



Water Conservation

•May 19, 2010

Capital Improvements Advisory Committee

Karen Guz

Conservation Director, San Antonio Water System

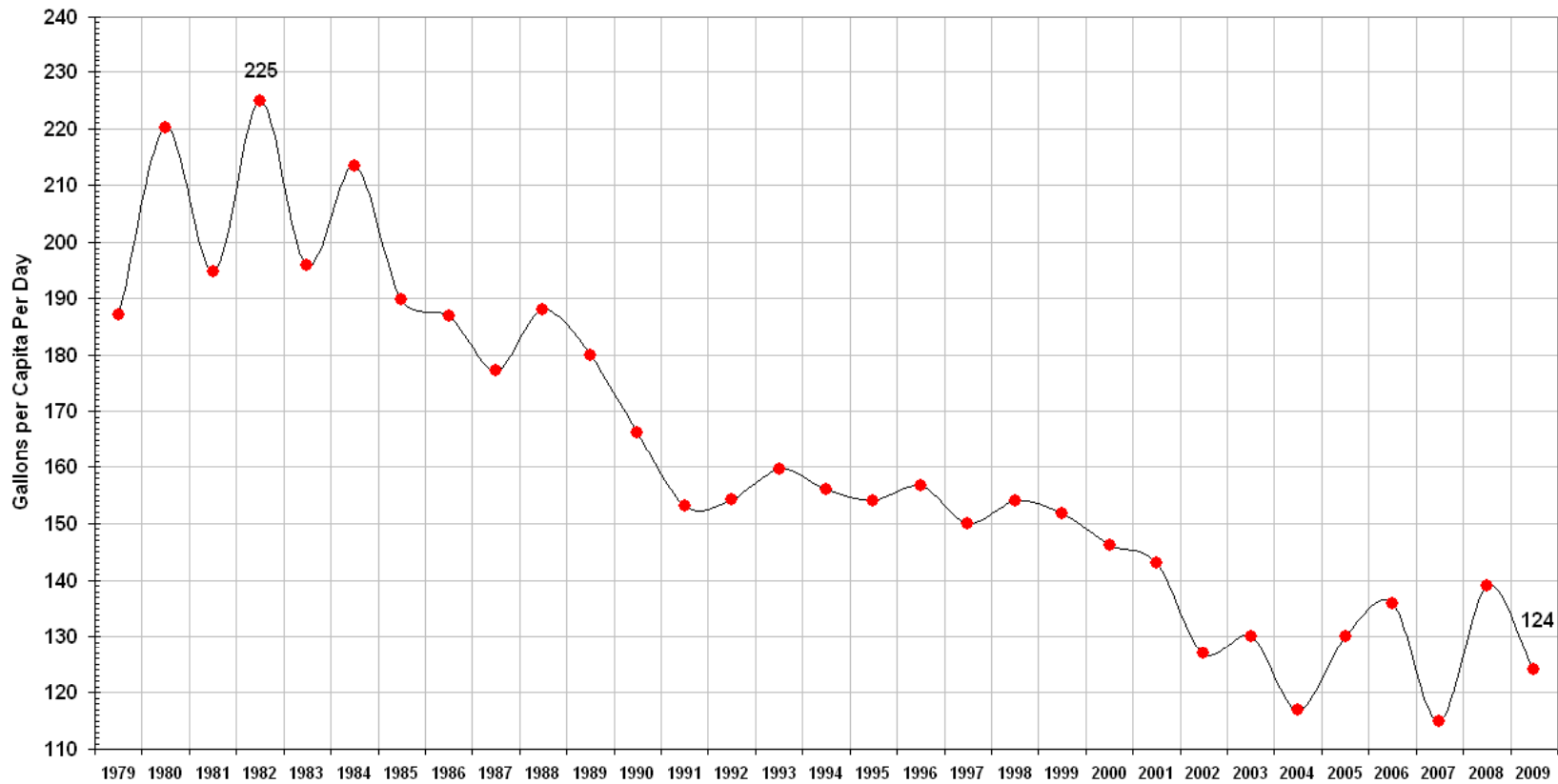
Background: Conservation History



- Conservation started as part of Water Management strategy for SAWS in 1992
- First conservation program was Plumbers to People in 1994
- Community Conservation Committee started in 1996
- First conservation GPCD goals met in 2001
- New goals set in 2005 for 116 by 2016

