



# Parker-Wise County Study

## Region C Water Planning Group

August 28, 2008  
Freese and Nichols, Inc.

# Parker-Wise County Study

## Agenda

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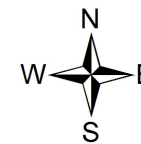
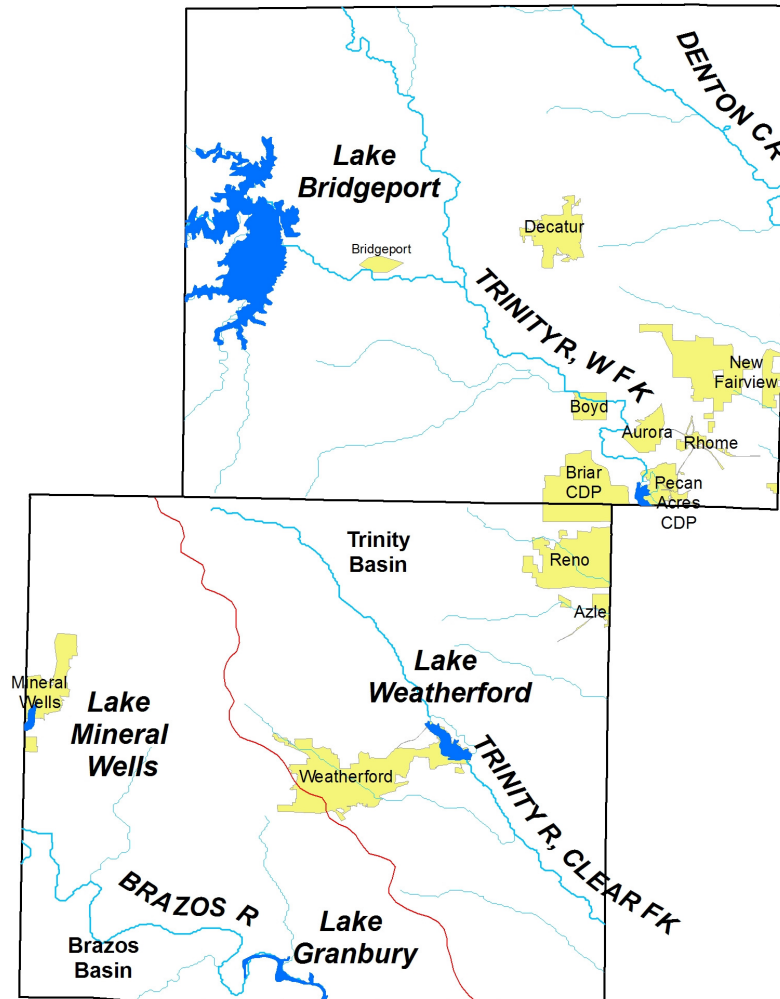
- Background Information
- Population and Demand Projections
- Summary by Water User Group
- Summary by Wholesale Water Provider
- Input from Water Providers
- Public Comments

# Parker-Wise County Study Overview

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- Study Period – 2010 to 2030
- Study Area – Parker County and Wise County
- Reasons for the Study
  - NCTCOG population projections for Parker and Wise Counties were much higher than projections in the *2006 Region C Water Plan*
  - Changes in preferred water management strategies

# Parker-Wise County Study Area



# Parker-Wise County Study

## Basic Steps Taken for the Study

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- Met with or Surveyed Water User Groups (WUGs) in the Study Area
- Reviewed Recent Population and Water Use Data
- Developed Population Projections, Per Capita Water Use, and Demand Values
- Revised Water Management Strategies to Meet Projected Demands
- Updated Cost Estimates for Water Management Strategies

# Parker-Wise County Study

## Draft Report

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- Water User Groups with Increased Population Projections
  - Aledo
  - Alvord
  - Aurora
  - Boyd
  - Decatur
  - Walnut Creek SUD
  - Weatherford
  - West Wise SUD (2020 & 2030 Projections)

# Parker-Wise County Study

## Draft Report

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- Water User Groups with Decreased Population Projections
  - Hudson Oaks
  - Rhome
  - Runaway Bay
  - Willow Park

# Parker-Wise County Study

## Draft Report

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- Water User Groups with No Change to Population Projections
  - Annetta
  - Annetta South
  - Azle
  - Bolivar WSC
  - Bridgeport
  - Chico
  - Community WSC
  - Mineral Wells
  - New Fairview
  - Newark
  - Parker County-Other
  - Reno
  - Springtown
  - Wise County Other

