

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com





Setting Rates: Conservation & Affordability

October, 2009

Karen Guz

San Antonio Water System

Karen Guz

Conservation Director

Topics

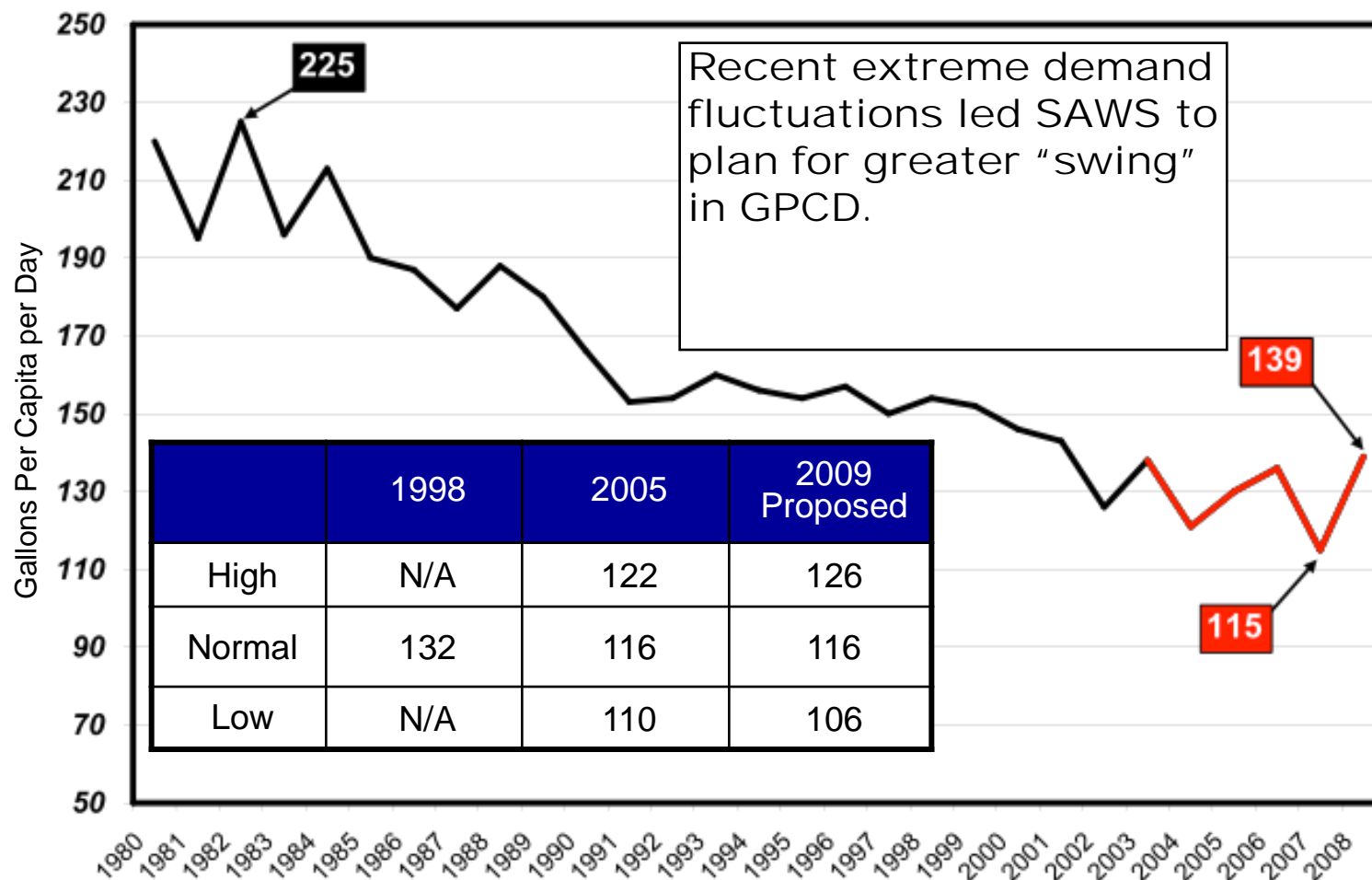
- How do rates fit in with overall water conservation goal strategy?
- Doesn't conservation cause increased rates?
- How do we quantify savings from water conservation programs?
- How do conservation driven rates impact low income customers?

October, 2009

WaterSmart Innovations

Water Management Plan GPCD Goals

San Antonio Goals vary by demand conditions



October, 2009

WaterSmart Innovations

2009 Goal Update

- Water Supply update for San Antonio underscored value of decreased GPCD
 - lower GPCD = less need for new water
 - new supplies are expensive
 - therefore accelerated goals set in motion
- Doubled Goals Proposed
 - Must lower GPCD by two per year
 - Requires 1 billion gallons of savings/year or 3,000 acre feet
 - Only 20% budget increase

October, 2009

WaterSmart Innovations

4



How to Meet New Goals?

