

Created in 1924

Five board members

## HISTORY & MISSION



- Tarrant Regional Water District was created in 1924 as a political subdivision of the State of Texas
- Two primary missions: Water supply and flood control
- District provides surface water to its customers
- Led by publicly elected fivemember board

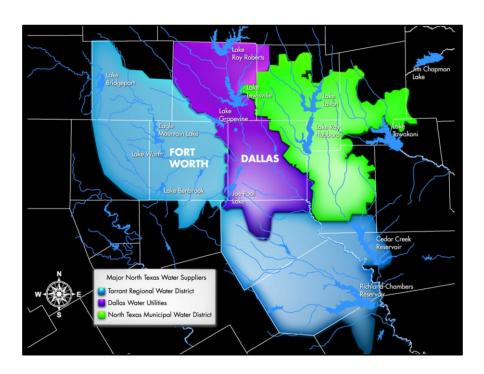
### WATER SUPPLIES



- Raw water supplier
- Serve the water needs of nearly two million people across 11 counties – most in Tarrant
- Fort Worth, Arlington, Mansfield, and Trinity River Authority
- Four major reservoirs:
  - Lake Bridgeport
  - · Eagle Mountain Lake
  - · Cedar Creek Reservoir
  - Richland-Chambers Reservoir
- About 75% of our water supplies come from East Texas

Tarrant Regional Water District is a wholesale raw water supplier that serves more than 70 communities across 11 counties.

Our primary customers are Arlington, Fort Worth, Mansfield and the Trinity River Authority (which serves the mid-cities area)

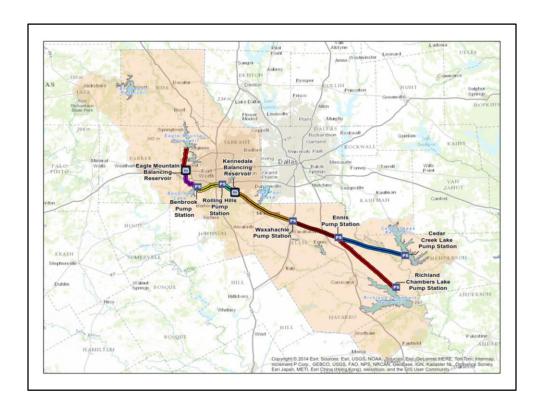


Supply 2 million people in 11 Counties and 70 Cities

Reservoirs that are part of our system:

Bridgeport
Eagle Mountain
Cedar Creek
Richland-Chambers

Terminal Storage: Benbrook Arlington



The TRWD water supply system includes seven reservoirs: Lake Bridgeport, Eagle Mountain Lake, and Lake Worth on the West Fork of the Trinity River.

Most of our water is supplied by two reservoirs to the southeast: Cedar Creek and Richland-Chambers.

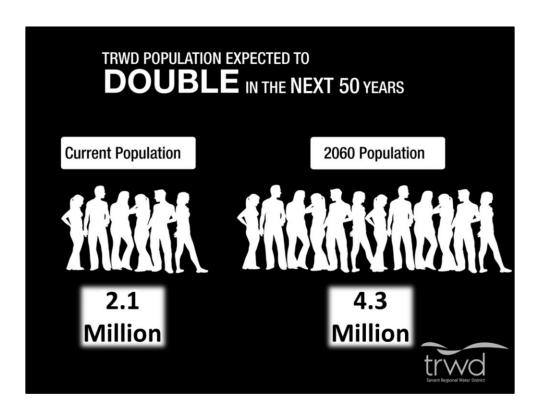
And we use two others for terminal storage: Lake Benbrook and Lake Arlington.

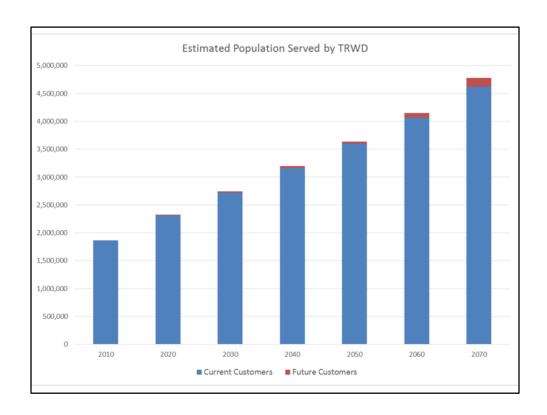
TRWD provides water to nearly two million people – takes tremendous energy to move that water from East Texas through huge pipelines and several pump stations to Tarrant County... (next slide)

THE ISSUE:

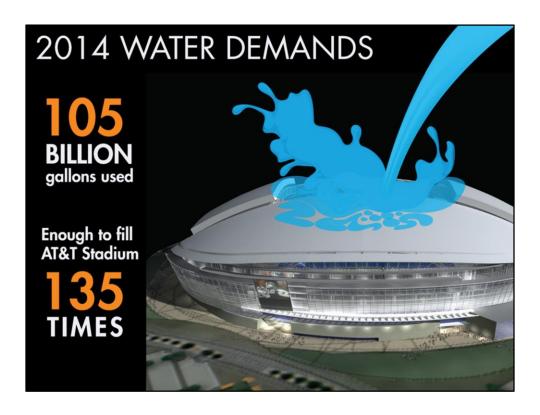
# CONSERVATION AS A WATER SUPPLY STRATEGY

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





Population continues to increase, projections are to double



2014 water use among primary customers in Tarrant County.



