



CITY OF POWELL
Minutes of 5/3/2016
Exhibit 1

DELCO

WATER COMPANY

City of Powell:

Mayor Brian Lorenz

Vice Mayor Jon Bennehoof

Frank Bertone

Tom Counts

Jim Hrivnak

Brendan Newcomb

Daniel Swarwout

City Manager

Steve Lutz

City Clerk

Karen Mitchell

Presentation by:

Glenn Marzluf,
General Manager/CEO



NATIONAL DRINKING WATER WEEK

Drinking Water Week May 1-7, 2016

YOUR WATER
to know it is to love it

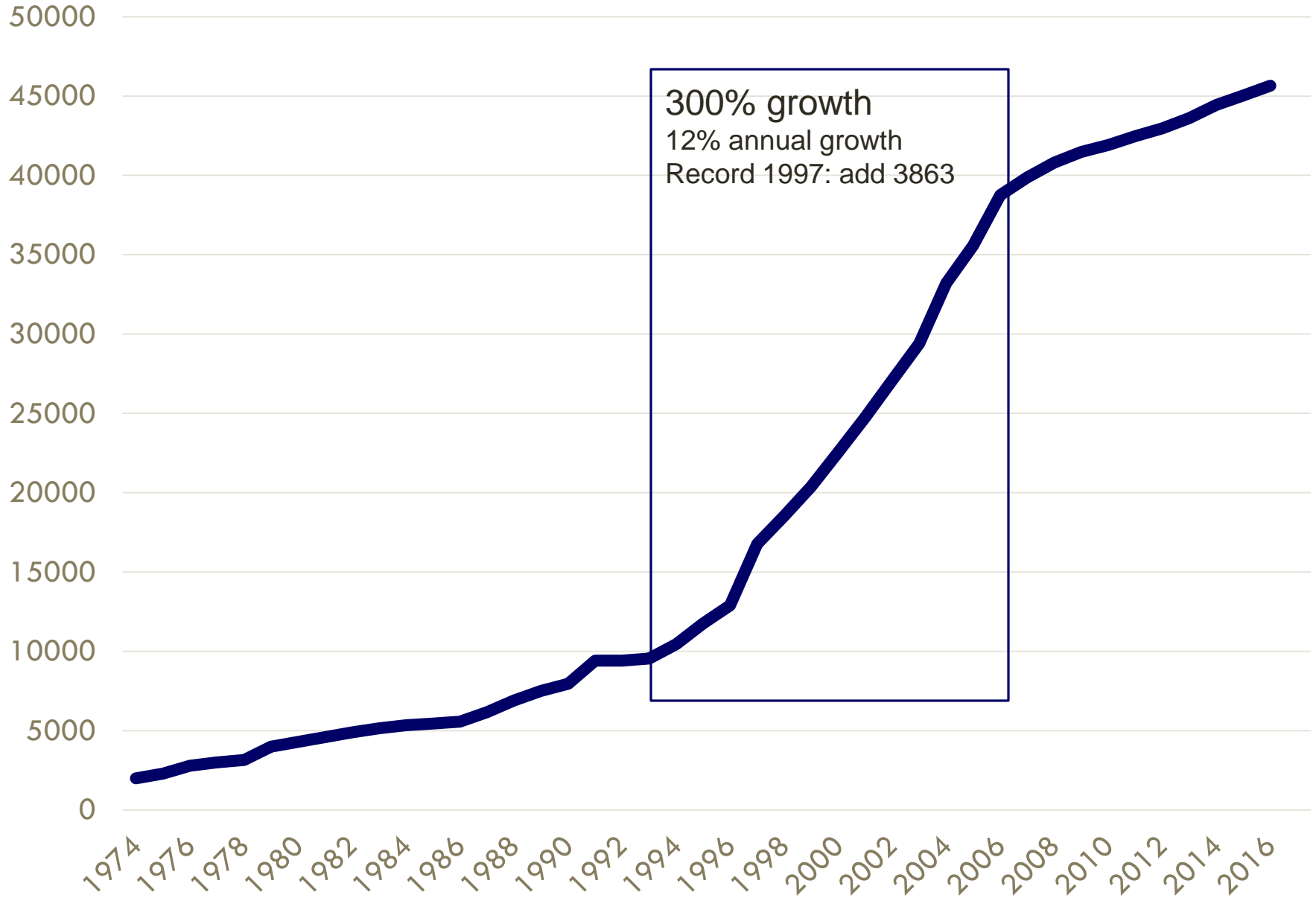
**Drink the
recommended 8
cups of water
daily.**