San Antonio per capita water use

San Antonio Water System
Gallons Per Capita Per Day (GPCD)
1979 - 2009



Background: Texas

- State population projected to double by 2060
- More population will be urban
- Water demand will grow by 27% while existing supplies will decrease
- Climate change may result in more extended droughts and flooding events
- 80% of Texans may experience water shortages by 2060 without improvements in current trends

Three Key Program Components

1. Education & Outreach

- Events, workshops, site visits, e-newsletter, performance contracts, demonstrations etc.

2. Reasonable Regulation

- Ordinance: described by AWE as most inclusive in the country

3. Financial Incentives

- Rates to discourage higher discretionary usage
- Rebate incentives/ free product for action

SAWS Conservation Programs



**Kick the Can
FREE Toilets**

**Watersaver Landscape
Rebates**

**Wash Right
Washing Machine Rebate**

**Hot Water
On Demand Rebate**

**Home Water
Conservation Audits**

**San Antonio
Landscape Care Guide**

Weekly E-newsleter



**Drought Restriction
Enforcement**

Reporting Water Waste

**Large-Scale Retrofit
Rebate Program**

**Toilet
Retrofit Program**

**Commercial Cooling
Tower Audits**

**Restaurant Certified
WaterSaver Program**

**On-Site Cooling
Water Reclamation**

Education & Outreach

- School aged education in a different department
 - Curricula for all ages
- Staff presentations & events
 - Reach about 10,000/year
- Weekly E-newsletter
 - 8,000 subscribers so far
- Partner organization education & outreach
 - Reach another 120,000 or more/year



Reasonable Regulation

- Water Waste Against the Law
- Time of Day Irrigation
- Drought Rules
- San Antonio Irrigation Standards; above state
- Rain Sensor Requirement
- Cooling Tower Efficiencies
- Power Washing Rules of Use
- Irrigation Check-Ups for Large Properties/Large Users
- Making Condensate Water Accessible on Commercial Construction
- Turfgrass Selection & Soil Under Turfgrass
- High Efficiency Toilets, Urinals, Faucets & Showerheads During Construction; to EPA WaterSense standards
- Limited total irrigation size for residential
- Water on request only in restaurants
- Charity car washes only at car wash operations

www.saws.org/conservation/ordinance/

Financial Incentives

- Rebates & Equipment Cost Share
 - Standing Programs like Kick the Can, Wash Right and others
 - Custom rebates for businesses to rebate based on how much water can be saved over 10 year period
 - Pilot rebate programs to drive changes such as conversion to drip irrigation and other irrigation improvements
- Rates Designed to Reward Conservation
 - Rates designed to send a signal that discretionary water is expensive for the community
 - Helps to drive interest in efficiency

All rebates and incentives are evaluated for cost/acre foot saved. Programs are NOT gifts, but must acquire water at reasonable cost.

The Hardest Message

- Supplemental irrigation of home and business landscapes drives GPCD year to year
- New home usage is growing, not declining because of irrigation consumption
- New businesses do not need to put in lush landscapes and if they choose extensive landscapes, they can establish and maintain them with less water than they think
- SAWS staff is working hard to educate landscape and irrigation professionals and property managers on the need to be aware of their irrigation consumption

1996 Drought Responses

San Antonio Express-News

Serving South Texas since 1865

SATURDAY, August 24, 1996

★ Final Edition 50c

Bunton orders pumping limits

City leaders react angrily, plan to file appeal Monday

By **KEN DILANIAN**
EXPRESS-NEWS STAFF WRITER

Flanked by local leaders at a dramatic City Hall news conference, Mayor Bill Thornton vowed Friday to appeal a federal judge's order that he decried as favoring animals over people.

"Today I think it's time we draw a line in the sand to fight for consideration of humans and human rights," Thornton said. "Quite frankly, the court is jacking us around."

