

Water Conservation Update

Dustan Compton
Regional Conservation Program Manager

Traci Peterson
Communications Coordinator



HISTORY & MISSION

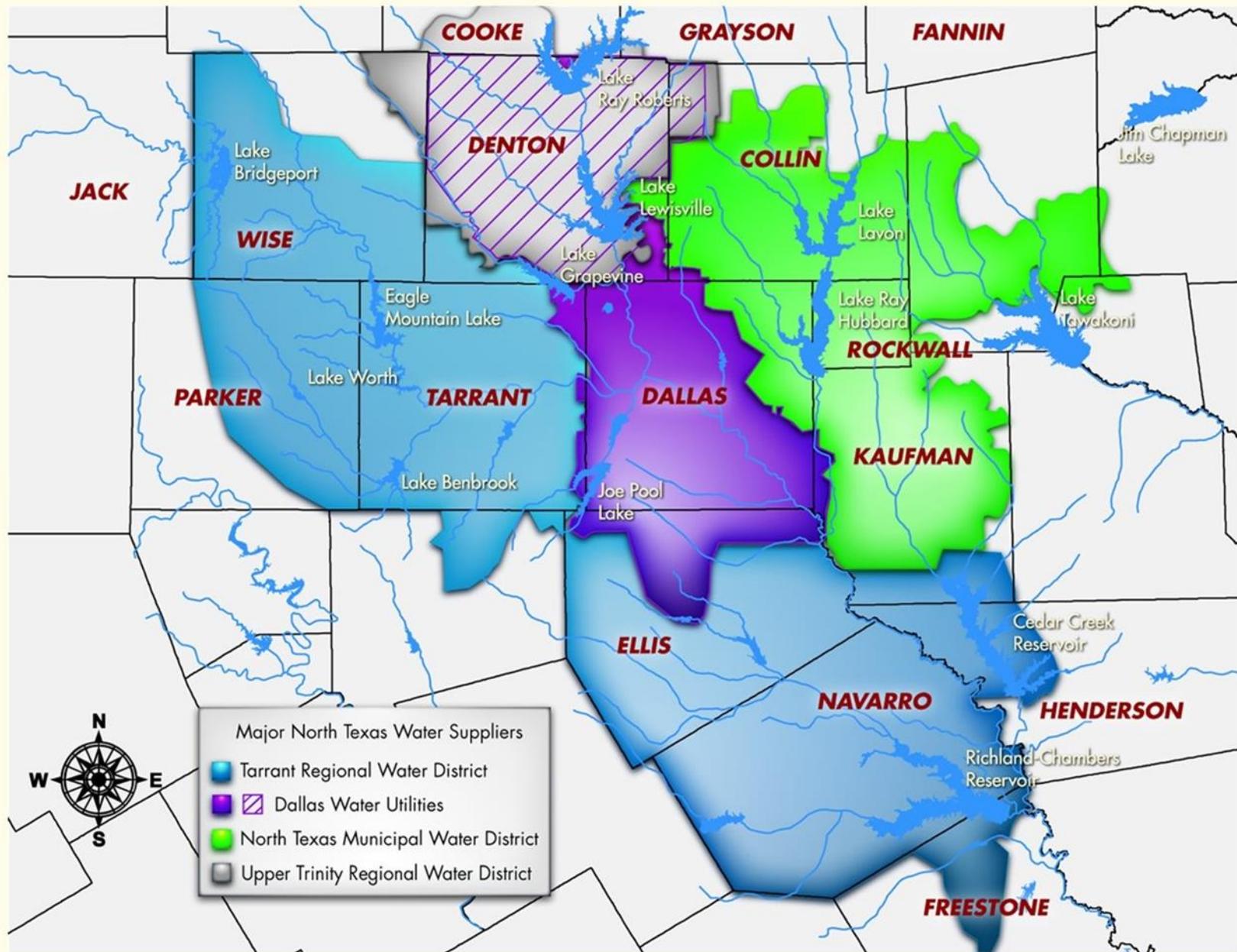


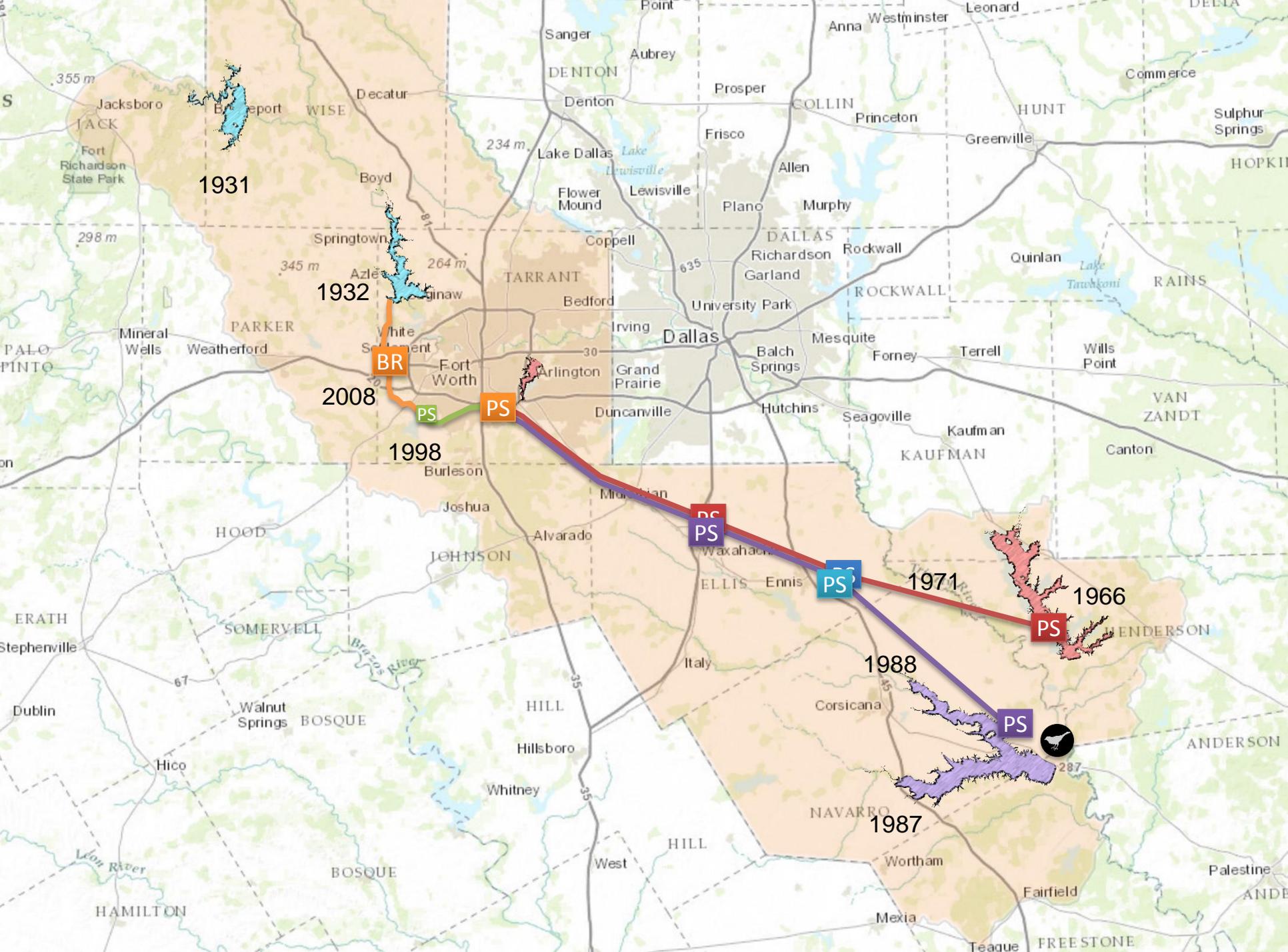
- Created in 1924 as a political subdivision of the State of Texas
- Two primary missions: Water supply and flood control
- District provides only raw, untreated surface water to its customers
- Led by publicly elected five-member board

