION 1**

**Consolidated Information**

**SECTION 2**

**Account Profile**

**SECTION 3**

**Economic Update**

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**SECTION 1**

**Consolidated Information**

## Investment Objectives

**Safety** – Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure to preservation of capital in the overall portfolio.

**Liquidity** – The investment portfolio will remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

**Return** – The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints for safety and liquidity needs.

## Chandler Asset Management Performance Objective

The performance objective for the District is to earn a return in excess of the strategy benchmarks:

**Liquid Fund:** Bank of America Merrill Lynch 3-Month US Treasury Bill Index.

**Limited Maturity Fund:** Bank of America Merrill Lynch 0-3 Yr US Treasury/Agency Index.

**Operating Reserve Fund:** Bank of America Merrill Lynch 1-10 Yr Treasury/Agency Index.

**Bond Reserves:** To earn a commensurate rate of return over market cycles while ensuring compliance with the District's indentured funds.



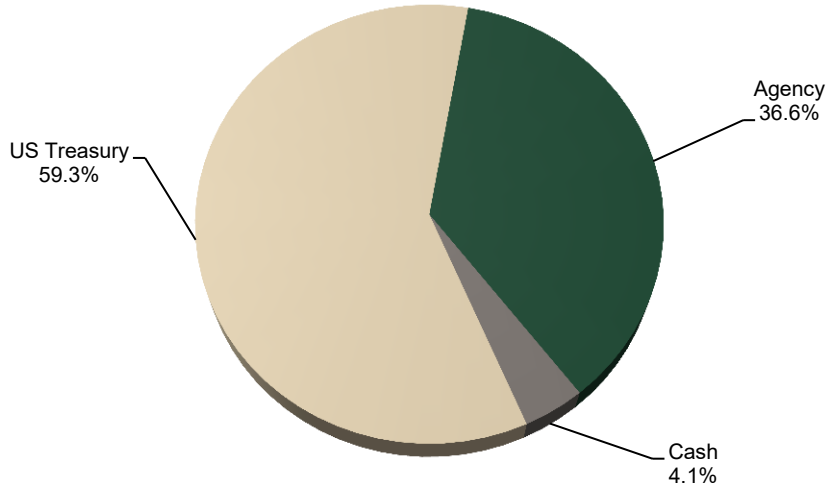
## Moulton Niguel Water District Bond Reserves

	12/31/2016	9/30/2016
	Portfolio	Portfolio
Average Maturity (yrs)	2.95	3.02
Modified Duration	2.85	2.93
Average Purchase Yield	1.03%	1.00%
Average Market Yield	1.45%	0.95%
Average Quality	AA+/Aaa	AA+/Aaa
Total Market Value	7,704,250	7,654,944

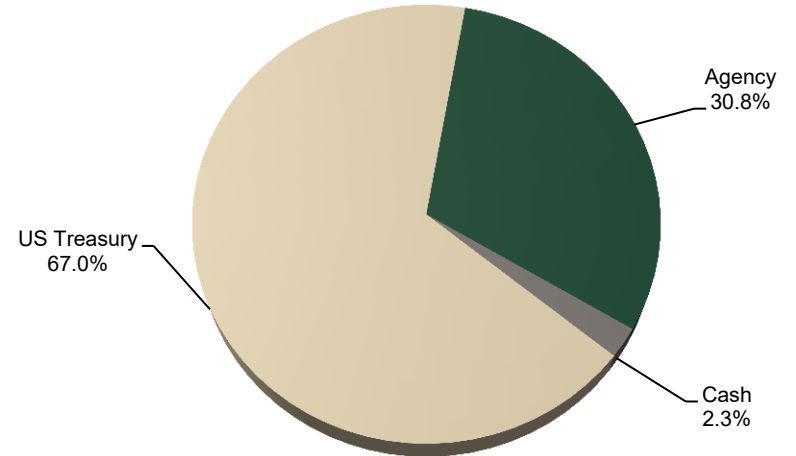


## Moulton Niguel Water District Bond Reserves

December 31, 2016



September 30, 2016





## Moulton Niguel Water District Consolidated

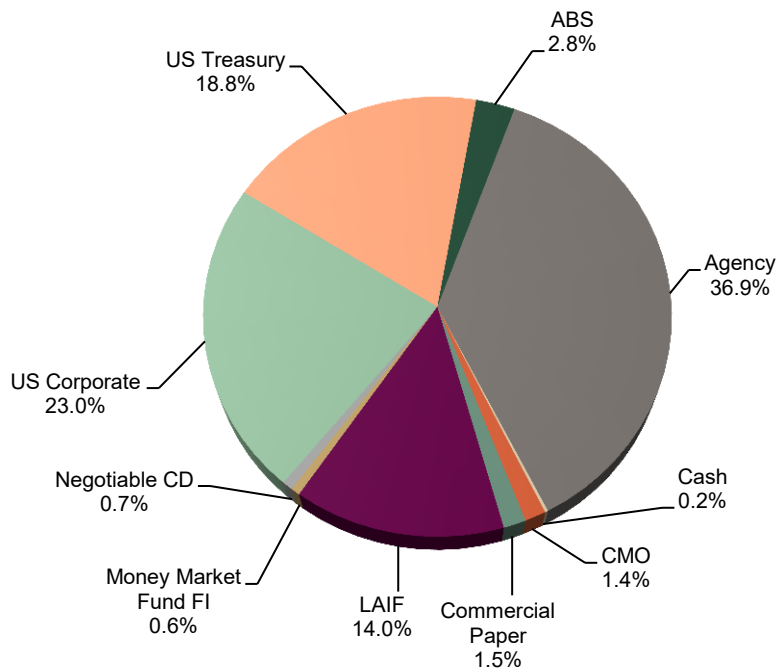
	12/31/2016	9/30/2016
	Portfolio	Portfolio
Average Maturity (yrs)	2.96	3.18
Modified Duration	2.74	2.96
Average Purchase Yield	1.74%	1.78%
Average Market Yield	1.57%	1.13%
Average Quality	AA/Aa1	AA/Aa1
Total Market Value	128,612,991	121,196,482



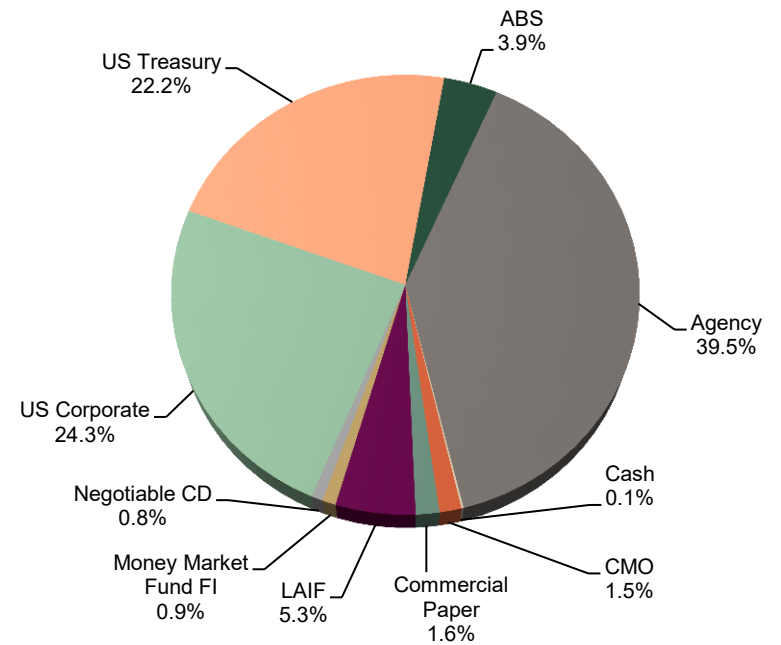
# Sector Distribution

## Moulton Niguel Water District Consolidated

December 31, 2016



September 30, 2016





**Moulton Niguel Water District Consolidated – Account #43**
**As of 12/31/2016**

Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Government of United States	US Treasury	1.78%	4.48	18.81%
Local Agency Investment Fund	LAIF	0.67%	0.00	14.01%
Federal Home Loan Bank	Agency	1.77%	3.86	10.78%
Federal National Mortgage Association	Agency	2.01%	5.27	10.35%
Federal Home Loan Mortgage Corp	Agency	1.58%	3.28	9.24%
Tennessee Valley Authority	Agency	1.79%	3.90	5.09%
General Electric Co	US Corporate	1.22%	0.64	1.65%
ChevronTexaco Corp	US Corporate	1.45%	1.26	1.51%
Bank of Tokyo-Mit UFJ	Commercial Paper	1.05%	0.18	1.47%
Federal Farm Credit Bank	Agency	1.46%	2.60	1.43%
Qualcomm Inc	US Corporate	2.03%	2.87	1.40%
Federal Home Loan Mortgage Corp	CMO	1.45%	1.65	1.35%
Bank of New York	US Corporate	1.97%	2.70	1.30%
Charles Schwab Corp/The	US Corporate	1.47%	1.19	1.27%
Paccar Financial	US Corporate	1.82%	2.26	1.27%
Honda Motor Corporation	US Corporate	1.68%	1.78	1.26%
Intel Corp	US Corporate	1.19%	0.96	1.22%
Oracle Corp	US Corporate	2.41%	4.71	1.04%
Apple Inc	US Corporate	1.28%	1.34	0.97%
Exxon Mobil Corp	US Corporate	2.16%	4.17	0.97%
JP Morgan ABS	ABS	1.41%	3.29	0.96%
State Street Bank	US Corporate	2.44%	4.38	0.96%
Cisco Systems	US Corporate	1.50%	2.16	0.95%
JP Morgan Chase & Co	US Corporate	1.94%	2.08	0.95%
US Bancorp	US Corporate	1.66%	1.87	0.95%
Toyota Motor Corp	US Corporate	1.83%	2.05	0.95%
Deere & Company	US Corporate	1.67%	1.95	0.92%
Berkshire Hathaway	US Corporate	2.25%	4.21	0.82%
John Deere ABS	ABS	1.11%	1.67	0.80%
Honda ABS	ABS	1.16%	1.61	0.76%

