

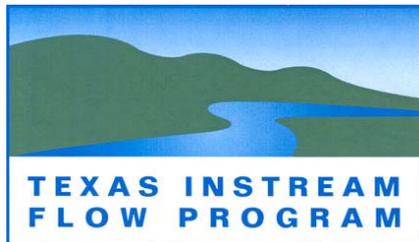


Overview of Water in the San Antonio Area

March 1, 2010

Steve Clouse

Senior Vice-President / Chief Operating Officer



**Guadalupe, San Antonio, Mission and Aransas Rivers
and Mission, Copano, Aransas, and San Antonio Bays
Stakeholder Committee**

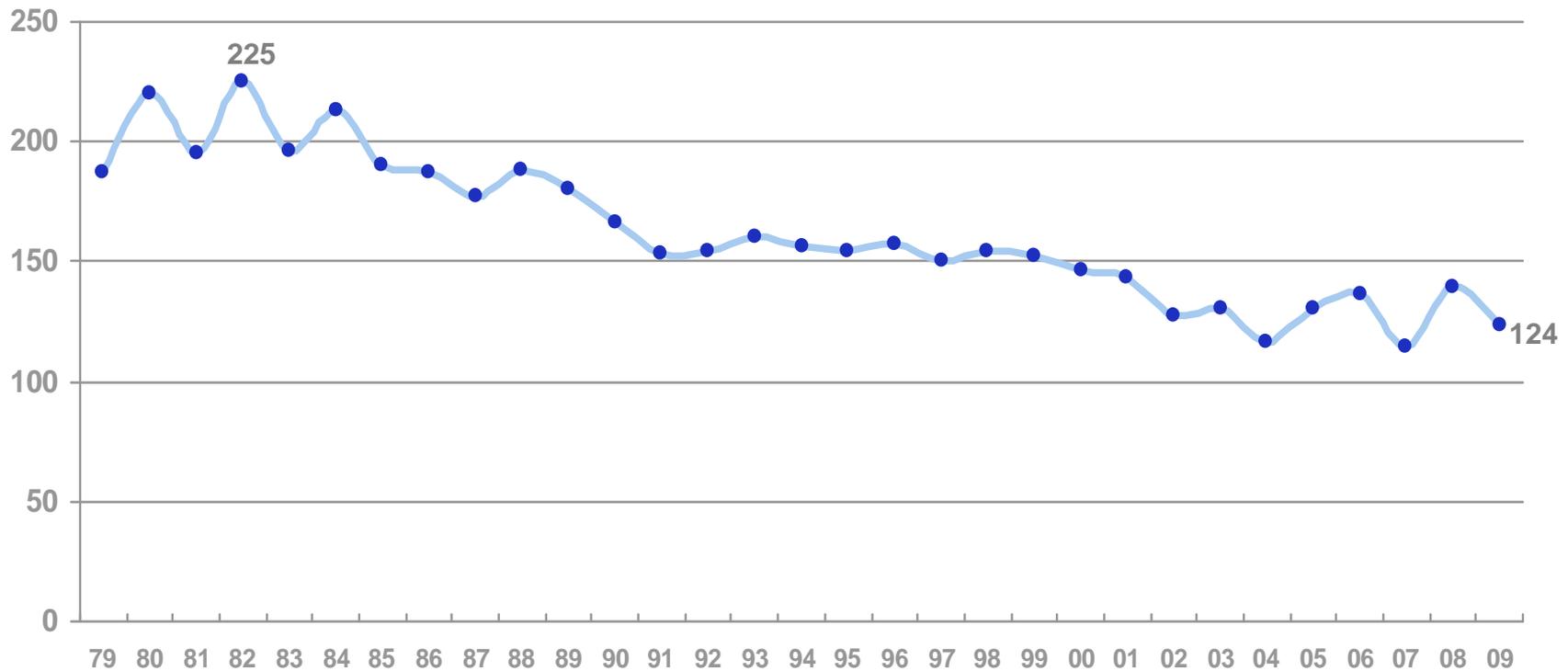
Background: San Antonio



- **San Antonio is America's 7th largest city**
- **Water and wastewater services provided to over 1.3 million people**
- **Owned by the City; independent Board appointed by SA City Council**
- **3 major Water Recycling Centers with 233 million gallon per day permitted capacity**
- **EPA Award winning facilities**
- **National leaders in conservation, reuse, and water resource management**