Del-Co General Information

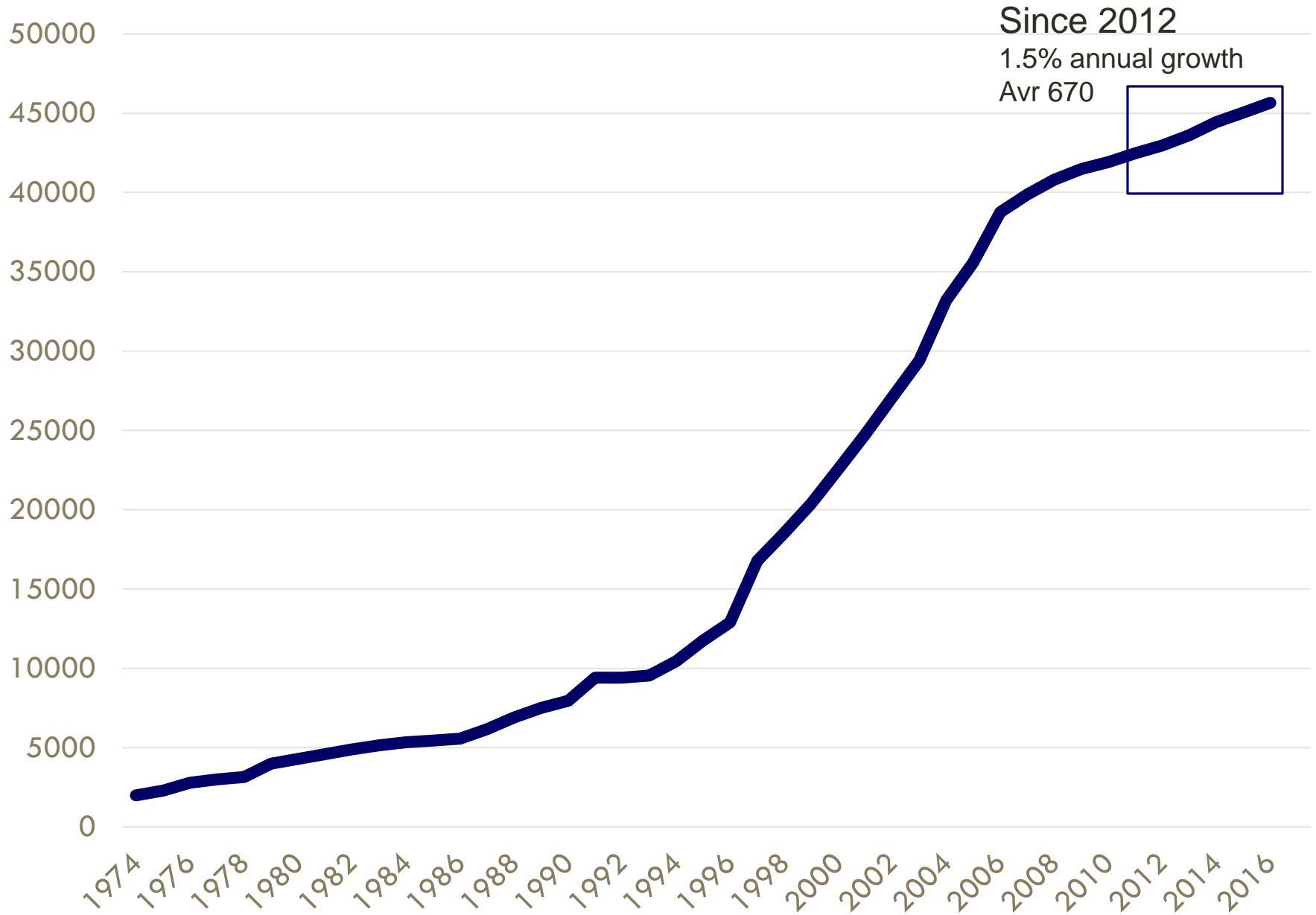


- ✓ Member (Customer) owned 501-c Non-Profit Corporation
- ✓ Governed by a Board of 10 Directors
- ✓ Incorporated in 1969, Served 1st customer in 1974
- ✓ Currently serving customers in Seven Counties
(Delaware, Morrow, Marion, Knox, Franklin, Union and Crawford Counties)
- ✓ 1800 miles main; 800 mile² service area

Customers



Customers



RECENT ACCOMPLISHMENTS / EFFORTS

PLANNING

- ▶ Master Plan *20 year planning horizon*
- ▶ Rate / Revenue Analysis

PROJECT

- ▶ Doult Reservoir \$26 million / \$170-M total

MASTER PLAN PROJECTS

- ▶ O'Shaughnessy Source Water Intake (\$12.1-million)
 - ▶ Olentangy Plant Expansion (\$15 million)
 - ▶ Expand Thomas E. Steward Plant (\$1.5 million)
 - ▶ Transmission Lines from 3 plants (\$15 million)
-