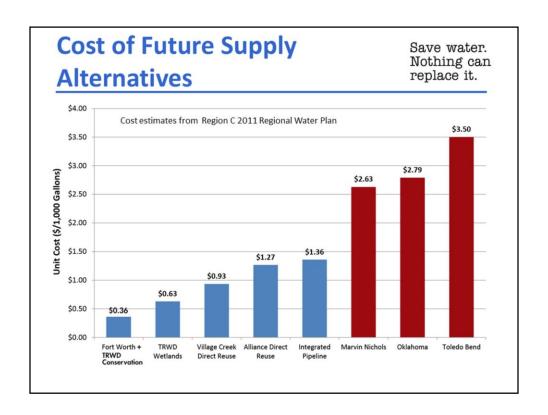
Factors contributing to water savings:

Public education and outreach campaign.

10 AM TO 6 PM water restrictions

2x per week watering schedule

Fort Worth made this a permanent measure in Spring 2014, several other cities have followed suit



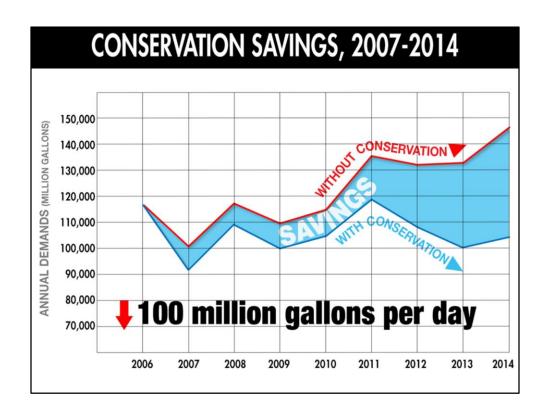
This chart is based on Region C 2011 study. The projects in red are the next big water supply projects on the books.

They are not cheap. Toledo bend is a \$2.7 billion water supply project...

The increases we're seeing in water efficiency – are allowing us to postpone those projects for a decade or more... (next slide).

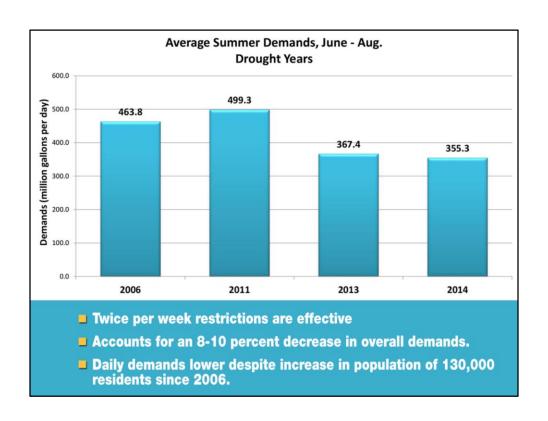
### CONSERVATION OVERVIEW

Putting the savings into perspective



Since getting serious about our water conservation program in 2007, we are seeing the results:

The estimated savings of our conservation efforts – that includes the implementation of 10 to 6 watering restrictions, a huge public education and outreach campaign, tiered pricing among most of our customers (the more you use, the more you pay), twice per week limitations on outdoor watering and other strategies – is adding up.

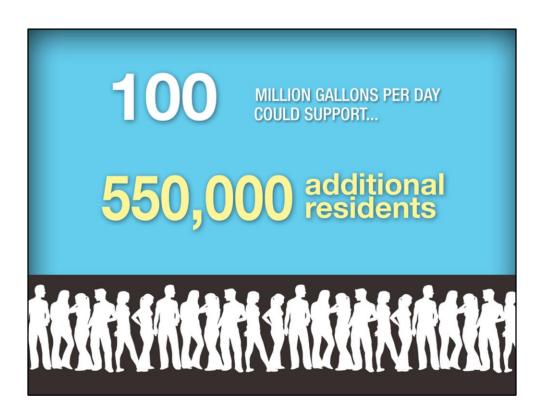


#### Key observations -

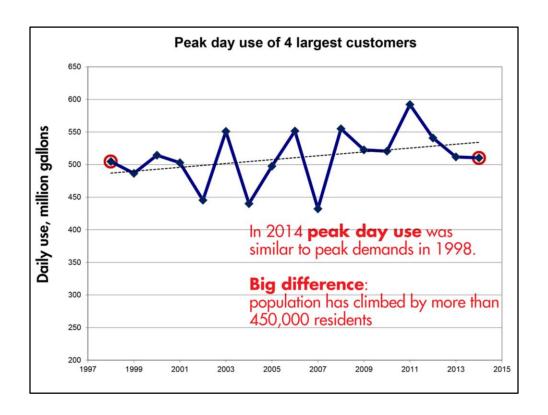
Twice per week restrictions work.