San Antonio per capita water use 1979 - 2009

gallons
per person
per day

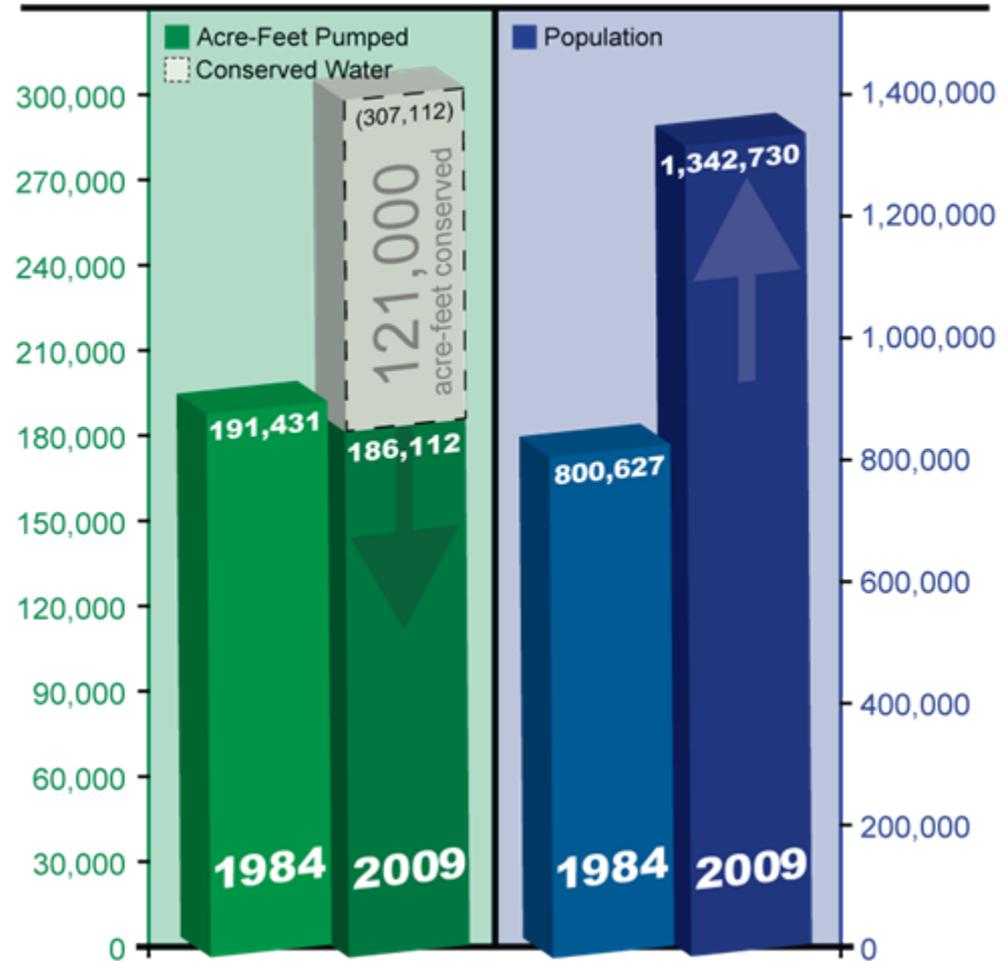


Managing Water Demand

67% More
Customers

0% More
Water

SAWS Total Production (1984 vs. 2009)



