CalPERS Update

Moulton Niguel Water District November 16, 2016

Kerry Worgan FSA, FCIA Senior Pension Actuary, CalPERS



Past Changes

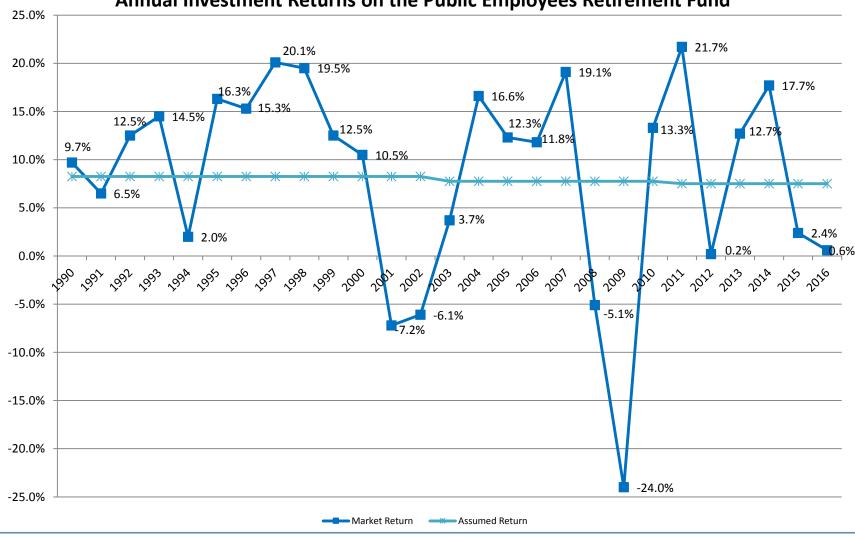
- Dollar Billing for Unfunded Liability
 - first reflected in June 30, 2014 valuation report
 - allows for "ownership" of the funding status
 - significant savings by making additional discretionary payments
- GASB 68
 - Net Pension Liability (NPL)
 - Sensitivity analysis: Discount Rate +/- 1%
 - How the NPL is calculated
 - Why the NPL is shown on our Statement of Net Position



Future Changes

- Possible Discount Rate Changes
 - CalPERS Board to decide Dec. 2016
 - reflect current capital asset market expectations
 - reflected in June 30, 2016 valuation impact rates 2018/19
- Demographic Assumption Changes
 - 2017 Experience Study completed (salary, mortality, retirement, termination)
 - Mortality improvement assumption (MP-2016)
 - Assumptions to be approved by CalPERS Board in Feb 2018
 - reflected in June 30, 2017 valuation impact rates 2019/20









Funded Status

	Tier 1		Tier 2		Tier 3 (PEPRA)	
As of June 30,	2014	2015	2014	2015	2014	2015
Liability	\$70,089,584	\$72,715,617	\$720,093	\$1,189,227	\$92,441	\$284,552
Assets	\$59,200,897	\$58,250,209	\$674,398	\$1,125,677	\$98,164	\$270,373
Unfunded Liability	\$10,888,687	\$14,465,408	\$45,695	\$63,550	(\$5,723)	\$14,179
Funded Ratio	84.5%	80.1%	93.7%	94.7%	106.2%	95.0%
Actives Retired	70 77	64 81	19 0	23 0	22 0	29 0



Required Contributions FY 2017/18

- Normal Cost Cost of service earned in the coming year
- Unfunded Accrued Liability Amortized payments for outstanding liability

Plan	Tier 1	Tier 2	Tier 3 (PEPRA)	Totals
Benefit	2% @ 55	2% @ 55	2% @ 62	
Normal Cost*	\$558,625	\$212,424	\$126,012	\$897,061
Unfunded Liability Payment**	\$817,712	\$3,179	\$1,893	\$822,784
Total Annual Contribution	\$1,376,337	\$215,603	\$127,905	\$1,719,845
2017/18 Normal Cost Employer Rate	10.812%	9.887%	7.045%	

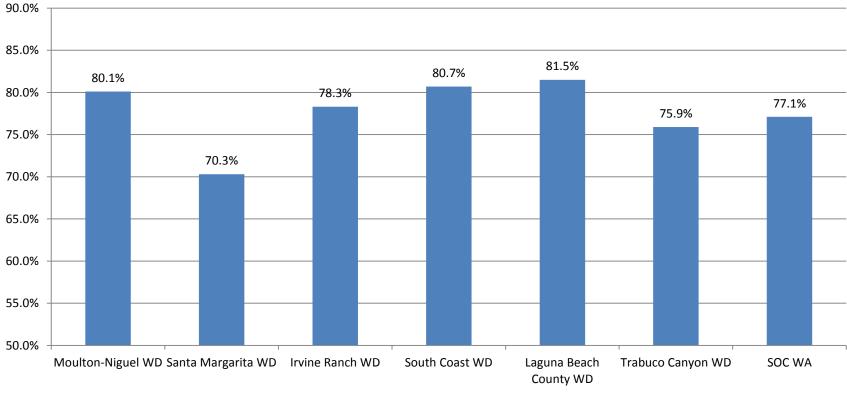
• *Normal Cost may no longer be paid by a lump sum and must be paid through each payroll

• **Unfunded Liability Payment may be pre-paid or CalPERS will send a monthly invoice



Plan Comparisons – Misc. Plan Tier 1 Funded Status

CalPERS Orange County Water Agencies

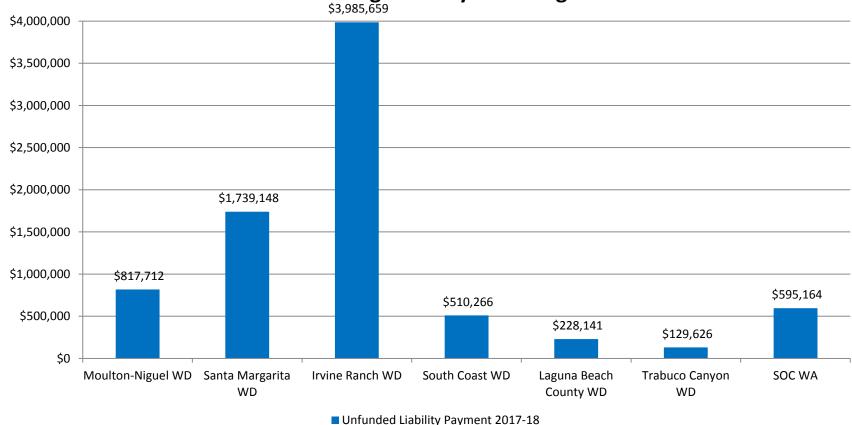


Funded Ratio at June 30, 2015



Plan Comparisons – Misc. Plan Tier 1 Unfunded Liability

CalPERS Orange County Water Agencies





Discount Rate Impact

• Miscellaneous Plan – Tier 1

Sensitivity Analysis					
As of June 30, 2015 6.50% Discount Rate (-1%) 7.50% Discount Rate (assumed rate) (+1%)					
Plan's Total Normal Cost	21.9%	17.7%	14.5%		
Accrued Liability	\$82,486,178	\$72,715,617	\$64,608,368		
Unfunded Accrued Liability	\$24,235,969	\$14,465,408	\$6,358,159		

Estimated Costs

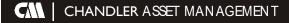
As of June 30, 2015	7.00% Discount Rate	7.25% Discount Rate
Plan's Total Normal Cost	19.80%	18.75%
Accrued Liability	\$77,600,898	\$75,158,257
Unfunded Accrued Liability	\$19,350,689	\$16,908,048

Normal Cost	\$105,000	\$52,500
UAL Payment - 2018/19	\$89,202	\$45,558
UAL Payment - 2019/20	\$183,757	\$93,849
UAL Payment - 2020/21	\$283,904	\$144,996
UAL Payment - 2021/22	\$389,895	\$199,128
UAL Payment - 2022/23	\$501,990	\$256,378



Questions?





