

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Water Conservation Lowers Rate Increases for Colorado Utility

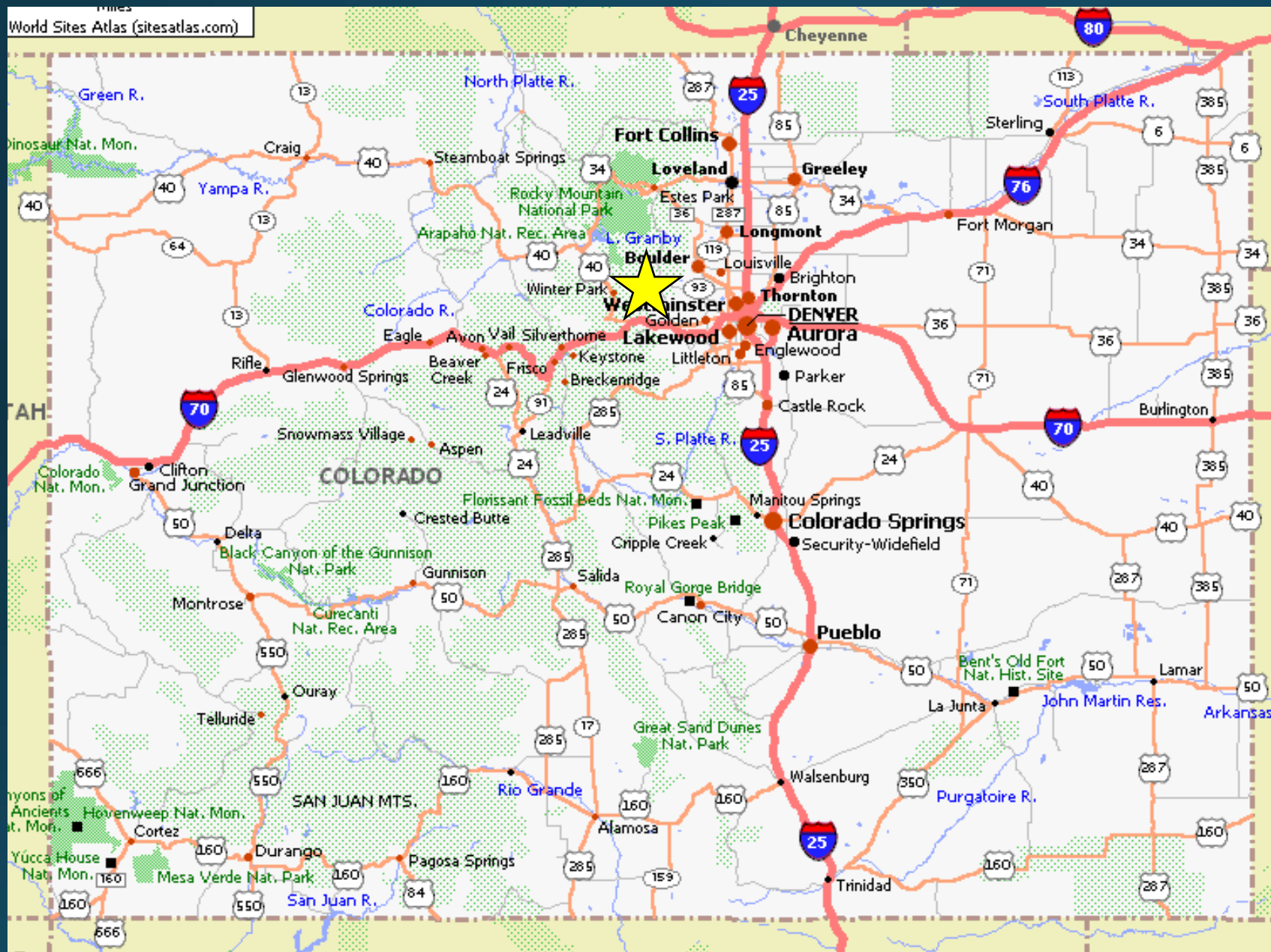
Peter Mayer, P.E., Principal, WaterDM