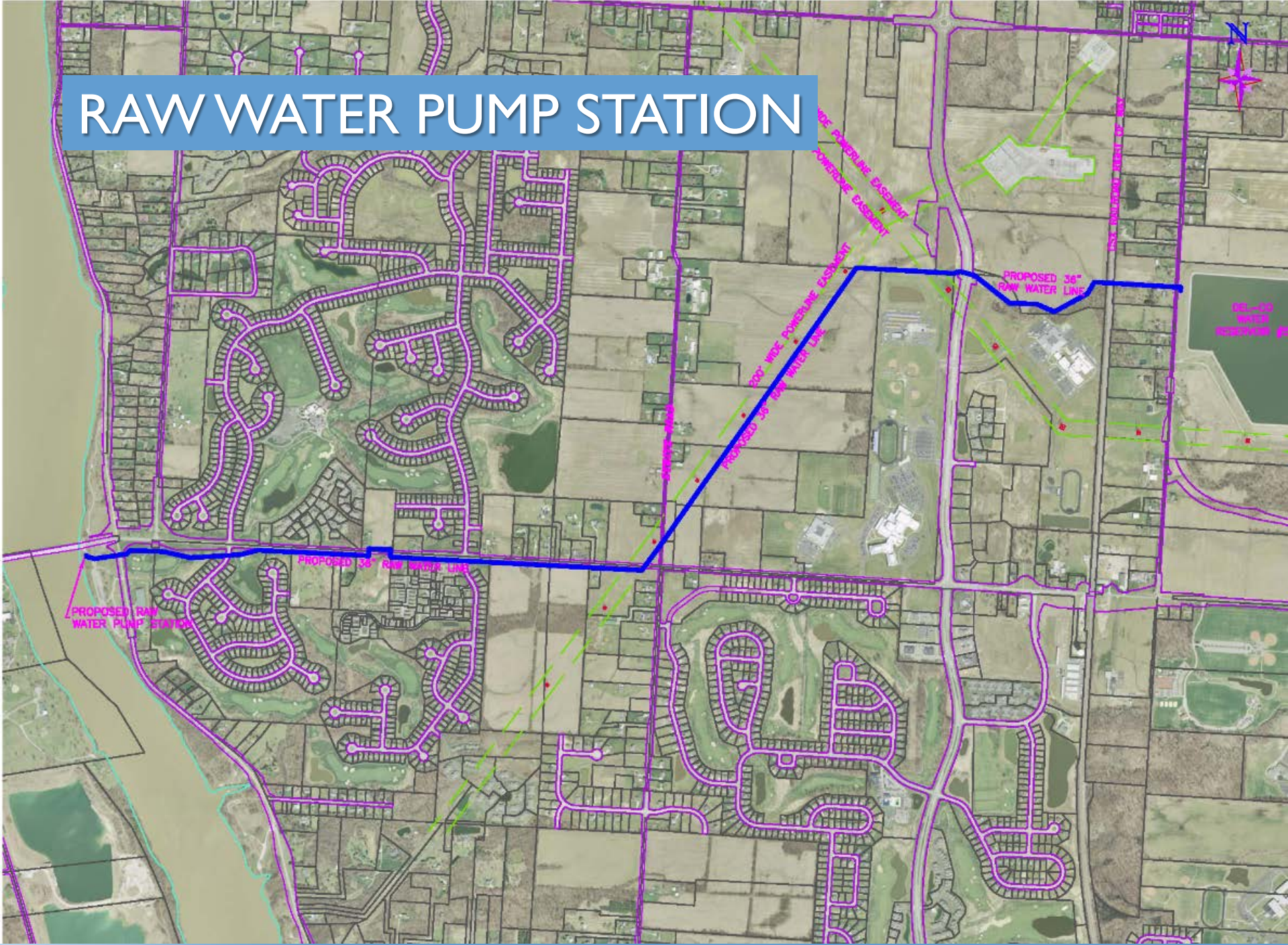
approx. \$45 million

FUTURE MASTER PLAN PROJECTS

- ▶ Ralph E. Scott Plant expansion (\$12 million)
- ▶ Thomas E. Steward Plant expansion (\$11 million)
- ▶ Additional reservoirs with Columbus (\$12 million)
- ▶ Raw water treatment

**TOTAL projects estimated
\$230 million in 20 years+**

RAW WATER PUMP STATION



RAW WATER PUMP STATION

Pipeline in active construction.
Trucco \$5.3-M

Pump station is in bidding process. Waiting on Columbus for easement. \$5.3-M

O'Shaughnessy Pump Station Project:

16.2 Million Gallons/Day capacity

Water supplied from Doult Reservoir Project

Total estimated cost \$12.1M

Source water for:

- Drought tolerance issues
- Future growth

OLENTANGY PLANT EXPANSION



OLENTANGY PLANT EXPANSION



Plant Expansion Details:

Hazen & Sawyer engineer

19.2 MGD → 28.8MGD

Schedule:

Bid 3rd qtr 2016

Estimated cost up to \$15 million

RATE STRUCTURE CHANGE

Effective 6/1/2016

RATE STRUCTURE CHANGE

Residential / Irrigation Metered Rates		
Gallons Per Month	EXISTING	NEW
	Per 1000 Gallons	Per 1000 Gallons
First 2,000	\$ 7.80	\$ 7.90
2,100 - 3,000	\$ 7.20	\$ 7.30
3,100 - 25,000	\$ 6.10	\$ 6.20
Conservation Tier 25,100 +	\$ 6.10	\$ 10.20

Modest increase
\$0.10 / 1000 gal

RATE STRUCTURE CHANGE

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Significant increase
\$4.10 / 1000 gal