*Savings based on water use in the early 1980s

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**

**Seasonal Irrigation
Program (SIP)**



**Drought Restriction
Enforcement**

Reporting Water Waste

**Large-Scale Retrofit
Rebate Program**

**Toilet
Retrofit Program**

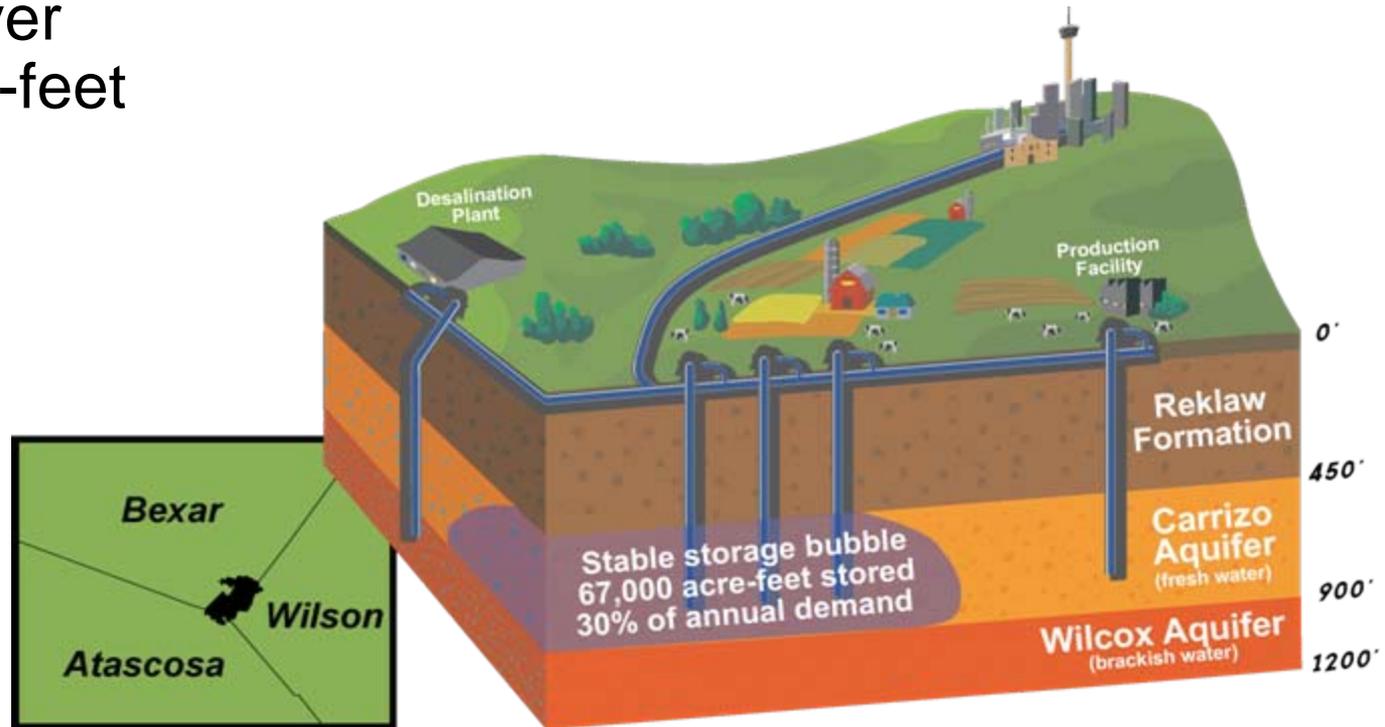
**Commercial Cooling
Tower Audits**

**Restaurant Certified
WaterSaver Program**

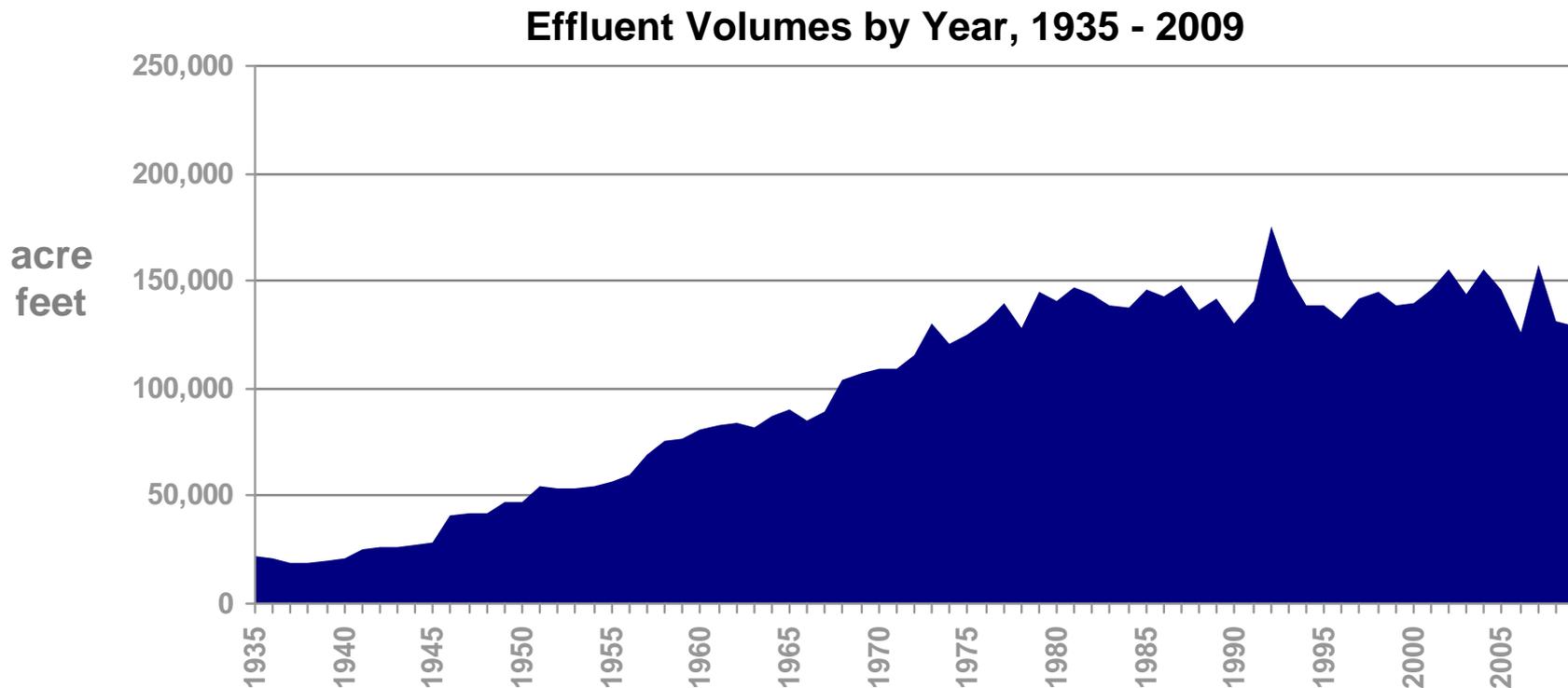