**Moulton Niguel Water District Consolidated – Account #43**
**As of 12/31/2016**

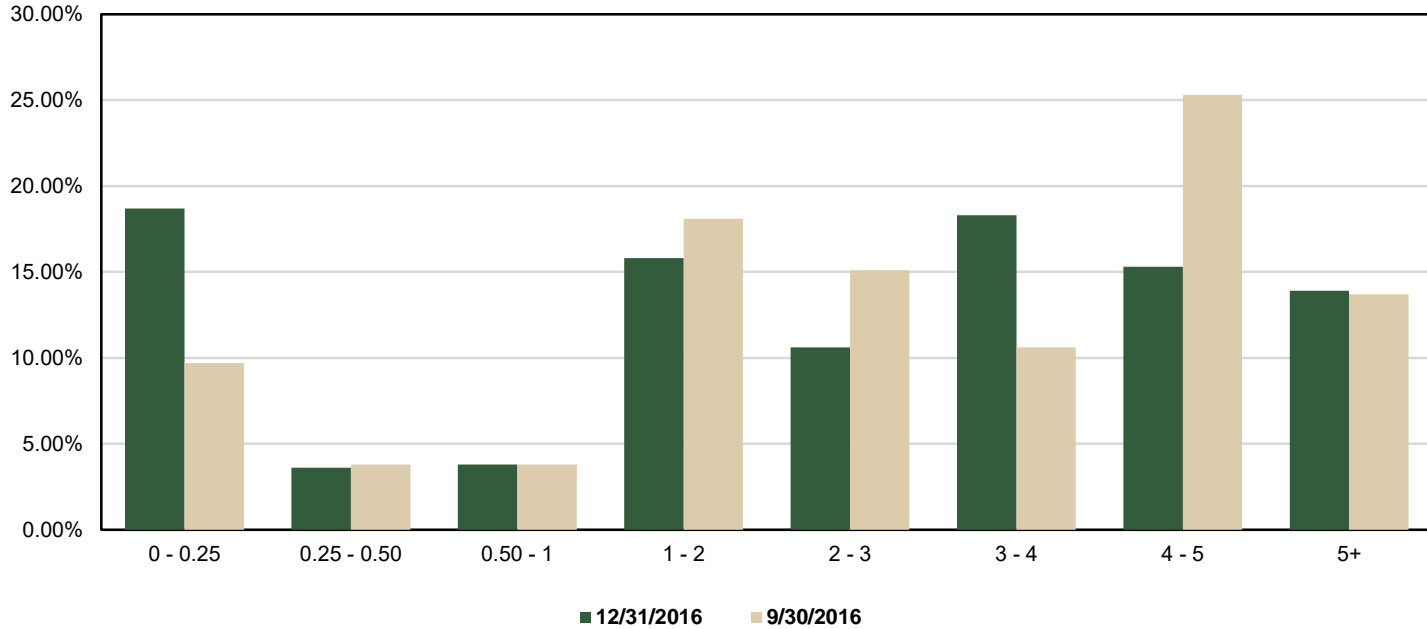
Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Pepsico Inc	US Corporate	2.13%	3.33	0.75%
Bank of Nova Scotia	Negotiable CD	1.26%	0.16	0.72%
Microsoft	US Corporate	2.24%	4.61	0.66%
Wells Fargo Adv Govt Money Market Fund	Money Market Fund FI	0.23%	0.00	0.65%
HSBC USA Corp	US Corporate	1.79%	1.04	0.62%
Wells Fargo Corp	US Corporate	1.62%	1.04	0.31%
Toyota ABS	ABS	1.24%	1.67	0.30%
Bank Cash Account	Cash	0.00%	0.00	0.25%
Air Products & Chemicals	US Corporate	1.23%	0.79	0.23%
United Technology Corp	US Corporate	1.17%	0.42	0.09%
<b>Total</b>		<b>1.57%</b>	<b>2.96</b>	<b>100%</b>



# Duration Distribution

## Moulton Niguel Water District Consolidated

December 31, 2016 vs. September 30, 2016



	0 - 0.25	0.25 - 0.50	0.50 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5+
<b>12/31/16</b>	<b>18.7%</b>	<b>3.6%</b>	<b>3.8%</b>	<b>15.8%</b>	<b>10.6%</b>	<b>18.3%</b>	<b>15.3%</b>	<b>13.9%</b>
<b>09/30/16</b>	<b>9.7%</b>	<b>3.8%</b>	<b>3.8%</b>	<b>18.1%</b>	<b>15.1%</b>	<b>10.6%</b>	<b>25.3%</b>	<b>13.7%</b>

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## SECTION 2

# Account Profile



## Bond Reserves

	Bond Reserves	
	12/31/2016	9/30/2016
Portfolio book value	\$7,801,325	\$7,635,016
Market value	\$7,704,250	\$7,654,944
Net Contribution/Withdrawal for the Period	\$150,000	--
Average book yield	1.03%	1.00%
Average maturity (yrs)	2.95	3.02
Modified duration	2.85	2.93
\$ change in value for 1% change in rates	\$219,721	\$224,103
% maturing within two years	22.0%	27.4%
Average credit quality	AA+/Aaa	AA+/Aaa



## Liquid Fund

	BAML 3-Month US Treasury Bill Index	Liquid Fund	
	12/31/2016	12/31/2016	9/30/2016
Portfolio book value	--	\$18,003,903	\$6,384,402
Market value	--	\$18,018,179	\$6,403,960
Net Contribution/Withdrawal for the Period	--	\$11,600,000	--
Average book yield	--	0.67%	0.63%
Average maturity (yrs)	0.14	0.00	0.00
Modified duration	0.15	0.00	0.00
\$ change in value for 1% change in rates	--	\$0	\$0
% maturing within one year	100%	100%	100%
Average credit quality	AAA	Not Rated	Not Rated



## Limited Maturity Fund

	BAML 0-3 Yr US Treasury Index	Limited Maturity Fund	
	12/31/2016	12/31/2016	9/30/2016
Portfolio book value	--	\$9,563,123	\$12,098,203
Market value	--	\$9,544,102	\$12,130,608
Net Contribution/Withdrawal for the Period	--	\$2,575,000	--
Average book yield	--	1.36%	1.18%
Average maturity (yrs)	1.40	1.20	1.19
Modified duration	1.36	1.07	1.06
\$ change in value for 1% change in rates	--	\$102,122	\$128,584
% maturing within two years	69.0%	74.4%	78.9%
Average credit quality	AAA	AA/Aa2	AA/Aa1



## Operating Reserve Fund

	BAML 1-10 Yr US Treasury/Agency Index	Operating Reserve Fund	
	12/31/2016	12/31/2016	9/30/2016
Portfolio book value	--	\$92,888,470	\$92,372,419
Market value	--	\$93,346,461	\$95,007,017
Net Contribution/Withdrawal for the Period	--	\$1,758	--
Average book yield	--	2.05%	2.00%
Average maturity (yrs)	3.90	3.71	3.66
Modified duration	3.65	3.43	3.41
\$ change in value for 1% change in rates	--	\$3,201,784	\$3,239,739
% maturing within two years	22.4%	24.1%	20.1%
Average credit quality	AAA	AA/Aa1	AA/Aa1



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**SECTION 3**

**Economic Update**



## ■ Federal Open Market Committee (FOMC)

- The Federal Open Market Committee (FOMC) unanimously voted to increase the target fed funds rate by 25 basis points to a range of 0.50%-0.75%, at the December 14 meeting.