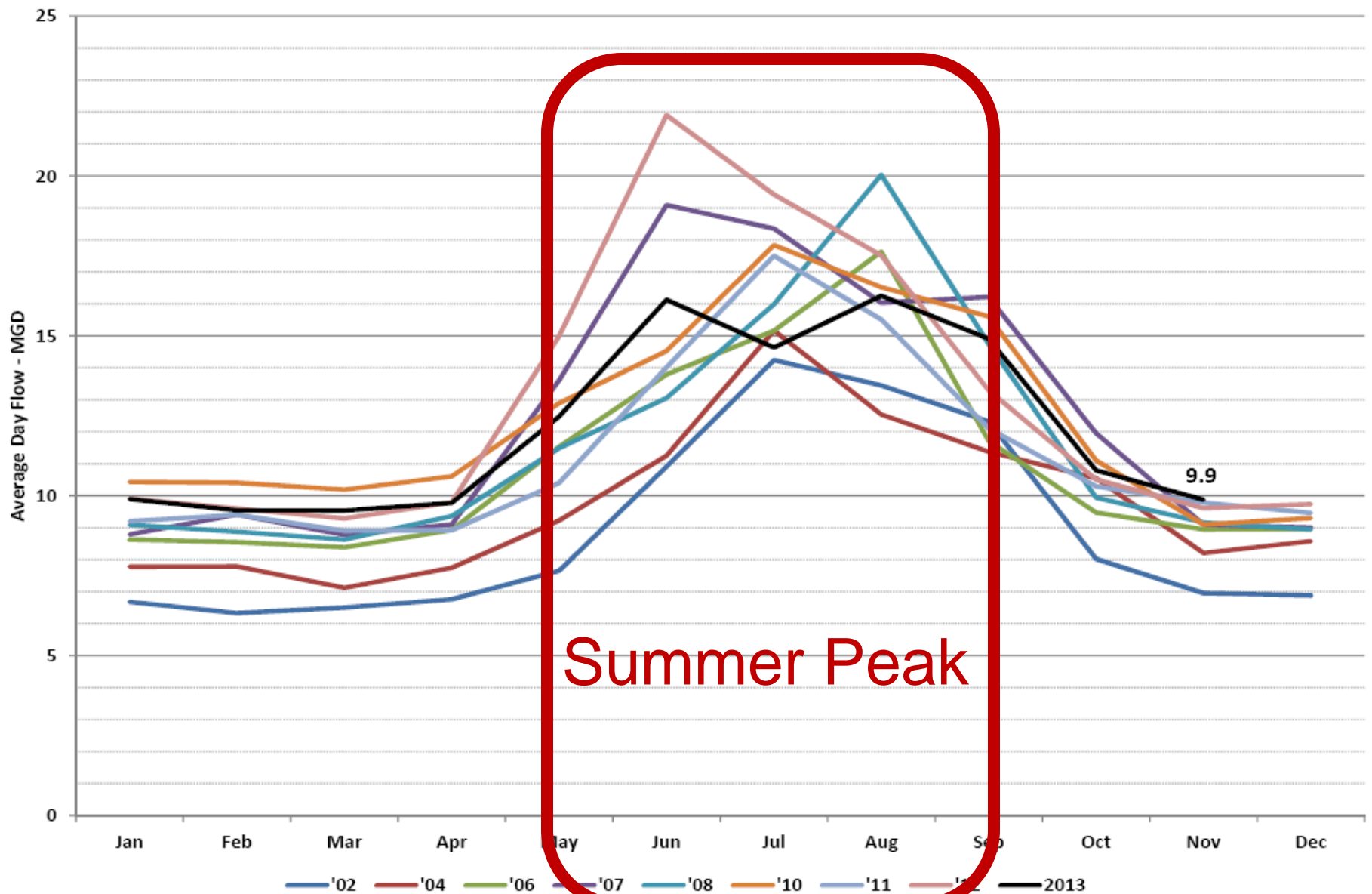
RATE STRUCTURE CHANGE

Residential / Irrigation Metered Rates		
Gallons Per Month	EXISTING Rates Per 1000 Gallons	NEW Rates Per 1000 Gallons
0 - 2,000	7.80	\$ 7.90
2,001 - 3,000	7.20	\$ 7.30
3,001 - 25,000	\$ 6.10	\$ 6.20
Conservation Tier 25,100 +	\$ 6.10	\$ 10.20