Thornton's sentiments were echoed by a variety of city officials who protested an order by Senior U.S. District Judge Lucius D. Bun-

ton III that may require San Antonians to stop watering their lawns in an effort to save five federally protected species at Comal and San Marcos springs.

After years of warnings, threats and voluntary plans, Bunton finally imposed a legally binding court order in response to allegations from the non-profit Sierra Club that San Antonio's Edwards Aquifer water use is violating the Endangered Species Act.

Governments at all levels have failed to properly preserve the Edwards, Bunton wrote, and that failure is killing species in violation

■ See THORNTON/8A



“Today I think it's time we draw a line in the sand to fight for consideration of humans and human rights. Quite frankly, the court is jacking us around.”

— Mayor Bill Thornton

“The Edwards Aquifer region has finally reached the point where the aquifer is unable to provide for the needs of all those who depend upon it during dry years.”

— Senior U.S. District Judge Lucius D. Bunton III



SAWS chief foresees ban on lawn watering by Oct. 1

By **JERRY NEEDHAM**
EXPRESS-NEWS STAFF WRITER

A federal judge ordered restrictions on pumping from the Edwards Aquifer by the city of San Antonio and other defendants Friday, in an endangered species lawsuit filed by the Sierra Club.

Mayor Bill Thornton and City Council members vowed an appeal.

The order by Senior U.S. District Judge Lucius D. Bunton III does not take effect until Oct. 1. Depending on how much rain falls by then, the San Antonio Water System and other large users of aquifer water could be limited to no



The water debate is about a lot more than blind critters.

Carlos Guerra/1B

more than 1.2 times their winter average pumpage.

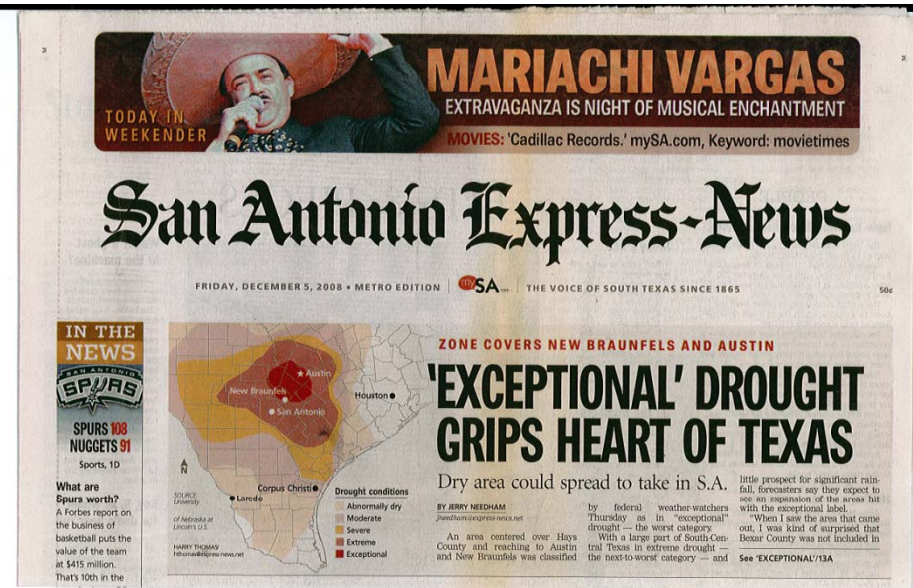
Joe Aceves, SAWS president, said that to meet that limit, the city probably would have to ban any outdoor water use by residen-