- More Education & Outreach
 - Double outreach, even more partners
- More Reasonable Regulation
 - Change drought triggers
 - Add more year-round efficiency rules
- Additional Financial Incentives
 - Offer greater amount of all rebate programs and free product programs for secure savings
 - Reflect GPCD goals in updated rate structure
 - reward customers for staying within residential

October, 2009

GPCD levels

WaterSmart Innovations

discourage excessive discretionary usage in

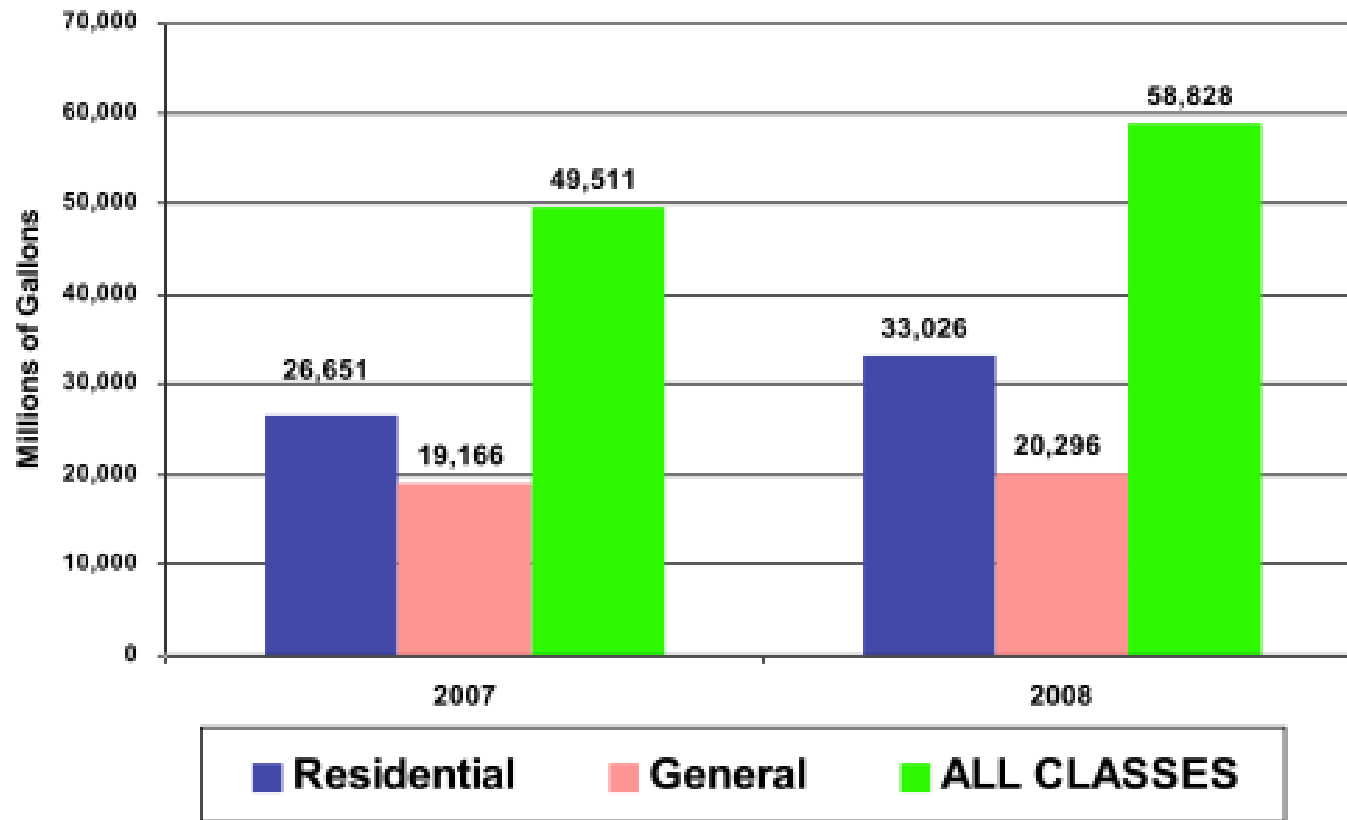
5



Why Target Outdoor Usage?

- Compare 2007 to 2008
 - 2007 = very wet year
 - 2008 = very dry, no drought restrictions
 - What was difference in consumption and who used more for what?
 - How significant is the increase for the discretionary consumption?
 - Would a change in 2008 top tier consumption be significant difference in Total GPCD?