**On-Site Cooling
Water Reclamation**

Aquifer Storage and Recovery

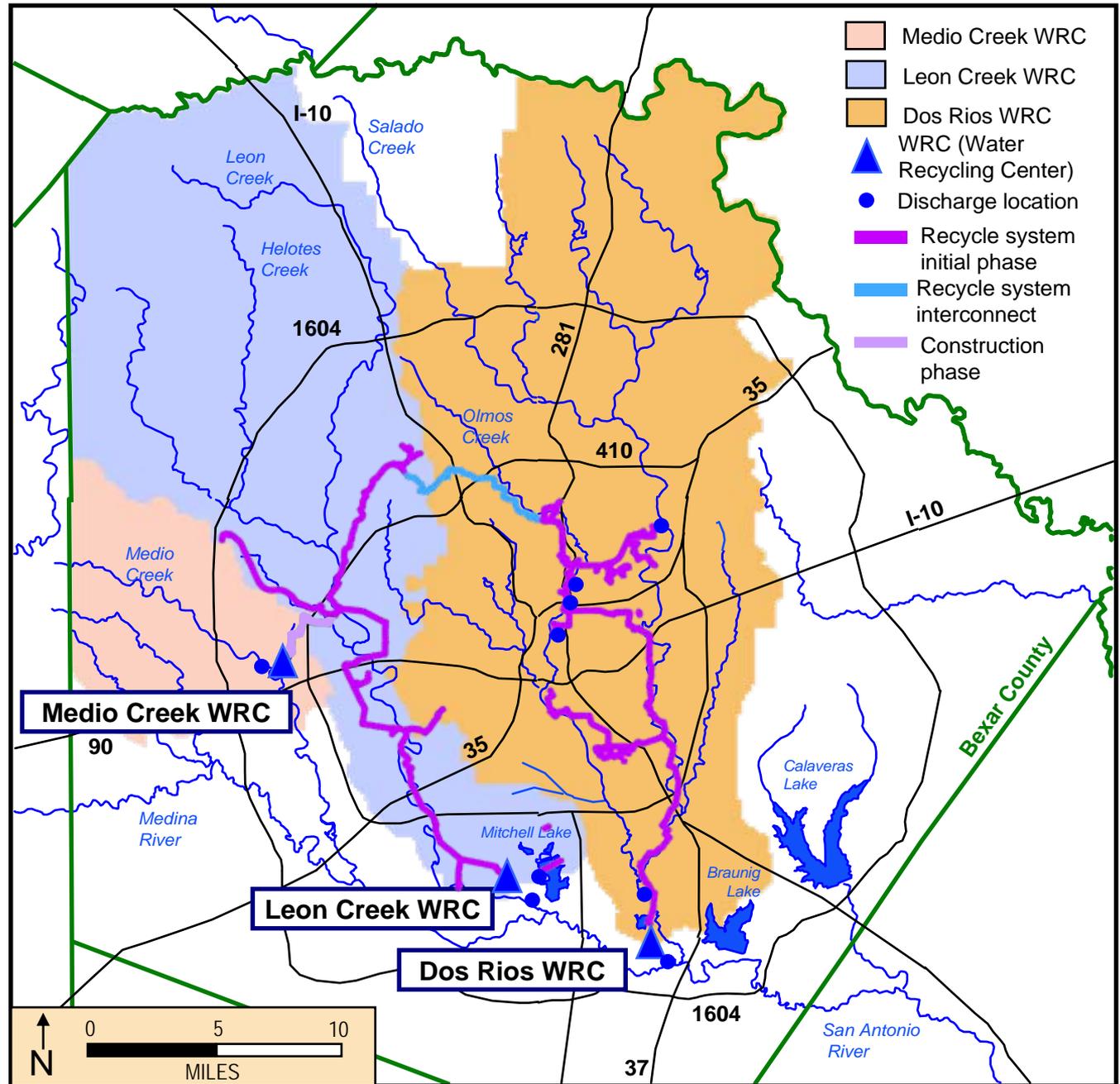
- Reduces Edwards pumping during critical periods
- Provides operational flexibility
- Currently over 70,000 acre-feet in storage



SAWS Total Wastewater Treated



SAWS Recycled Water System



Uses of Recycled Water



landscaping



River Walk



cooling towers



golf courses



Toyota