## ■ Labor Markets

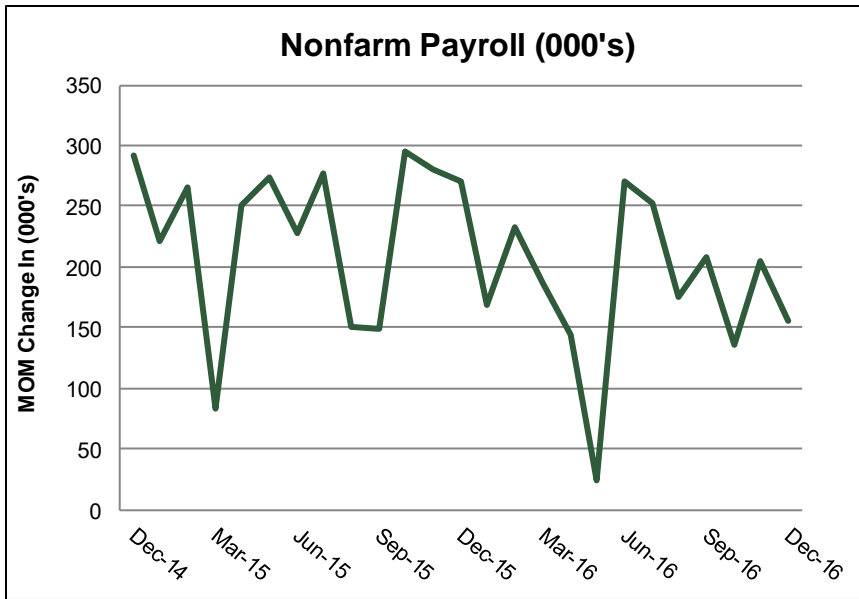
- The U.S. labor market continues to improve, consumer confidence remains strong, and housing trends remain favorable. The manufacturing sector has also improved.

## ■ Inflation

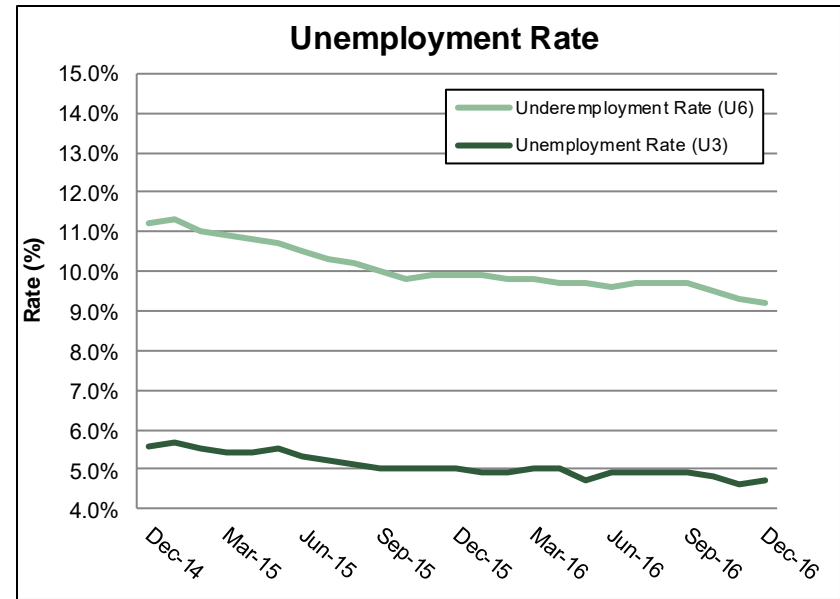
- The Personal Consumption Expenditures (PCE) index was up 1.4% year-over-year in November, unchanged from October. Core PCE (excluding food and energy) was up 1.6% year-over-year in November after being up 1.8% year-over-year in October.

## ■ Economic growth

- Third quarter 2016 GDP grew 3.5%, following growth of 1.4% in the second quarter and 0.8% in the first quarter.

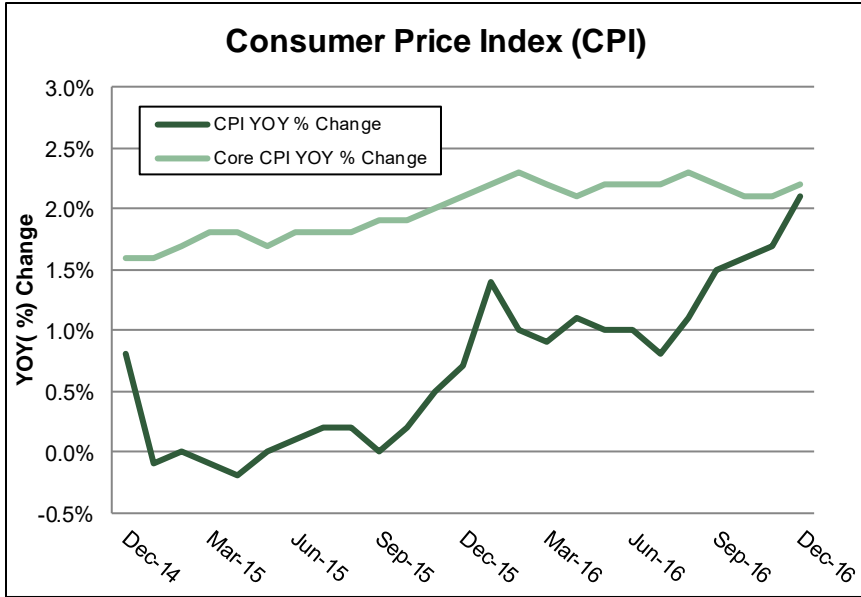


Source: US Department of Labor

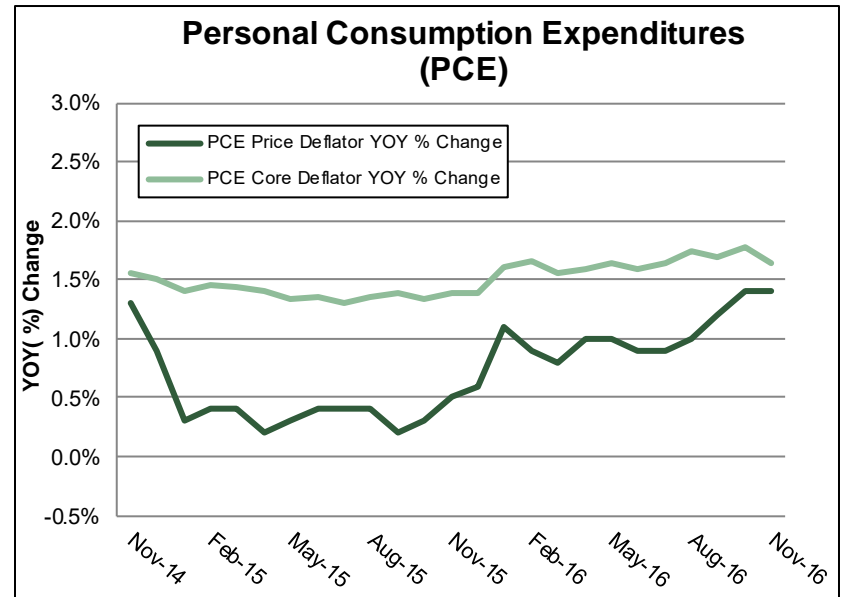


Source: US Department of Labor

Nonfarm payrolls were lower than expected in December, up 156,000 versus the consensus forecast of 175,000. However, October and November payrolls were revised up by a total of 19,000. On a trailing 3-month and 6-month basis, payrolls increased by an average of 165,000 and 188,500 per month, respectively. The unemployment rate inched back up to 4.7% from 4.6%, but the participation rate also increased to 62.7% from 62.6%. A broader measure of unemployment called the U-6, which includes those who are marginally attached to the labor force and employed part time for economic reasons, declined to 9.2% in December from 9.3% in November. Wages were up a solid 0.4% in December, versus expectations for a 0.3% increase. On a year-over-year basis, wages were up 2.9% in December (the highest year-over-year increase since June 2009), vs. 2.5% in November.