2007 to 2008 Consumption Increases



- Residential increased 23.9%, Irrigation meters up over 40%
- General increased 5.9%
- All Classes increased 18.8%

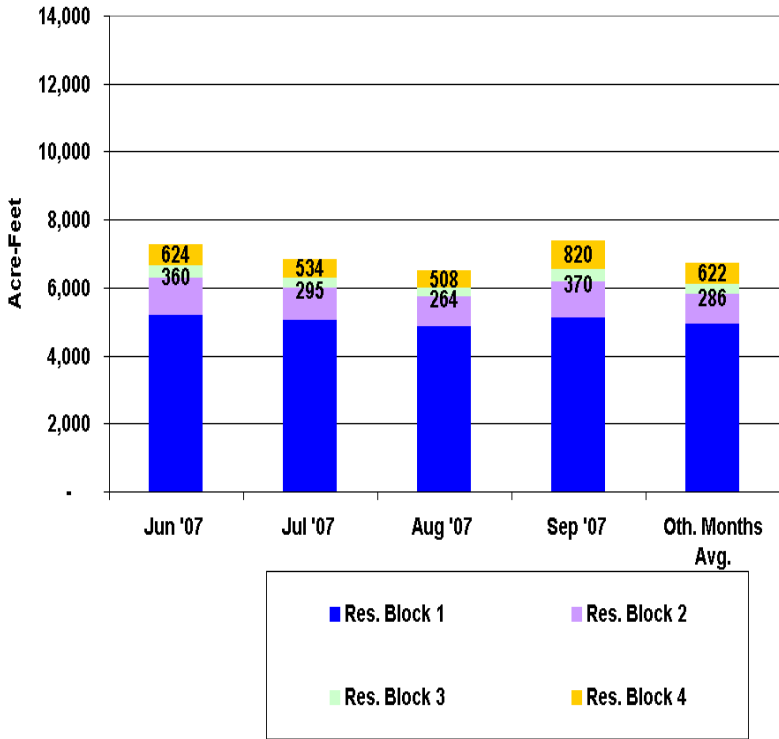
October, 2009

WaterSmart Innovations

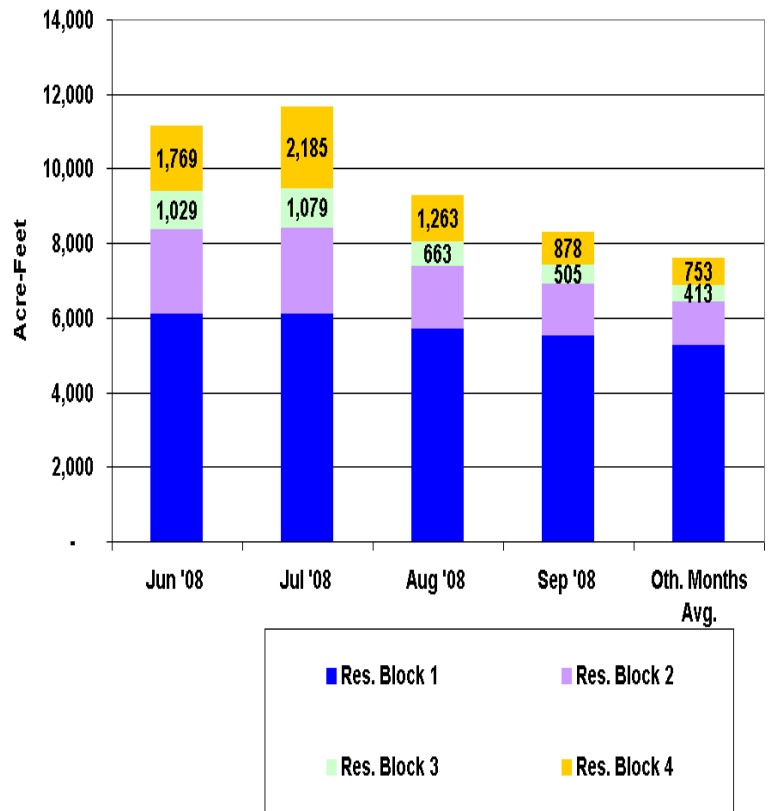
7

2007/2008; Where was change?(acre-feet)

2007 Acre Feet/Tier



2008 Acre Feet/Tier



Consumption Patterns

- During dry years more water is sold for outdoor irrigation
 - Through irrigation meters
 - Through residential meters; especially in 3rd and 4th block (4th = over 17,205 gallons)
- Even in very wet months there is still discretionary consumption in the top two blocks residential
- How much does this matter? Is it significant?