Investment Presentation

Moulton Niguel Water District

Period Ending September 30, 2016

6225 Lusk Blvd | San Diego, CA 92121 | Phone 800.317.4747 | Fax 858.546.3741 | www.chandlerasset.com



SECTION 1	Consolidated Information
SECTION 2	Account Profile
SECTION 3	Economic Update



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 the 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 Objectives

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.



Portfolio Characteristics

Moulton Niguel Water District Bond Reserves

	09/30/2016	06/30/2016
	Portfolio	Portfolio
Average Maturity (yrs)	3.02	2.92
Modified Duration	2.93	2.83
Average Purchase Yield	1.00 %	0.96 %
Average Market Yield	0.95 %	0.78 %
Average Quality	AA+/Aaa	AA+/Aaa
Total Market Value	7,654,944	7,848,635

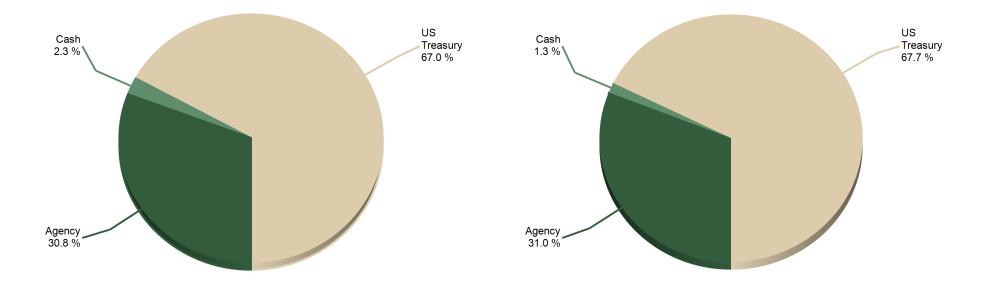
There was a \$179,266 withdrawal from the portfolio over the reporting period.



Moulton Niguel Water District Bond Reserves

September 30, 2016

June 30, 2016





Portfolio Characteristics

Moulton Niguel Water District Consolidated

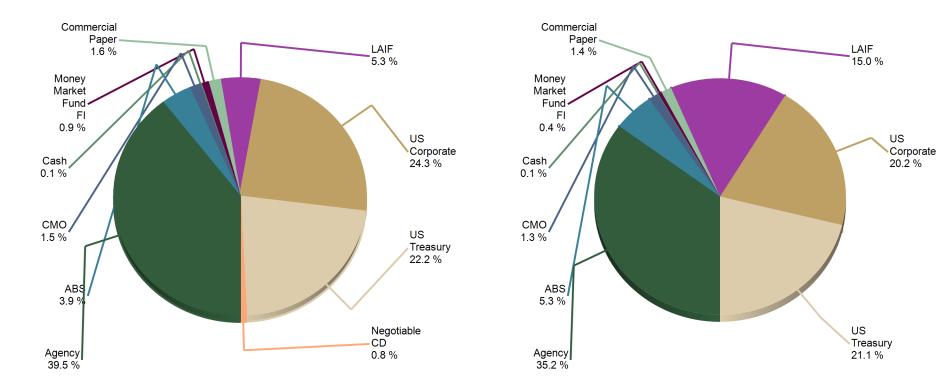
	09/30/2016	06/30/2016
	Portfolio	Portfolio
Average Maturity (yrs)	3.18	2.90
Modified Duration	2.96	2.66
Average Purchase Yield	1.78 %	1.63 %
Average Market Yield	1.13 %	0.95 %
Average Quality	AA/Aa1	AA/Aa1
Total Market Value	121,196,482	139,268,732

Sector Distribution

Moulton Niguel Water District Consolidated

September 30, 2016

June 30, 2016





Issuers

G	1

Microsoft

Moulton Niguel Water District Consolidated Account #43

As of 9/30/2016

1.64%

4.86

0.72~%

		As of 9/3		
Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Government of United States	US Treasury	1.09%	4.35	22.22 %
Federal Home Loan Bank	Agency	1.16%	3.93	11.81 %
Federal Home Loan Mortgage Corp	Agency	1.05%	3.37	10.50 %
Federal National Mortgage Association	Agency	1.16%	4.15	10.11 %
Tennessee Valley Authority	Agency	1.27%	4.16	5.55 %
Local Agency Investment Fund	LAIF	0.63%	0.00	5.28 %
General Electric Co	US Corporate	1.11%	0.89	1.77 %
ChevronTexaco Corp	US Corporate	1.19%	1.52	1.61 %
Bank of Tokyo-Mit UFJ	Commercial Paper	0.75%	0.07	1.56 %
Federal Farm Credit Bank	Agency	1.02%	2.85	1.55 %
Qualcomm Inc	US Corporate	1.56%	3.13	1.52 %
Federal Home Loan Mortgage Corp	СМО	1.22%	1.90	1.45 %
Bank of New York	US Corporate	1.45%	2.95	1.40 %
Paccar Financial	US Corporate	1.31%	2.53	1.36 %
Honda Motor Corporation	US Corporate	1.23%	2.03	1.36 %
Charles Schwab Corp/The	US Corporate	1.23%	1.44	1.35 %
Intel Corp	US Corporate	1.09%	1.21	1.30 %
John Deere ABS	ABS	1.04%	1.88	1.21 %
Honda ABS	ABS	0.96%	1.81	1.11 %
State Street Bank	US Corporate	1.78%	4.64	1.05 %
Exxon Mobil Corp	US Corporate	1.71%	4.42	1.04 %
Apple Inc	US Corporate	1.09%	1.59	1.03 %
JP Morgan ABS	ABS	1.10%	3.54	1.03 %
US Bancorp	US Corporate	1.32%	2.13	1.02 %
Cisco Systems	US Corporate	1.30%	2.42	1.01 %
Toyota Motor Corp	US Corporate	1.35%	2.30	1.01 %
JP Morgan Chase & Co	US Corporate	1.62%	2.33	1.01 %
Deere & Company	US Corporate	1.17%	2.20	0.99 %
Wells Fargo Adv Govt Money Market Fund	Money Market Fund FI	0.14%	0.00	0.90 %
Berkshire Hathaway	US Corporate	1.52%	4.46	0.89 %
Pepsico Inc	US Corporate	1.40%	3.58	0.82 %
Bank of Nova Scotia	Negotiable CD	1.26%	0.42	0.76 %