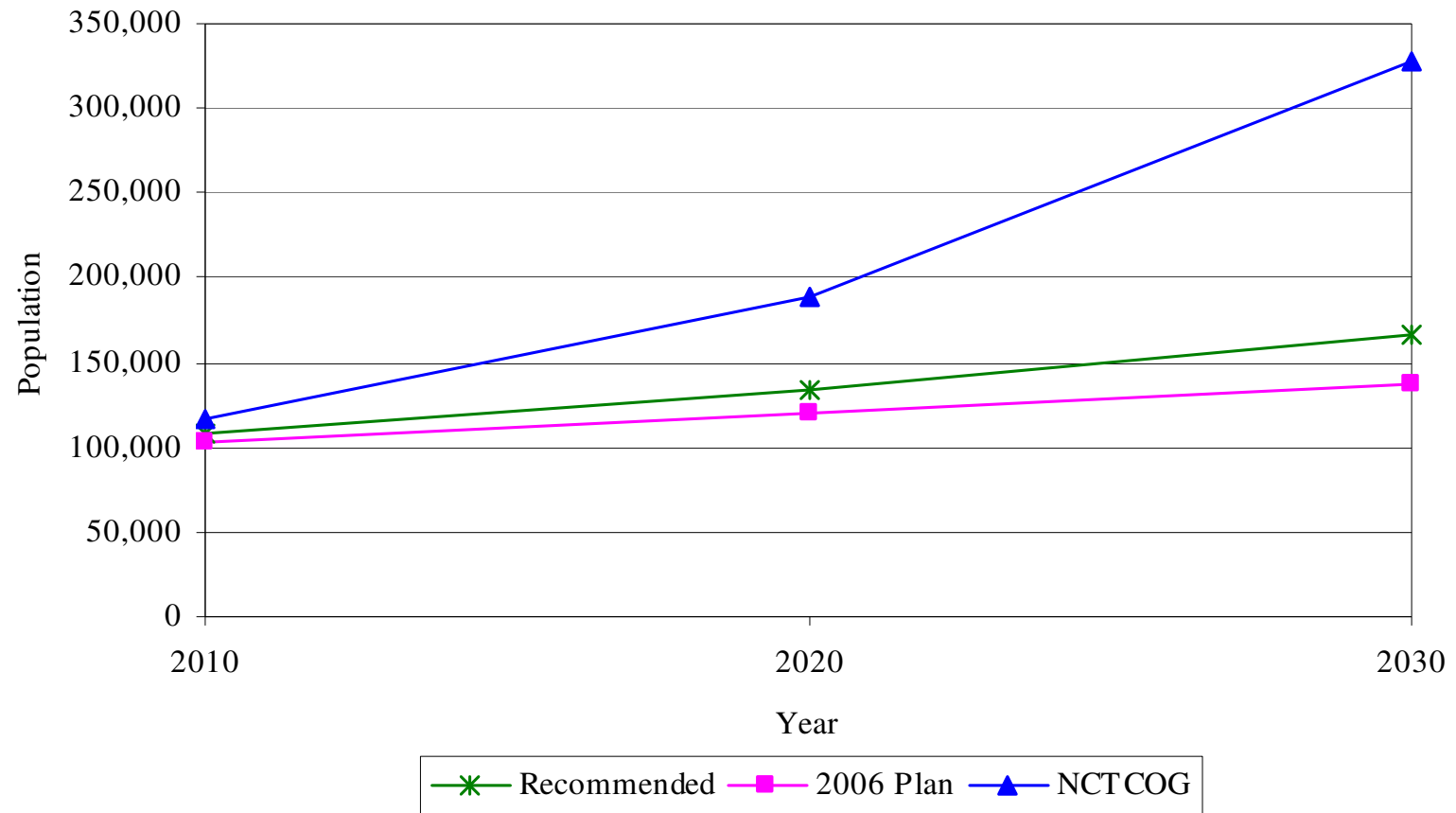


# Parker-Wise County Study Draft Report

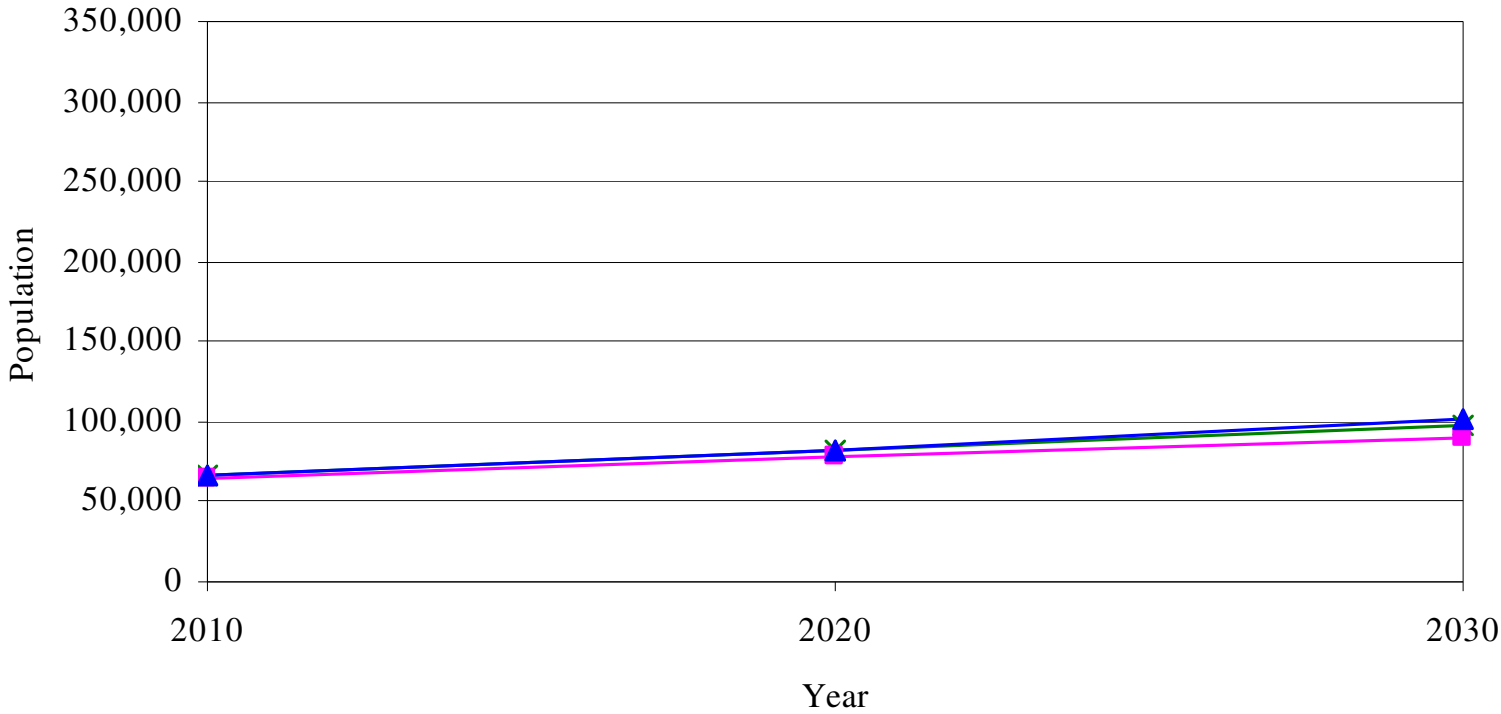
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- Population Projections Summary
  - Population and demand growing faster than projected in 2006 Region C Plan
  - County total population growing slower than projected by NCTCOG