They accounted for an 8 to 10 percent decrease in overall demands.

And summer demands last year were lower than previous drought years, despite an increase in population of 120,000 since 2006.



The average daily savings amounts to about 100 million gallons per day. What does that mean to you and me? It means based on current demand trends, we could support an additional 550,000 residents on today's supplies. It helps delay the need to build expensive new supplies to meet new demands... (next slide)



Peak day use – it's a measure of the highest volume of water demands on a given day during the year.

Here you see that peak day use in 2014 was 35 million gallons less than what we used on the peak day of 1998.

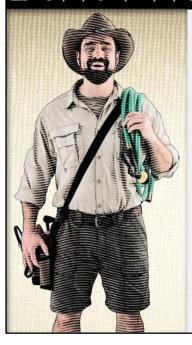
Big difference – population climbed by more than 400,000 residents during that 16-year stretch.

Why important? Water utilities plan their treatment plant expansions to meet peak day water use.

Lower peak demands takes the pressure off – and gives utilities the ability to delay increasing treatment capacity.

It means lower water bills for you and me.

### LAWN WHISPERER



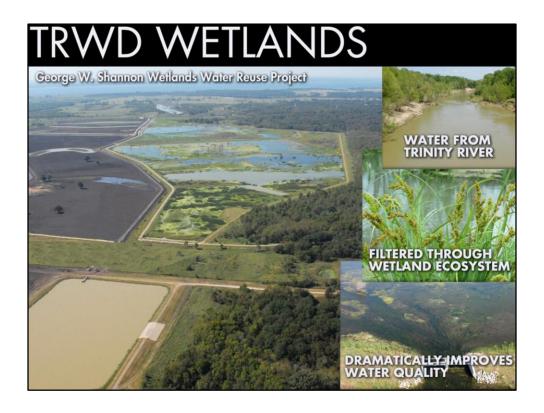
- Regional outreach campaign with Dallas Water since 2007
- Coordinate advertising efforts and share costs

   helps us get twice the advertising for our dollars
- Lawn Whisperer introduced in 2011
- Twice per week or less watering is the key message
- Television, radio, billboards, newspaper, and social media – he has more than 5,000 friends on Facebook. Are you one of them?
- Weekly watering advice every Monday on Facebook

### trwd wetlands



- Makes use of return flows in the Trinity River to supplement supplies in Richland-Chambers and Cedar Creek Reservoirs
- Total yield will be more than the yield of the West Fork Reservoirs (Lake Bridgeport and Eagle Mountain)
- · Sustainable/available supply
- Wetlands used as a natural treatment system to clean the river water so it can be added to reservoirs without degrading water quality.
- Partnership with Texas Parks and Wildlife Department
- Creates prime wetland habitat. An ideal spot for bird watching and educational excursions.



2000-acre wetlands facility at Richland-Chambers

Currently recycling 60 MGD a day and adding back to our water supply

Plans call for building an additional 2000 acres of wetlands at Cedar Creek

Total capacity of recycled water will be 175,000 acre feet, which is more than the yield of R-C, which is our largest reservoir

Once completed, wetlands will allow us to serve an additional 1 million people.

The savings from water conservation allows us to serve an additional 500,000.

These new sources of water can meet needs of 1.5 million more people in our service area

### Water Quality



- Watershed protection programs: Eagle Mountain Lake, Cedar Creek and Richland-Chambers Reservoirs
- Working with Texas AgriLife and local sponsoring groups
- Identified areas in watersheds that are contributing the most runoff of nutrients and sediments
- Identified most cost effective best management practices for implementation – agriculture and urban
- Lake Benbrook: addressing impacts associated with rapid urbanization and waste water treatment plant discharge in the watershed and reservoir



### REVERSE LITTER





- Regional anti-litter awareness and educational campaign for North Texas
- TRWD, Dallas, Fort Worth, and Denton. More to come...
- Reverse the litter trail to protect our waterways and drinking water supplies
- Ten on Tuesdays: encourages individuals and groups to pick up 10 pieces of trash on Tuesdays. If 5,000 people got involved we would remove 2.6 million pieces of litter from washing into our creeks, rivers and lakes in a year's time
- Look for the message on billboards, buses, television, and at gas stations. Learn more on our Web site and Facebook page