US Corporate



Issuers Continued

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Moulton Niguel Water District Consolidated Account #43

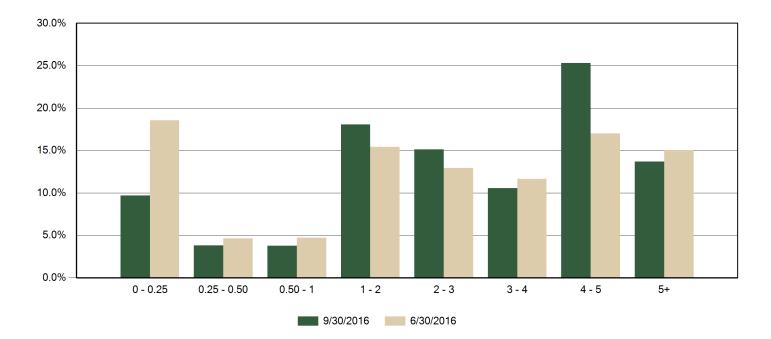
As of 9/30/2016

Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Wal-Mart Stores	US Corporate	0.98%	1.53	0.70 %
HSBC USA Corp	US Corporate	1.58%	1.30	0.65 %
Toyota ABS	ABS	0.98%	1.75	0.53 %
Wells Fargo Corp	US Corporate	1.40%	1.30	0.33 %
Air Products & Chemicals	US Corporate	1.13%	1.04	0.25 %
Bank Cash Account	Cash	0.00%	0.00	0.14 %
United Technology Corp	US Corporate	1.08%	0.67	0.10 %
Total		1.13%	3.18	100.00 %



Moulton Niguel Water District Consolidated





	0 - 0.25	0.25 - 0.50	0.50 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5+
9/30/16	9.7 %	3.8 %	3.8 %	18.1 %	15.1 %	10.6 %	25.3 %	13.7 %
6/30/16	18.5 %	4.6 %	4.7 %	15.4 %	13.0 %	11.6 %	17.0 %	15.1 %



SECTION 2

Account Profile

Bond Reserves

	Bond Reserve	S
	9/30/2016	6/30/2016
Portfolio book value	\$7,635,016	\$7,779,063
Market value	\$7,654,944	\$7,848,636
Net Contribution/Withdrawal for the Period	(\$179,266)	
Average book yield	1.00%	0.97%
Average maturity (yrs)	3.02	2.92
Modified duration	2.93	2.84
\$ change in value for 1% change in rates	\$224,103	\$222,680
% maturing within two years	27.4%	35.5%
Average credit quality	AA+/Aaa	AA+/Aaa

	BAML 3-Month US Treasury Bill Index	Liquid Fund	
	9/30/2016	9/30/2016	6/30/2016
Portfolio book value		\$6,384,402	\$20,894,575
Market value		\$6,403,960	\$20,931,026
Net Contribution/Withdrawal for the Period		(\$14,540,000)	
Average book yield		0.63%	0.58%
Average maturity (yrs)	0.15	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

Liquid Fund

Limited Maturity Fund

	BAML 0-3 Yr US Treasury/Agency Index	Limited Maturity	Fund
	9/30/2016	9/30/2016	6/30/2016
Portfolio book value		\$12,098,203	\$15,677,479
Market value		\$12,130,608	\$15,419,083
Net Contribution/Withdrawal for the Period		(\$3,295,000)	
Average book yield		1.18%	1.14%
Average maturity (yrs)	1.39	1.19	1.17
Modified duration	1.36	1.06	1.06
\$ change in value for 1% change in rates		\$128,584	\$163,442
% maturing within two years	68.5%	78.9%	72.5%
Average credit quality	AAA	AA/Aa1	AA/Aa1

Operating Reserve Fund

	BAML 1-10 Yr US Treasury/Agency Index	Operating Reserve	e Fund
	9/30/2016	9/30/2016	6/30/2016
Portfolio book value		\$92,372,419	\$91,888,486
Market value		\$95,007,017	\$95,069,988
Net Contribution/Withdrawal for the Period		(\$1,992)	
Average book yield		2.00%	2.01%
Average maturity (yrs)	3.94	3.66	3.82
Modified duration	3.70	3.41	3.49
\$ change in value for 1% change in rates		\$3,239,739	\$3,317,943
% maturing within two years	21.6%	20.1%	19.0%
Average credit quality	AAA	AA/Aa1	AA/Aa1



SECTION 3

Economic Update



Federal Open Market Committee (FOMC)

The Federal Open Market Committee kept the fed funds rate unchanged at a range of 0.25%-0.50% in September. However, there were three dissenting votes (out of ten) who preferred to raise the target range. If economic data remains modestly favorable over the next few months, we expect the Fed will hike the fed funds rate range by 25 basis points in December.

Labor Markets

The US Labor market remains healthy. The unemployment rate was 5.0% in September, and payrolls have increased by an average of 192,000 on a trailing 3-month moving average basis. Consumer confidence remains strong. Housing trends remain favorable even though home price appreciation has softened.

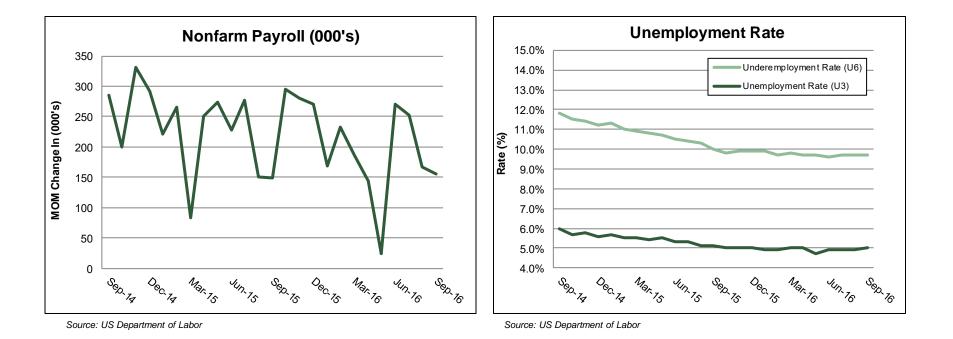
Inflation

 Core PCE (excluding food and energy) was up 1.7% year-over-year in September. The PCE remains below the Fed's 2.0% target.