■ See FEDERAL/8A

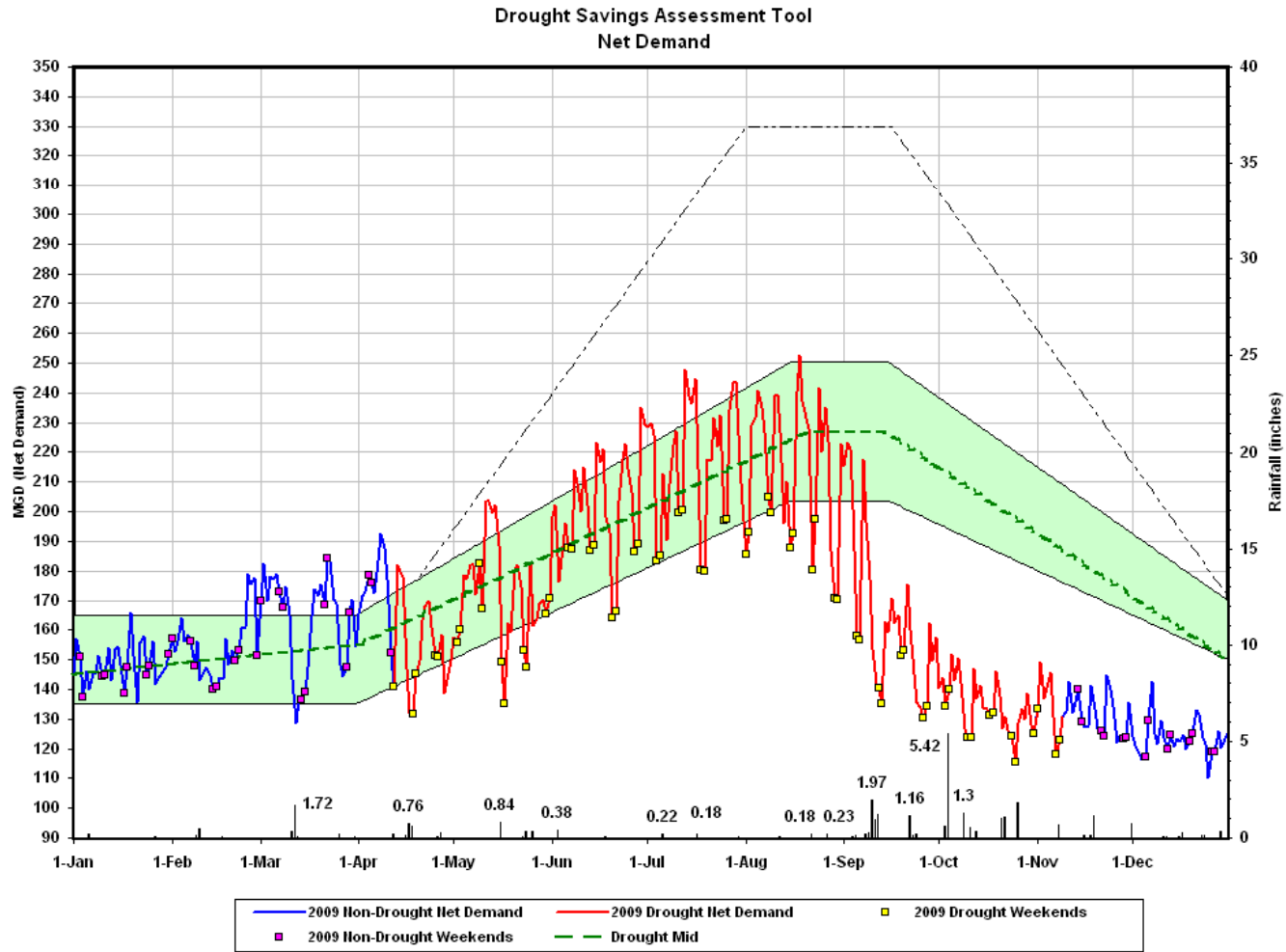
Multi-year drought would be a Stage IV by today's standards

Drought Management 2009

- City rules enact early response with good result
- Strong support from media, stakeholders, law enforcement, city and utility departments
- Rules work to reduce pumping early
- Each stage has rules to achieve more savings



Drought Results San Antonio



Summary

- Conservation programs have resulted in lifestyle and business improvements
 - Customers usually like their efficient products better than their high water using ones
 - Businesses appreciate their lower costs
- Conservation programs have gotten excellent cooperation from stakeholder groups in San Antonio
 - Our success depends on experts in every user group
- Our community can continue to drop the GPCD of San Antonio while thriving economically and being known for our high quality of life



Water Conservation

Karen Guz

Conservation Director, San Antonio Water System