Reduction of 10%

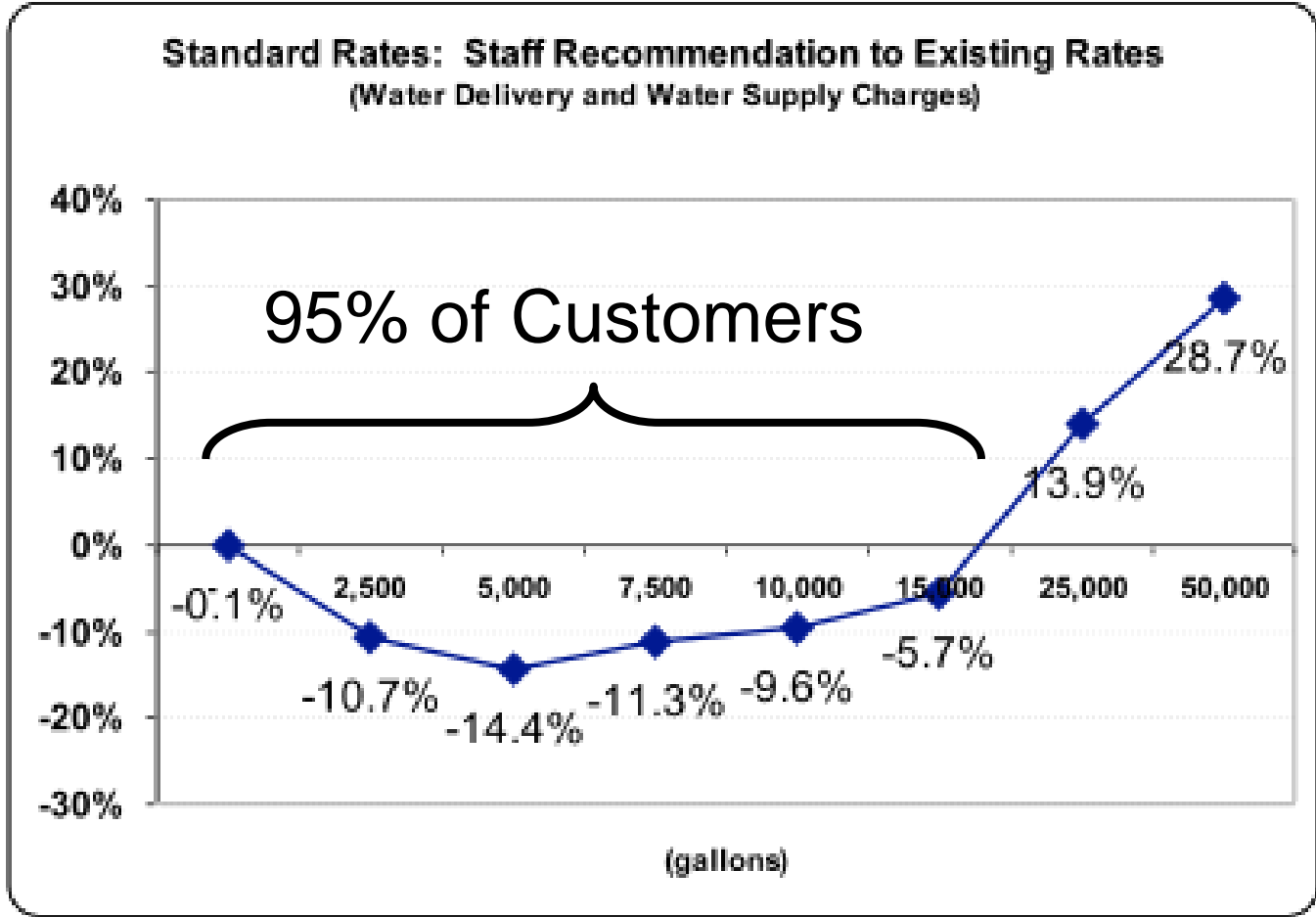
- 2007 Reduction of 10% in 3rd and 4th block usage would have resulted in:
 - 359.7 million gallons
 - 1,103.9 acre feet
- 2008 Reduction of 10% in 3rd and 4th block usage would have resulted in:
 - 609.3 million gallons
 - 1,869.9 acre feet
 - This is decrease of 1.5 GPCD in year and big drop in peak demand

Solutions?

- There is no silver bullet answer:
 - Home owners often over-water WaterSaver/xeriscape landscapes
 - “Smart” irrigation controllers are too generous in water application
- We need to motivate a change in irrigation settings
 - Even at 4th block rates it costs only about \$10 to run an irrigation cycle for 2000 gallons
- How to motivate change?