Economic growth

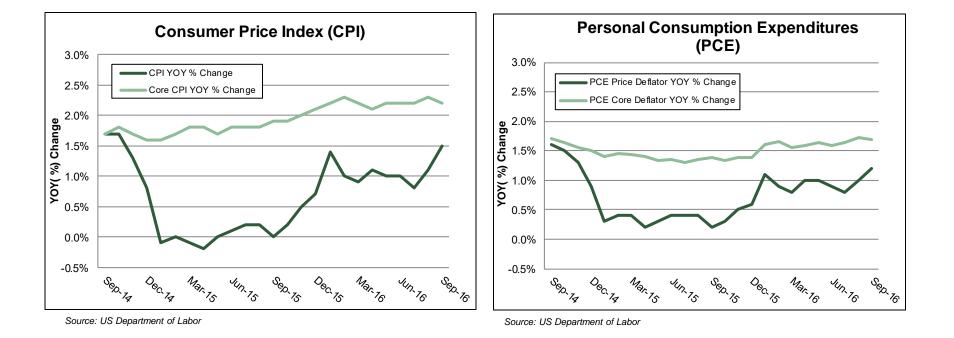
The third quarter real GDP (advance report) was released with an initial estimate of annualized growth of 2.9% versus 1.4% in the second quarter. Market participants are forecasting fourth quarter growth of 2.3%

Employment



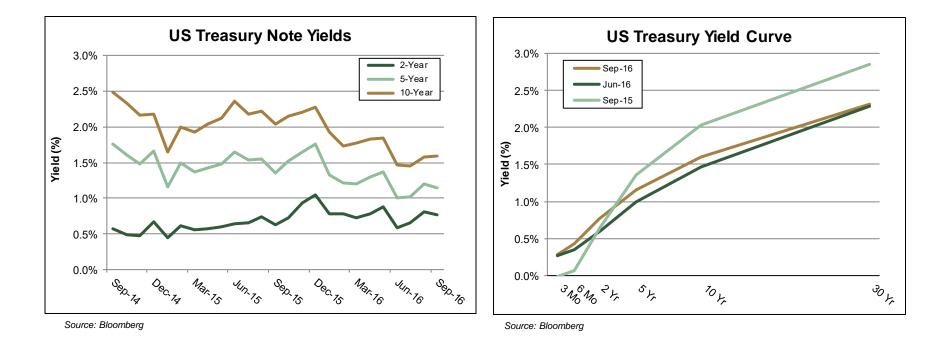
Nonfarm payrolls were lower than expected in September, up 156,000 versus the consensus forecast of 172,000. July and August payrolls were revised down by a net total of 7,000. On a trailing 3-month and 6-month basis, payrolls increased by an average of 192,000 and 169,000 per month, respectively. The unemployment rate inched up in September to 5.0% from 4.9% in August, as the participation rate increased to 62.9% from 62.8%. 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, remained unchanged in September at 9.7%. Wages increased 0.2% in September, following a 0.1% increase in August. On a year-over-year basis, wages were up 2.6% in September, versus 2.4% in August.





The Consumer Price Index (CPI) was up 1.5% year-over-year in September, versus up 1.1% year-over-year in August. Core CPI (CPI less food and energy) was up 2.2% year-over-year in September, vs. 2.3% in August. The Personal Consumption Expenditures (PCE) index was up 1.2% year-over-year in September, versus 1.0% in August. Core PCE (excluding food and energy) was up 1.7% year-over-year in September vs. up 1.7% year-over-year in August. 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.





Over the past three months, the yield curve shifted upward with the 2-year Treasury yield up 18 basis points and the 10-year Treasury yield up nearly 13 basis points. However, on a year-over-year basis the yield curve flattened with the 2-year Treasury yield up about 13 basis points and the 10-year Treasury yield down more than 44 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.

moulton niguel water district

Presentation of Draft Audit Documents

Purpose of Today's Presentation

- Present draft copies of audit documentation to Board
- Discuss changes and highlights in reports
- Next Steps
 - Board to provide any comments/request for changes to District staff by December 1st
 - Final Audit Reports will be presented in December for consideration by Board



Documents included in Agenda

- Comprehensive Annual Financial Report (CAFR)
 - Includes auditor opinion
- Single Audit Report
 - Includes opinion on internal control
 - Required if an agency receives \$750k in Federal grants
- Audit Communication Letter (SAS 114 Letter)
- Annual Appropriations Limit Calculation



CAFR – pg 75

- Major Initiatives pg 85
- Unmodified "Clean Opinion" pg 93
- Total Net Income \$6.4 million Bottom of pg 109
- New Governmental Accounting Standard, No. 72 pg 124
- District's proportion of CalPERS NPL- down .0085% pg 136
- Net Pension Liability sensitivity analysis pg 139
- New Governmental Accounting Standard, No. 82 pg 151
- Will be submitting the CAFR for the GFOA award for the 7th consecutive year



Single Audit – pg 185

- First time District has had a single audit (\$750k threshold)
 - Additional compliance requirements
 - Prevailing wages
 - Additional reporting
- Internal Control Letter pg 187
- Letter on compliance with grants pg 189
- Schedule of Federal Expenditures pg 192
- Summary of audit results pg 194

NOTE: The Single Audit Report will be posted on the website and will accompany the CAFR once finalized



Audit Communication Letter – pg 199

- Standard Letter
- Informs Board of auditors responsibilities
- Contains information about scope and timing of the audit
- Discussed letter with audit ad hoc



Appropriations Limit Report – pg 203

- Separate Agreed Upon Procedures report
- Not audited
- Report required per California Government Code
- Discussed with audit ad hoc

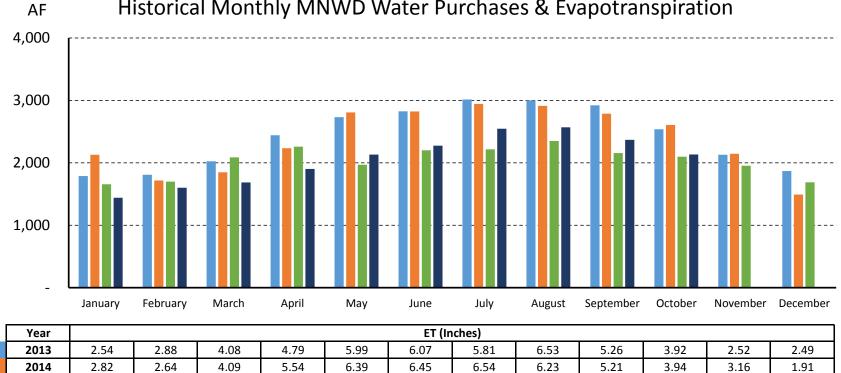


Questions?

www.mnwd.com 27500 La Paz Road Laguna Niguel, CA 92677



FOLLOW US ONLINE!