# Parker County Population Projections

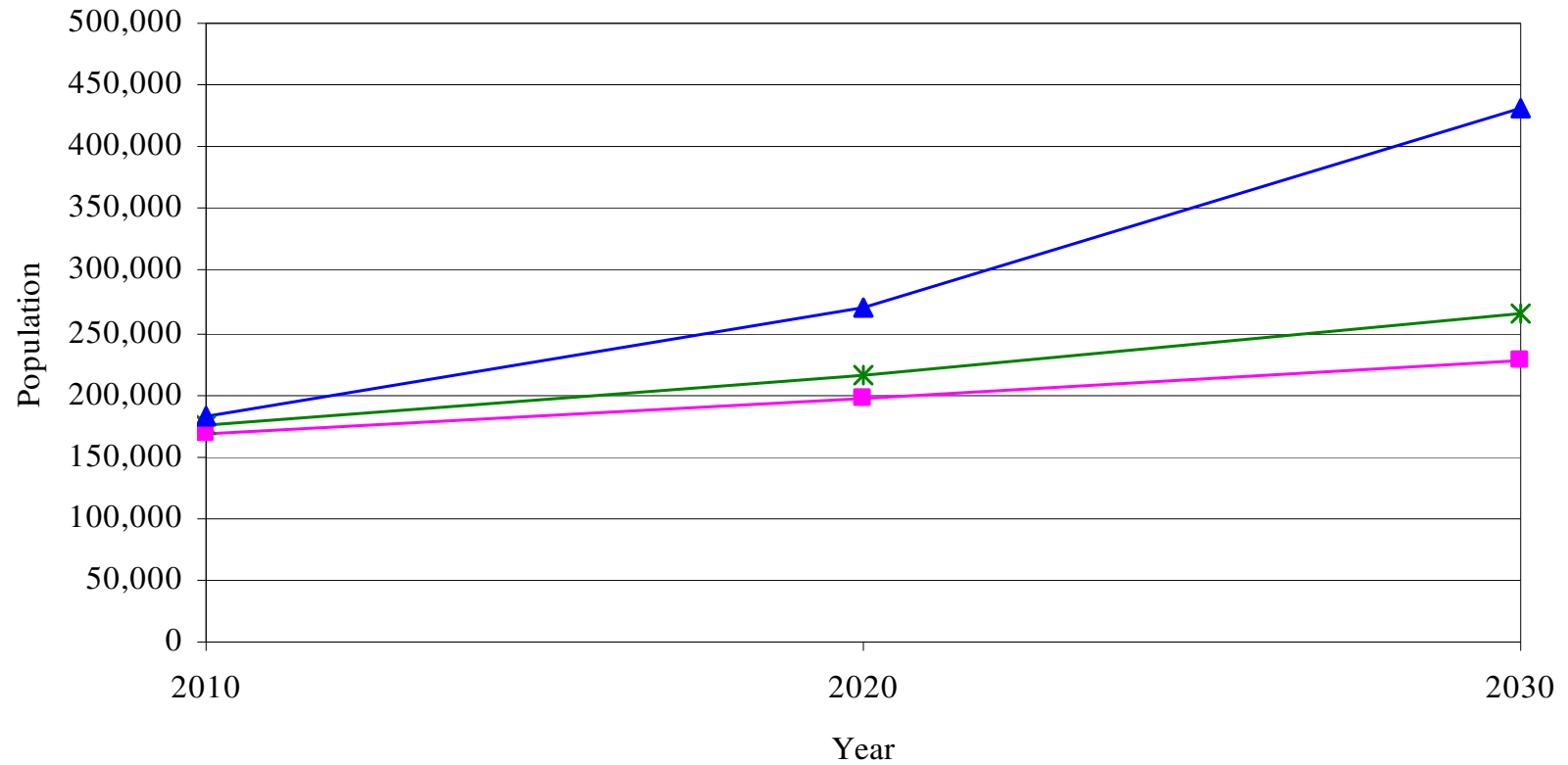


# Wise County Population Projections



—\*— Recommended    —■— 2006 Plan    —▲— NCTCOG

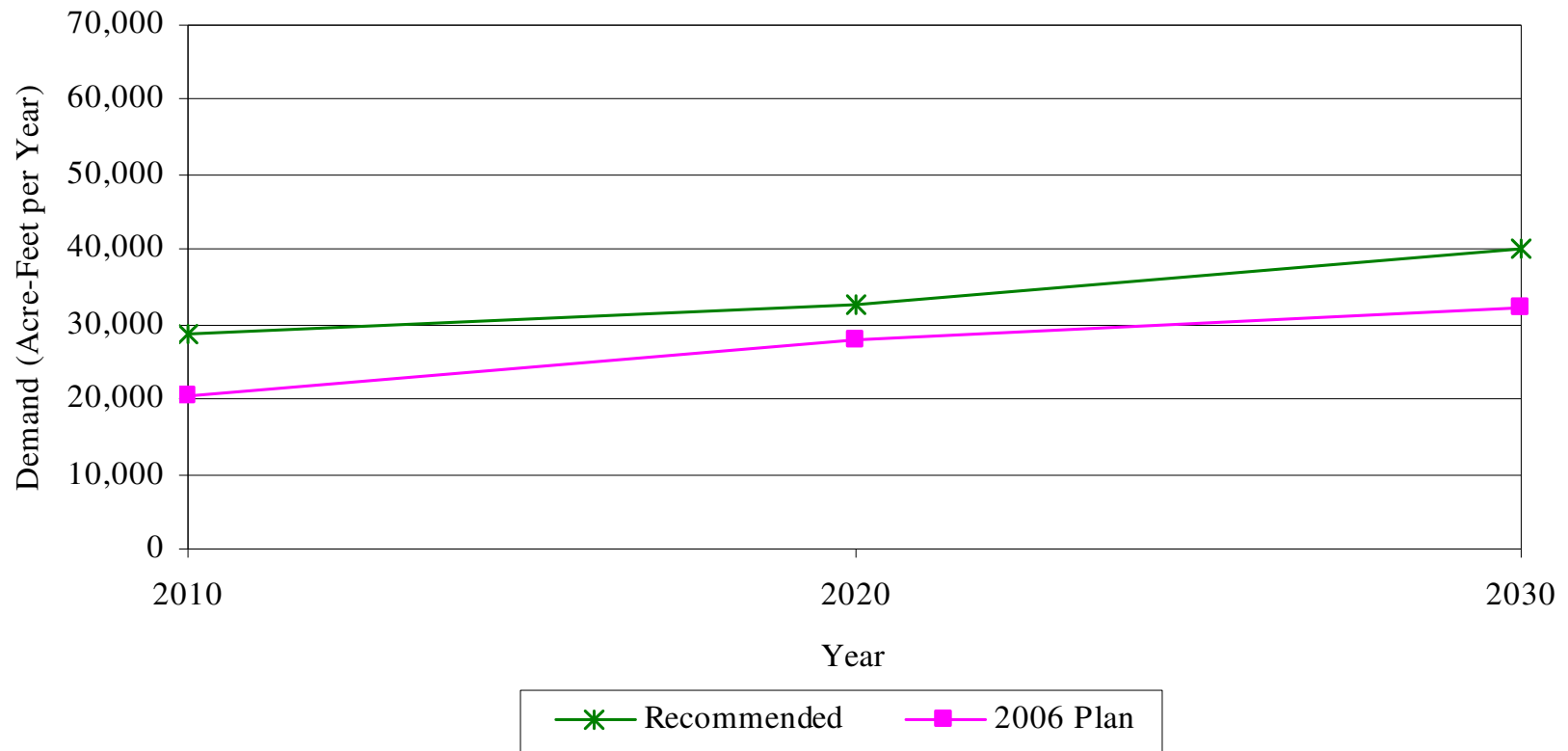
# Population Projections for Study Area



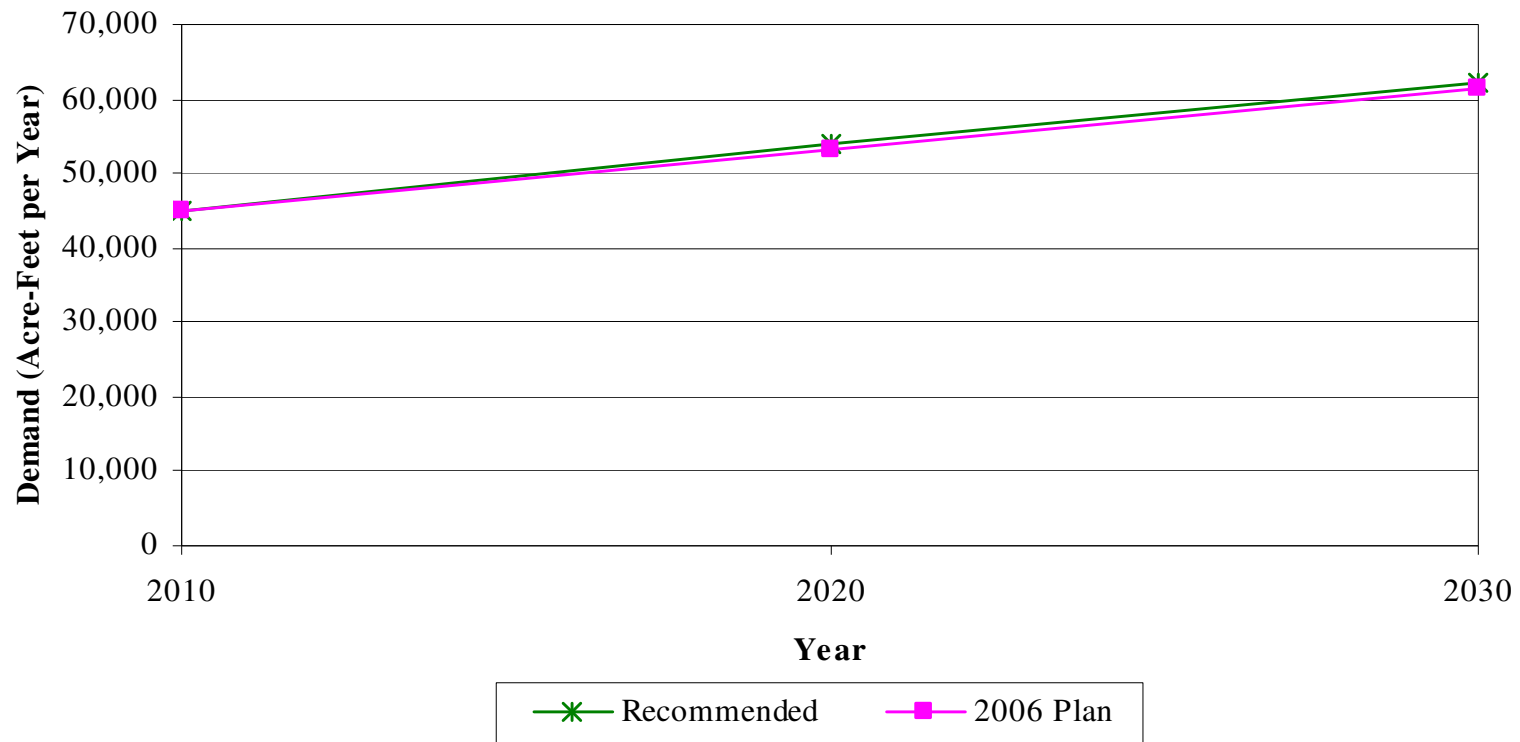
—\*— Recommended —■— 2006 Plan —▲— NCTCOG



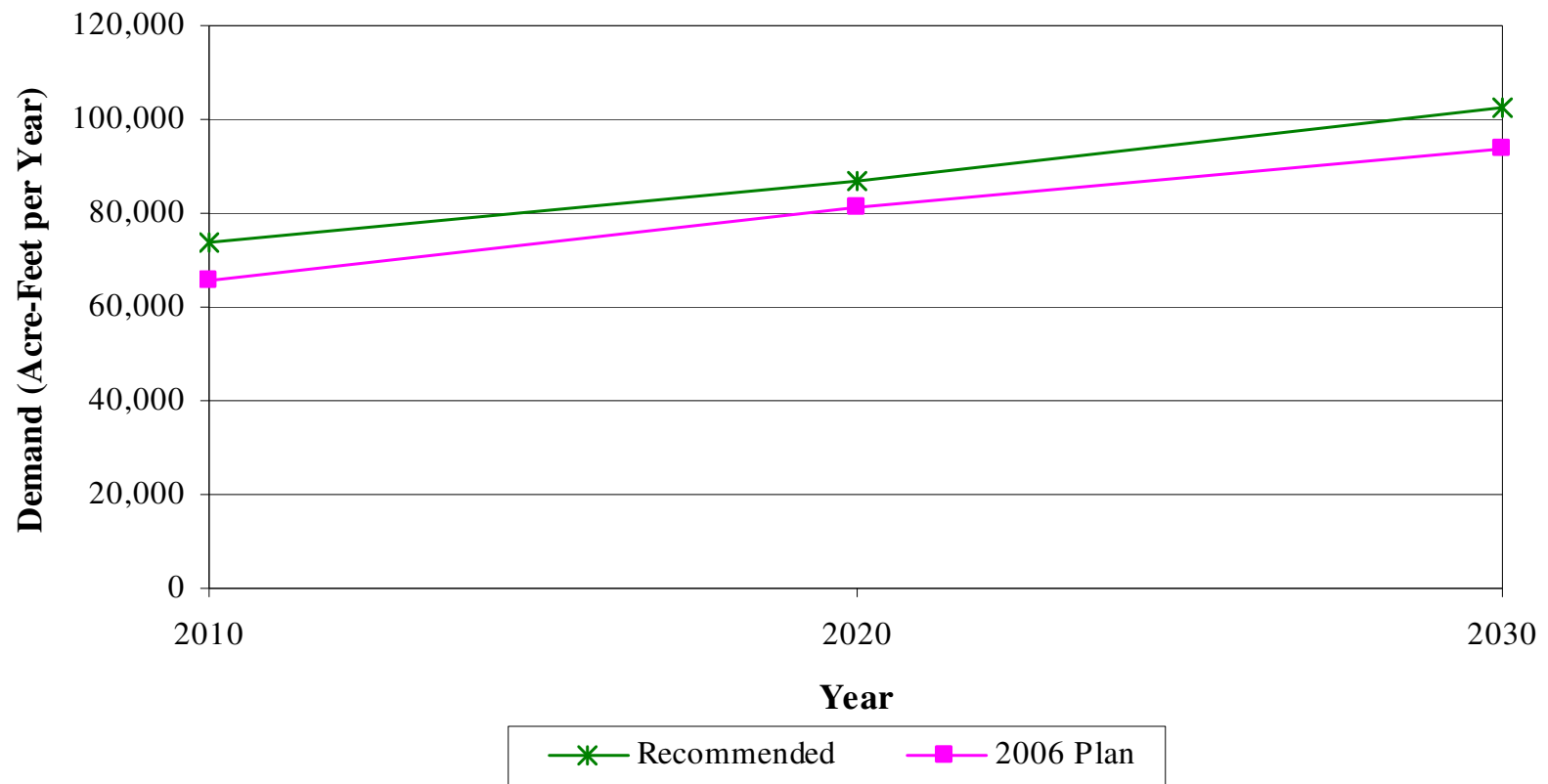
# Parker County Total Demand Projections



# Wise County Total Demand Projections



# Demand Projections for Study Area





# Parker-Wise County Study

Summary by Water User Group



# Summary by Water User Group

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## ■ Aledo

- Current Sources
  - Trinity Aquifer
- Recommended Strategies
  - Water Conservation
  - Purchase Water from Fort Worth
  - Temporary Overdraft

## ■ Alvord

- Current Sources
  - Trinity Aquifer
- Recommended Strategies
  - Water Conservation
  - Purchase Water from West Wise SUD
  - Temporary Overdraft

# Summary by Water User Group

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- Annetta and Annetta South
  - Current Sources
    - Trinity Aquifer
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from Weatherford
    - Temporary Overdraft

# Summary by Water User Group

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## ■ Aurora

### ■ Current Sources

- Trinity Aquifer
- TRWD Sources through Rhome

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from Rhome (Walnut Creek SUD)

## ■ Azle

### ■ Current Sources

- TRWD Sources

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from TRWD
- 3 MGD Water Treatment Plant Expansion (2030)

# Summary by Water User Group

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- Bolivar WSC
  - Current Sources
    - Trinity Aquifer
  - Recommended Strategies
    - Water Conservation
    - Temporary Overdraft
    - Cooke County Water Supply Project (Outside Study Area)
    - Purchase Water from UTRWD (Outside Study Area)
    - Additional Groundwater (Outside Study Area)
- Boyd
  - Current Sources
    - Trinity Aquifer
    - TRWD Sources (through Walnut Creek SUD)
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from Walnut Creek SUD