Microsoft



industrial processes



grass farming

The Treatment Trifecta

Biosolids, Gas

- One of the largest compost operations in the country
- 98% of biosolids to beneficial use in 2009
- The first U.S. utility to sell digester gas

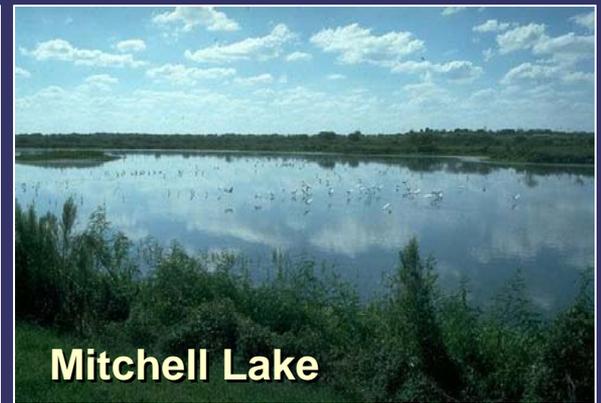
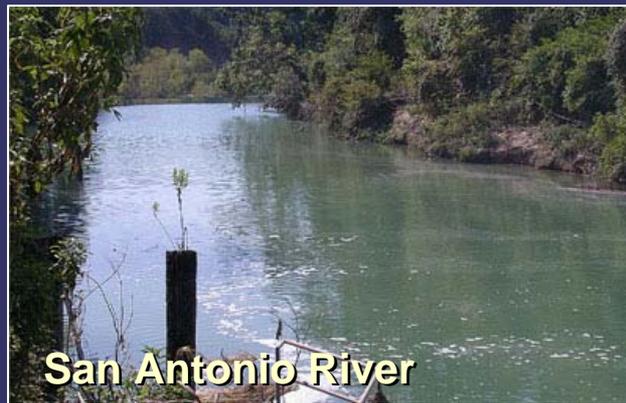
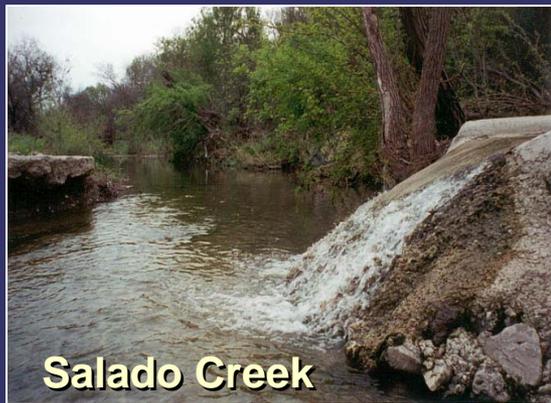
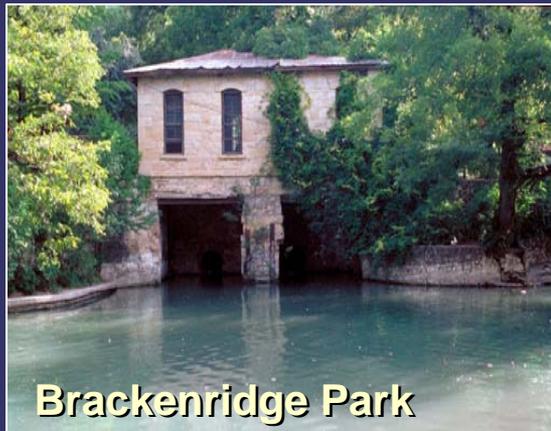
digester flare