5.75

5.77

4.48

4.63

5.69

6.77

6.27

5.97

Historical Monthly MNWD Water Purchases & Evapotranspiration

2015

2016

2.52

1.87

3.02

3.82

5.31

5.16

4.96

3.98

November 16, 2016

2.35

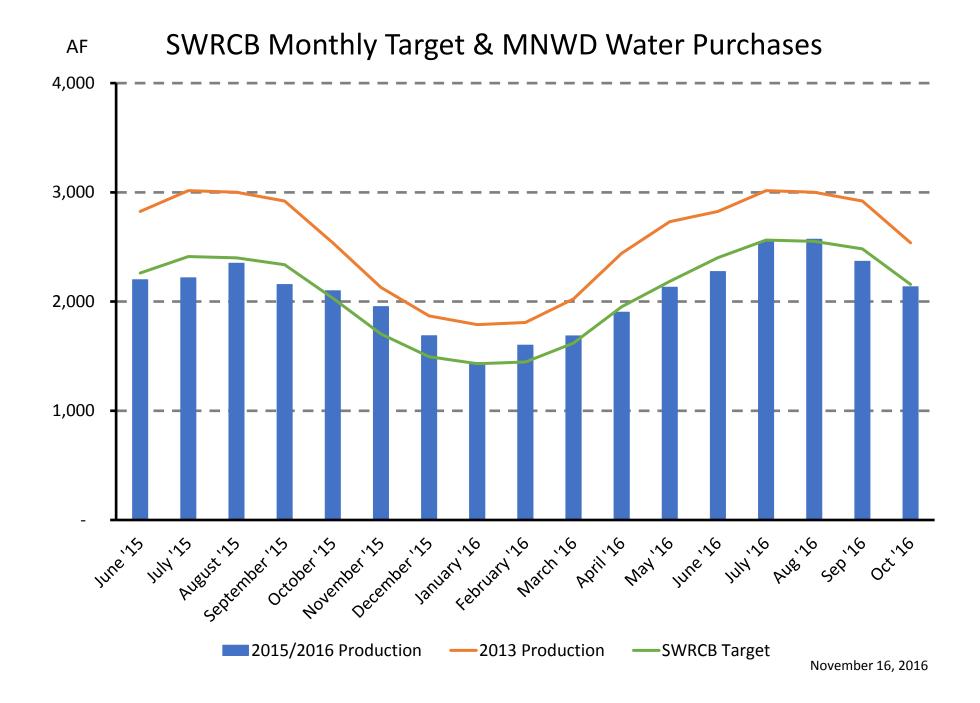
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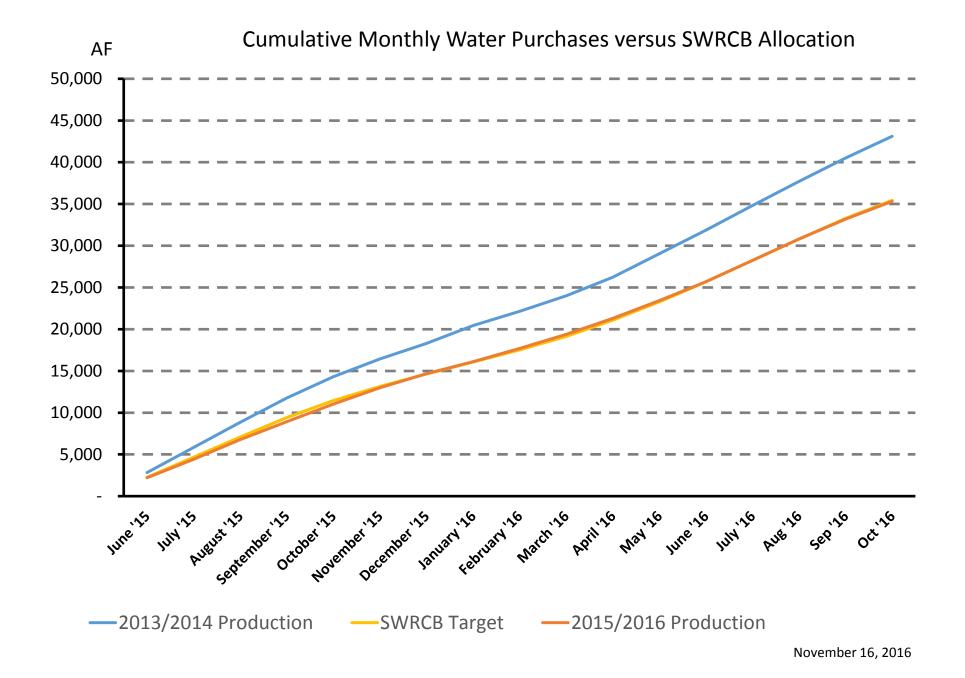
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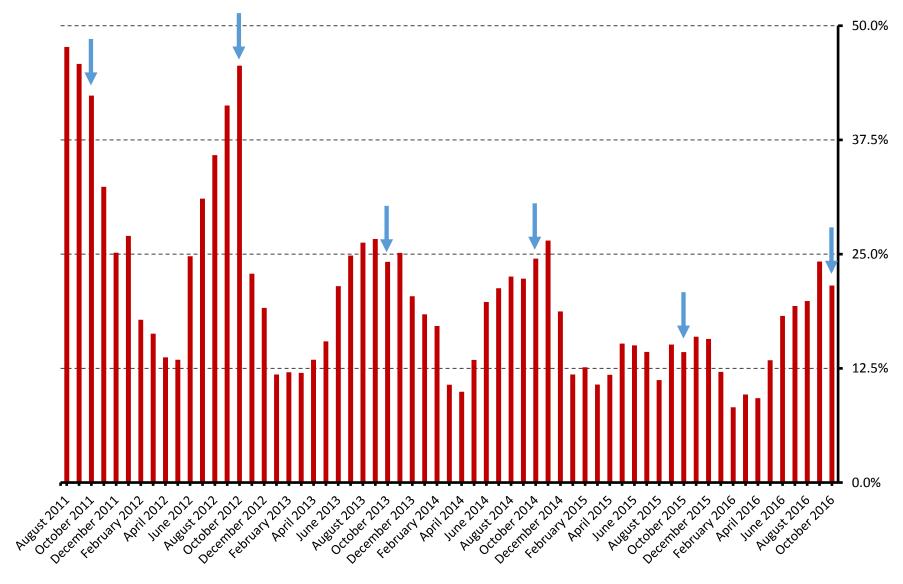
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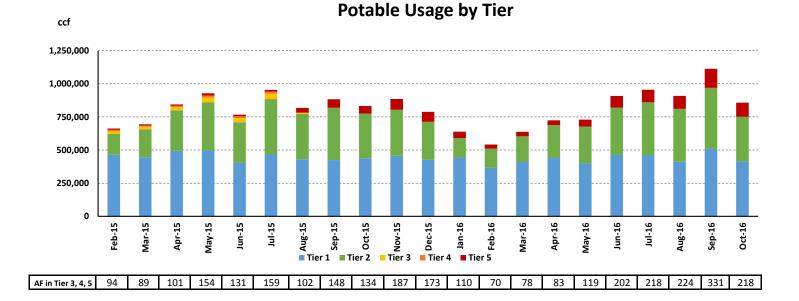
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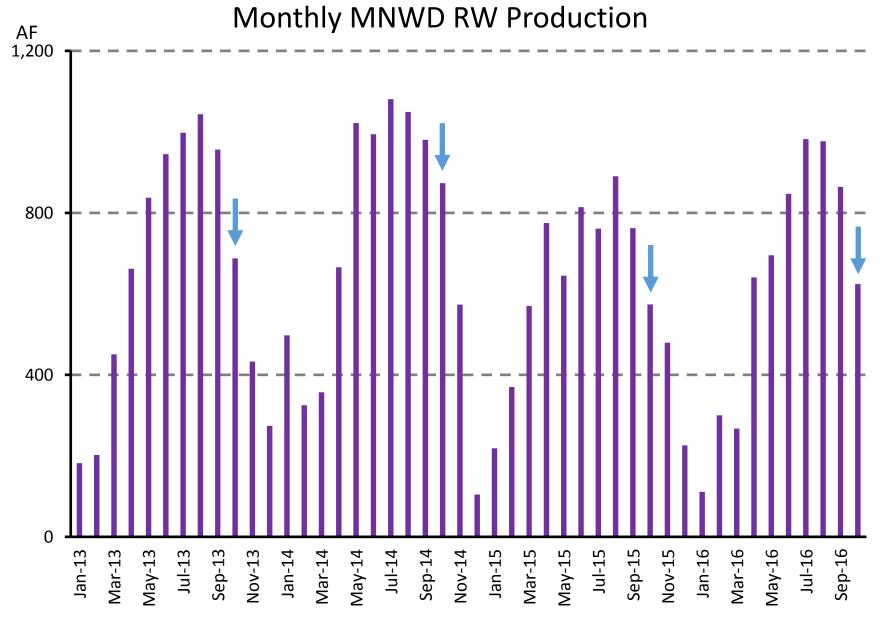