HISTORY & MISSION



- Four primary customers:
 - Arlington
 - Fort Worth
 - Mansfield
 - Trinity River Authority
(Bedford, Colleyville, Euless,
Grapevine, North Richland Hills)
- Water provider to more than 70 cities in 11 counties:
Denton, Ellis, Freestone,
Henderson, Jack, Johnson,
Kaufman, Navarro, Parker,
Tarrant, and Wise





Lake Arlington

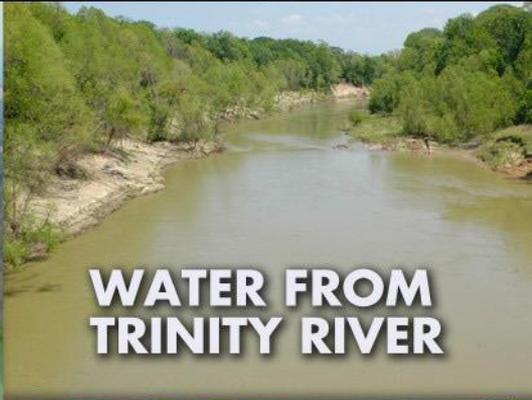
Holds about 16 billion gallons

Richland Chambers holds 370 billion gallons
Cedar Creek holds 210 billion gallons
Eagle Mountain holds 59 billion gallons
Benbrook holds 27 billion gallons