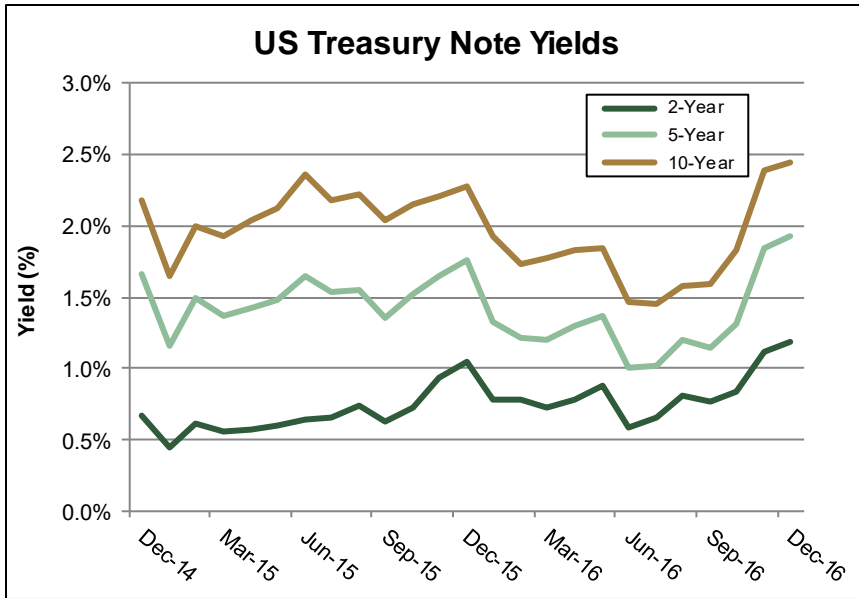


Source: US Department of Labor

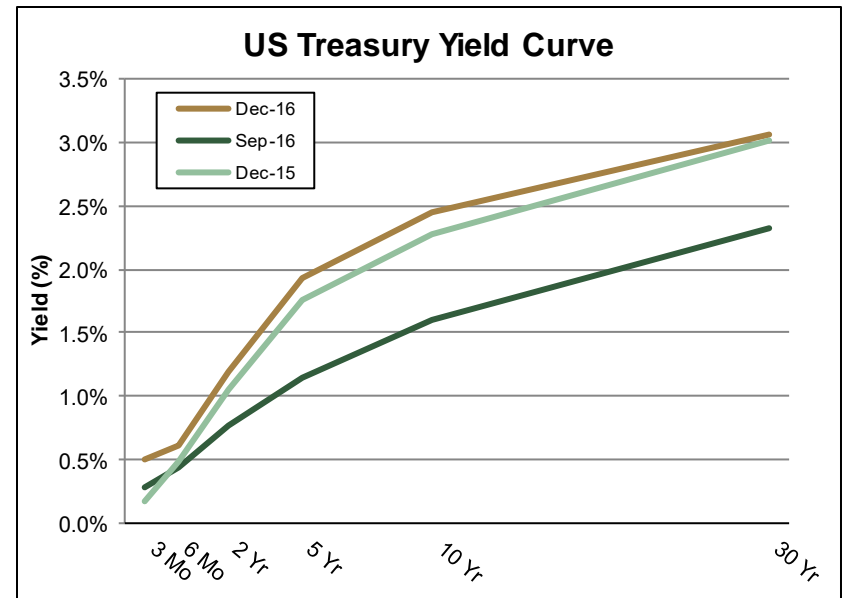


Source: US Department of Labor

The Consumer Price Index (CPI) was up 2.1% year-over-year in December, versus up 1.7% year-over-year in November, largely driven by an increase in energy prices. Core CPI (CPI less food and energy) was up 2.2% year-over-year in December, versus up 2.1% year-over-year in November. The Personal Consumption Expenditures (PCE) index was up 1.4% year-over-year in November, unchanged from October. Core PCE (excluding food and energy) was up 1.6% year-over-year in November, after being up 1.8% year-over-year in October. Although Core CPI is trending above 2.0%, the Fed's primary inflation gauge is PCE which remains below the Fed's 2.0% target.



Source: Bloomberg

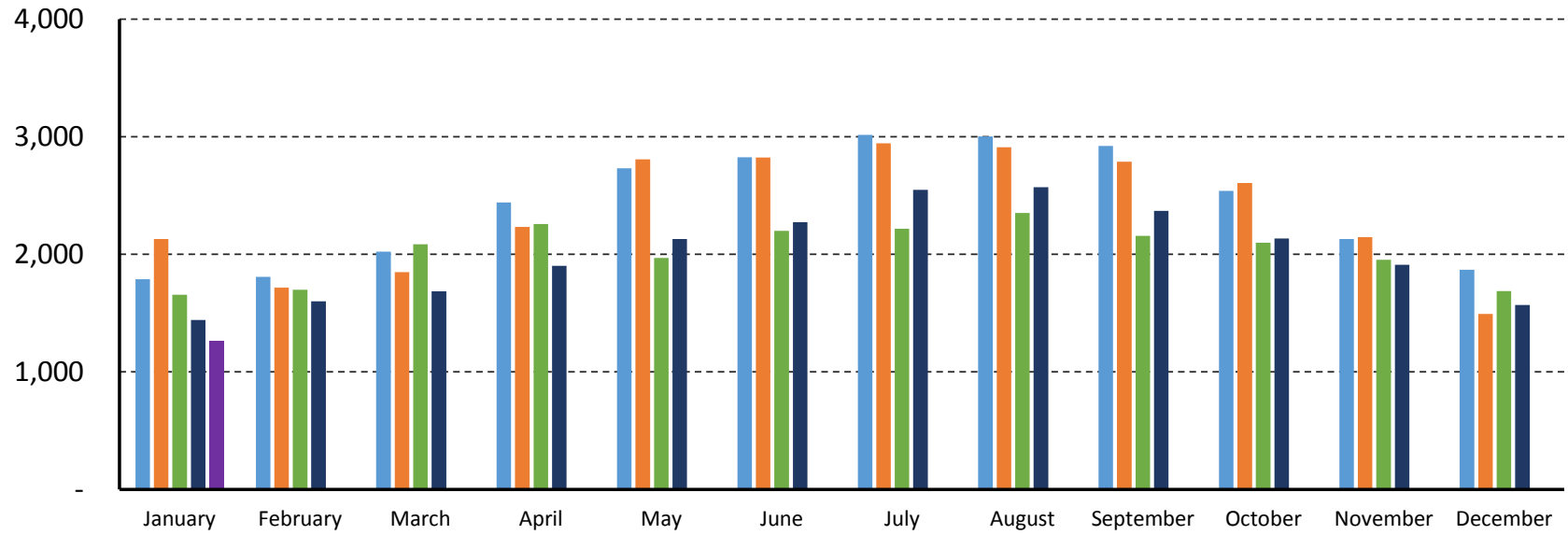


Source: Bloomberg

Over the past three months, the yield curve steepened with the 2-year Treasury yield up nearly 43 basis points and the 10-year Treasury yield up 85 basis points. On a year-over-year basis the 2-year Treasury yield increased 14 basis points and 10-year Treasury yield increased about 18 basis points. Over the past year, financial market volatility has been elevated due to weak global economic growth, volatile commodity prices, political uncertainty, and divergent global central bank monetary policy.