Residential Impact

Staff Recommendation: Standard Charges

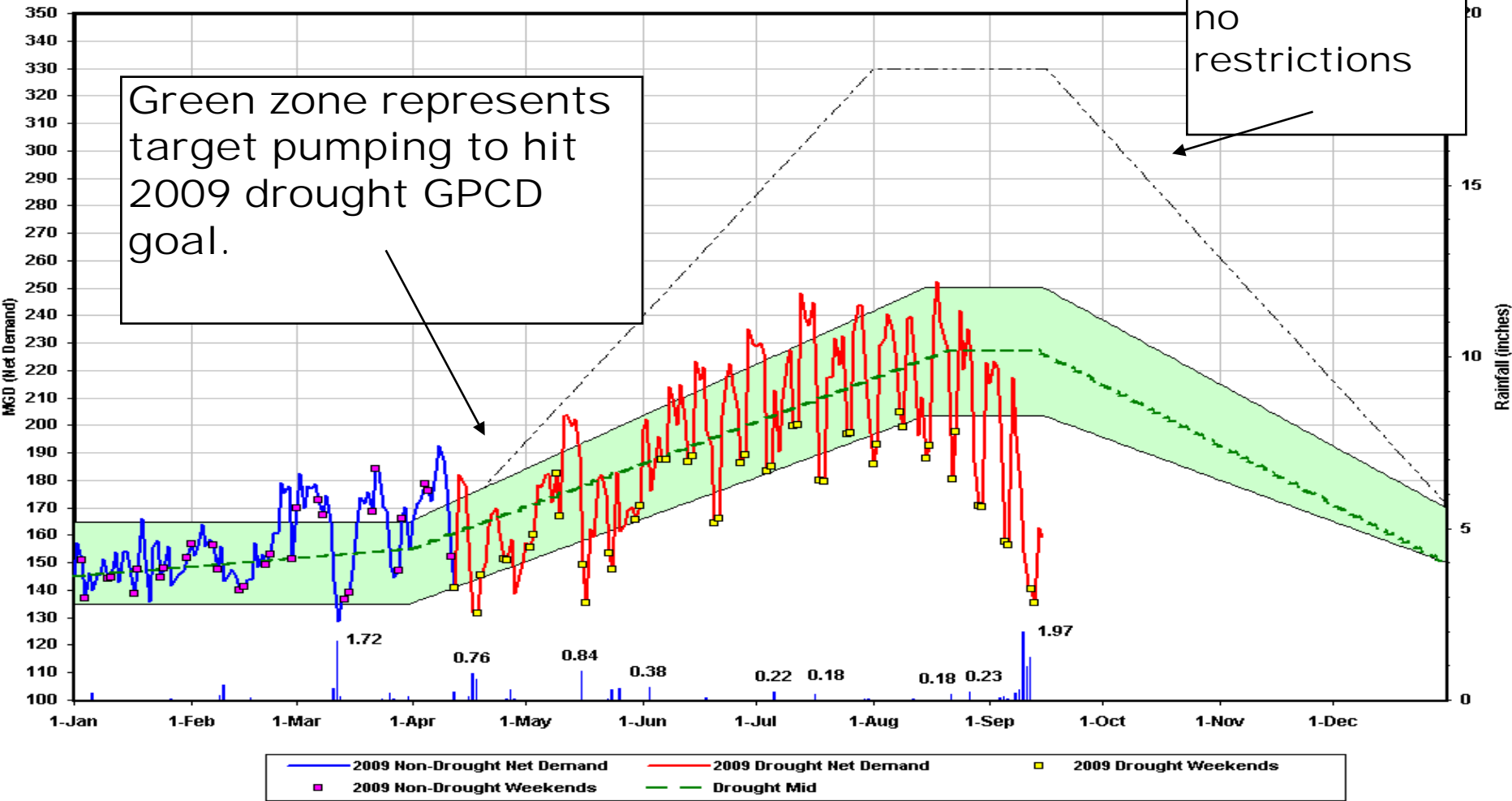


More Evidence of Outdoor Impact

Drought Savings Assessment Tool
Net Demand

Dotted line is demand with no restrictions

Green zone represents target pumping to hit 2009 drought GPCD goal.



— 2009 Non-Drought Net Demand	— 2009 Drought Net Demand	■ 2009 Drought Weekends
■ 2009 Non-Drought Weekends	— Drought Mid	

October, 2009

Conclusions

- Smart reductions by all top users results in significantly lower GPCD
- Small changes in commercial irrigation usage also result in significantly lower GPCD
 - currently water is very low on overhead cost
- Can reflect residential GPCD goals in rates
 - Use it in education to teach “water footprint”
 - Go beyond “efficiency” to “conservation ethic”
- On cost of service model going up on top tier means going down on lowest tier
 - Conservation & Affordability hand in hand

October, 2009

WaterSmart Innovations

Additional Resources

- Presentation by SAWS CFO Doug Evanson outlines why he supports conservation as smart financial move
- SAWS Rate Advisory Committee is working on review of rate structure
 - Within a few months public information on this may be ready for review
 - Should include reasoning for additional tiers for conservation impacts.