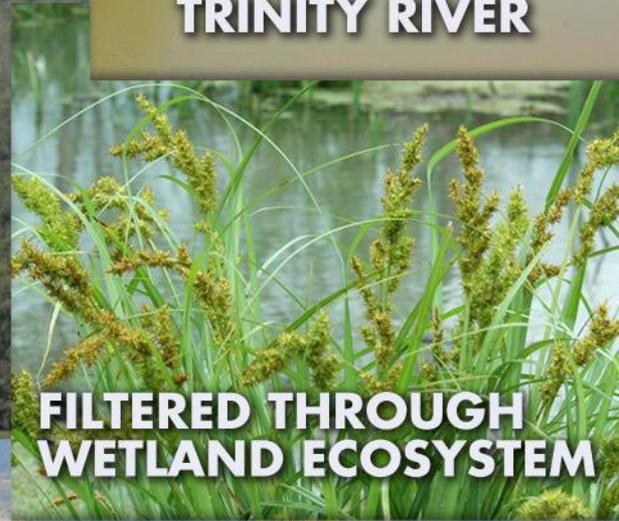


TRWD WETLANDS

George W. Shannon Wetlands Water Reuse Project



WATER FROM TRINITY RIVER



FILTERED THROUGH WETLAND ECOSYSTEM



DRAMATICALLY IMPROVES WATER QUALITY

TRWD POPULATION EXPECTED TO
DOUBLE IN THE NEXT 50 YEARS

Current Population

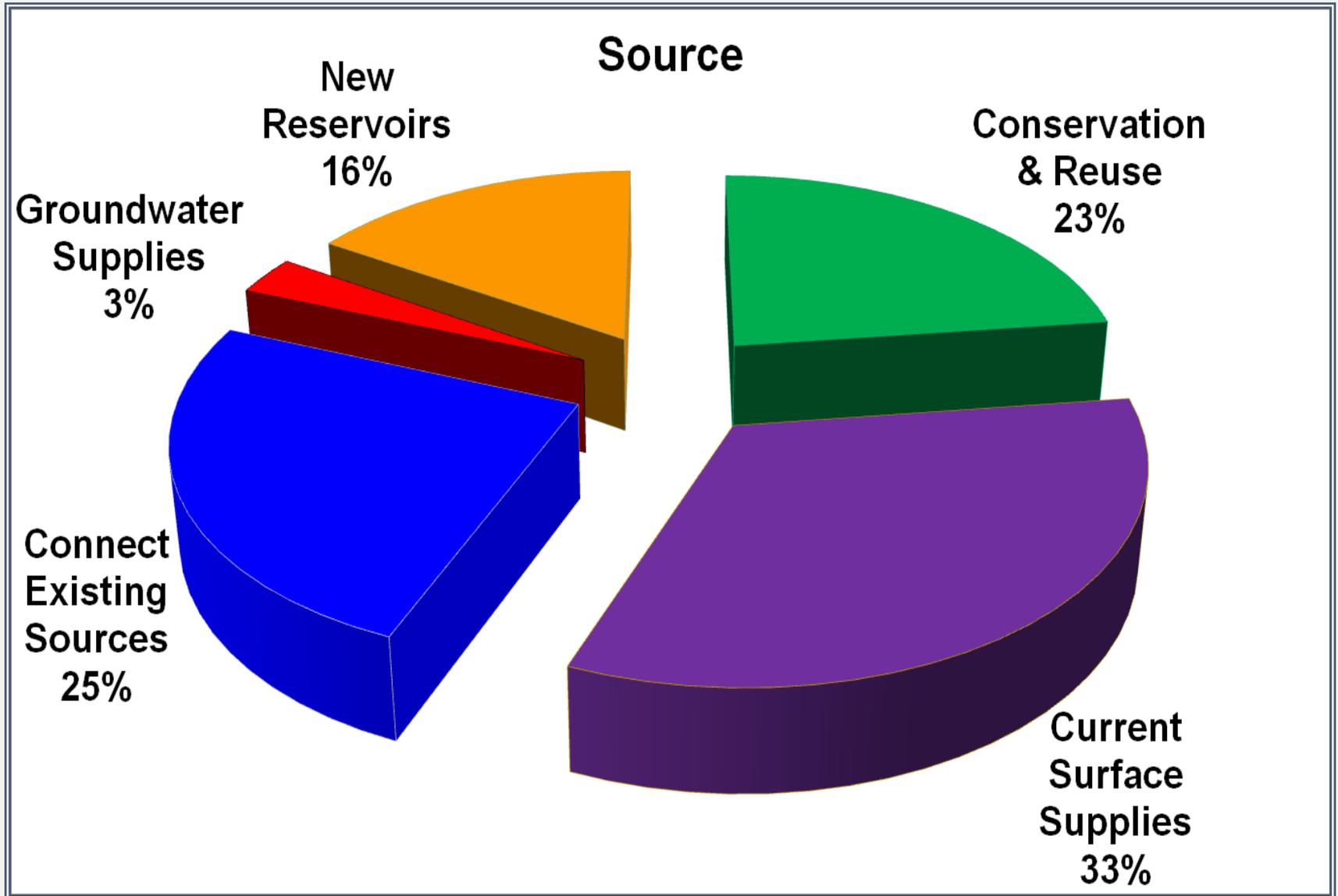
2060 Population



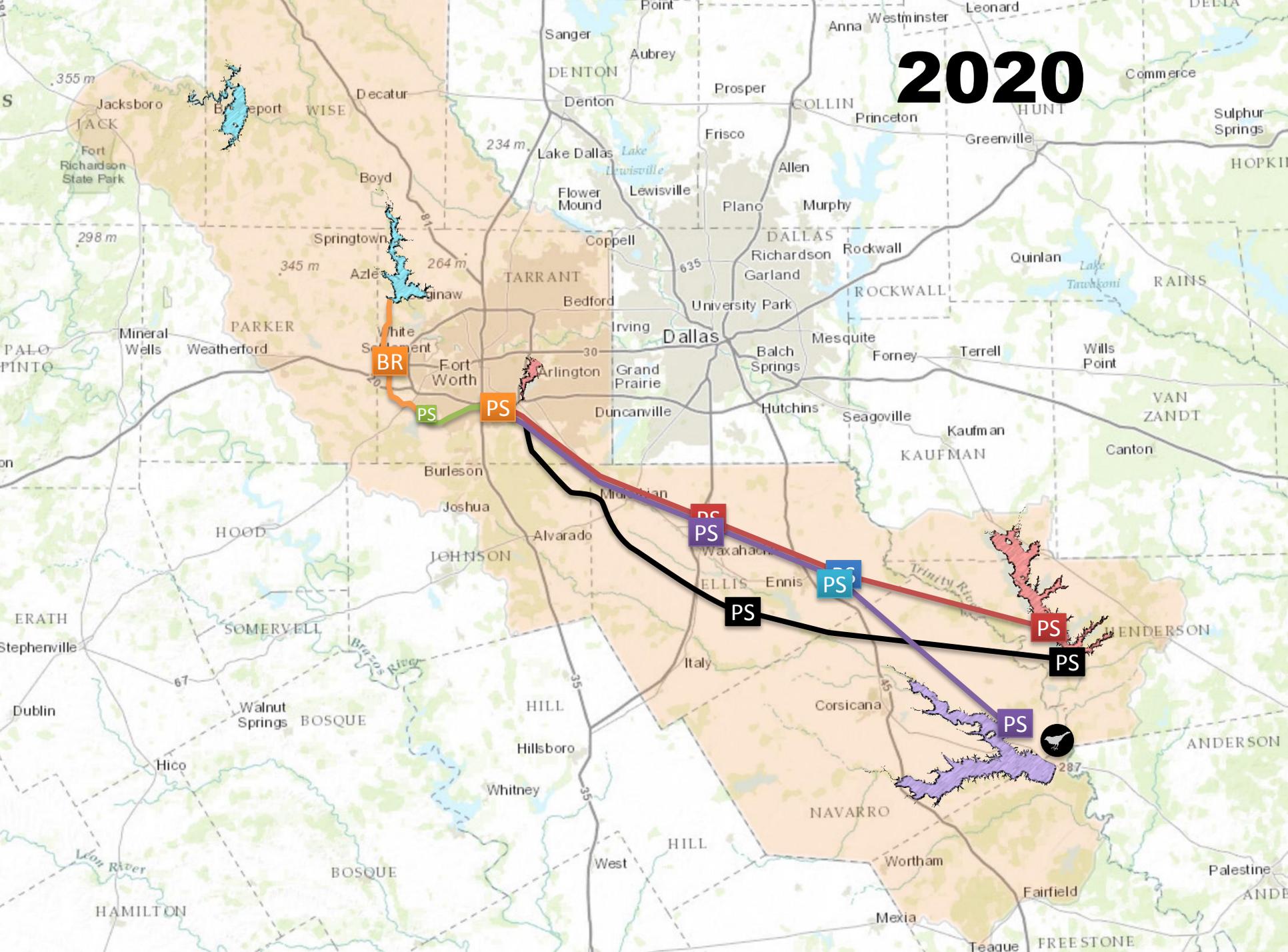
2.1
Million

4.3
Million

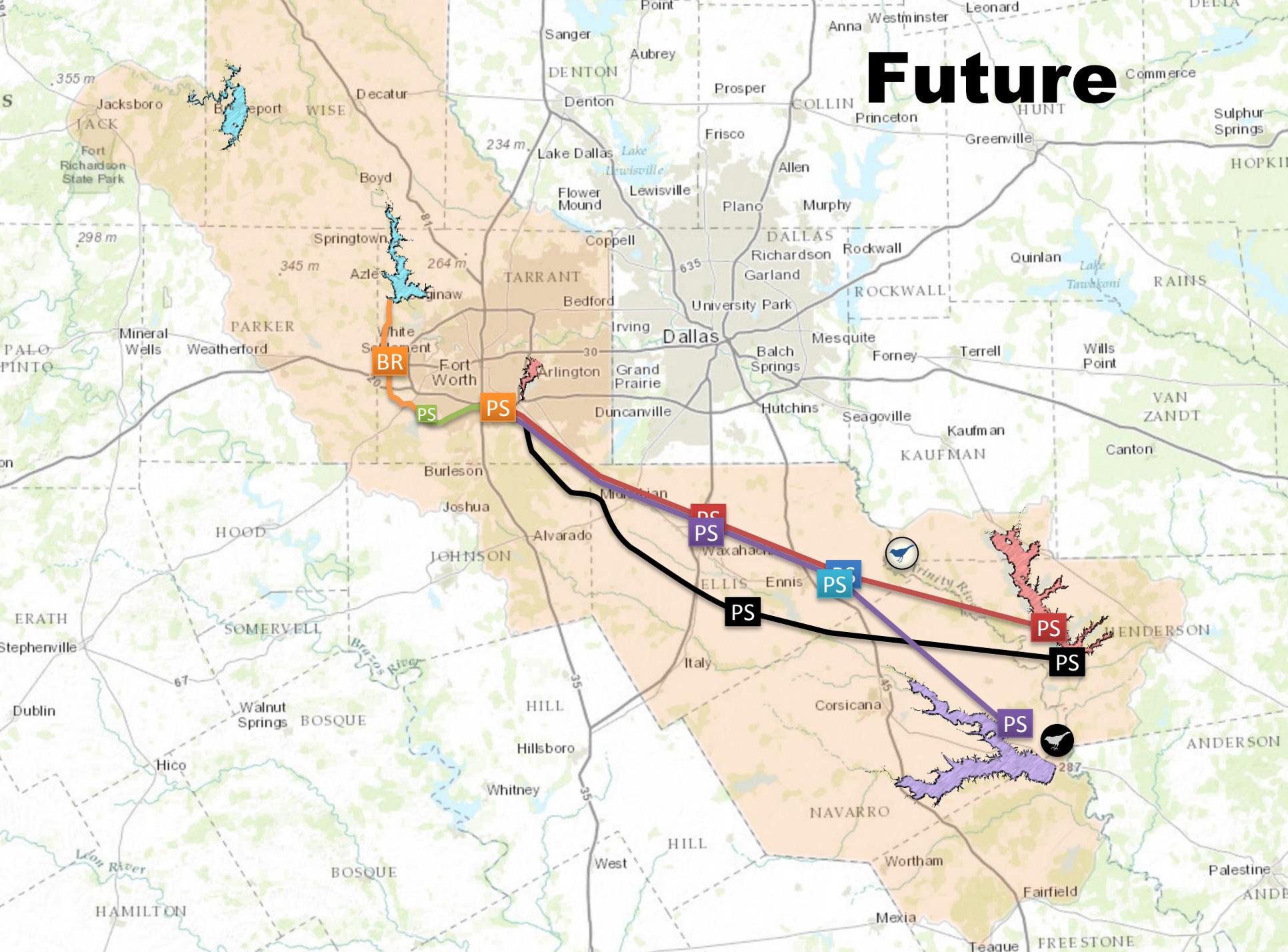
2060 Water Supply



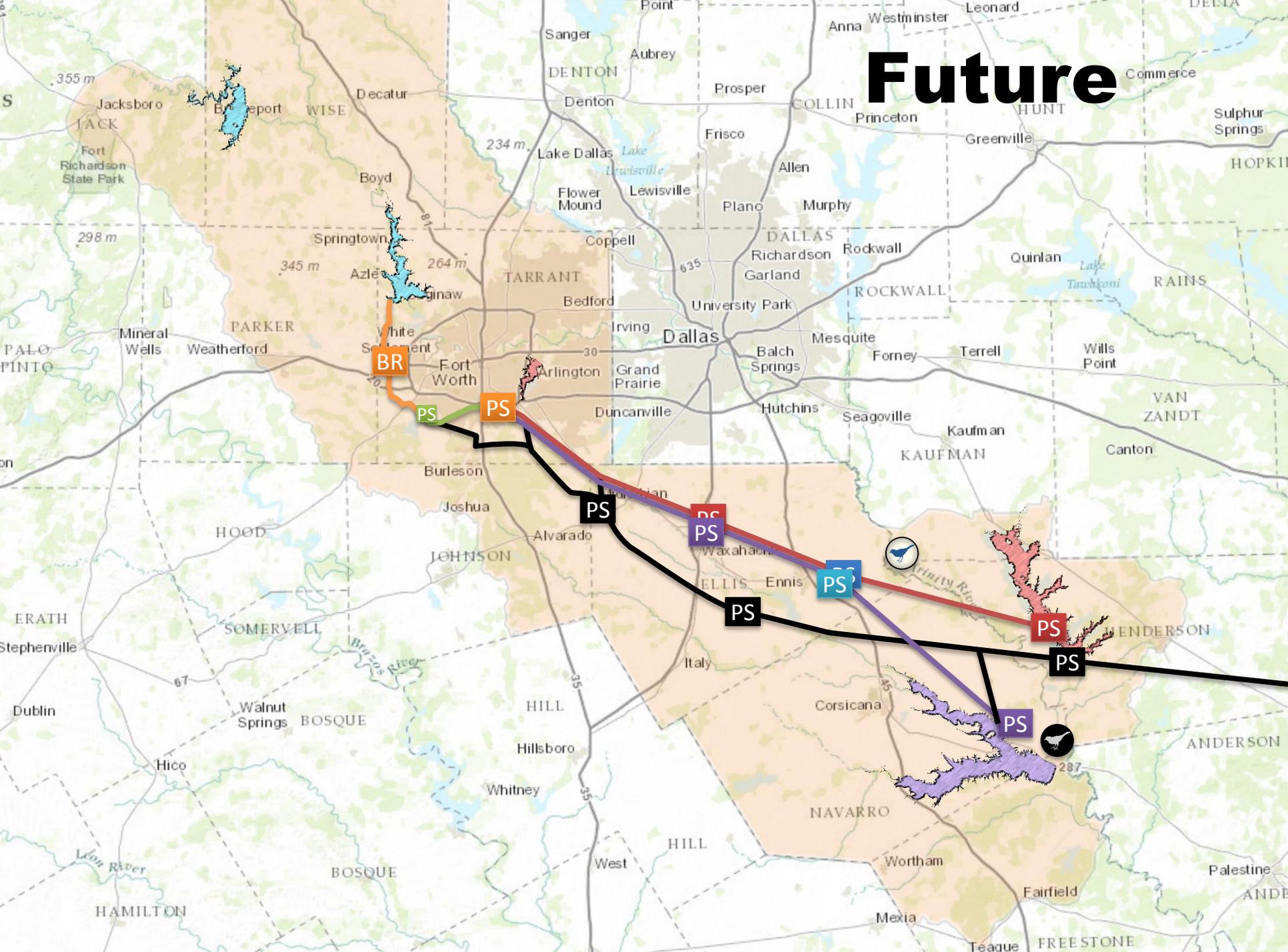