Stu Feinglas, Water Resources Analyst, City of Westminster

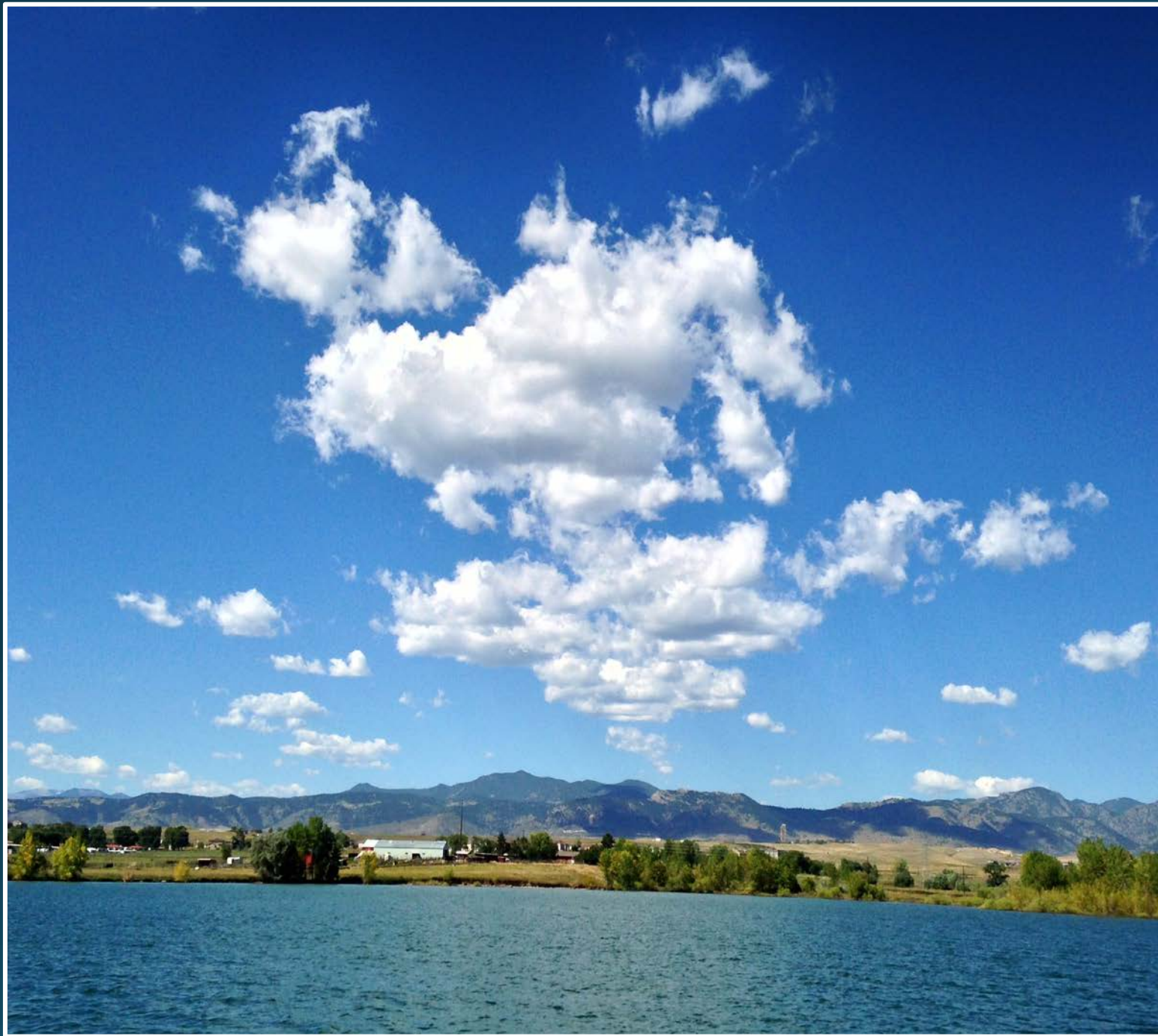
Christine Gray, Senior Management Analyst, City of Westminster