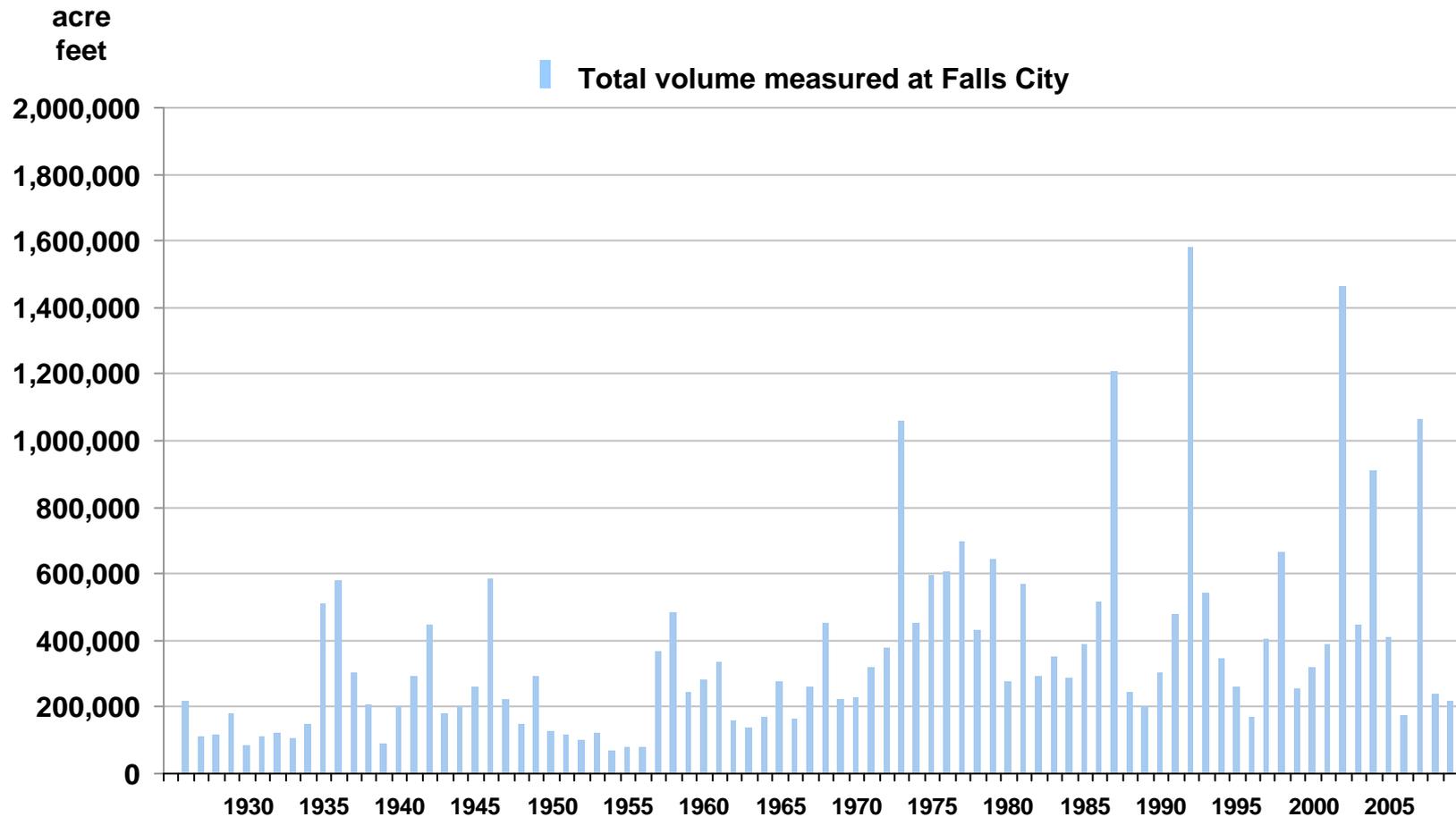
compost pad



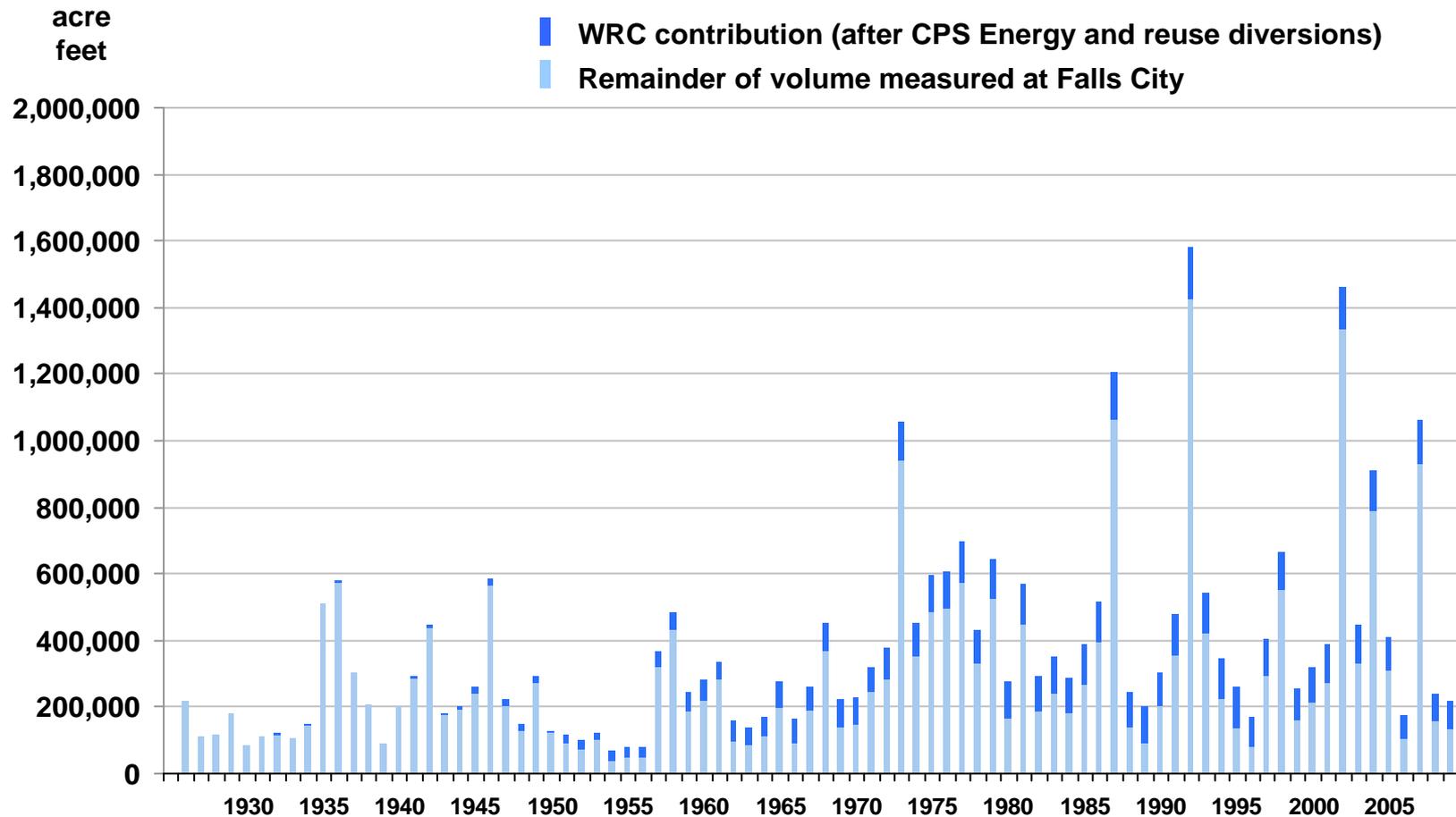
Discharges of Recycled Water for Environmental Enhancement