2020

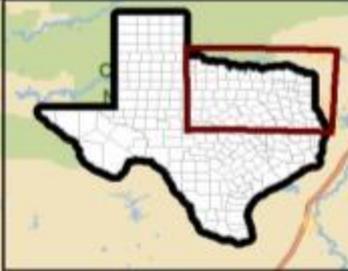


Future



Future



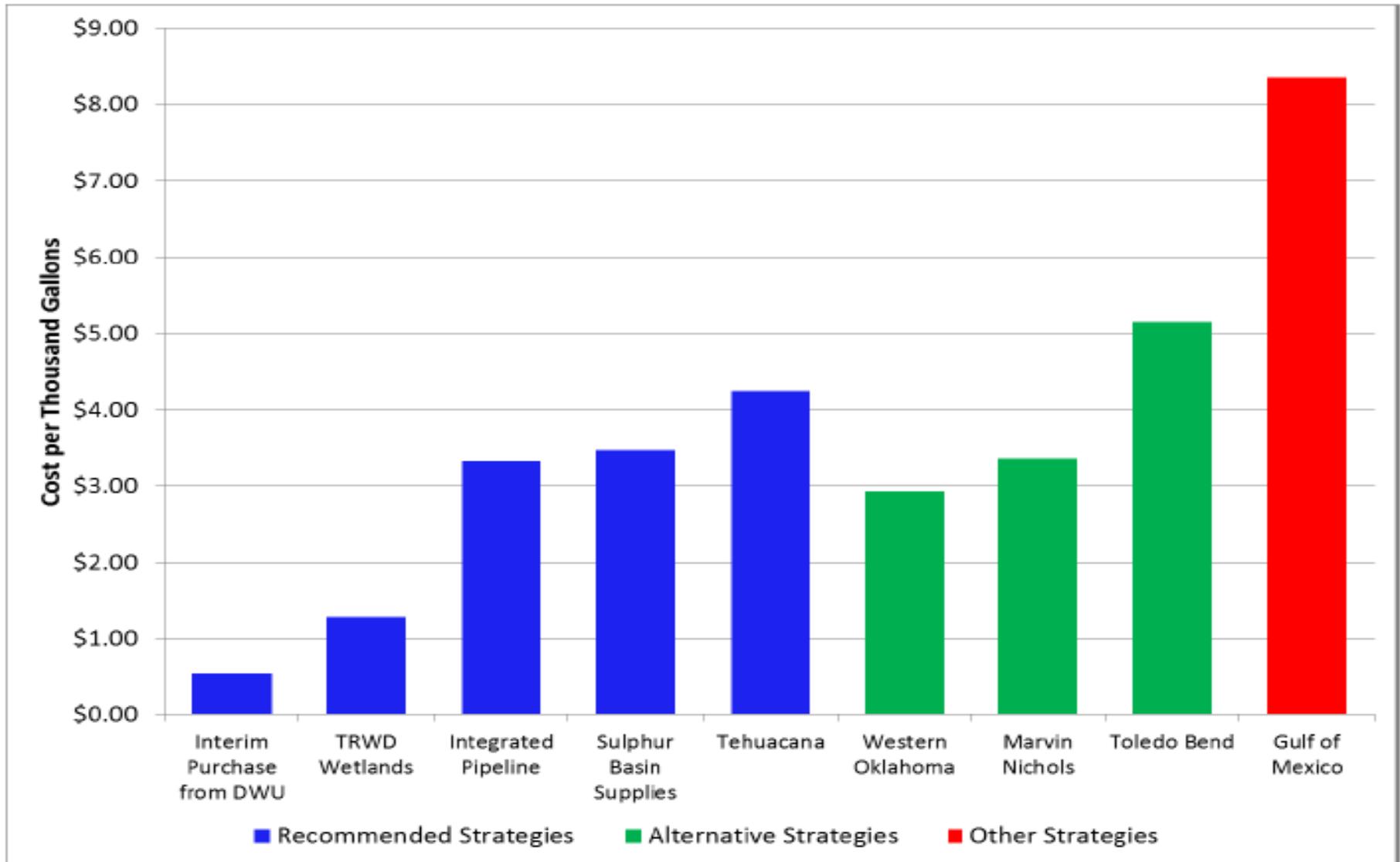


Existing Pipeline	Texoma to Bridgeport (with DWU - Blend)	Existing Reservoir	Overview Map
Marvin Nichols to Lake Bridgeport	Toledo Bend Option 1 (Similar to Current Reg. C Route)	Proposed Reservoir	
Kiamichi To Bridgeport	Wright Patman to Lake Bridgeport	Urban Areas	0 20 40 80 Miles
Columbia to Palestine		County Boundary	

Cost of Future Supply Alternatives

Save water.
Nothing can
replace it.