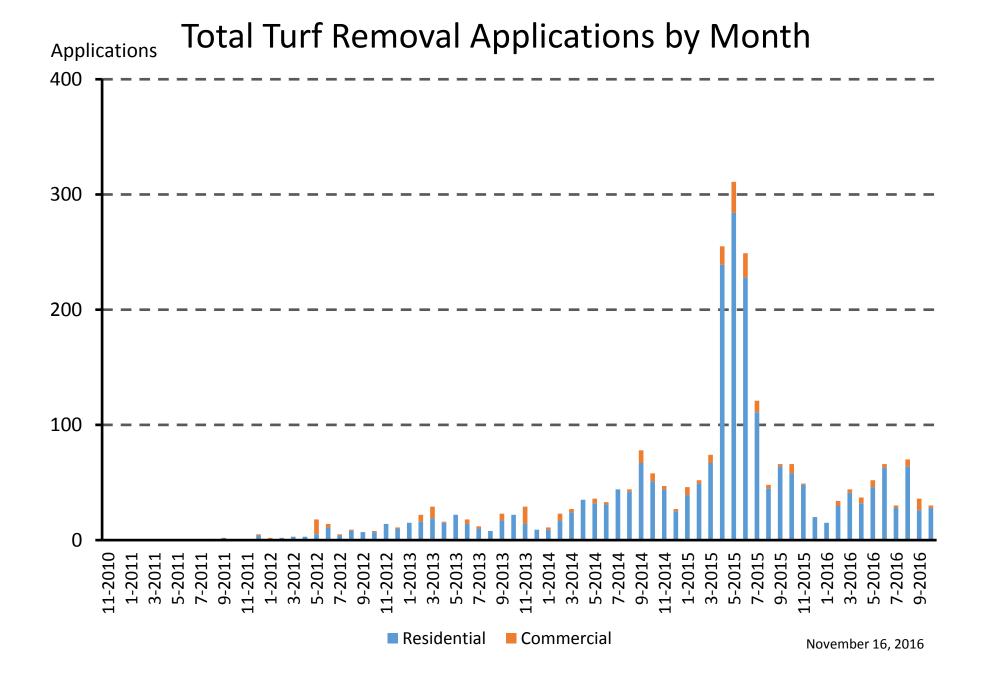
Single Family Residential Accounts Above Tier 2