Water Delivery Rates

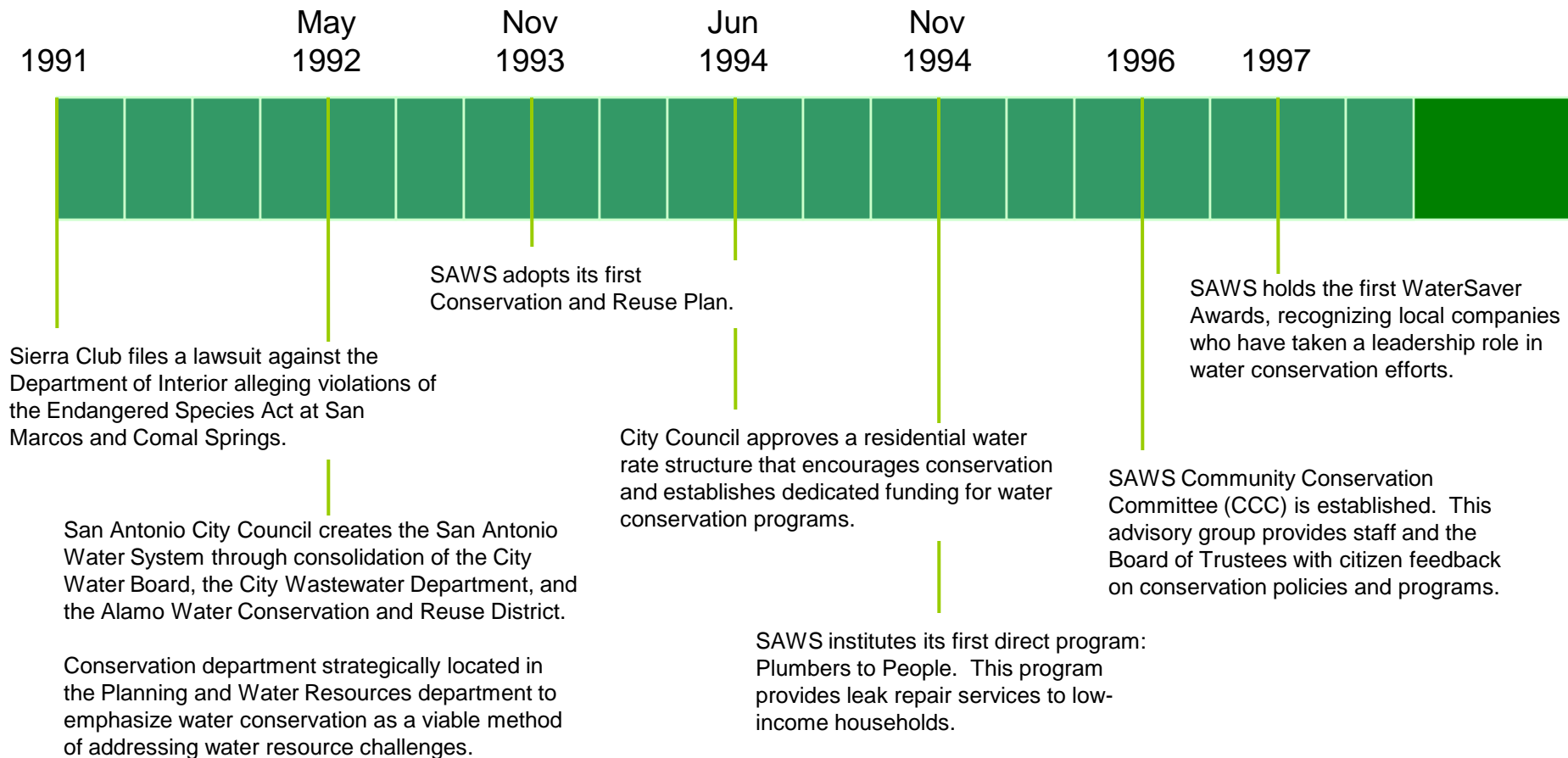
Residential Inside-City Charges

	Existing Rates		Conceptual Design		Staff Recommendation	
Block	Usage Range		Usage Range		Usage Range	
1	0 - 7,481		0 - 5,985		0 - 5,985	
2	7,482 - 12,717		5,986 - 12,718		5,986 - 12,717	
3	12,718 - 17,205		12,719 - 19,451		12,718 - 17,205	
4	> 17,205		> 19,451		> 17,205	
5						
Block	Standard	Seasonal	Standard	Seasonal	Standard	Seasonal
1	\$ 0.0906	\$ 0.0906	\$ 0.0923	\$ 0.0923	\$ 0.0897	\$ 0.0897
2	\$ 0.1309	\$ 0.1423	\$ 0.1325	\$ 0.1441	\$ 0.1298	\$ 0.1412
3	\$ 0.2058	\$ 0.2217	\$ 0.1866	\$ 0.2012	\$ 0.1831	\$ 0.1974
4	\$ 0.3288	\$ 0.4246	\$ 0.3499	\$ 0.4519	\$ 0.3206	\$ 0.4141

General Inside-City Charges

	Existing Rates		Conceptual Design		Staff Recommendation	
Block	Usage Range		Usage Range		Usage Range	
1	Base		Base		Base	
2	> 100% - 125%		> 100% - 125%		> 100% - 125%	
3	> 125% - 150%		> 125% - 175%		> 125% - 175%	
4	> 150% - 200%		> 175%		> 175%	
5	> 200%					
Block	Standard Rates		Standard Rates		Standard Rates	
1	\$	0.1086	\$	0.0975	\$	0.1086
2	\$	0.1257	\$	0.1298	\$	0.1298
3	\$	0.1633	\$	0.1821	\$	0.1821
4	\$	0.2138	\$	0.2666	\$	0.2666
5	\$	0.3160				