Unit Costs of Potentially Feasible Strategies for TRWD



THE ISSUE:

CONSERVATION AS A WATER SUPPLY STRATEGY

extends the life of existing supplies

meets the needs of growing population

delays need for expensive new supplies

makes more water available during drought

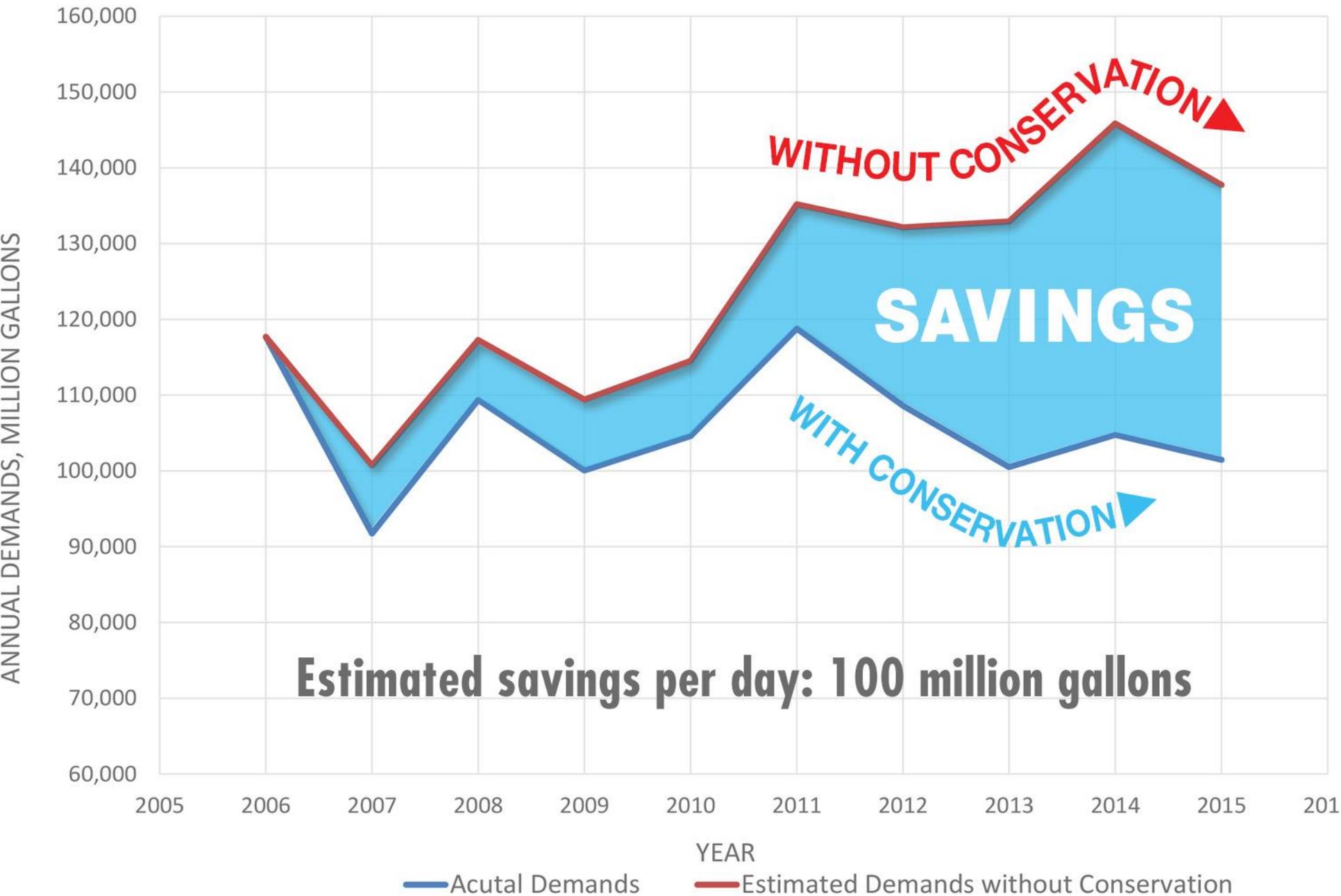
reduces peak demands

least expensive water supply strategy

Water Conservation Plan

- Water Conservation Plan
 - Required to be updated every 5 years
- Purpose
 - Identify water conservation goals and practices that will protect long-term water supplies
- Plan Requirements
 - Provide accurate and universal metering
 - Control water loss
 - Public education and information program
 - Adopt a conservation oriented water rate structure

CONSERVATION SAVINGS 2006 - 2015



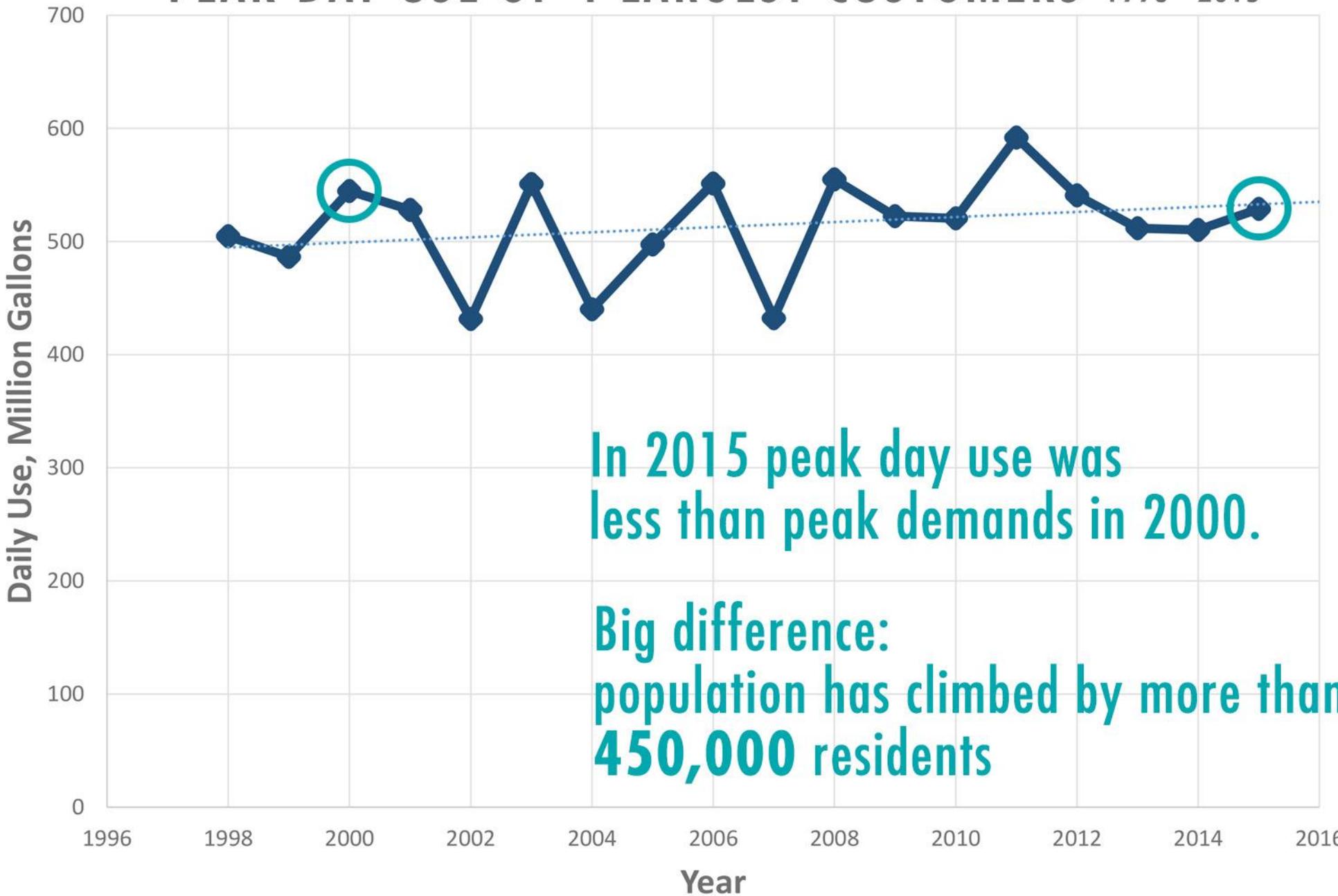
100

MILLION GALLONS PER DAY
COULD SUPPORT...