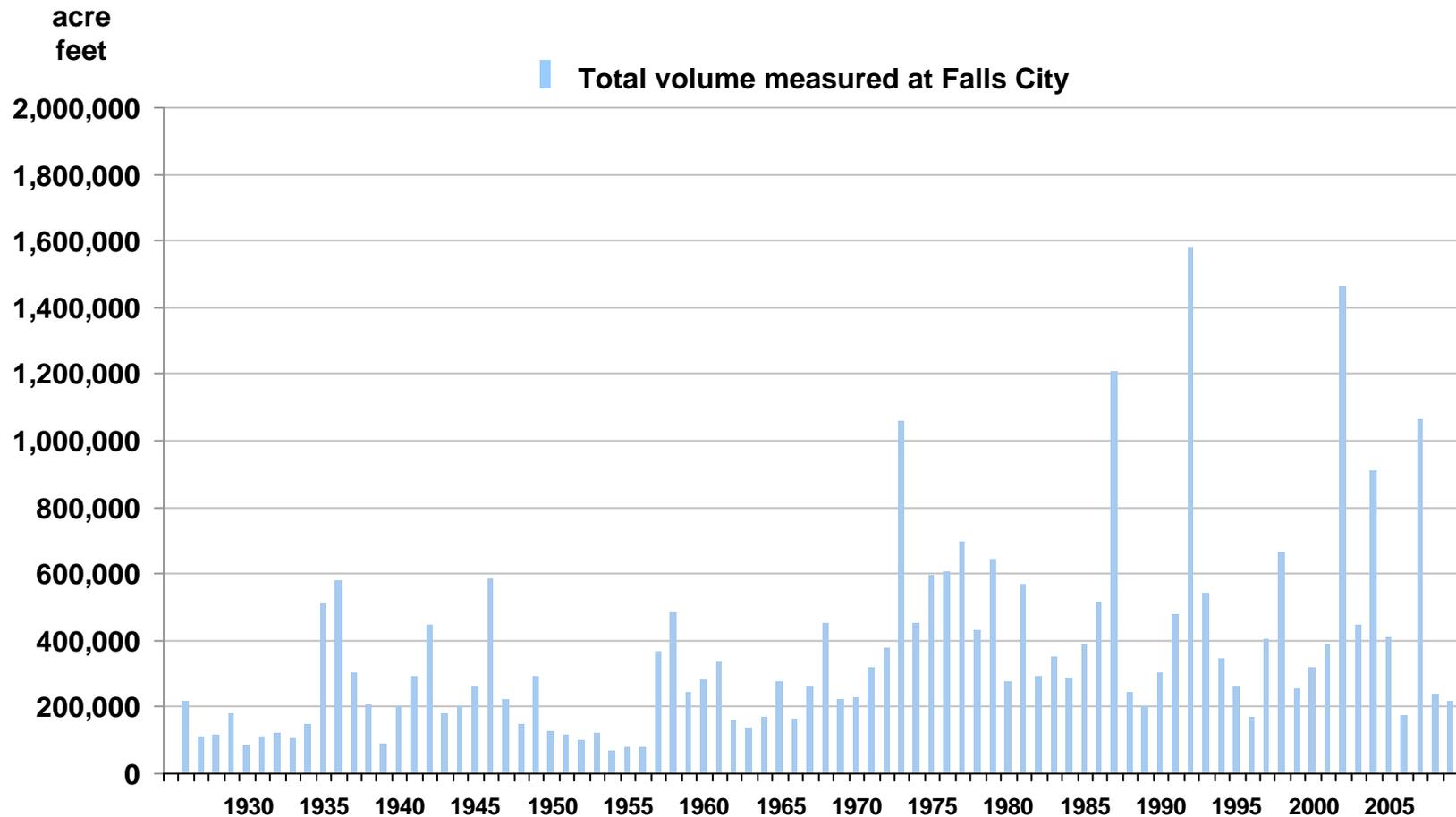
San Antonio River Flows at Falls City



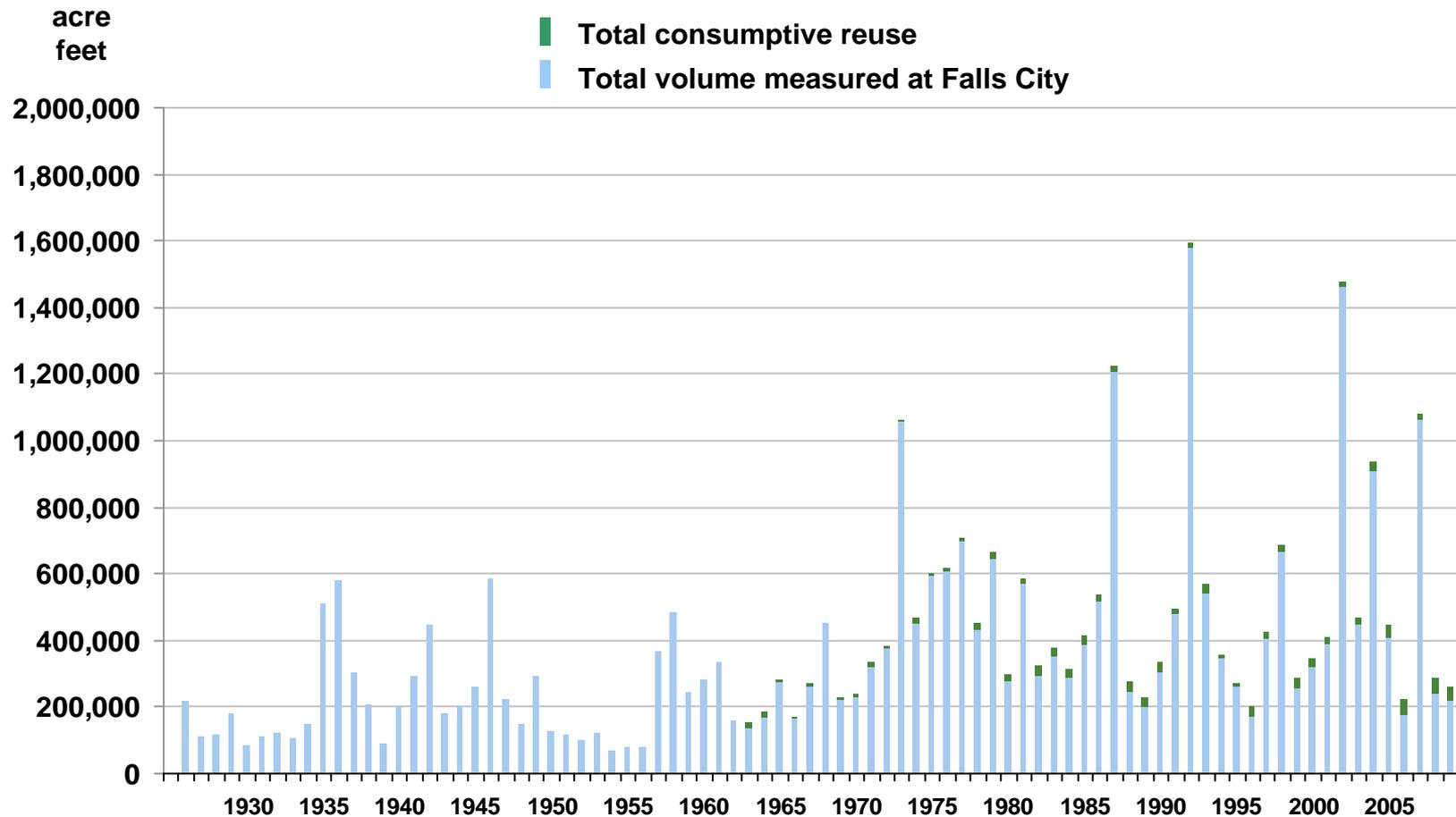
San Antonio River Flows at Falls City



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San Antonio River Flows at Falls City



Treatment in the 1980s

That was then.....