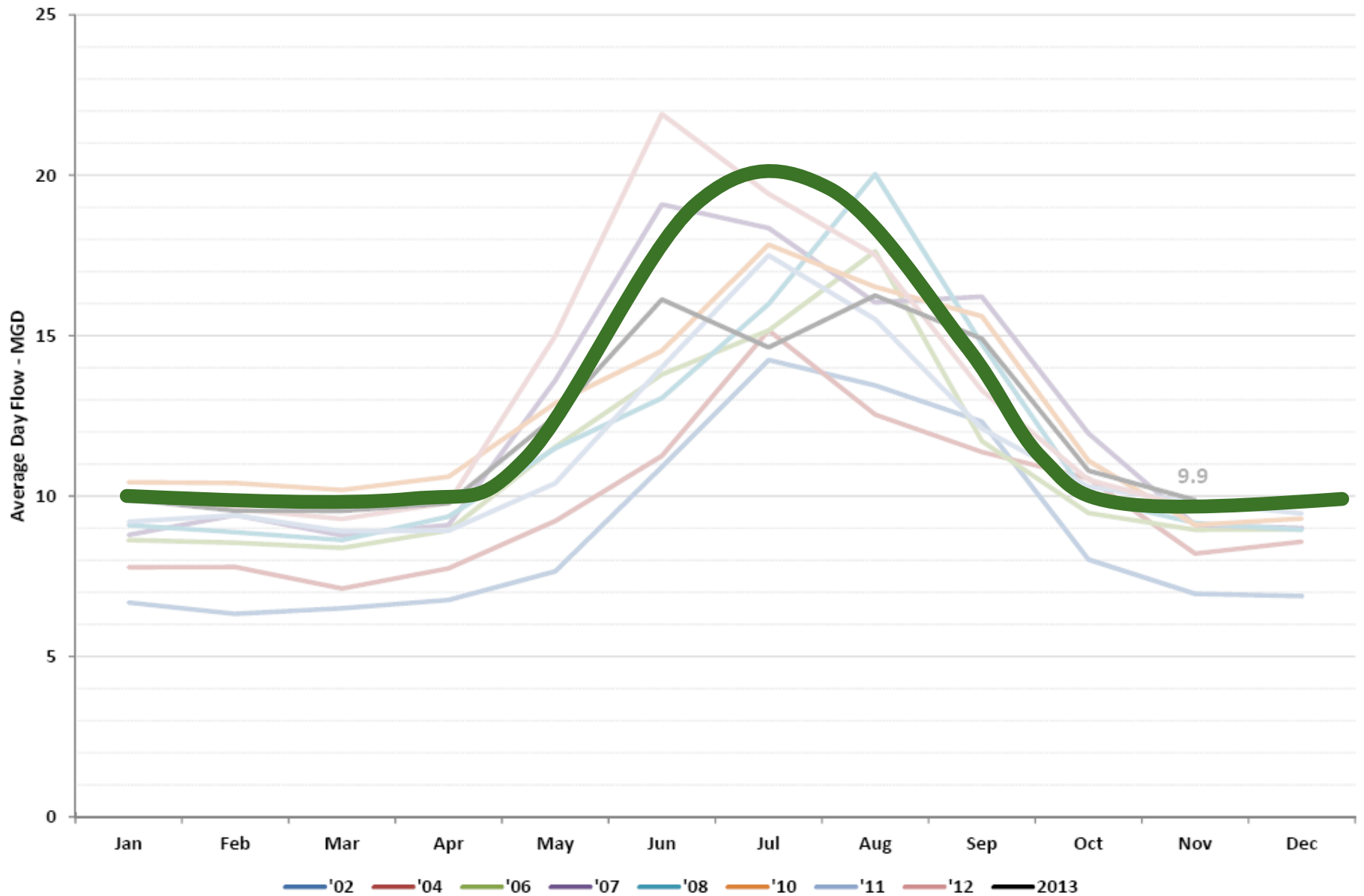


Significant increase
\$4.10 / 1000 gal

Historical High Service Pump Production for All Water Treatment Plants



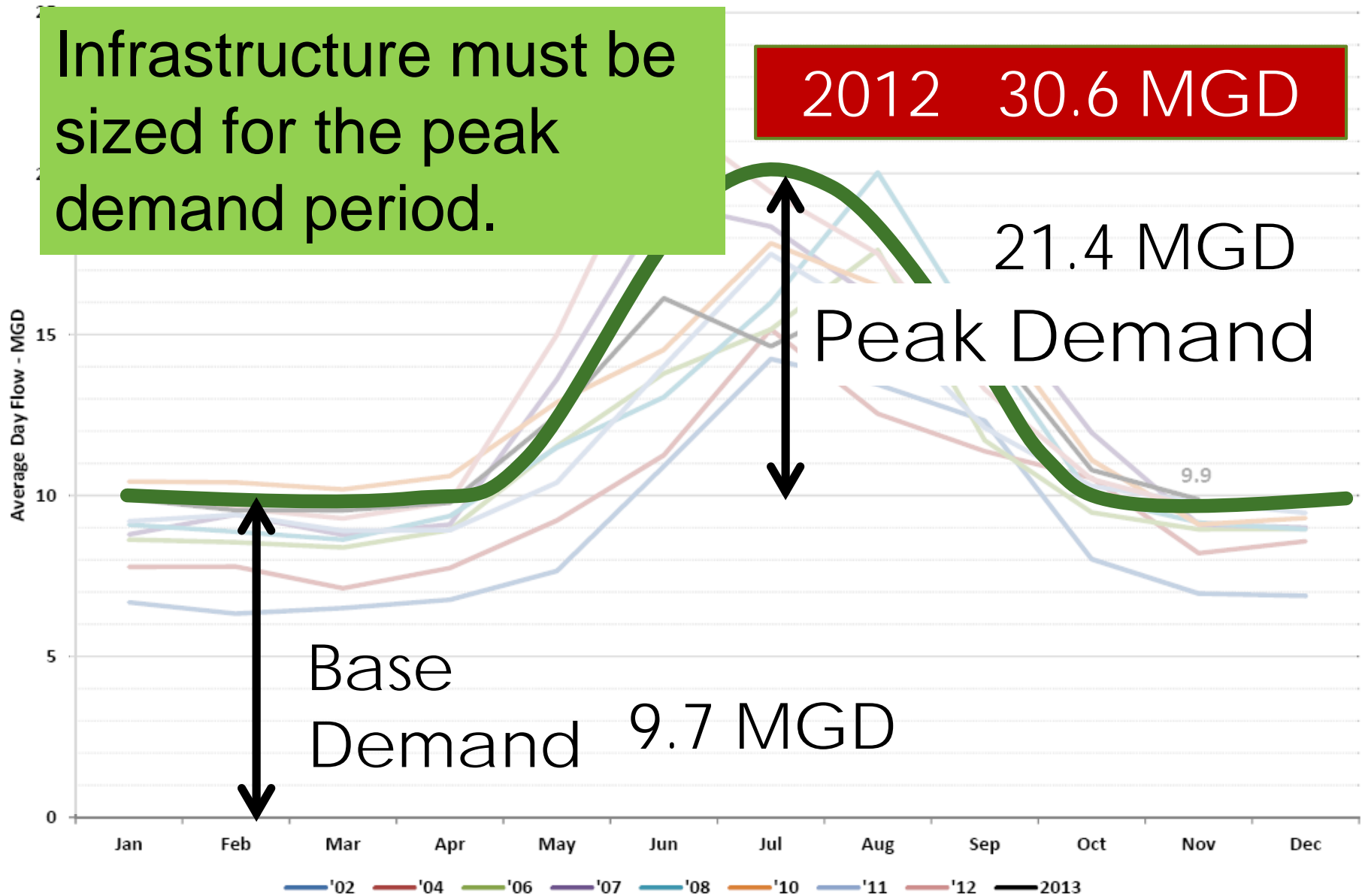
Historical High Service Pump Production for All Water Treatment Plants



Historical High Service Pump Production for All Water Treatment Plants

Infrastructure must be sized for the peak demand period.


2012 30.6 MGD



Typical July – Nearly Full



July 2012



New O'Shaughnessy Project
and Douitt Reservoir solution

2015 Summary Data

	Peaking Factor (max day/avg day)	% summer increase over average day
Cleveland	1.20	4.6%
Columbus	1.19	
Toledo	1.35	
Akron	1.21	
Dayton	1.24	2.4%
Youngstown	1.25	11.1%
Del-Co	1.81	34.1%
Newark	1.37	-1.3%
Delaware City	1.38	5.0%

Existing challenge:
high seasonal
water demand.

Residential use:

233 gal/day summer vs. 149 winter (+57%)