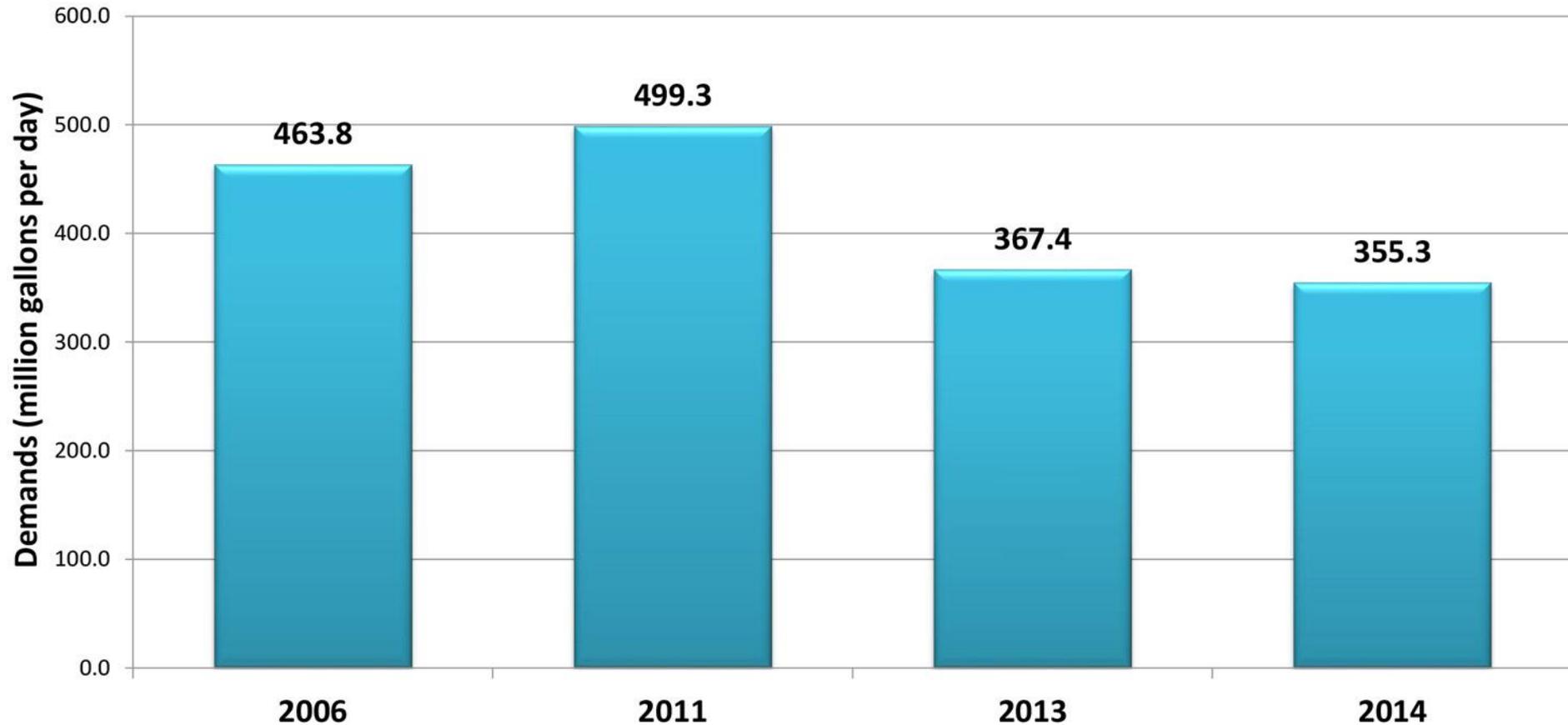
550,000 additional residents



PEAK DAY USE OF 4 LARGEST CUSTOMERS 1998 - 2015



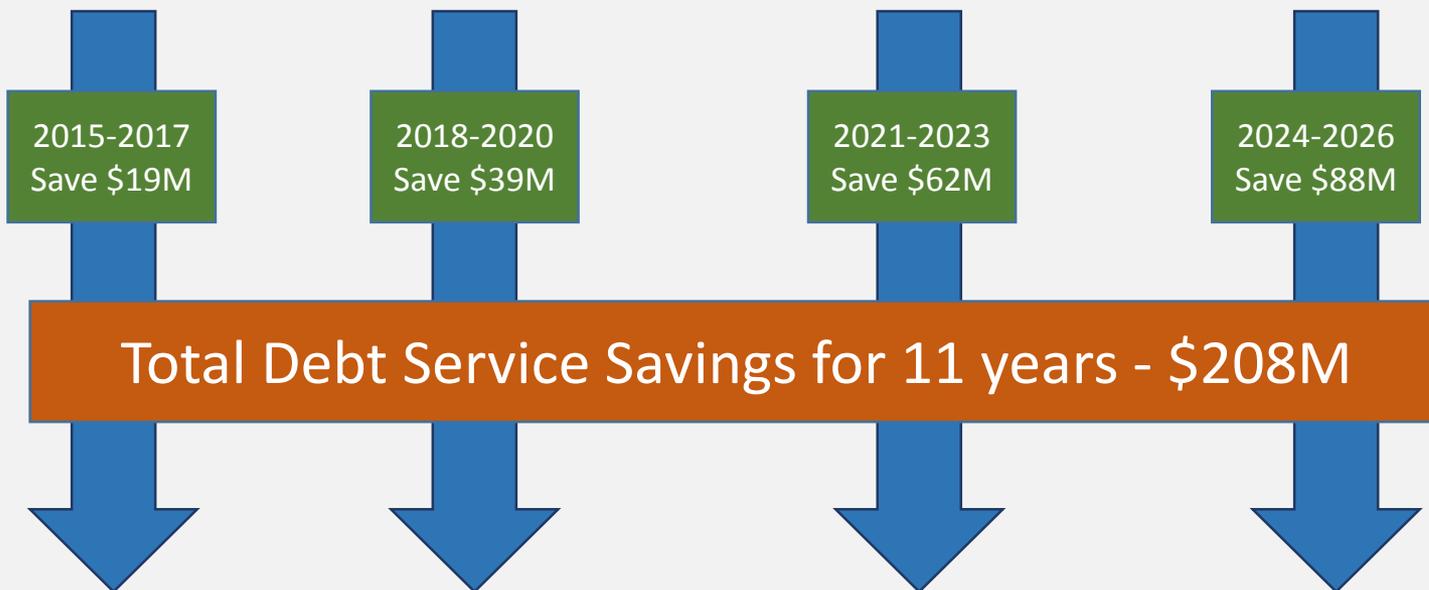
Average Summer Demands, June - Aug. Drought Years