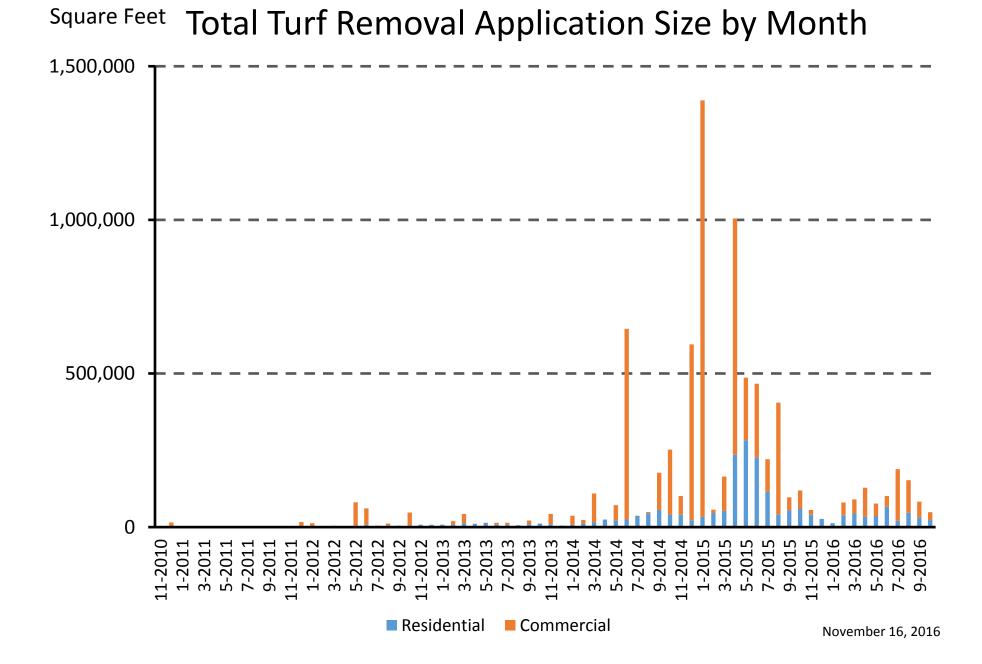


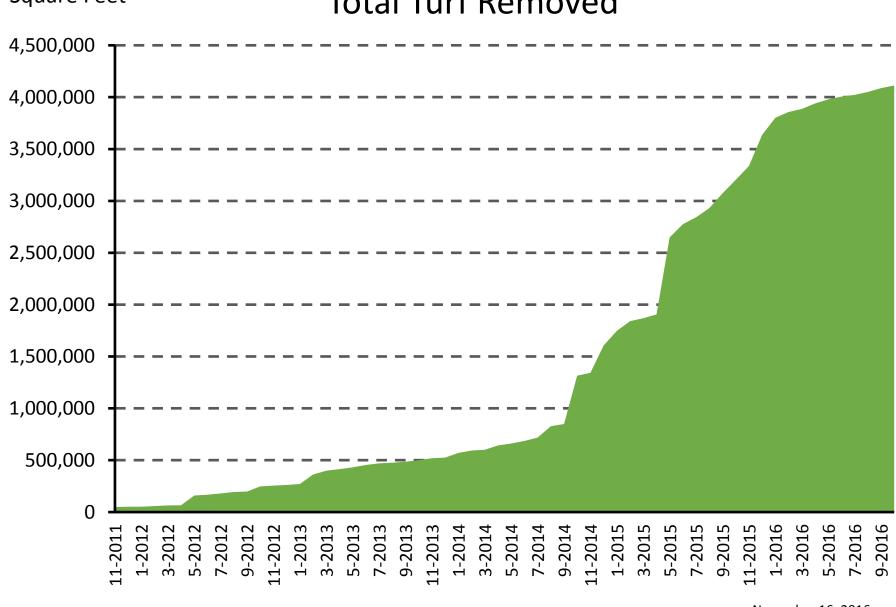
Percent Potable Usage by Tier 100% 75% 50% 25% 0% Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Mar-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Feb-15 Mar-15 Apr-15 May-15 Jun-15 Tier 5 1.5% 1.4% 1.1% 1.8% 1.6% 1.4% 4.3% 7.3% 7.0% 9.2% 9.6% 7.5% 5.6% 5.4% 5.0% 7.1% 9.7% 9.9% 10.7% 12.9% 12.4% 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% Tier 3 3.3% 0.0% 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% Tier 2 23.8% 30.1% 40.0% 43.8% 41.9% 44.7% 40.4% 39.2% 22.9% 26.8% 30.3% 38.1% 39.3% 41.6% 44.0% 41.2% 39.1% 36.1% 39.0% 36.2% 33.7% 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%