# Summary by Water User Group

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- Bridgeport
  - Current Sources
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - 0.9 MGD Water Treatment Plant Expansion (2010)
    - New 2 MGD Water Treatment Plant (2020)
- Chico
  - Current Sources
    - Trinity Aquifer
    - TRWD Sources (through West Wise SUD)
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from West Wise SUD

# Summary by Water User Group

- Community WSC
  - Current Sources
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - 0.5 MGD Water Treatment Plant Expansion (2020)
- Decatur (Wise County SUD)
  - Current Sources
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - 1 MGD Water Treatment Plant Expansion (2010)
    - New 2 MGD Water Treatment Plant (2020)
    - 2 MGD New Water Treatment Plant Expansion (2030)

# Summary by Water User Group

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- Hudson Oaks
  - Current Sources
    - Trinity Aquifer
    - TRWD Sources (through Weatherford)
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from Weatherford
    - Temporary Overdraft

# Summary by Water User Group

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## ■ Mineral Wells

- Current Sources
  - Lake Mineral Wells
  - Lake Palo Pinto
- Recommended Strategies
  - Water Conservation

## ■ New Fairview

- Current Sources
  - Trinity Aquifer
- Recommended Strategies
  - Water Conservation
  - Purchase Water from Rhome (Walnut Creek SUD)



# Summary by Water User Group

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## ■ Newark

### ■ Current Sources

- Trinity Aquifer

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from Walnut Creek SUD

## ■ Reno

### ■ Current Sources

- Trinity Aquifer
- TRWD Sources (Springtown & Walnut Creek SUD)

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from Springtown
- Purchase Water from Walnut Creek SUD

# Summary by Water User Group

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## ■ Rhome

### ■ Current Sources

- Trinity Aquifer
- TRWD Sources (Walnut Creek SUD)

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from Walnut Creek SUD

## ■ Runaway Bay

### ■ Current Sources

- TRWD Sources

### ■ Recommended Strategies

- Water Conservation
- Purchase Water from TRWD
- 0.5 MGD Water Treatment Plant Expansion (2030)

# Summary by Water User Group

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- Springtown
  - Current Sources
    - Trinity Aquifer
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
- Walnut Creek SUD
  - Current Sources
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - 6 MGD Water Treatment Plant Expansion (2010)
    - New 12 MGD Water Treatment Plant (2010)

# Summary by Water User Group

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- Weatherford
  - Current Sources
    - Lake Weatherford
    - Trinity Aquifer
    - TRWD Sources
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - 4 MGD Water Treatment Plant Expansion (2020)
    - New 8 MGD Water Treatment Plant (2030)

# Summary by Water User Group

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- West Wise SUD
  - Current Sources
    - TRWD Sources (Direct & through Walnut Creek SUD)
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from TRWD
    - Purchase Water from Walnut Creek SUD
    - New 0.5 MGD Water Treatment Plant (2030)
- Willow Park
  - Current Sources
    - Trinity Aquifer
  - Recommended Strategies
    - Water Conservation
    - Purchase Water from Weatherford
    - Temporary Overdraft



# Parker-Wise County Study

Summary by Wholesale Water Provider

# TRWD Current Customers

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- Azle
- Bridgeport
- Community WSC
- Decatur (Wise County SUD)
- Runaway Bay
- Springtown
  - Reno

# TRWD Current Customers

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- Walnut Creek SUD
  - Boyd
  - Reno
  - Rhome
    - Aurora
  - County Other
  - West Wise SUD and Chico



# TRWD Current Customers

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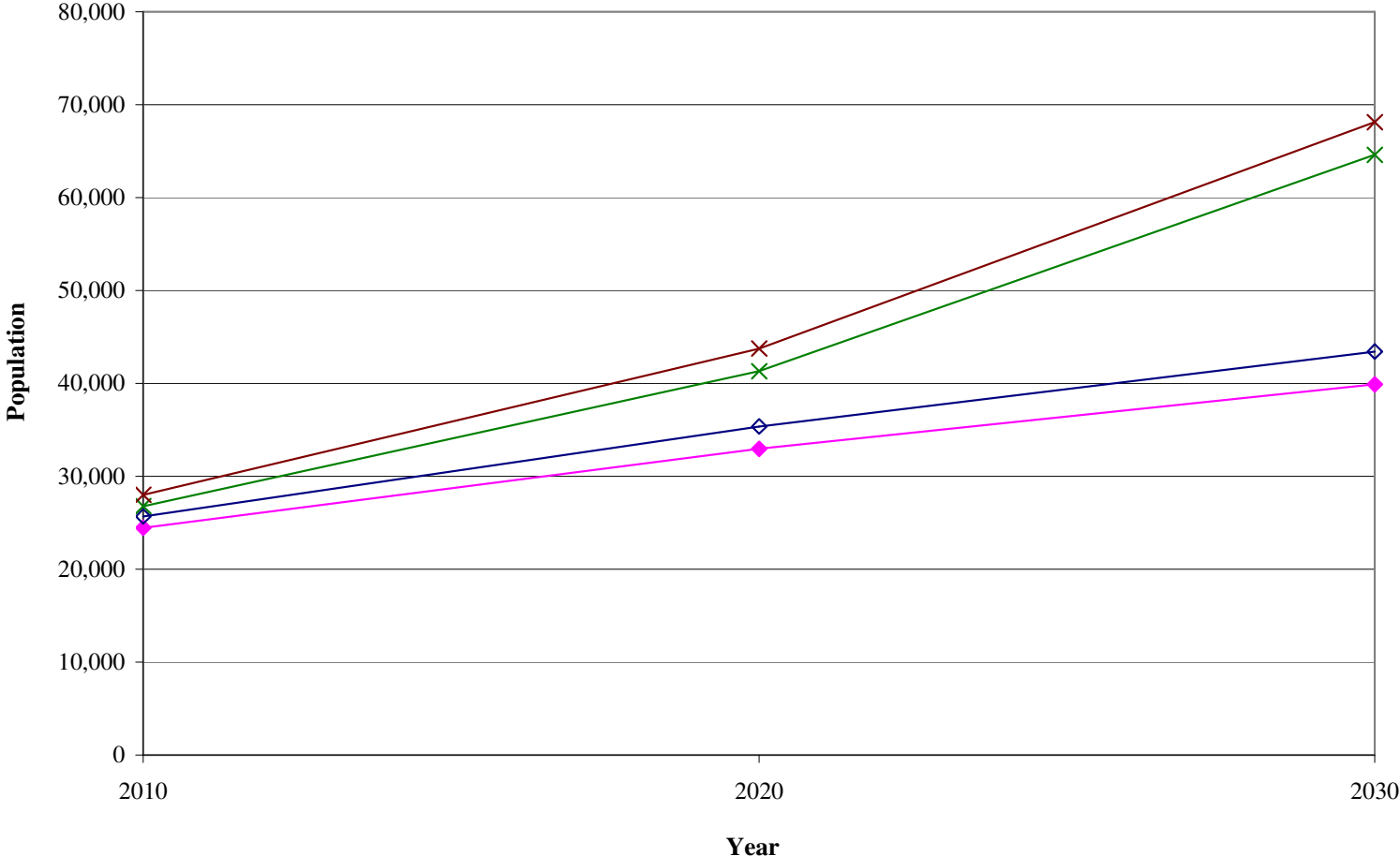
- Weatherford
  - Hudson Oaks
- West Wise SUD
  - Chico
- Wise County Other