RIVER SEWAGE 'DEPLORABLE'

By RICHARD SMITH
STAFF WRITER

City officials say raw sewage being dumped into the San Antonio River can't be cleaned out in time to forestall a threatened lawsuit by the state, which calls the river's condition "deplorable."

The possible lawsuit is yet another problem plaguing the city stemming from its troubled sewer system.

The city also faces an investigation and possible lawsuit over the drowning death of a 12-year-old youngster who fell through an uncovered manhole while chasing a volleyball near Tafolla Middle School.

Charging the city with contaminating the San Antonio River with raw sewage to the point of causing fish kills, the Texas Department of Water Resources says it wants an explanation by Nov. 28.

TDWR wants to know why the city hasn't complied with orders to clean up the river.

TDWR Executive Director Charles Nemir said that information collected from city plants — particularly the Rilling Road Wastewater Treatment Plant — allege city facilities are dumping treated wastes into the river "with a quality approaching that of raw sewage."

Nov 10, 1983

State demands clean-up

He also charged the city with not keeping its promise, made Oct. 14, 1982 by City Council, to act in good faith to meet state clean-water standards.

A letter from Nemir zeroes in on the 60-year-old Rilling Road plant, citing mismanagement and unsound solid waste operations.

"In light of this information, I am seriously considering a staff recommendation to request the attorney general to institute legal action against the city for permit violations," Nemir stated in the letter, which was sent to Mayor Henry Cisneros and city councilmembers.

Monitoring

Nemir said the agency has been monitoring the city's sewerage treatment operations for several months and came to this opinion:

"These conditions and the deplorable condition of the San Antonio River has now led us to conclude the city has failed in its agreed-upon responsibilities regarding operation and maintenance of existing facilities," Nemir said.

"There's not enough time to comply," said City Councilwoman Helen

Dutmer, who is a member of wastewater treatment committees for both the city and the region.

She said steps are being taken by the city to obtain rights-of-way for the planned Dos Rios wastewater treatment plant at the junction of the Medina rivers.

"It takes time to equipment," Dutmer said. The plant could be 1986 and 1988.

However, another who asked not to the letter was a concocted by the to the federal go funds for the \$350

"The letter was expected. The city I show the feder; needs the funding, the official said.

Up to 80 percent funding for the project in the Reagan administration. Because of the had to consider a five-fold over the the project in order clean-water requi

By DAVID ANTHONY RICHELIEU
STAFF WRITER

The city of San Antonio may face fines of up to \$10,000 per day for spewing sewage into the San Antonio River from the Rilling Road treatment plant.

Frustrated and out of patience, directors of the San Antonio River Authority voted Wednesday to give notice that unless solutions are forthcoming, the river authority will haul the city into court.

The SARA deadline is Dec. 14, the date of next month's meeting.

River authority manager Fred Pfeiffer told the board that despite two previous letters to Mayor Henry Cisneros over the unacceptable effluent going downstream from the Rilling plant, the agency has yet to receive a formal reply.

The plant is already under fire from the Texas Department of Water Resources and the federal Environmental Protection Agency.

Residents downstream have re-

City may get in hot water over river pollution

SARA directors threaten legal action

in sewage battle

Nov 17, 1983

S.A.'s raw sewage angers neighbors

City could face stiff fines

ported recent fish kills believed to have been caused by the unacceptable pollution from the plant on city's South Side.

Angry board members from Karnes, Wilson and Bexar counties all pushed for legal action Wednesday, citing the months of silence and inaction by the city.

A report of a recent sampling done by the SARA environmental chief Hayes K. Galitski showed the Rilling Road plant is discharging five times more solid matter into the river than permitted. He added there is no evidence of anything being done to fix the plant or operate it properly.

The city's Leon Creek and Salado Creek plants are functioning within standards, he said.

Board member Truett Hunt of

Karnes County said, "It is incomprehensible that the city of San Antonio would spend millions of dollars to improve the conditions and appearance of the river within the city while discharging untreated sewage into the water flowing into Wilson and Karnes counties."

Board member Clifton McNeel of Bexar County called the city's treatment of downstream residents shocking. She added that if the river flowed the other direction and the polluted water was going through the downtown River Bend, the city would have cleaned it up long ago.

Hunt suggested the city be forced to move its proposed Applewhite surface water reservoir from the Medina River to the San Antonio River — placing the city's new source of

drinking water just below the malfunctioning Rilling plant.

After conferring with legal counsel Ralph Brown, Pfeiffer urged the board wait for the city's reply, due Nov. 28, to a Texas Department of Water Resources letter.

"Then, if the solutions are not immediate enough or satisfactory, we can seek injunctive relief in the courts," Pfeiffer said.

Brown told the board the law calls for fines of from \$1,000 to \$10,000 per day for unauthorized discharges.

In other action, the board:

• Authorized accepting the bid by Michael Construction Co. of Biloxi, Miss., to build a \$9.4 million marina, dam and other river channel improvements on Nueva Street.

Nov 17, 1983

San Antonio River IBI Rating

- 2002 to 2008: All IBI ratings over 50
- Nine pollution sensitive species found
- Four not previously collected in the Upper San Antonio River Watershed
- Indicates increased biodiversity attributed to continuing improvements in water quality and habitat



Mexican Stoneroller



Long-ear Perch



Log Perch



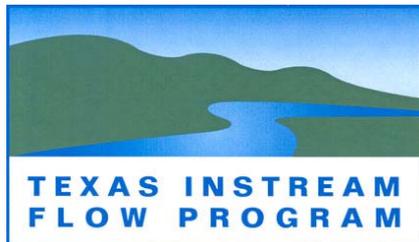


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