AF

## Historical Monthly MNWD Water Purchases & Evapotranspiration

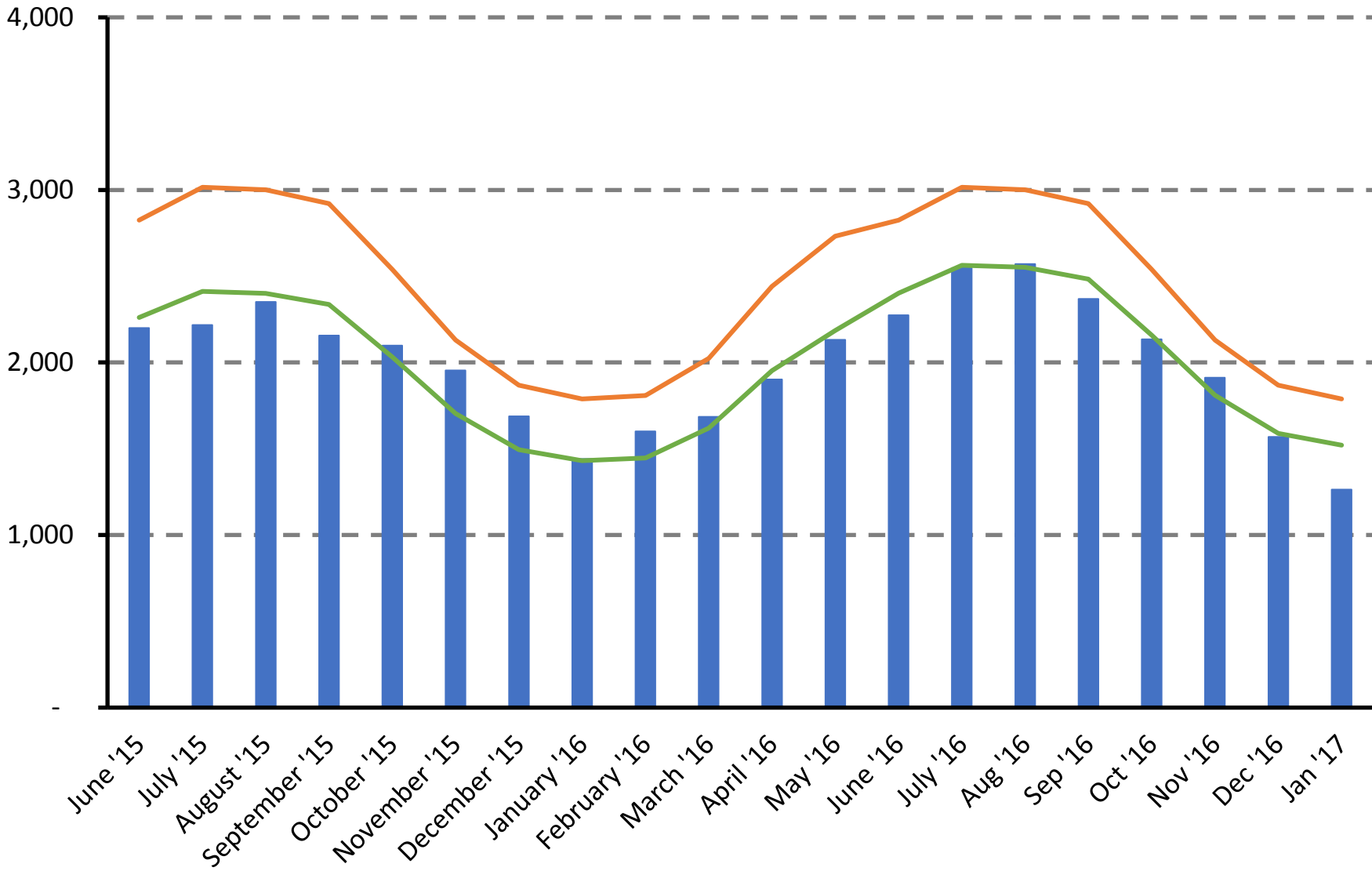


Year	ET (Inches)												
2013	2.54	2.88	4.08	4.79	5.99	6.07	5.81	6.53	5.26	3.92	2.52	2.49	
2014	2.82	2.64	4.09	5.54	6.39	6.45	6.54	6.23	5.21	3.94	3.16	1.91	
2015	2.52	3.02	4.96	5.31	4.48	5.75	5.69	6.27	5	3.88	3.24	2.35	
2016	1.87	3.82	3.98	5.16	4.63	5.77	6.77	5.97	4.51	3.23	2.75	1.89	
2017	1.96												

February 13, 2017

# SWRCB Monthly Target & MNWD Water Purchases

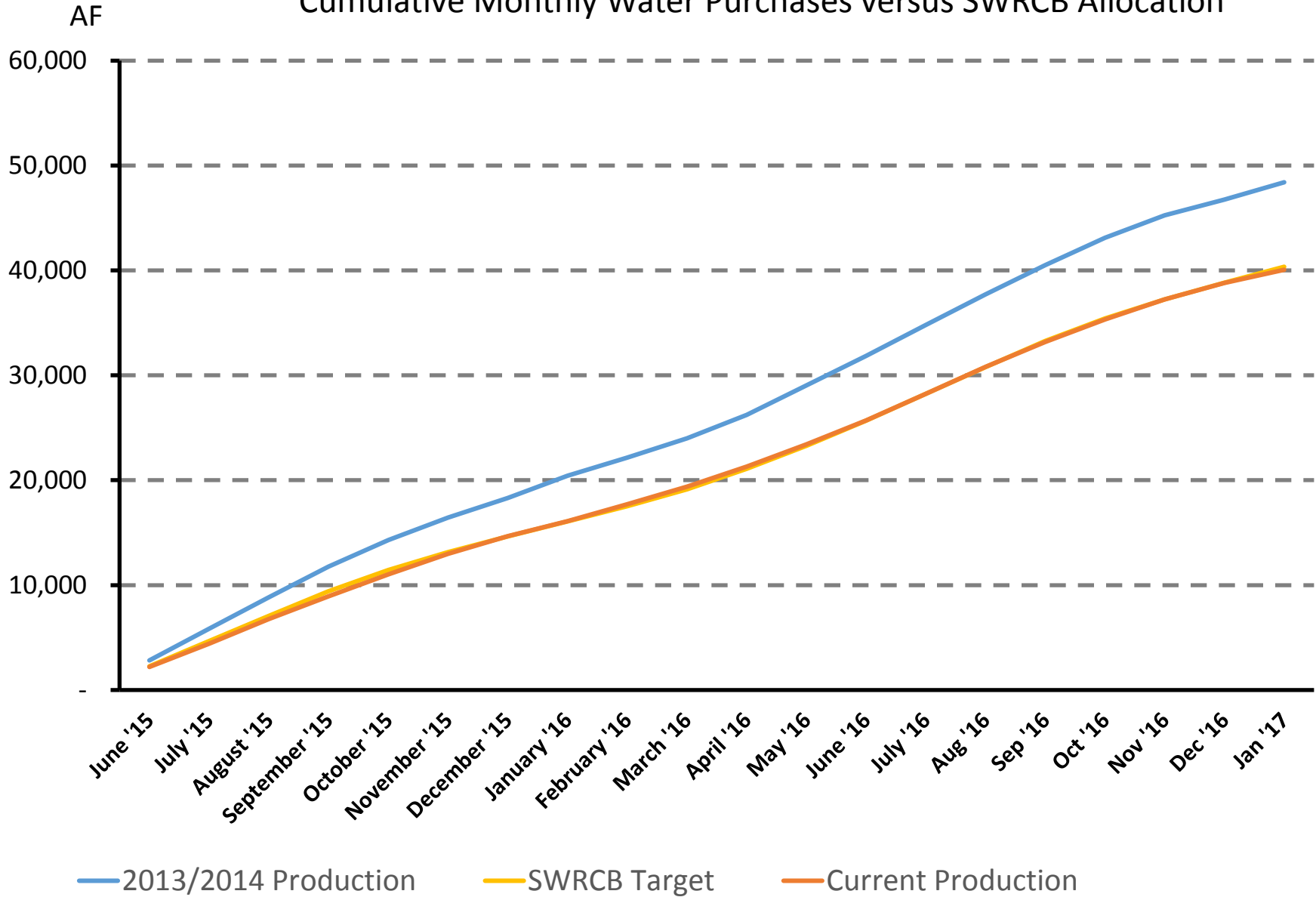
AF



■ Current Production    
 — 2013 Production    
 — SWRCB Target

January 13, 2017

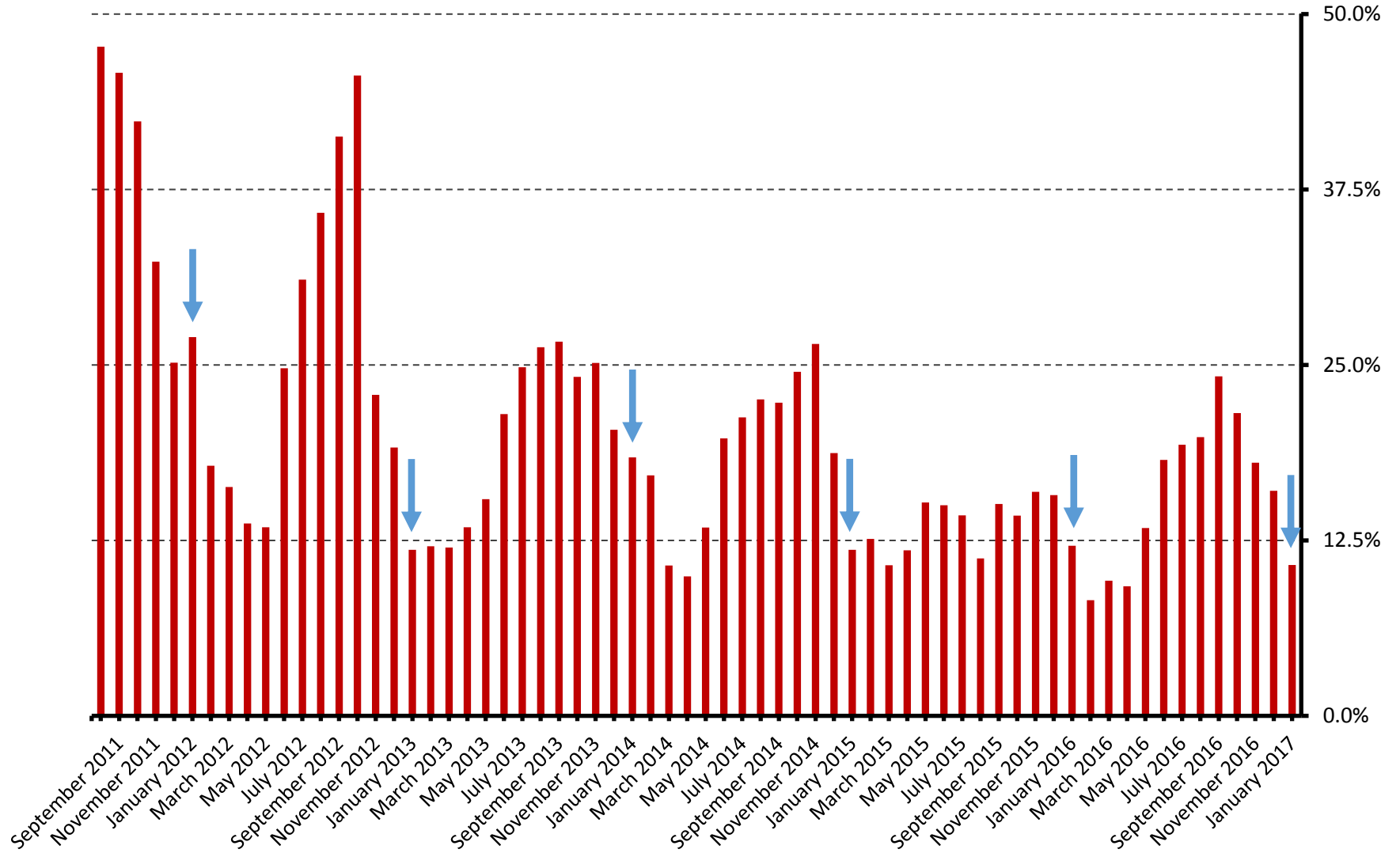
# Cumulative Monthly Water Purchases versus SWRCB Allocation