WESTMINSTER



Westminster, Colorado



Standley Lake

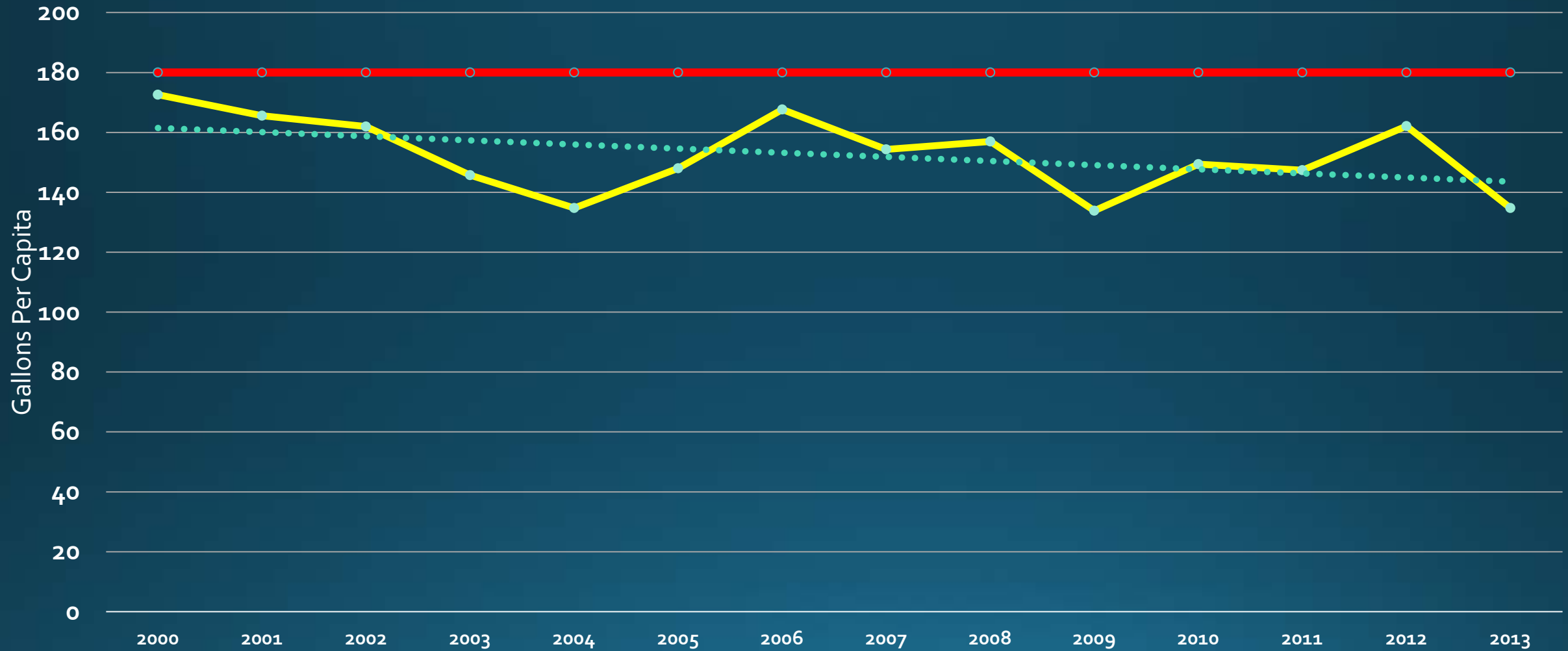
**Westminster,
Colorado**

Why are my rates going up again when I keep conserving water?!

- Due to conservation, per capita water use has dropped 21% since 1980.
- YET.... what customers pay for water continues to increase.