■ Tier 1 ■ Tier 2 ■ Tier 3 ■ Tier 4 ■ Tier 5









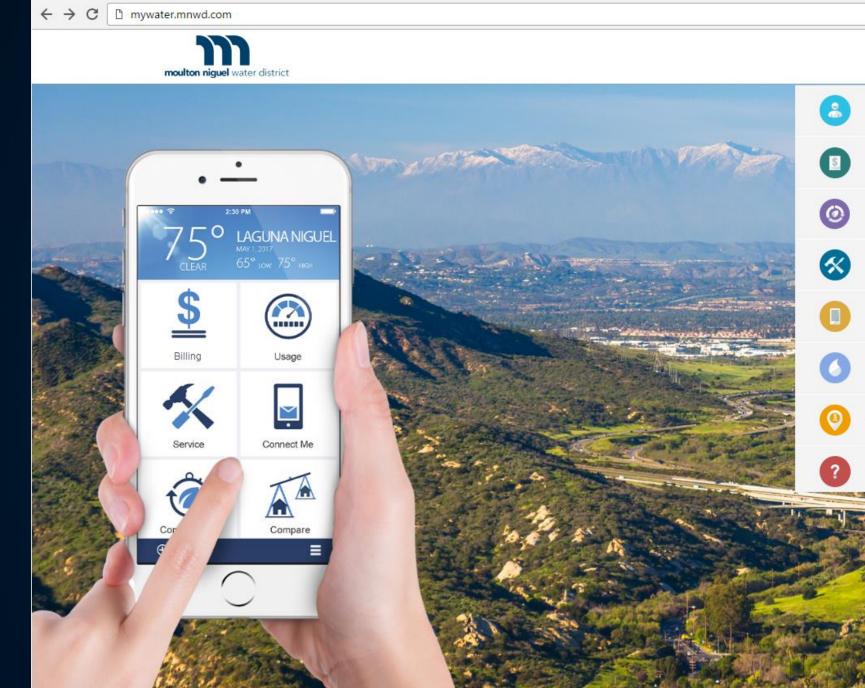
Square Feet

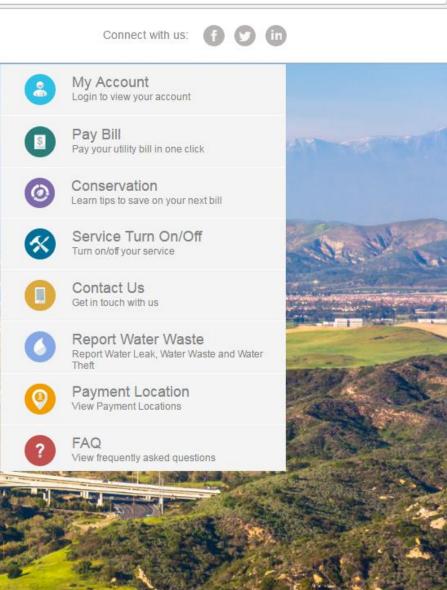
Total Turf Removed

moulton niguel water district

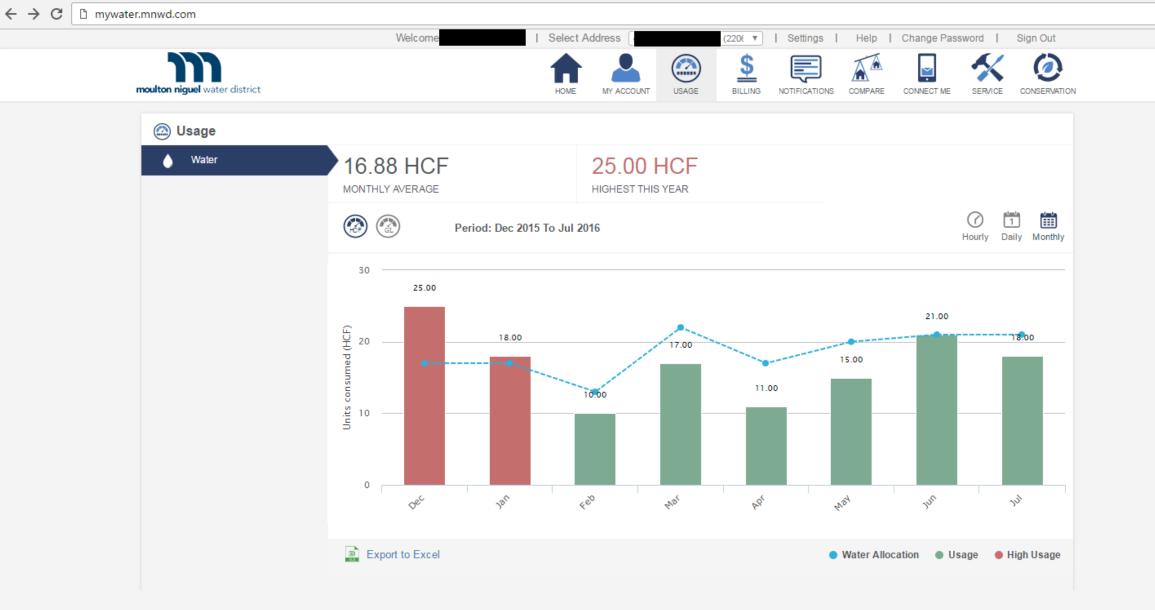
Customer Portal Demo

Finance and Information Technology Board Meeting November 16, 2016

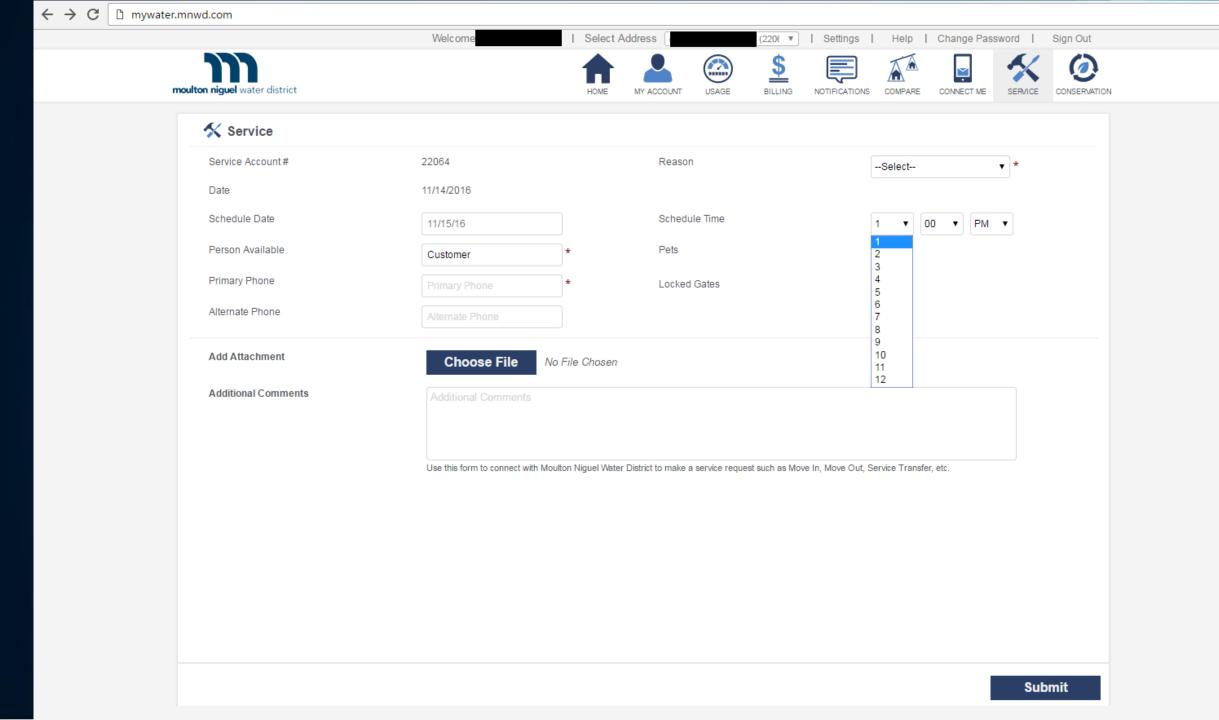


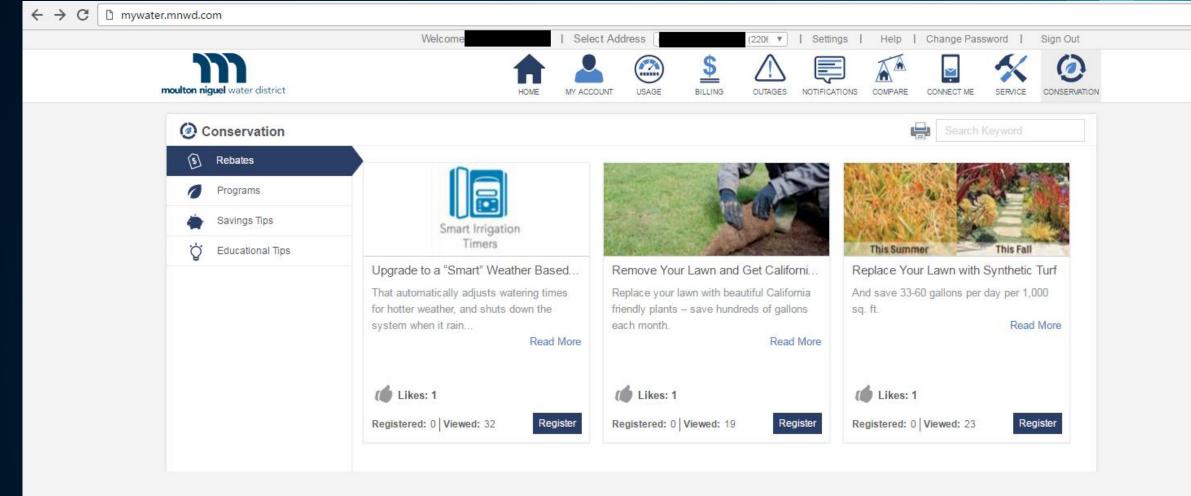


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moulton niguel water district		HOME	MY ACCOUNT	USAGE		FICATIONS	COMPARE	CONNECT ME	SERVICE	CONSERVATION
Onservation	<u>\$</u> Billing			Water Usag	je (CF GL		Compare		**
Smart Irrigation Timers	Balance Due: \$0.00 Date Due: Jul 21, 201 Pay Bill Viev	16 w Bill	40	6 2016 HUR 2016 HOR	016 1016 Jun 2016	12010			s equal to your utility.	
NO MORE SURPRISES	Notifications	<u>^</u>	2	My Accoun	nt					
Enroll in Budget Assistance Now! GET STARTED	Outage	Ó	Defaul	It Address	aguna Niguel, CA - 92677					
	Billing	Ô								
	Service	Ô								
	Connect Me	Ô								
	Leak Alert	Ô								



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	Welcome	Select	Address		(220€ 🔻	Settings	Help	Change Pas	sword	Sign Out
moulton niguel water district		HOME	MY ACCOUNT	USAGE	BILLING	NOTIFICATIONS	COMPARE	CONNECT ME	SERVICE	
<u>\$</u> Billing										
🔷 Utility Bill	Bill									
🕥 History	Total Usage									13464.00GL
a d Billing Queries	Total Charges									64.72
S Payment Location	Bill Details									
No more bill surprises ! Enroll in Budget Assistant now, and take more control of your bill Enroll Now >	Billing Period 06/06/2016 to 07/06/2016									
	Total Bill This Period \$64.72									
	Previous Balance Due \$69.61									
	Late Payment/Penalty Charges \$0.00									
	Total Amount Due \$134.33							\$134.33		
	Amount Paid This Period \$134.33								\$134.33	
	Remaining Balance Due									\$0.00
	Due Date									07/21/2016





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