February 13, 2017

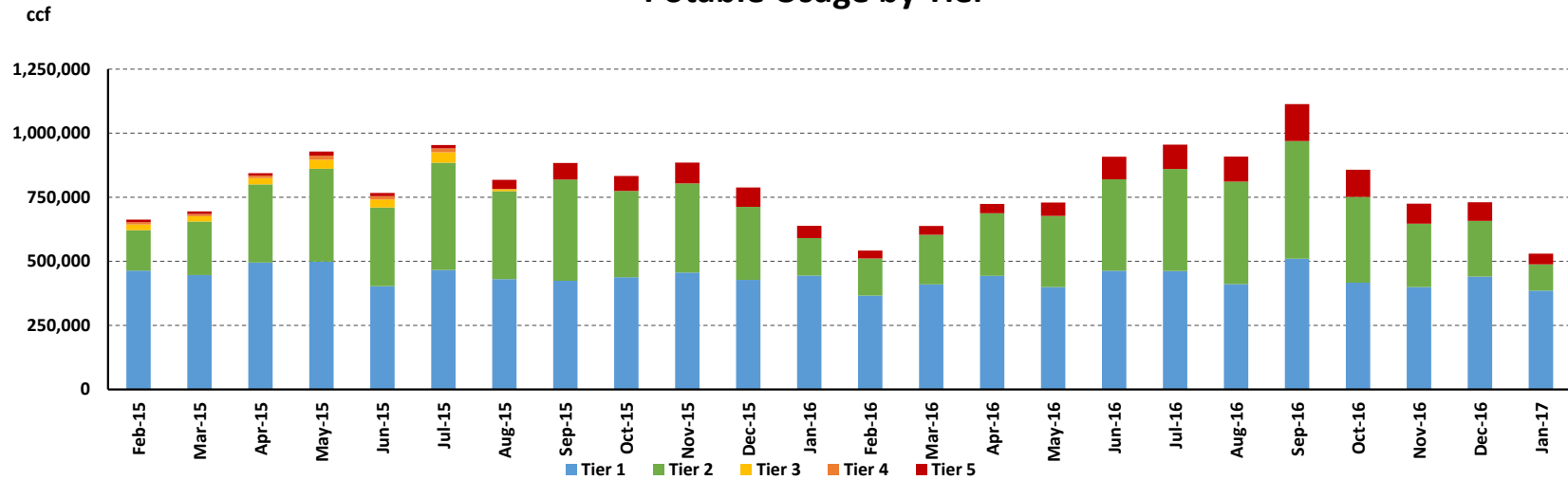


# Single Family Residential Accounts Above Tier 2



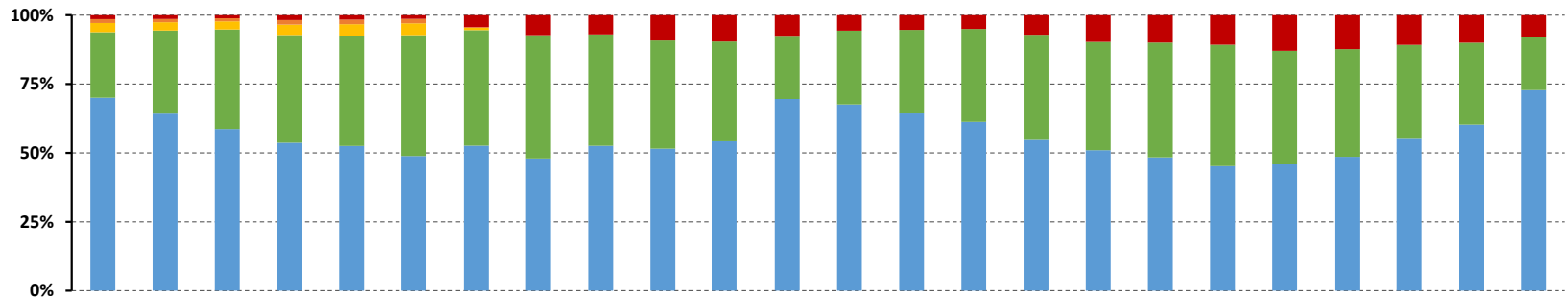
February 13, 2017

### Potable Usage by Tier



AF in Tier 3, 4, 5	94	89	101	154	131	159	102	148	134	187	173	110	70	78	83	119	202	218	224	331	243	180	167	96
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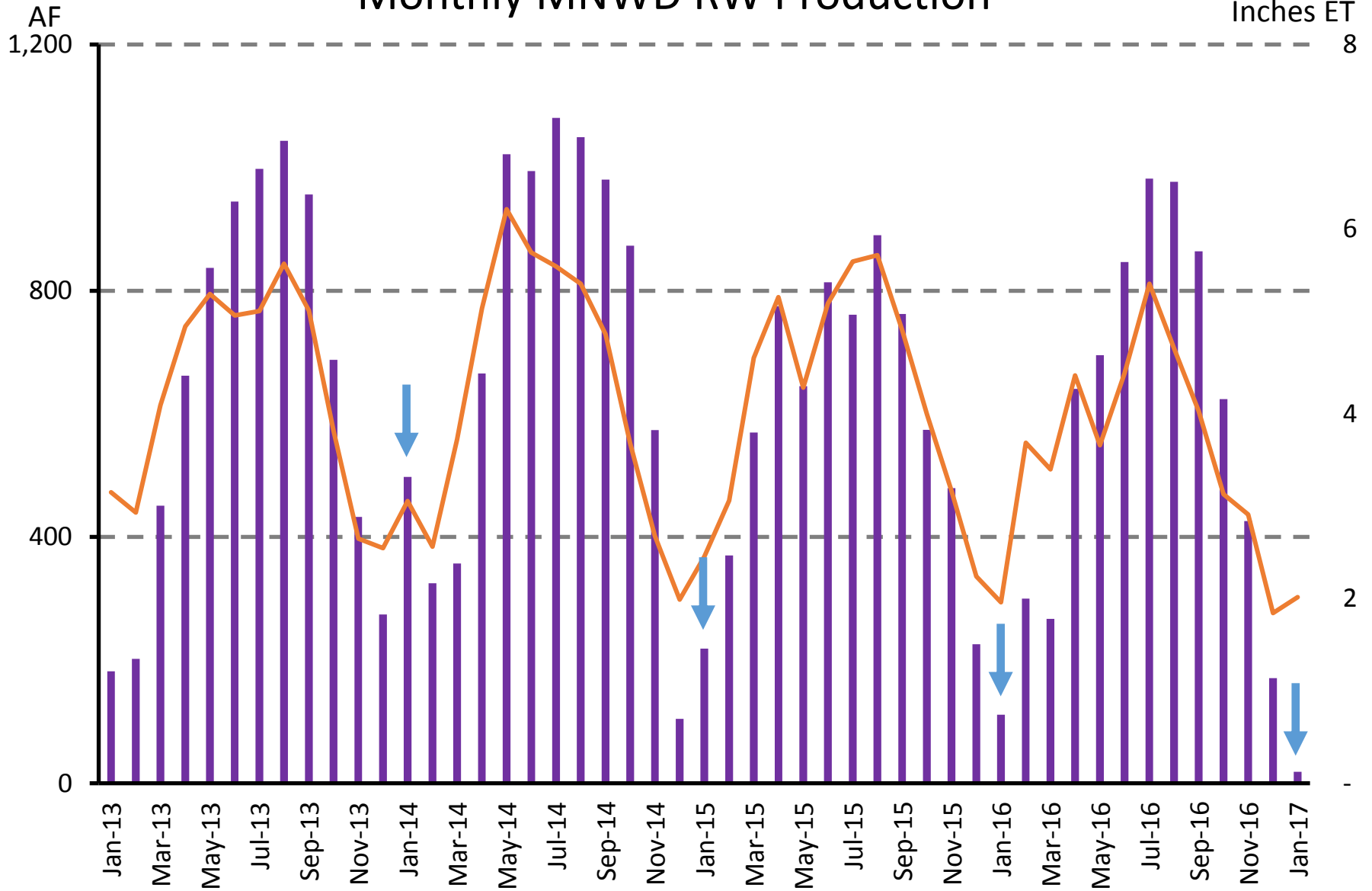
### Percent Potable Usage by Tier