- Customers are confused and frustrated.
- What is the impact on rates and tap fees due to conservation?

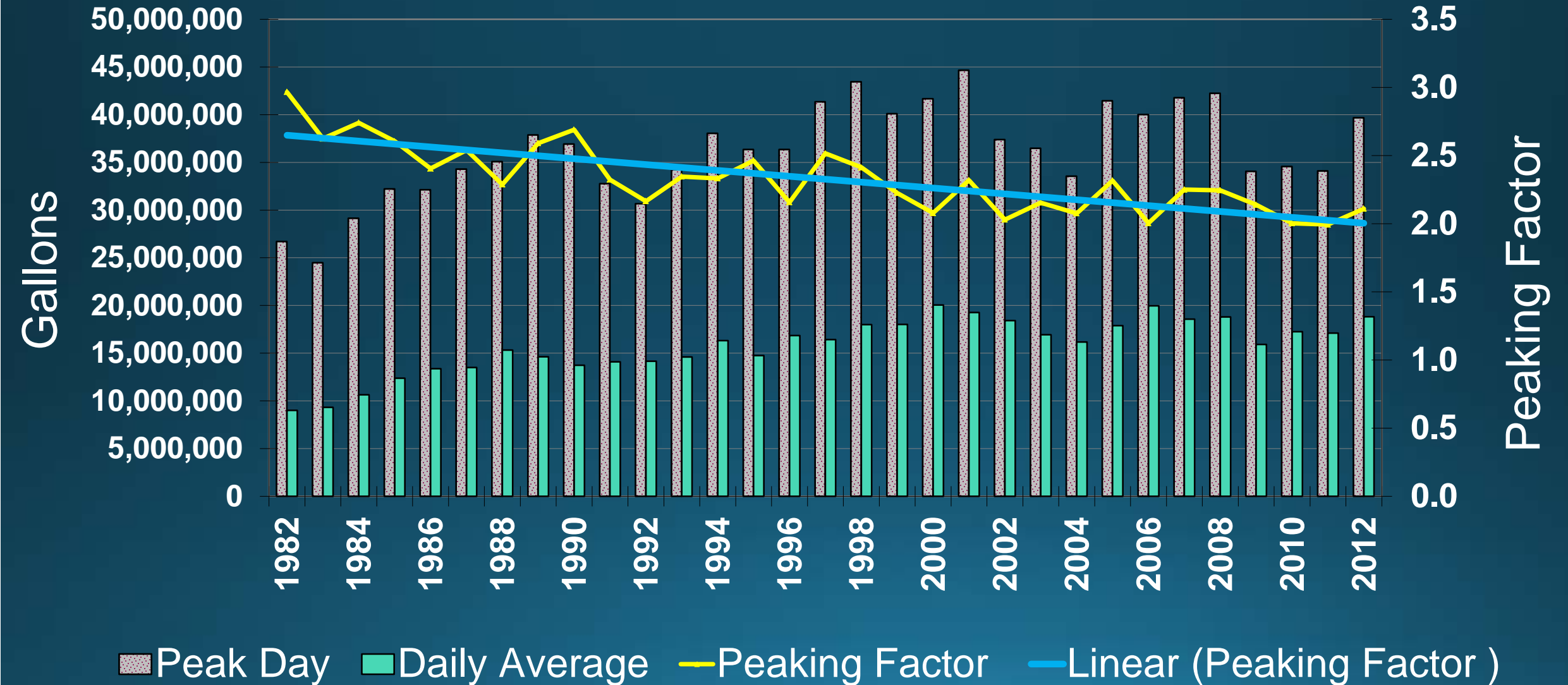


Per Capita Water Use

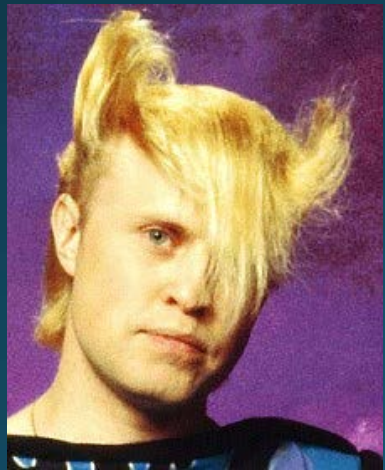


—○— 1980 Per Capita —●— Actual Per Capita ... Linear (Actual Per Capita)