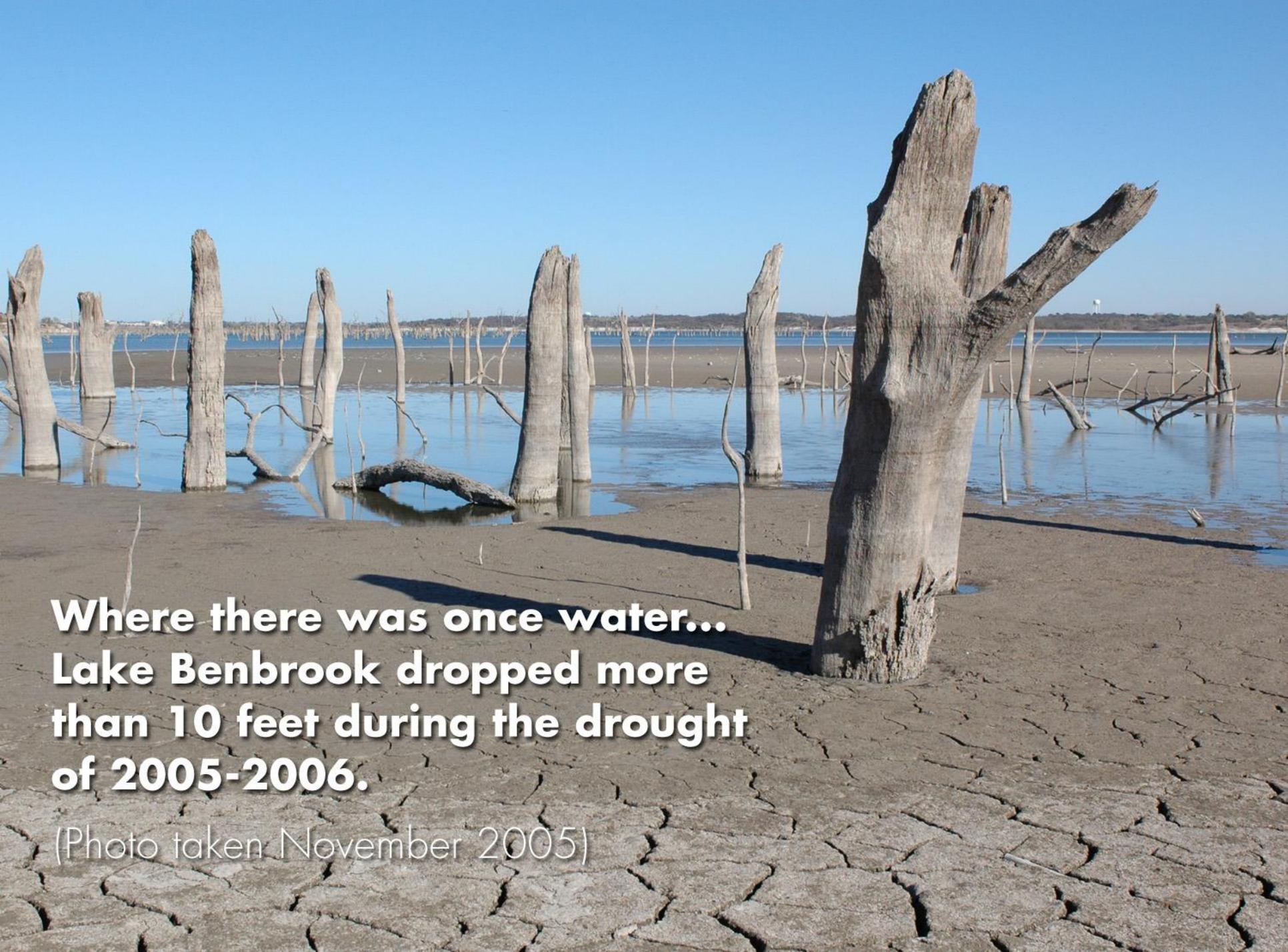


- **Twice per week restrictions are effective**
- **Accounts for an 8-10 percent decrease in overall demands.**
- **Daily demands lower despite increase in population of 130,000 residents since 2006.**

Reduced Demands Delay Costly Capital Expansion

Debt Service Saved by delaying sections of the IPL to match Projected Demands





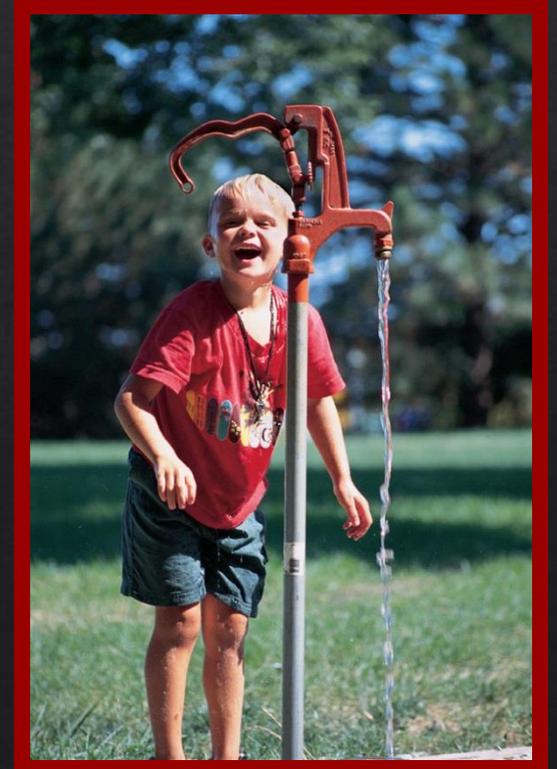
**Where there was once water...
Lake Benbrook dropped more
than 10 feet during the drought
of 2005-2006.**

(Photo taken November 2005)

Communicating the Value of Water

Only Tap Water Delivers

- Public Health Protection
- Fire Protection
- Support for the Economy
- Quality of Life





WATER IS AWESOME.
USE IT. ENJOY IT. JUST DON'T WASTE IT.



WATER IS AWESOME.

WaterIsAwesome.com



DON'T WASTE IT.



WATER IS AWESOME.

WaterIsAwesome.com



DON'T WASTE IT.



Water is
Awesome

@waterisawesome

Home

About

Photos

Likes

Videos

Posts



Water is Awesome

August 19 at 7:23am · 🌐

Even before they can talk, they know: Water is awesome. Check out WaterIsAwesome.com to learn more about ways to save the awesomeness.



👍 Like

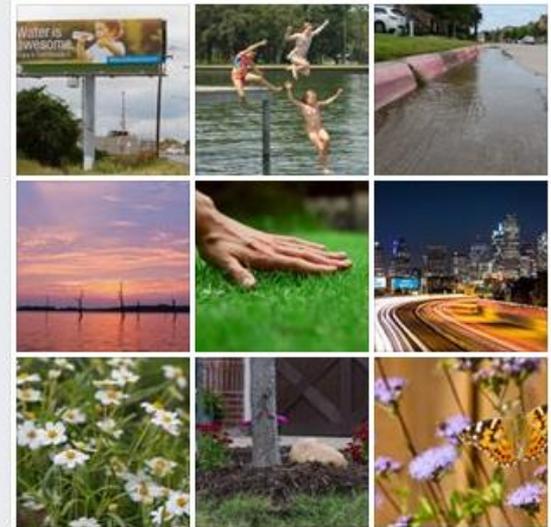
💬 Comment

➦ Share

🔍 Water is awesome. Don't waste it.

🌐 <http://WaterIsAwesome.com/>

PHOTOS



VISITOR POSTS



Water is both abundant and rare.

We are surrounded by it, as it makes up 70 percent of our planet. Yet less than 1 percent of that water — all the water from our lakes, streams, and rivers — is fresh. And without it, we would cease to exist.

WATER IS AWESOME.

Use it. Enjoy it. Just don't waste it.