# Potential New TRWD Customers

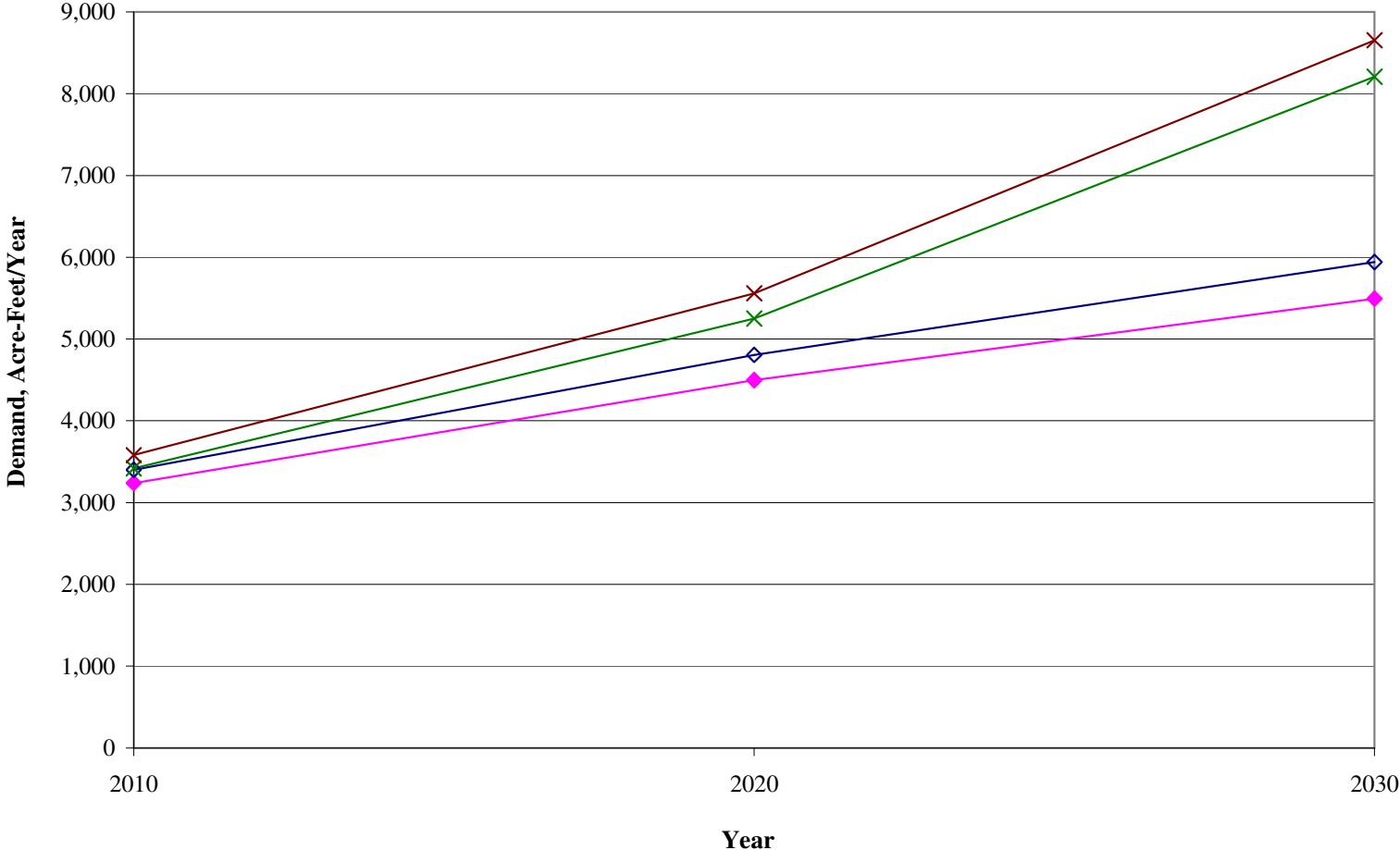
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- Aledo (through Fort Worth)
- Alvord (direct or through West Wise SUD)
- Annetta (through Weatherford)
- Annetta South (through Weatherford)
- Newark (through Walnut Creek SUD)
- New Fairview (through Rhome/Walnut Creek SUD)
- Willow Park (through Weatherford)

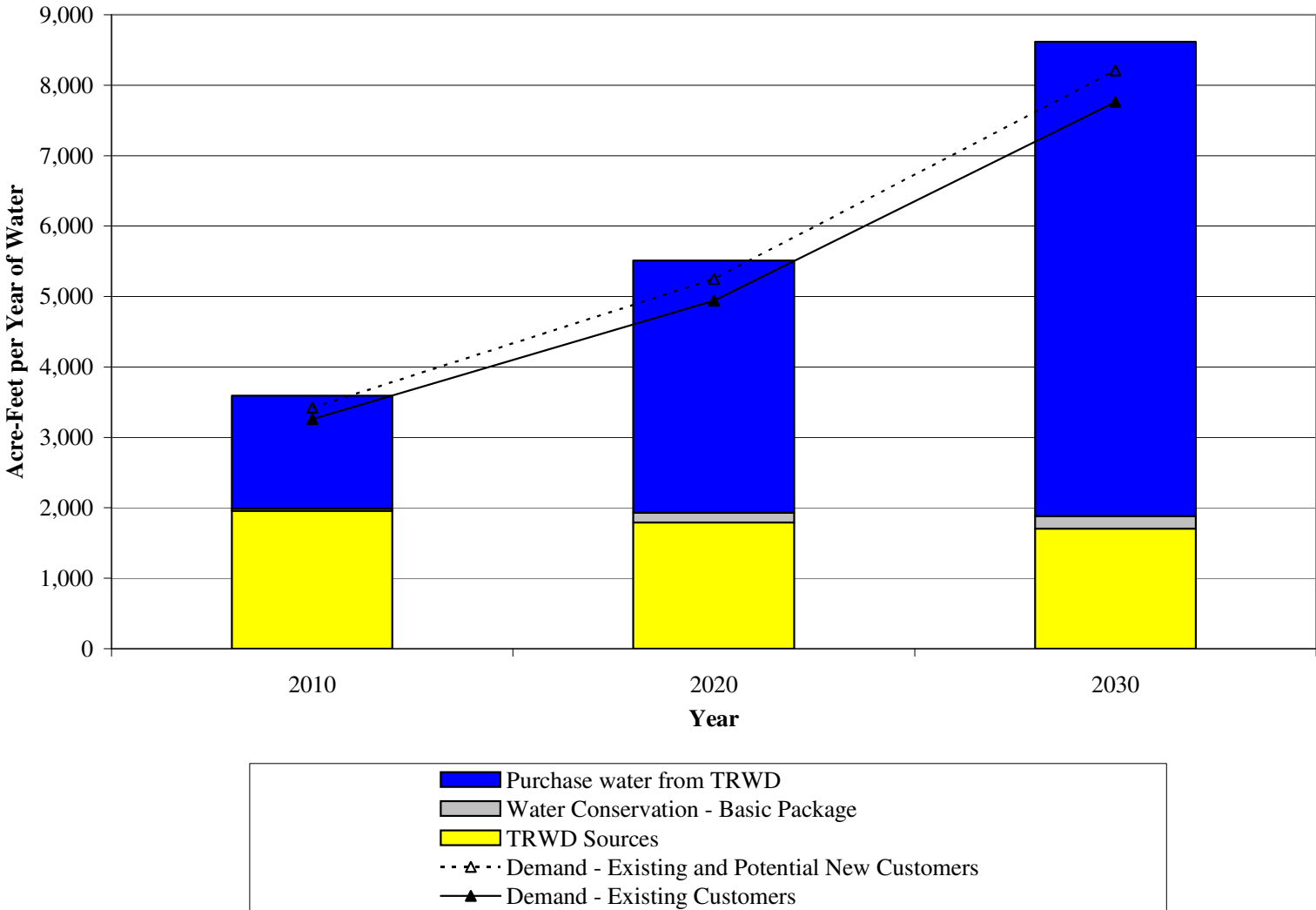
# Population Projections for Walnut Creek SUD