Potable Water Production



1980



Significant Changes

- Rate structure changes
- Rebate programs
- Changes to plumbing codes
- Landscape regulations and Xeriscape
- Education
- Attitude
- Efficiency and conservation

2014



**Water and
wastewater rates
have increased
faster than the
Consumer Price
Index (CPI) over
the past 15 years.**

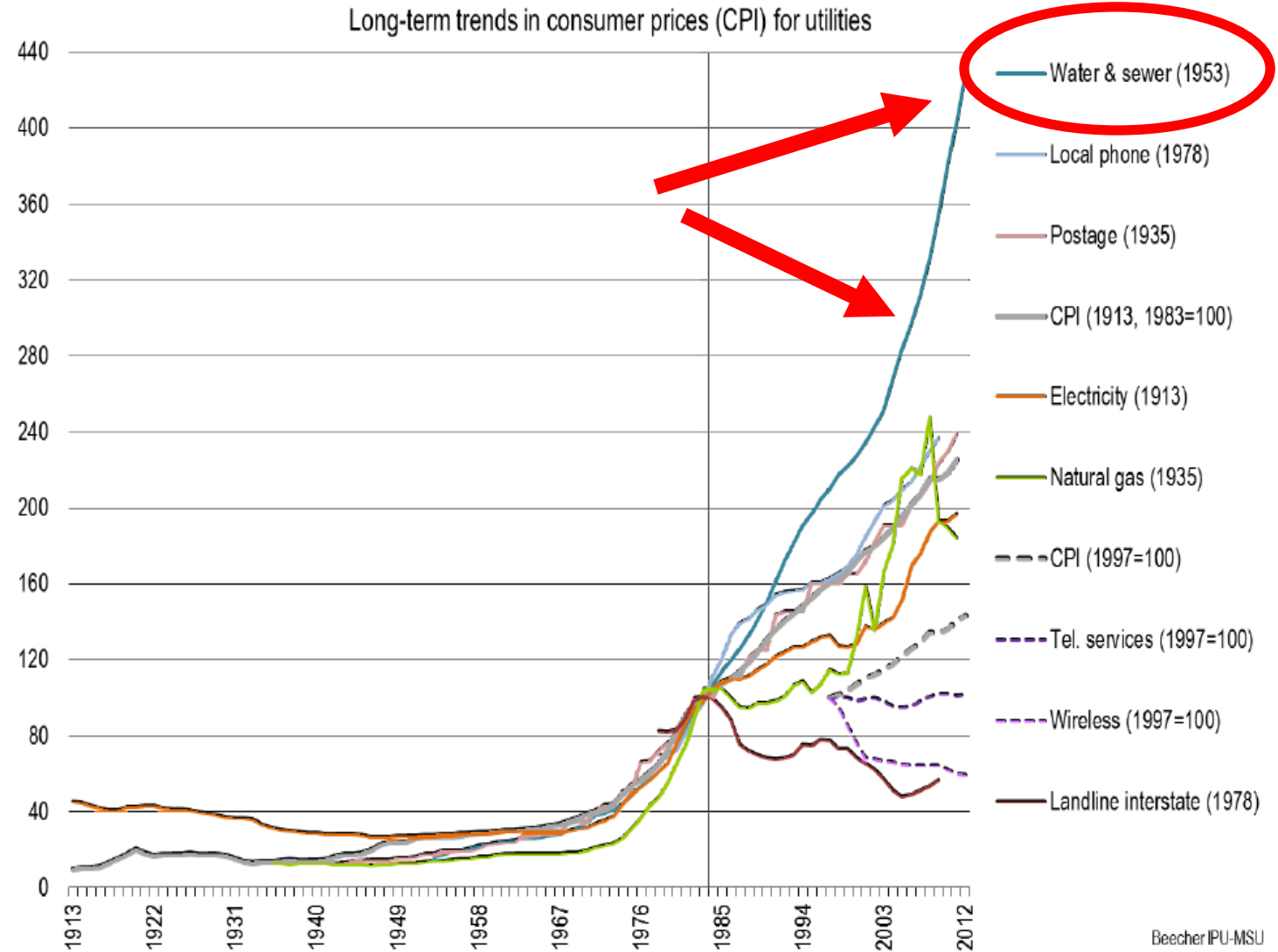
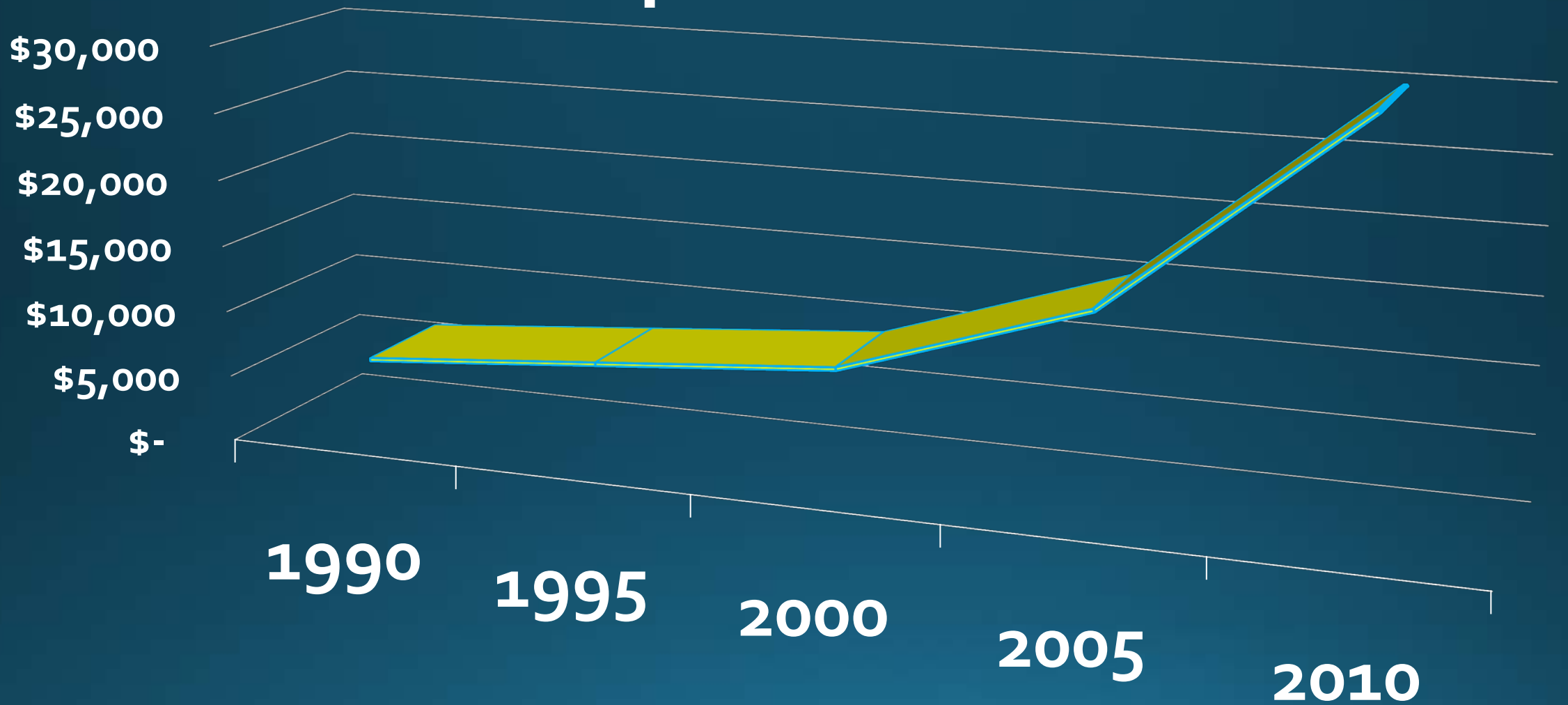