POPULATION GROWTH / FUTURE DEMAND

Figure 4-3 Historical Demand Trends and Future Projected Demand

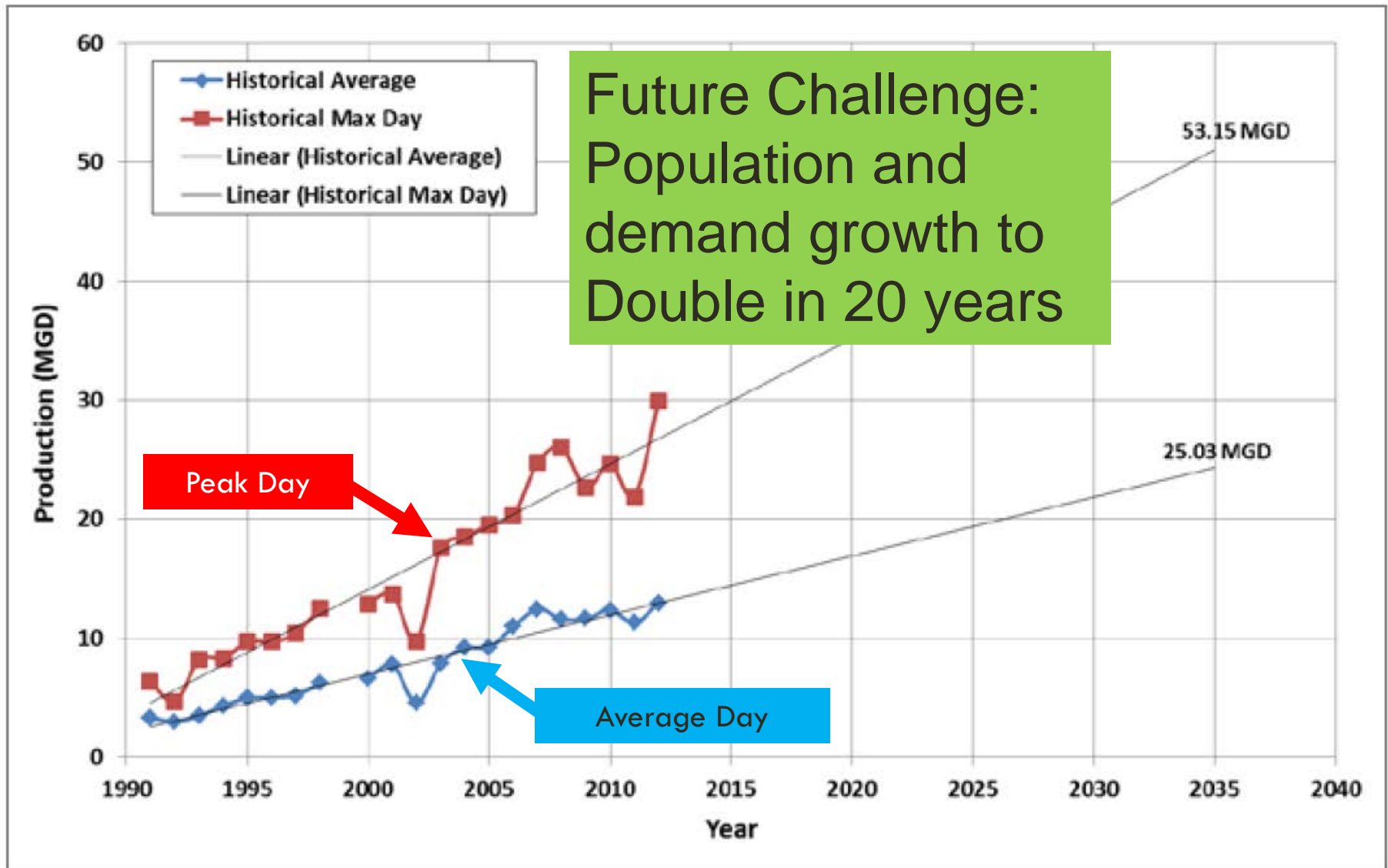
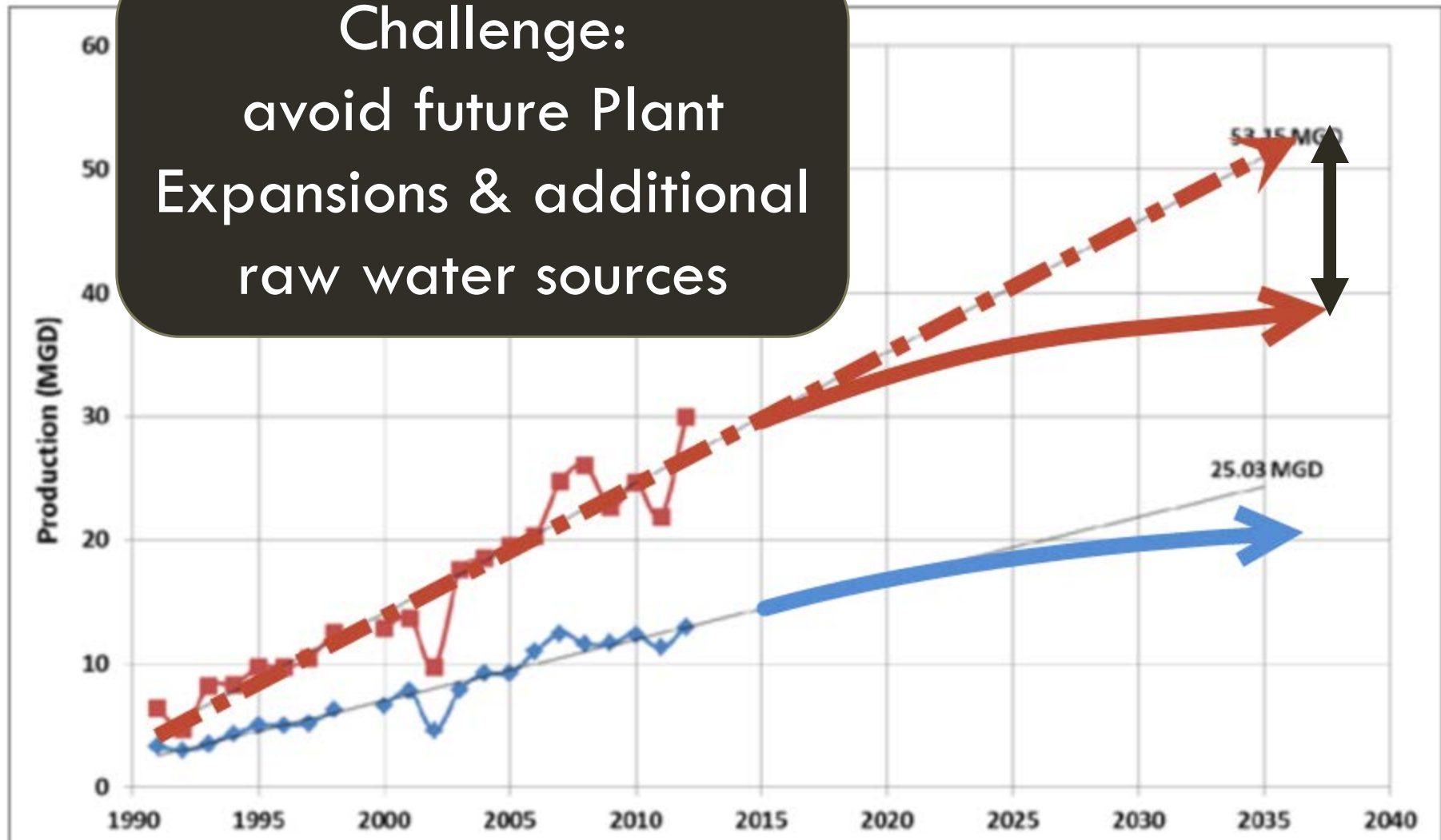
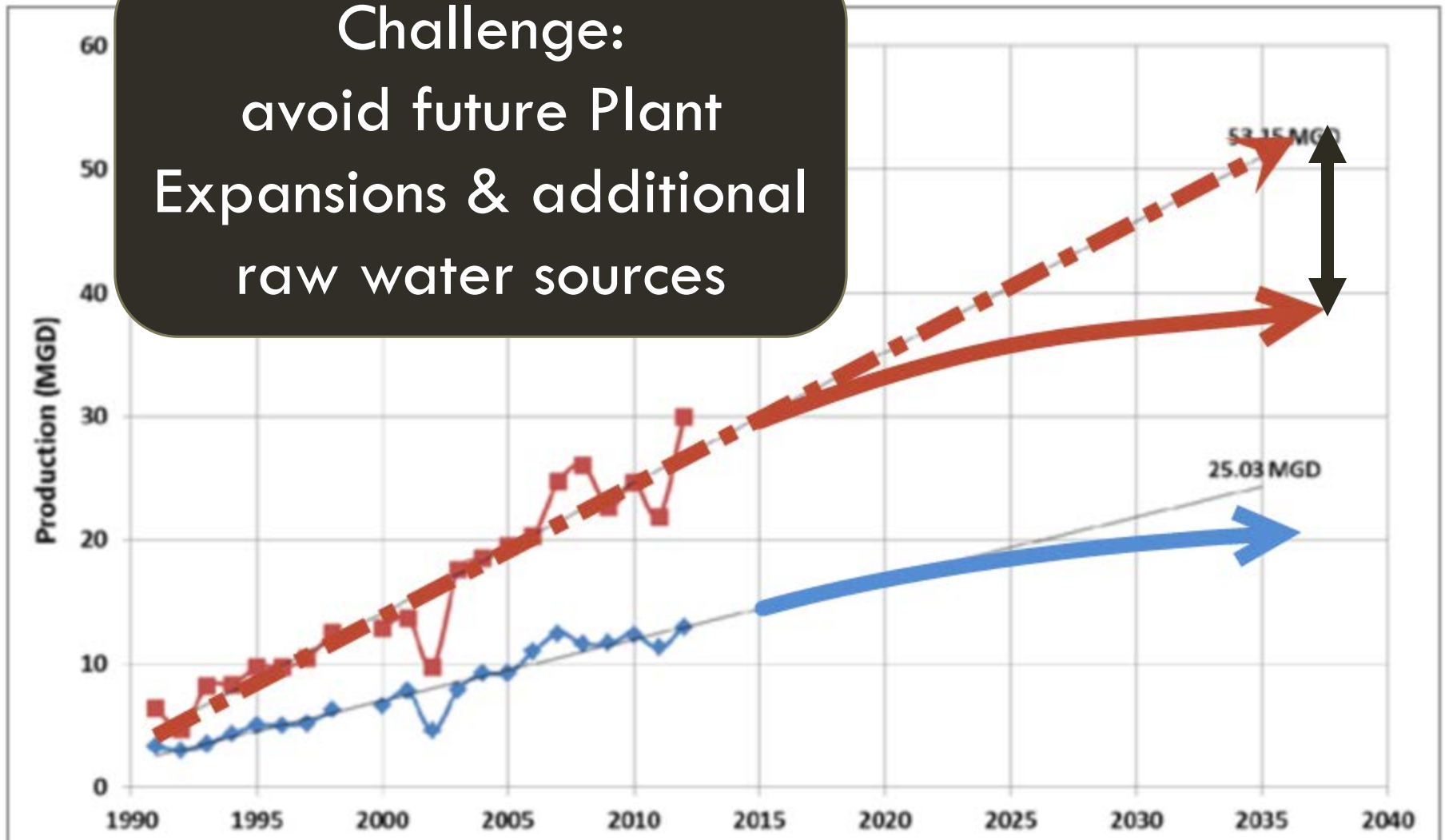