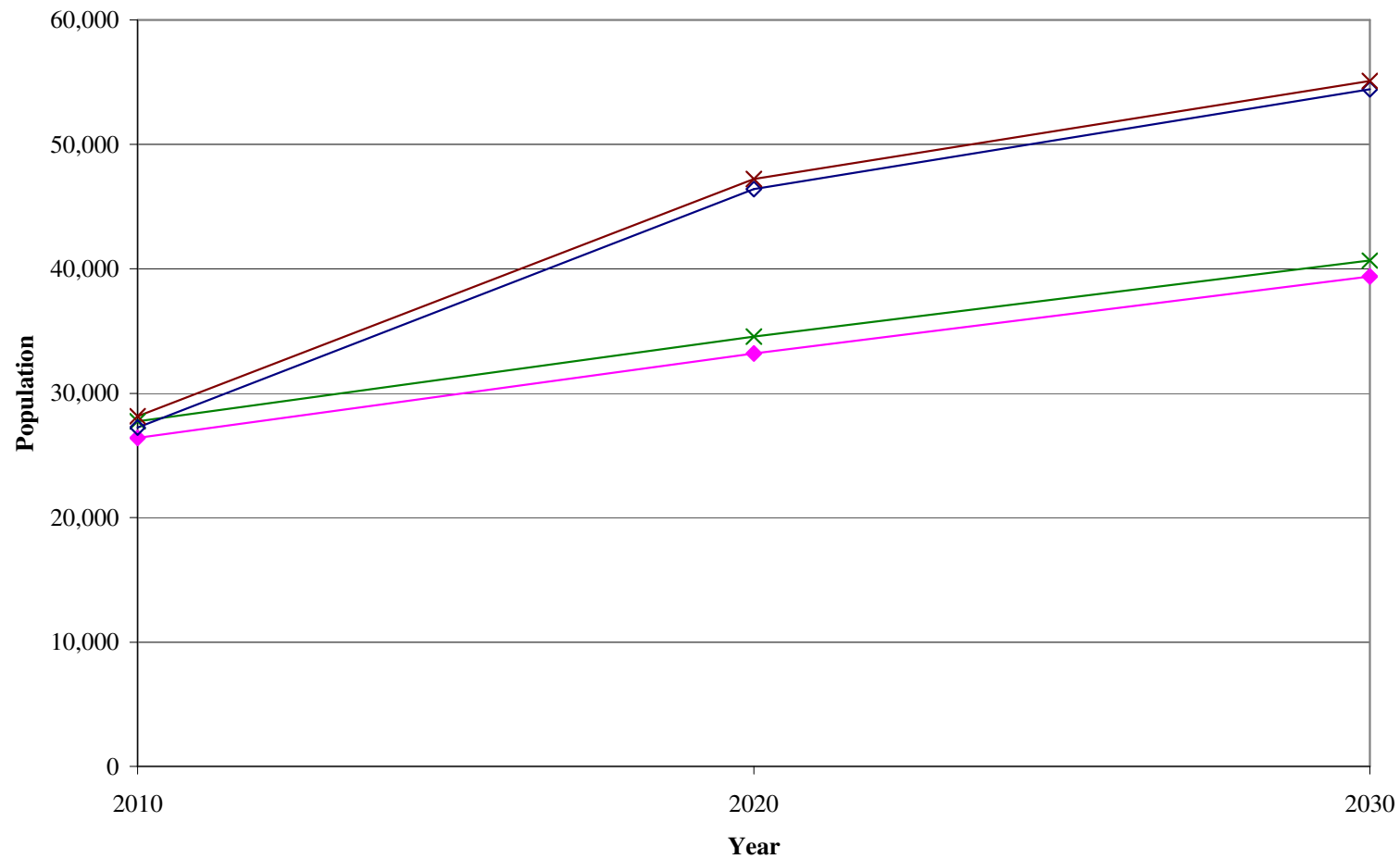
# Demand Projections for Walnut Creek SUD



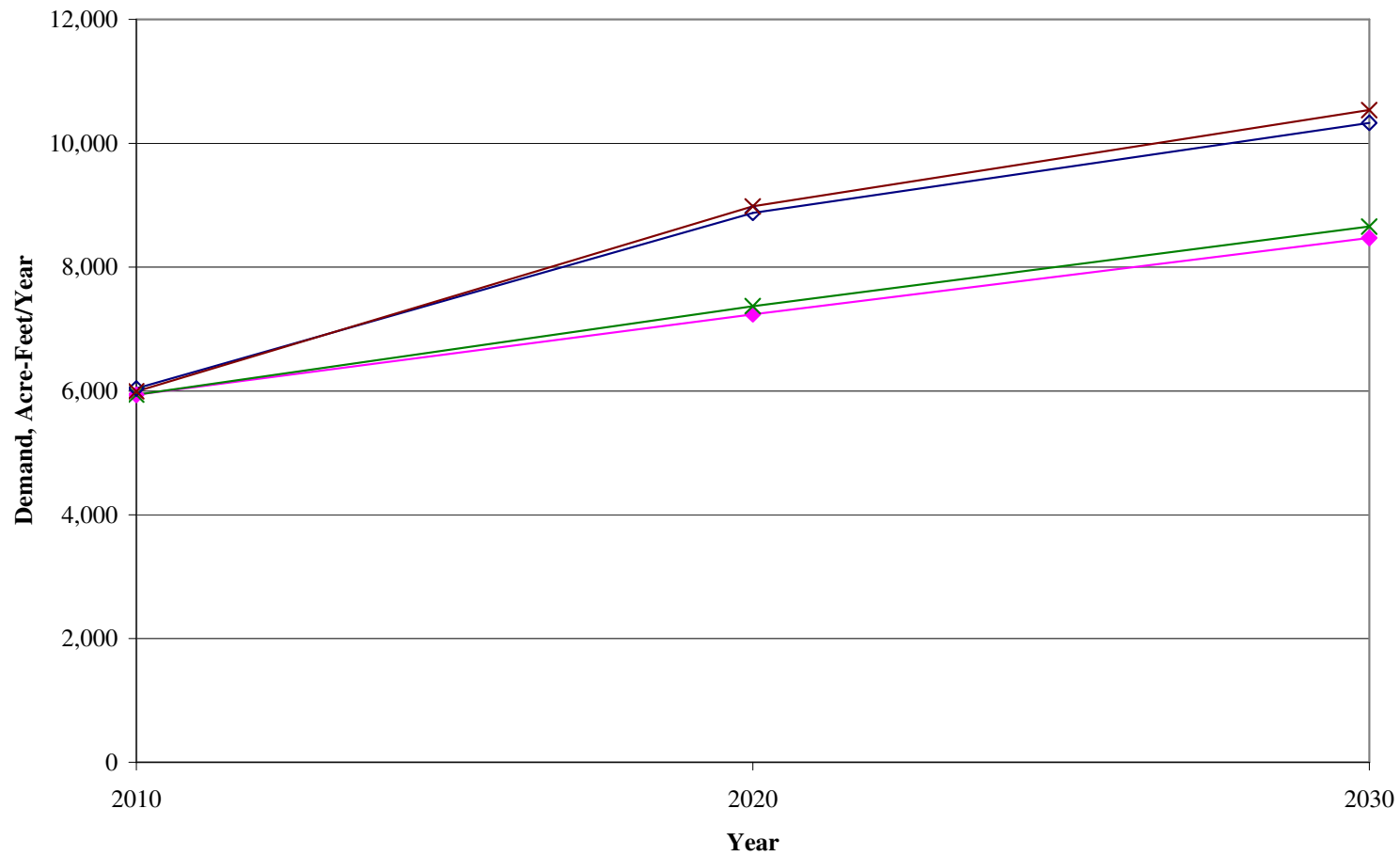
# Demands and Supplies for Walnut Creek SUD