Exhibit 1. Long-term trends in the Consumer Price Index (CPI) for utilities (1913-2012).

The index is set to 100 for 1982-1984 except for telephone and wireless services, where the index is set to 100 for 1997. Date () indicates start of series.

Cost per Acre-Foot of Water*

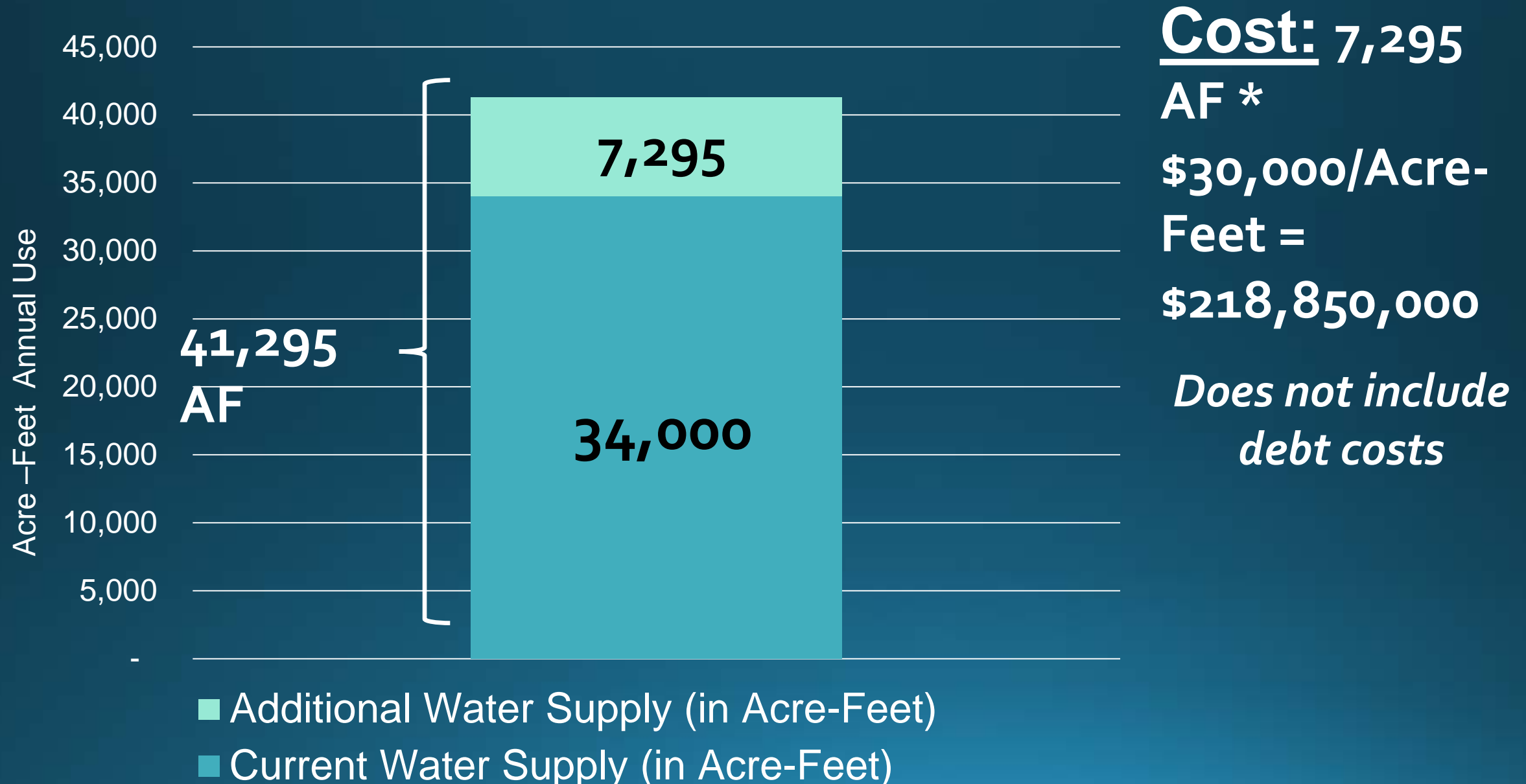


* Costs of water in the Clear Creek/South Platte basins in Colorado



Water Resources: COSTS/IMPACTS

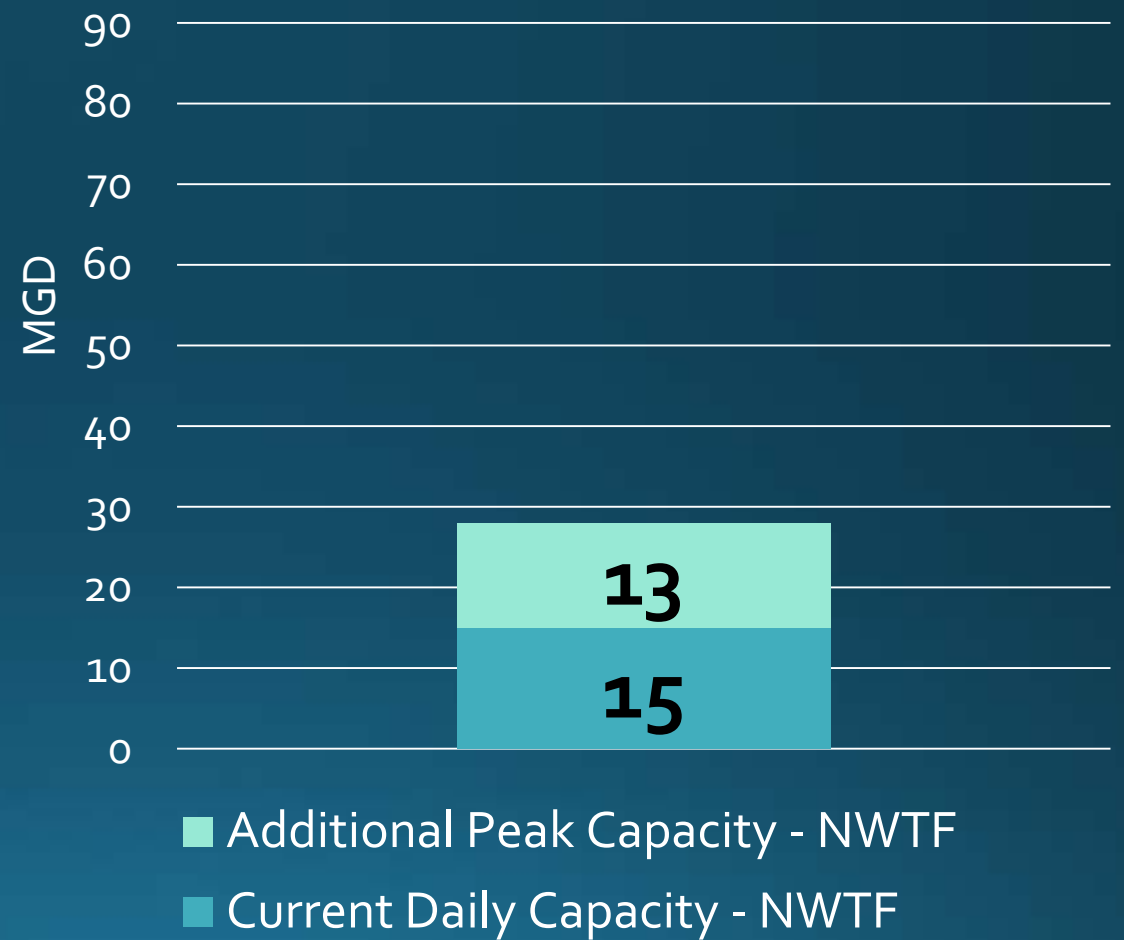
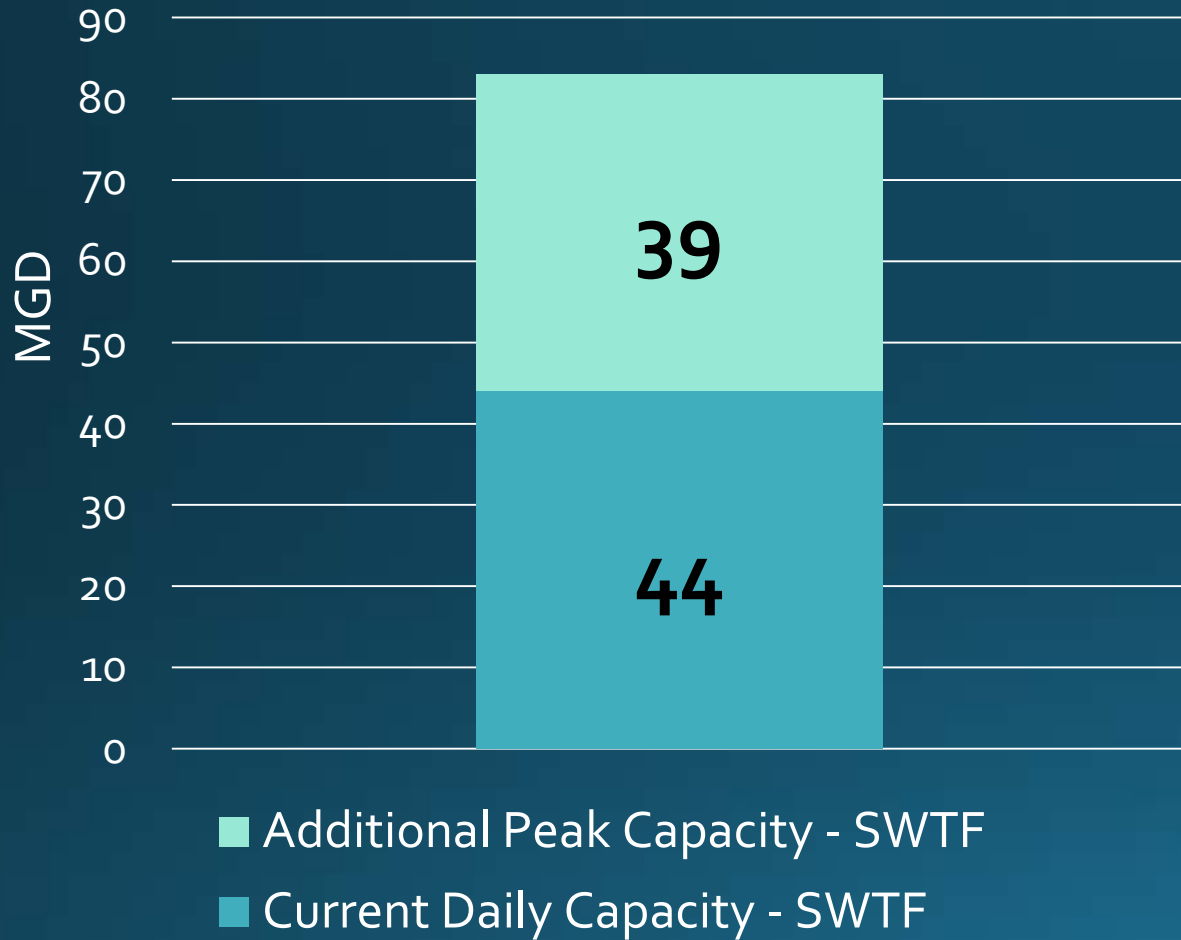
Impacts on Demand & Water Resources at Buildout