	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Tier 5	1.5%	1.4%	1.1%	1.8%	1.6%	1.4%	4.3%	7.3%	7.0%	9.2%	9.6%	7.5%	5.6%	5.4%	5.0%	7.1%	9.7%	9.9%	10.7%	12.9%	12.4%	10.8%	10.0%	7.9%
Tier 4	1.4%	1.2%	1.1%	1.7%	1.7%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 3	3.3%	3.0%	3.0%	3.8%	4.1%	4.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 2	23.8%	30.1%	36.1%	39.0%	40.0%	43.8%	41.9%	44.7%	40.4%	39.2%	36.2%	22.9%	26.8%	30.3%	33.7%	38.1%	39.3%	41.6%	44.0%	41.2%	39.1%	34.1%	29.7%	19.3%
Tier 1	70.0%	64.3%	58.7%	53.7%	52.6%	48.9%	52.6%	48.0%	52.6%	51.6%	54.3%	69.6%	67.6%	64.3%	61.3%	54.8%	51.0%	48.4%	45.2%	45.8%	48.6%	55.1%	60.3%	72.8%

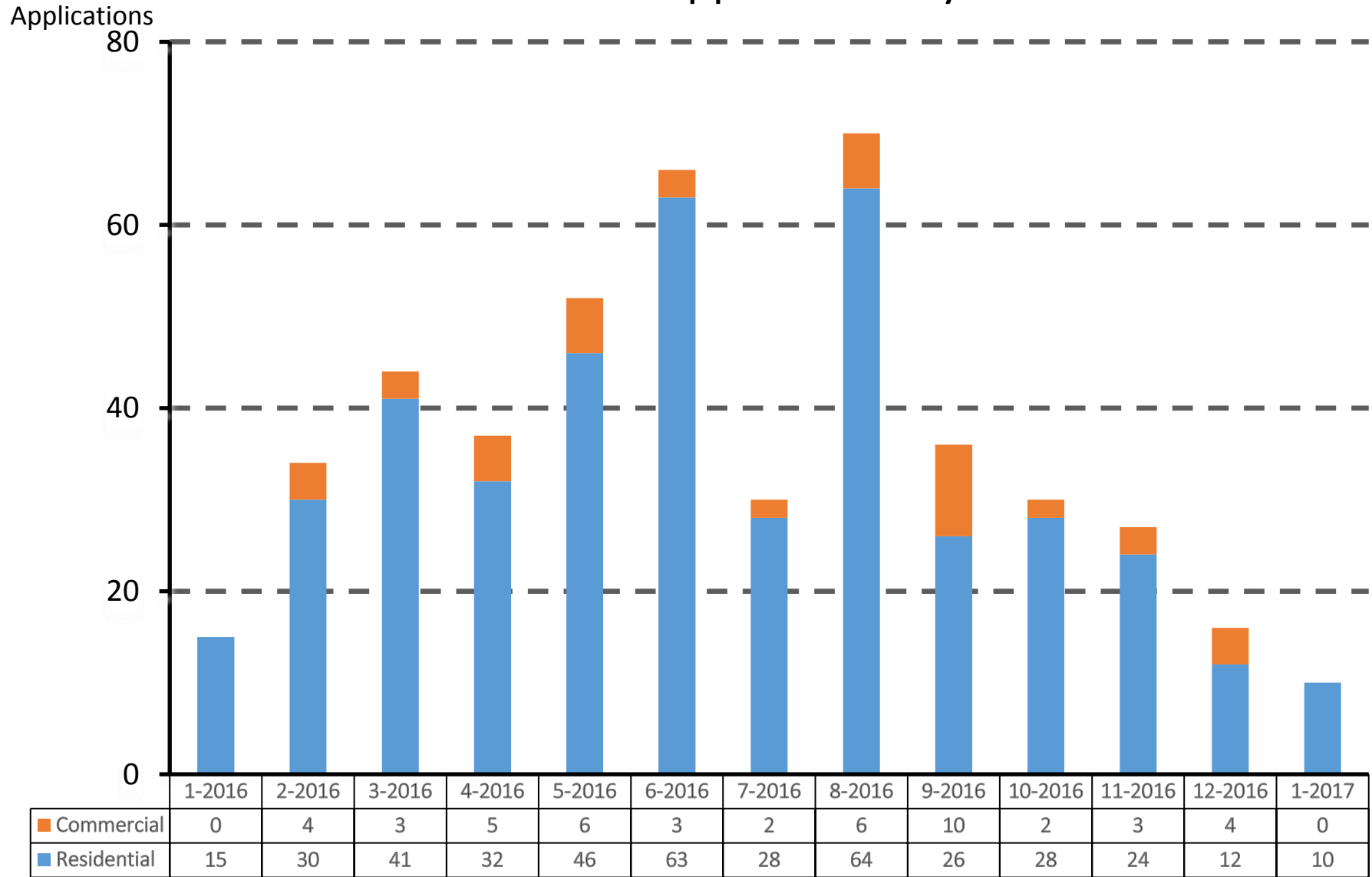
Tier 1 Tier 2 Tier 3 Tier 4 Tier 5

# Monthly MNWD RW Production



February 13, 2017

# Total Turf Removal Applications by Month

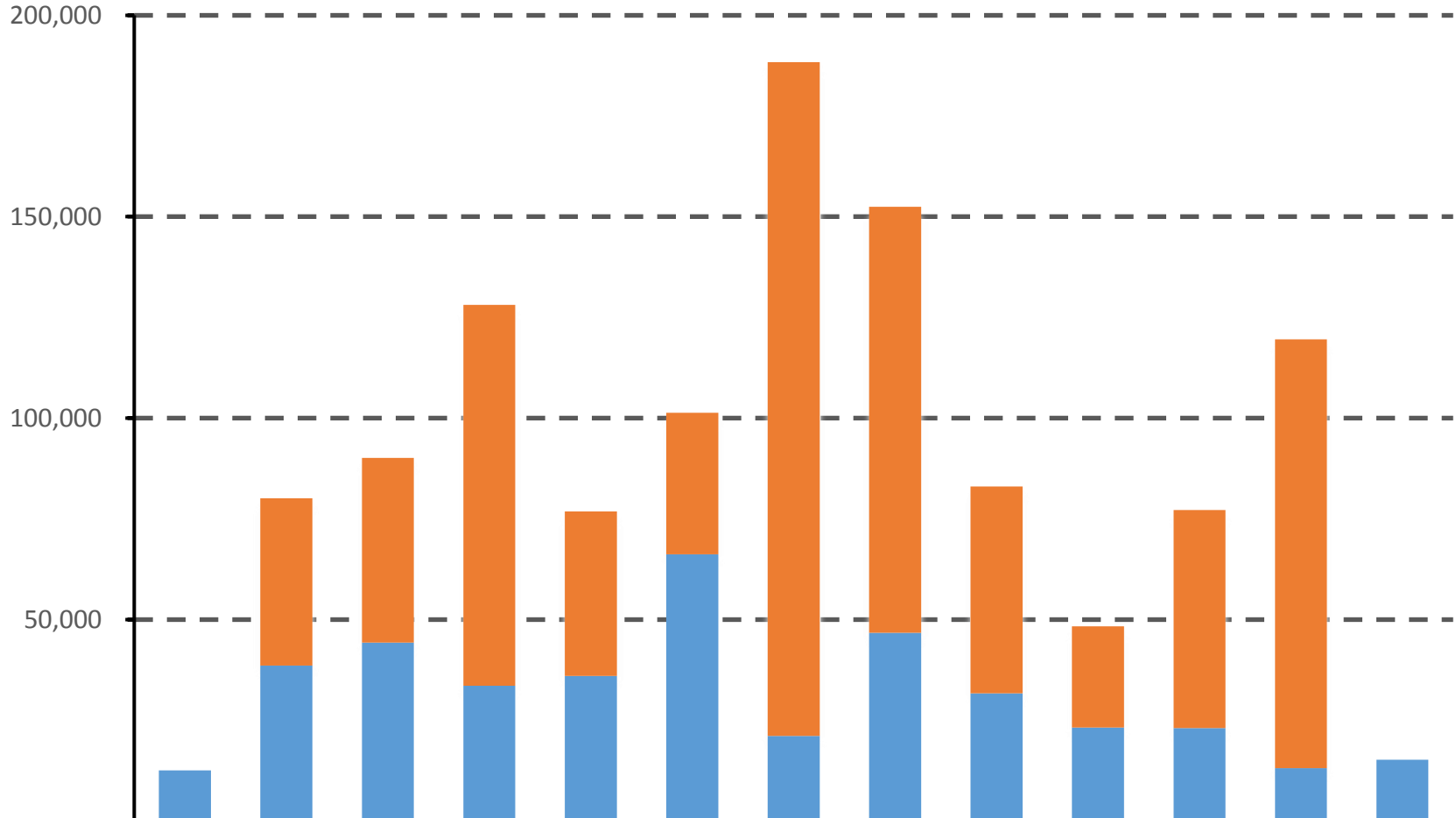


■ Residential ■ Commercial

February 13, 2017

# Total Turf Removal Application Size by Month

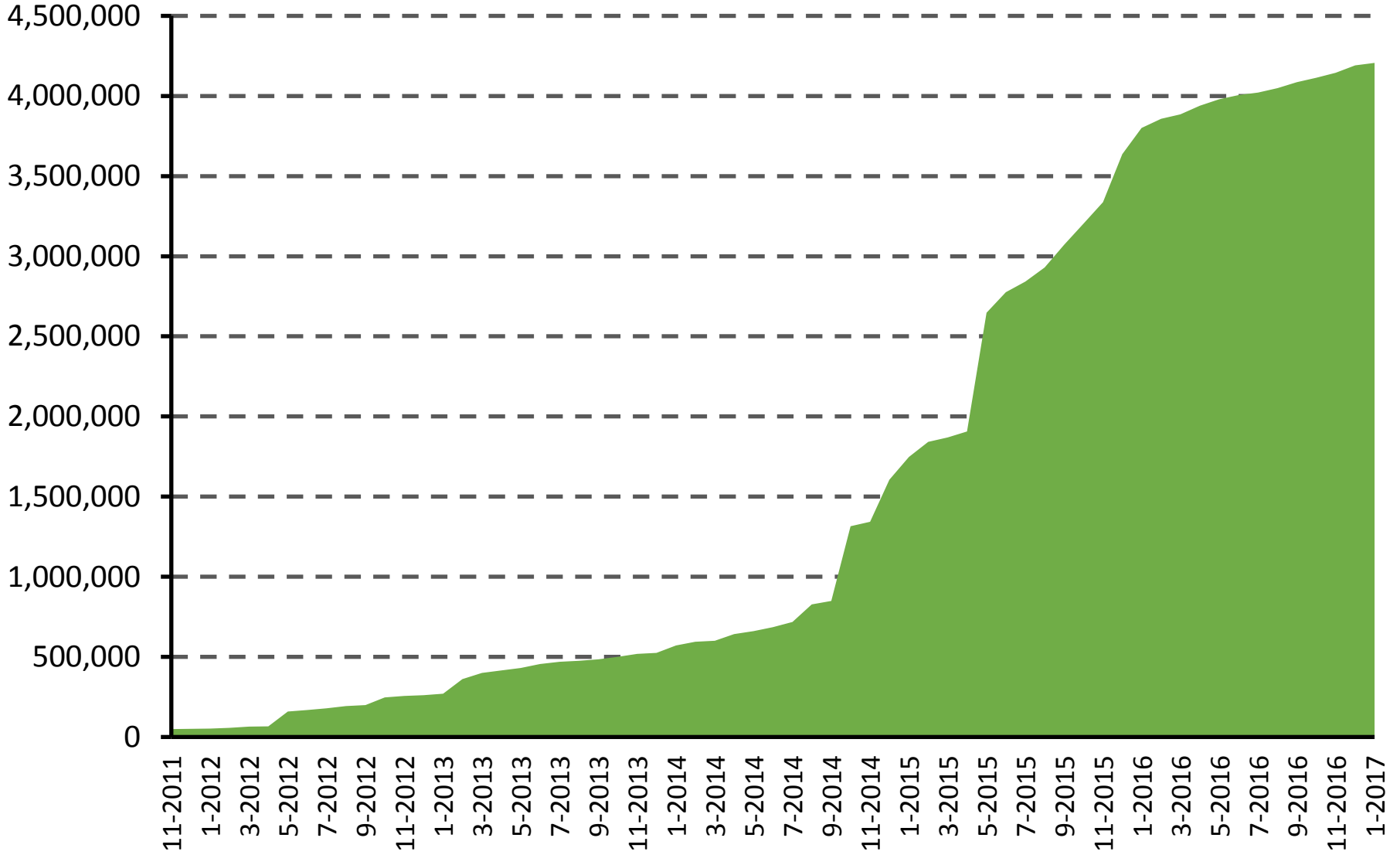
Square Feet



	1-2016	2-2016	3-2016	4-2016	5-2016	6-2016	7-2016	8-2016	9-2016	10-2016	11-2016	12-2016	1-2017
Commercial	-	41,563	45,913	94,603	40,855	35,153	167,285	105,813	51,389	25,127	54,155	106,459	0
Residential	12,507	38,522	44,231	33,539	35,983	66,181	21,110	46,682	31,654	23,193	23,023	13,087	15,149

Square Feet

# Total Turf Removed



February 13, 2017

REBATE FUNDING LEVELS

February 10, 2017

<b>RESIDENTIAL</b>						
<b>Residential Device Rebates</b>	<b>Parameters</b>	<b>MWD</b>	<b>MWDOC</b>	<b>MNWD</b>	<b>Total Incentive</b>	
High Efficiency Clothes Washers		\$ 85.00	\$ -	\$ 200.00	\$ 285.00	
Premium High Efficiency Toilets						
1.06 gpf or less		\$ 40.00	\$ -	\$ -	\$ 40.00	
Weather Based Irrigation Controller						
areas less than 1 acre		\$ 80.00	\$ 150.00	\$ 150.00	\$ 380.00	