Figure 4-3 Historical Demand Trends and Future Projected Demand



Engineering peak factor
Del-Co Water = 3.0, Columbus = 1.5

Figure 4-3 Historical Demand Trends and Future Projected Demand



Using Columbus' peaking factor, the need to expand our Olentangy Plant wouldn't occur for 30+ years.

CONSERVATION TIER



.27 Ac lot

Assuming home and driveway

0.15 Ac irrigable area = 6500 sq ft

1" coverage on turf = 4,070 gal / sprinkle

16,300 gal

Allows 8700 ($avr < 5400$ gal) gal for domestic use before hitting 25K.

CONSERVATION TIER



0.50 Ac Lot

Assuming home and driveway

0.23 Ac irrigable area = 9920 sq ft

1" coverage on turf = 6,250 gal / sprinkle

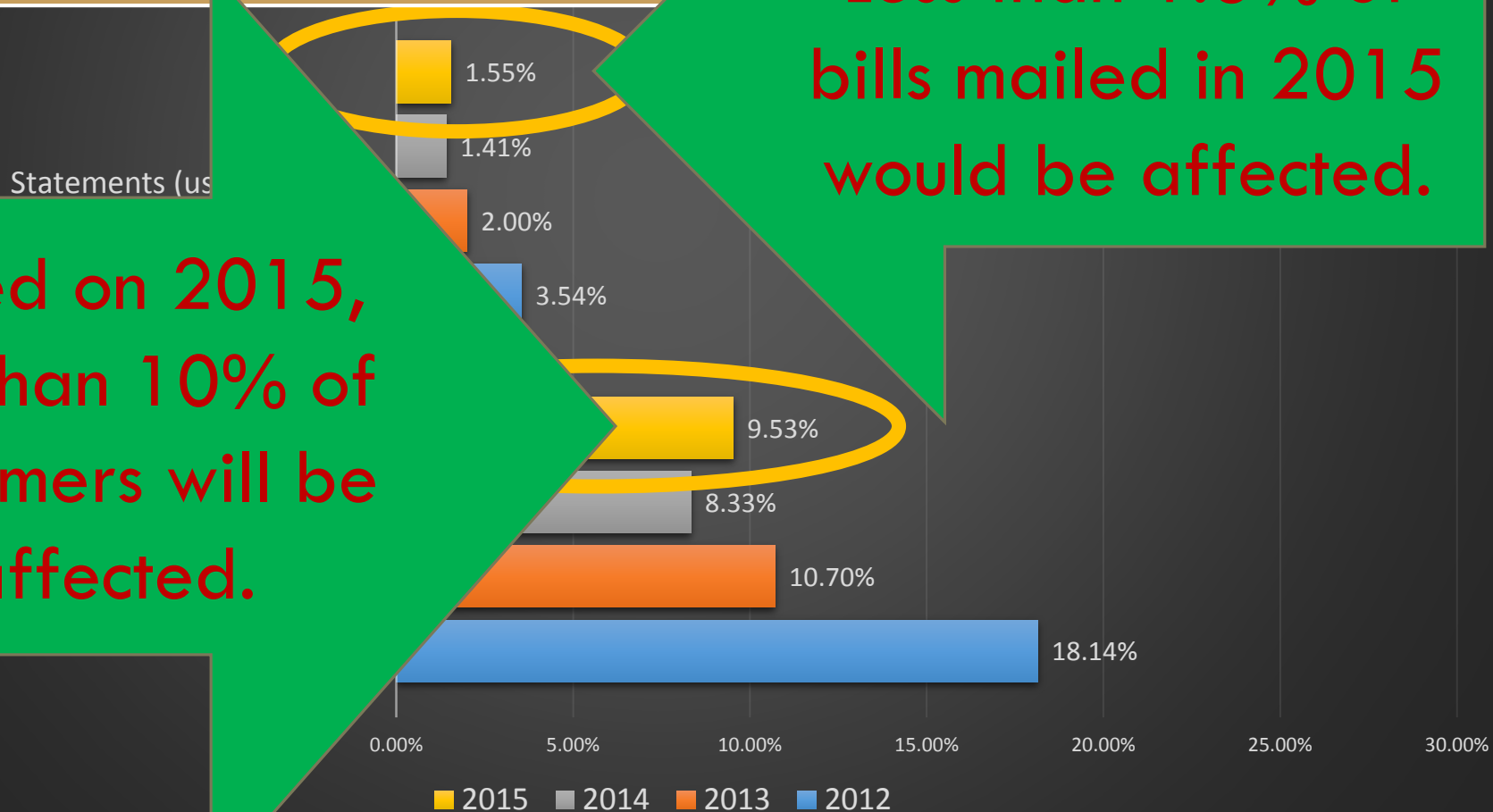
25,000 gal

If they sprinkle 4 times in a month, almost certainly would exceed 25K.

CONSERVATION TIER

Less than 1.6% of
bills mailed in 2015
would be affected.

Based on 2015,
less than 10% of
customers will be
affected.



CONSERVATION TIER



City of Powell, Ohio

City of Powell 2015 statistics:

3,751 customers

15% affected by Conservation Tier

2.3% bills would be affected

System Wide:

9.6% of customers and 1.55% of bills



Gallons Used	2015 Bill	2016 Bill	Percent Increase
1,500	\$ 11.70	\$ 11.85	1.3%
2,000	\$ 15.60	\$ 15.80	1.3%
3,000	\$ 22.80	\$ 23.10	1.3%
4,000	\$ 28.90	\$ 29.30	1.4%
5,000	\$ 35.00	\$ 35.50	1.4%
6,000	\$ 41.10	\$ 41.70	1.5%
7,000	\$ 47.20	\$ 47.90	1.5%
8,000	\$ 53.30	\$ 54.10	1.5%
9,000	\$ 59.40	\$ 60.30	1.5%
10,000	\$ 65.50	\$ 66.50	1.5%
Gallons Used	2015 Bill	2016 Bill	Percent Increase
15,000	\$ 96.00	\$ 97.50	1.6%
20,000	\$ 126.50	\$ 128.50	1.6%
25,000	\$ 157.00	\$ 159.50	1.6%
30,000	\$ 187.50	\$ 210.50	12.3%
35,000	\$ 218.00	\$ 261.50	20.0%
40,000	\$ 248.50	\$ 312.50	25.8%
50,000	\$ 309.50	\$ 414.50	33.9%
75,000	\$ 462.00	\$ 669.50	44.9%
100,000	\$ 614.50	\$ 924.50	50.4%
150,000	\$ 919.50	\$ 1,434.50	56.0%

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15,000	\$ 96.00	\$ 97.50	1.6%
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150,000	\$ 919.50	\$ 1,434.50	56.0%

Capital expenditures:

- \$26-M on Doult Reservoir
- \$45-M current major projects

Delay future projects:

Master plan has identified around \$230 Million needed in next 20 years

RATE STRUCTURE CHANGE

Non-Residential Customers		
Gallons Per Month	EXISTING Per 1000 Gallons	NEW Per 1000 Gallons
First 2,000	\$ 7.80	\$ 7.90
2,100 - 3,000	\$ 7.20	\$ 7.30
Over 3,100	\$ 6.10	\$ 6.20
NO CONSERVATION TIER		

Modest increase
\$0.10 / 1000 gal

- Customer classes do not have as strong a seasonal demand
- Don't want to prohibit commerce, only discretionary use



► Questions ?

Glenn Marzluf, PE

General Manager/CEO

gmarzluf@delcowater.com