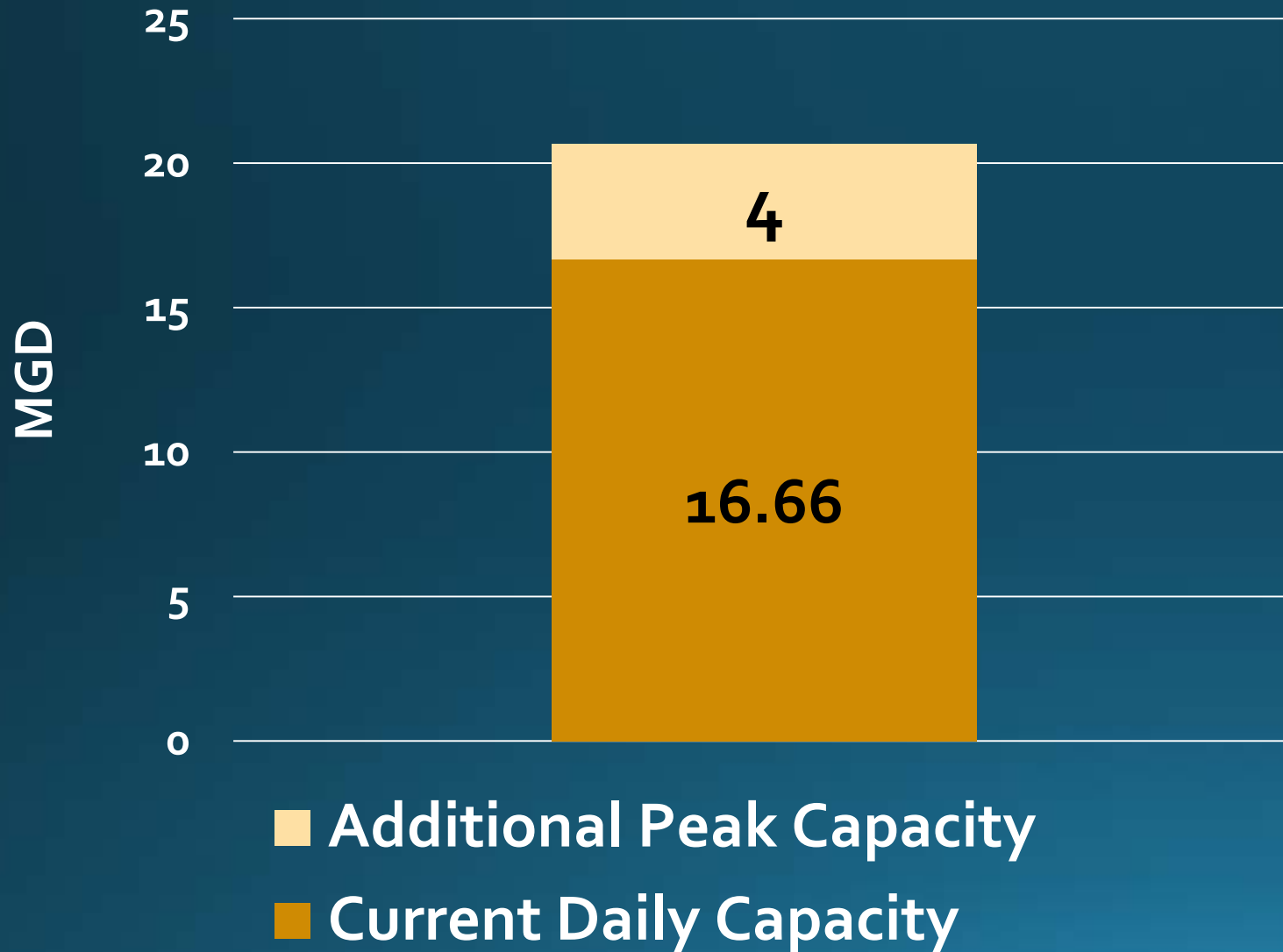
Infrastructure: COSTS/IMPACTS

Impacts to Water Treatment Infrastructure at Buildout



Cost: 52MGD * \$2,500,000/MGD = \$130,000,000

Impacts to Wastewater Treatment Infrastructure at Buildout



$$\begin{aligned} &\text{Cost:} \\ &4 \text{ MGD} * \\ &\$5,000,000/\text{MGD} \\ &= \\ &\$20,000,000 \end{aligned}$$

Upfront Financial Impacts to City-CAPITAL

Additional Water Resources	\$218,850,000
Additional WTP capacity	\$130,000,000
Additional WWTP capacity	\$20,000,000
Subtotal of Costs:	\$368,850,000
Interest (on debt funding)	\$223,106,000
Total Costs	\$591,956,000

Ongoing Financial Impacts to City- OPERATING

	<u>Current</u>	<u>Additional</u>	<u>Total</u>
Annual water operating costs	\$2,239,000	\$480,400	\$2,719,400
Annual wastewater operating costs	\$3,059,000	\$763,300	\$3,822,300
		\$1,243,700	
<i>* No Additional Personnel</i>			

UTILITY FUND REVENUE SOURCES



- Two primary sources of revenue
- Rates pay for operations
- Tap fees pay for capital projects
(new infrastructure and water resources)

Customer Impact :

Single Family Rates –Annual Bill

	<u>2012</u>	<u>Additional Charge with NO Conservation</u>	<u>Total Annual Single Family Bill</u>	<u>Avoided Customer Cost</u>
Water and Sewer Rates	\$655	\$624	\$1,279	95%
Updated 2014:				94%

Customer Impact: Single Family Tap Fees

	<u>2012</u>	<u>Additional Charge with NO Conservation</u>	<u>Total Annual Single Family Tap Fee</u>	<u>Avoided Customer Cost</u>
Water and Sewer Tap Fees	\$21,229	\$16,952	\$38,181	80%
Updated 2014:				68%

Customer Water Rates are LOWER with Conservation

<u>2012 Single Family Annual</u>	<u>WITH Conservation</u>	<u>WITHOUT Conservation</u>	<u>Avoided Customer Cost</u>
Rates	\$655	\$1,280	95%
Tap Fees	\$21,000	\$38,000	80%



The cheapest water is
(by far) the water we
already have?

Thank you. Questions?

Peter Mayer, P.E., Principal, WaterDM

Stu Feinglas, Water Resources Analyst, City of Westminster

Christine Gray, Management Analyst, City of Westminster



W E S T M I N S T E R

END