Weather Based Irrigation Controller						
areas greater than 1 acre	per station	\$ 35.00	\$ 15.00	\$ 40.00	\$ 90.00	
Rotating Nozzles	minimum of 30 nozzles	\$ 2.00	\$ -	\$ 4.00	\$ 6.00	
Rain Barrels	maximum of 2 barrels	\$ 35.00	\$ -	\$ -	\$ 35.00	
Cisterns	tiered	\$ 300.00	\$ -	\$ -	\$ 300.00	
<b>Non-Device Incentives</b>	<b>Parameters</b>	<b>MWD</b>	<b>MWDOC</b>	<b>MNWD</b>	<b>Total Incentive</b>	
Turf Removal - Residential	per square foot	\$ 0.30	\$ 0.70	\$ 1.00	\$ 2.00	
<b>COMMERCIAL</b>						
<b>Commercial Device Rebates</b>	<b>Parameters</b>	<b>MWD</b>	<b>MWDOC</b>	<b>MNWD</b>	<b>Total Incentive</b>	
Large Rotary Spray Nozzles	per set; minimum of 8	\$ 13.00	\$ -	\$ 15.00	\$ 28.00	
Rotating Sprinkler Nozzles	minimum of 30	\$ 2.00	\$ -	\$ 4.00	\$ 6.00	
Weather Based Irrigation Controller	per station	\$ 35.00	\$ 15.00	\$ 40.00	\$ 90.00	
Soil Moisture Sensor	per station	\$ 35.00	\$ 15.00	\$ 40.00	\$ 90.00	
In-Stem Flow Regulator	per regulator	\$ 1.00	\$ -	\$ -	\$ 1.00	
Ultra Low and Zero Water Urinal		\$ 200.00	\$ -	\$ -	\$ 200.00	
Connectionless Food Steamer	per compartment	\$ 485.00	\$ -	\$ 500.00	\$ 985.00	
Air Cooled Ice Machine		\$ 1,000.00	\$ -	\$ 750.00	\$ 1,750.00	
Dry Vacuum Pump	per 0.5 HP	\$ 125.00	\$ -	\$ -	\$ 125.00	
Laminar Flow Restrictor	minimum of 10	\$ 10.00	\$ -	\$ -	\$ 10.00	
Plumbing Control Valve	minimum of 10	\$ 5.00	\$ -	\$ -	\$ 5.00	
Cooling Tower Conductivity Controller		\$ 625.00	\$ -	\$ 600.00	\$ 1,225.00	
Cooling Tower pH Controller		\$ 1,750.00	\$ -	\$ 1,000.00	\$ 2,750.00	
<b>Non-Device Incentives</b>	<b>Parameters</b>	<b>MWD</b>	<b>MWDOC</b>	<b>MNWD</b>	<b>Total Incentive</b>	
Turf Removal - Commercial	per square foot	\$ -	\$ -	\$ 2.00	\$ 2.00	
Spray to Drip - Commercial	per square foot	\$ 0.20	\$ -	\$ 0.20	\$ 0.40	
Water Savings Incentive Program		\$ 6.00	\$ 6.00	\$ -	\$ 12.00	