**OUTDOOR WATER
SAVING TIPS**



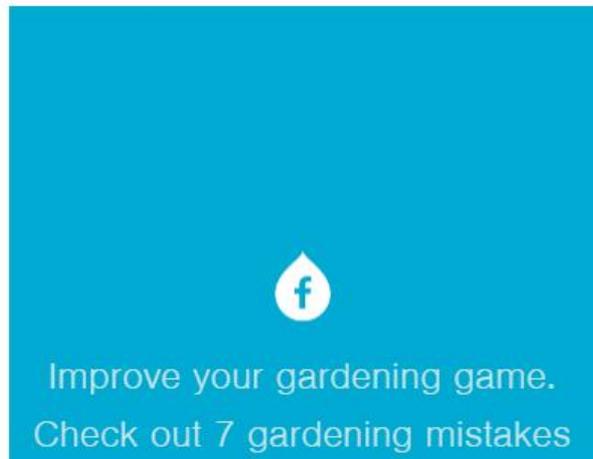
**NATIVE AND
ADAPTIVE PLANTS**



**WEEKLY WATERING
ADVICE**



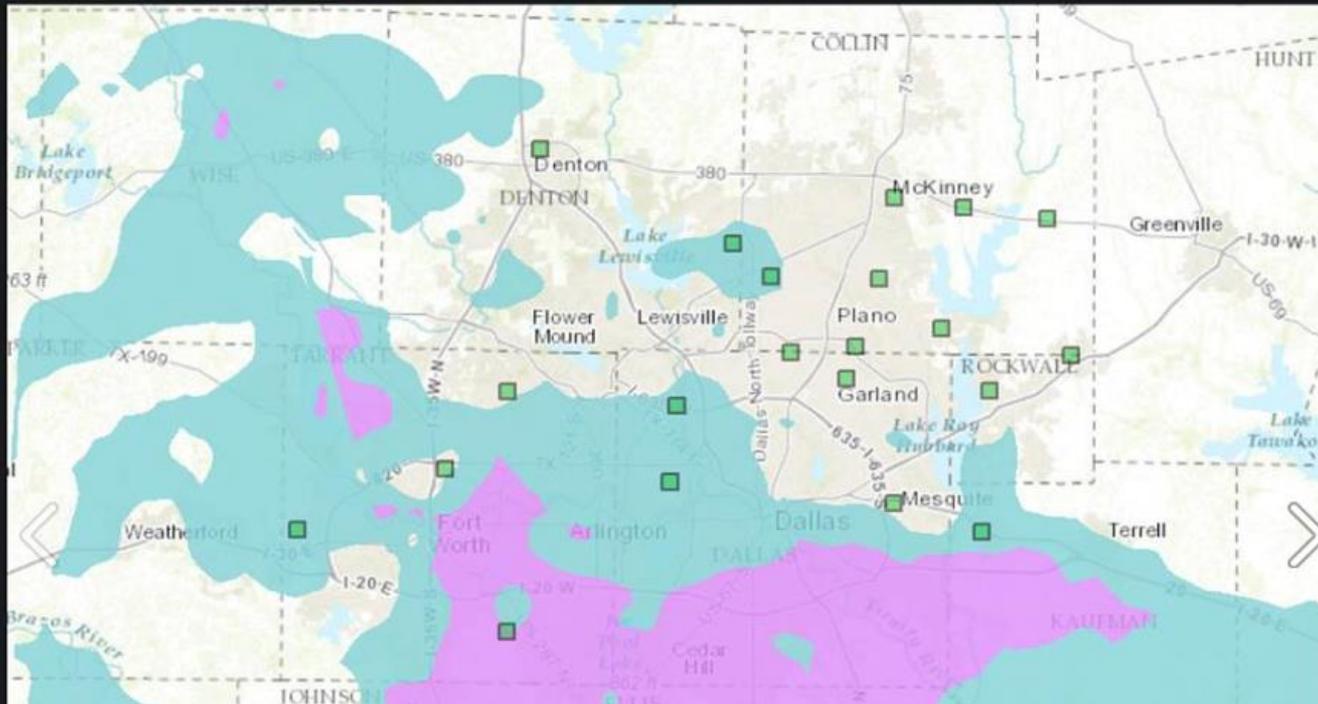
**7 WORST
GARDENING MISTAKES**



Improve your gardening game.
Check out 7 gardening mistakes

WEEKLY WATERING ADVICE SEPTEMBER 19-25

■ 0.75 INCHES ■ 0.50 INCHES ■ 0.25 INCHES ■ NO WATERING



Average total run times for applying 0.25" of water based on sprinkler type, along with suggestions for breaking up your irrigation cycles to minimize runoff:

Spray head zones:
12 minutes total per station
(two 6-minute cycles)

Rotor zones:
24 minutes total per station
(two 12-minute cycles)

Multi-stream zones:
26 minutes total per station

City of Arlington



- Population: ~370,115 – ~428,000 Buildout
- Land Area: 99.5 square miles
- Visitors to Arlington: 14 million in 2015
- Number of Water Treatment Plants: 2
 - Total treatment system capacity: 174.11 MGD
- Miles of Distribution Pipe: 1,531
- Annual Gallons Billed Consumption: ~18.5 billion

Paying for Service

Water

Usage (1,000 gallons)	Rate
0 – 2	\$2.02
3 – 10	\$2.79
11 – 15	\$4.02
16 – 29	\$4.79
≥ 30	\$5.94

Sewer

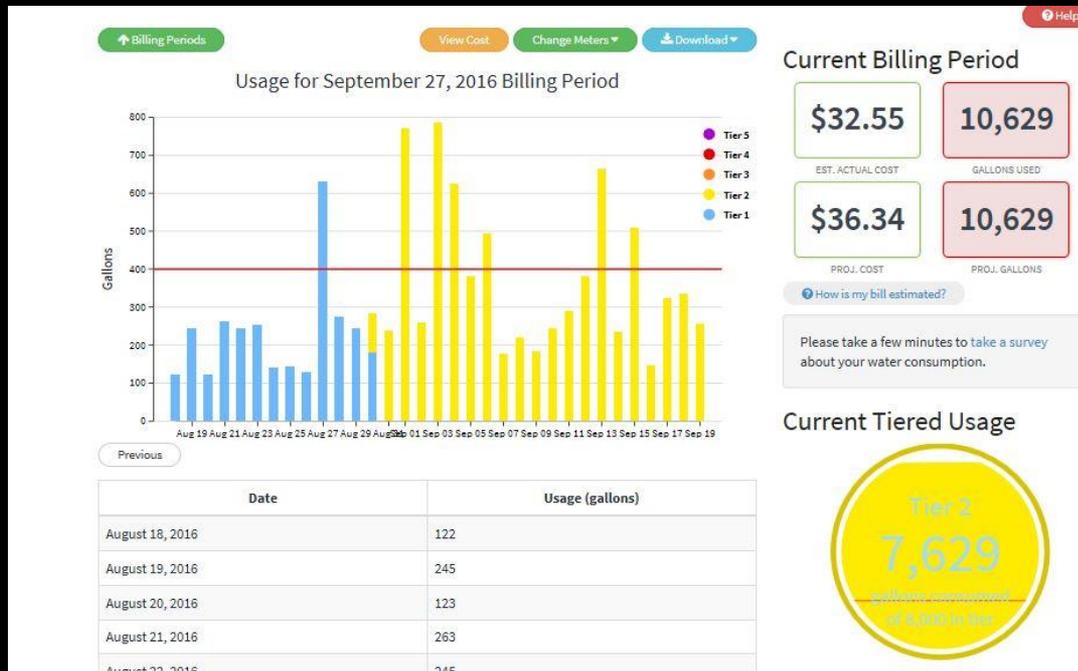
Usage (1,000 gallons)	Rate
All Usage	\$4.18

Fixed Fees

Usage (1,000 gallons)	Rate
¾” Meter (>2,000 gal)	\$9.00 water & \$9.90 sewer

Arlington Water Utilities New Technology & Programs

- Investments in Automated Metering Infrastructure
- Pro-Active Leak Detection
- Valve Operations



Arlington Water Utilities Conservation Initiatives

- Sprinklers prohibited between 10 am & 6 pm year round
- Promotion of water efficient fixtures
- Education outreach with WaterWise program at AISD
 - In 2015-16, Arlington and TRWD program reached 737 fifth-graders
- Water efficient landscape classes with Tarrant County Master Gardeners



Arlington Water Utilities Online Presence

- www.SaveArlingtonWater.com
- www.arlingtontx.gov/water
- www.facebook.com/arlingtonwater
- <https://twitter.com/ArlingtonWater>
- www.myarlingtontx.com
- Ask Arlington App
 - Easily connect any concerns to the city and track progress
 - Ex. water leaks



Contact Information

- Traci Peterson, Arlington Water Utilities
 - Traci.Peterson@arlingtontx.gov
- Dustan Compton, Tarrant Regional Water District
 - dustan.compton@trwd.com