History of San Antonio Conservation

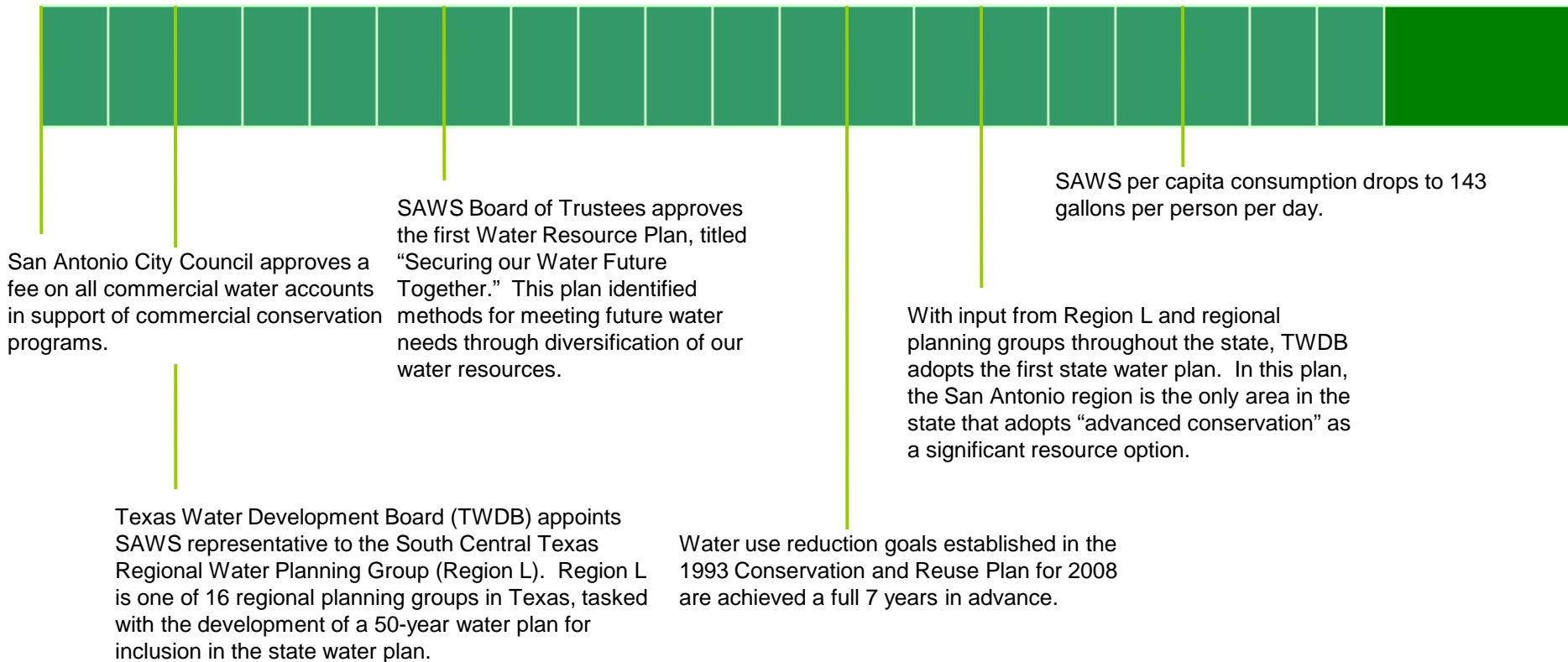


October, 2009

WaterSmart Innovations

History of San Antonio Conservation

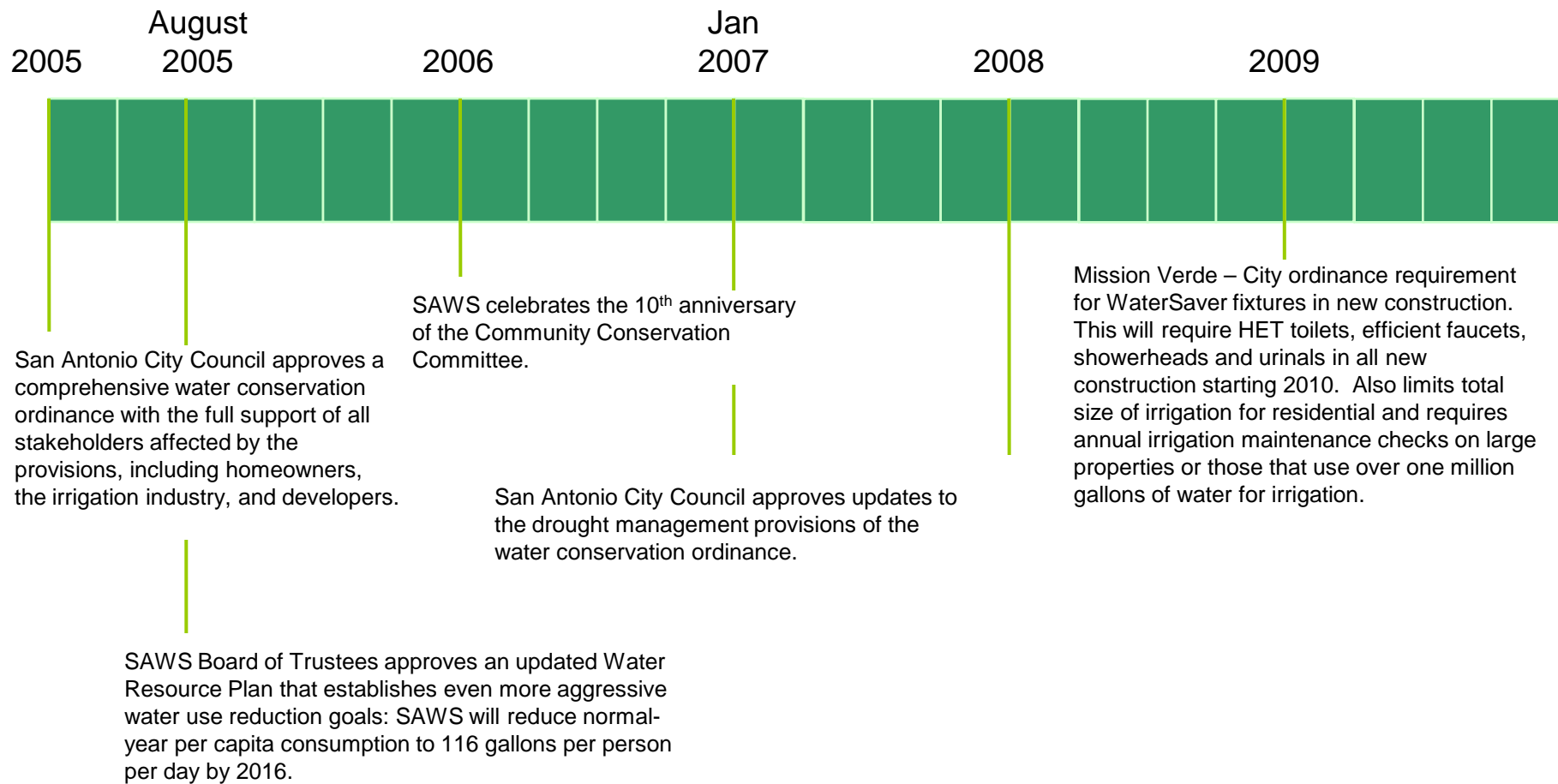
Jan 1998 Mar 1998 Oct 1998 Jan 2001 Dec 2001 Jan 2002



October, 2009

WaterSmart Innovations

History of San Antonio Conservation



October, 2009

WaterSmart Innovations



Setting Rates: Conservation & Affordability

October, 2009

Karen Guz

San Antonio Water System

Karen Guz

Conservation Director