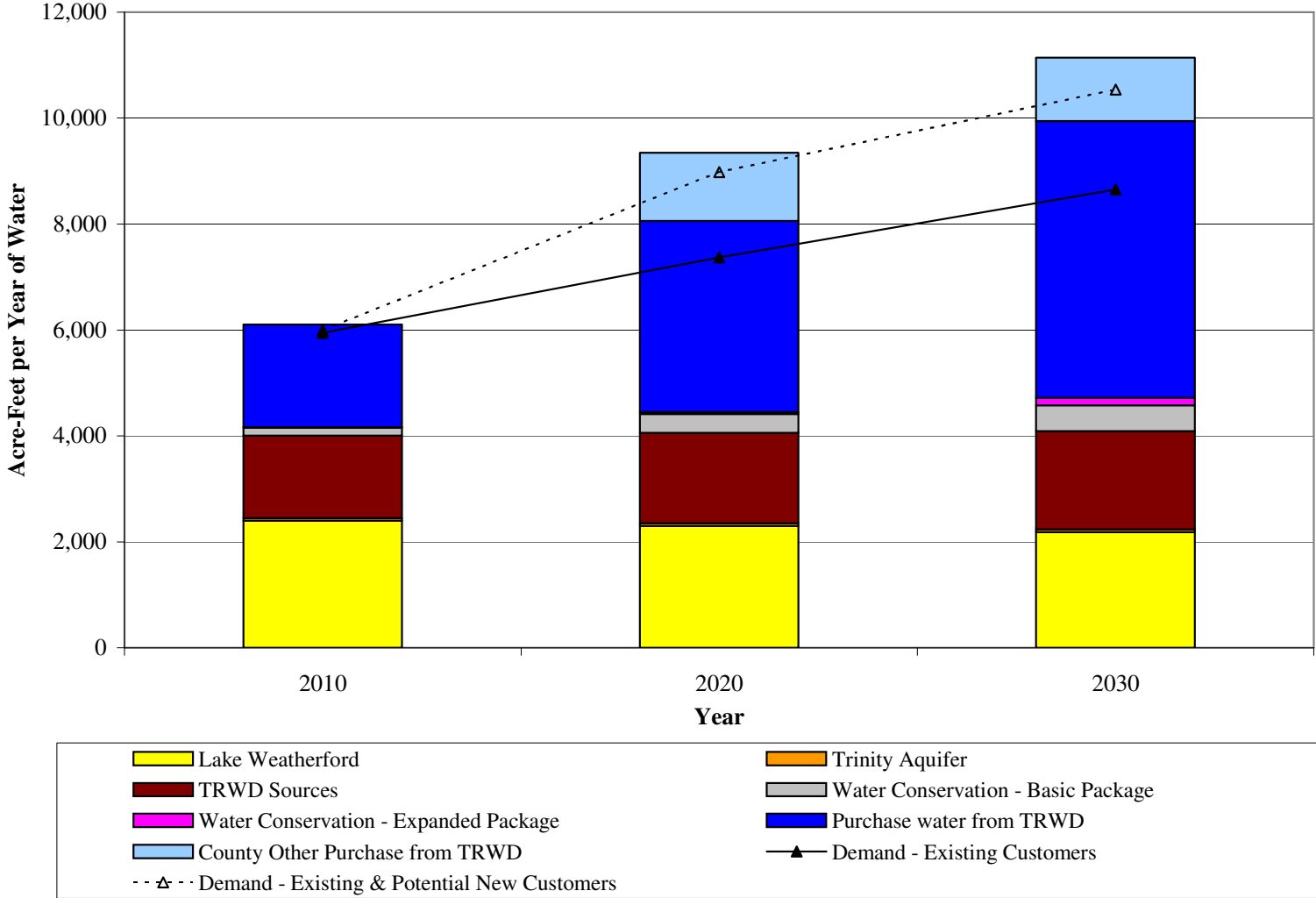
# Population Projections for the City of Weatherford and Customers



# Demand Projections for the City of Weatherford and Customers



# Demands and Supplies for City of Weatherford and Customers





# Parker-Wise County Study

## Projected Costs

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- Supplemental Wells
  - \$35,400,000
- New Water Treatment Plants
  - \$86,900,000
- Water Treatment Plant Expansions
  - \$56,900,000

# Parker-Wise County Study

## Projected Costs

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### ■ Water Transmission Facilities (Capital Costs)

- |  |                |
|--|----------------|
| ■ Walnut Creek Parallel Pipeline to Boyd and Rhome   | ■ \$28,400,000 |
| ■ East Parker County System - Pipeline from Weatherford to Annetta, Annetta South, and Willow Park | ■ \$13,700,000 |
| ■ Decatur Parallel Pipeline to Bridgeport  | ■ \$15,000,000 |
| ■ Other Projects   | ■ \$18,200,000 |
| <hr/>  |                |
| ■ Total Capital Costs for Transmission Facilities  | ■ \$75,300,000 |

# Parker-Wise County Study Projected Costs

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- Total Capital Costs for Study Area
  - \$254,500,000

# Parker-Wise County Study

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- Discussion

- Are the current supplies correct?
- Do you agree with the proposed Water Management Strategies?

# Public Comments

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- Please complete a speaker card before speaking.
- Time allowed is 3 minutes per person.

# Parker-Wise County Study

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- Closing Thoughts

- Please provide comments by noon Thursday, September 4<sup>th</sup>

## Contact Information:

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