2026 Initially Prepared Region C Water Plan

IPP PUBLIC HEARING

MAY 19, 2025

Agenda

- Introductions and Opening Remarks
- Overview of the Regional Water Planning Process
- Overview of the 2026 Initially Prepared Region C Water Plan
- Public Comments
- Adjournment

Overview of the Regional Water Planning Process

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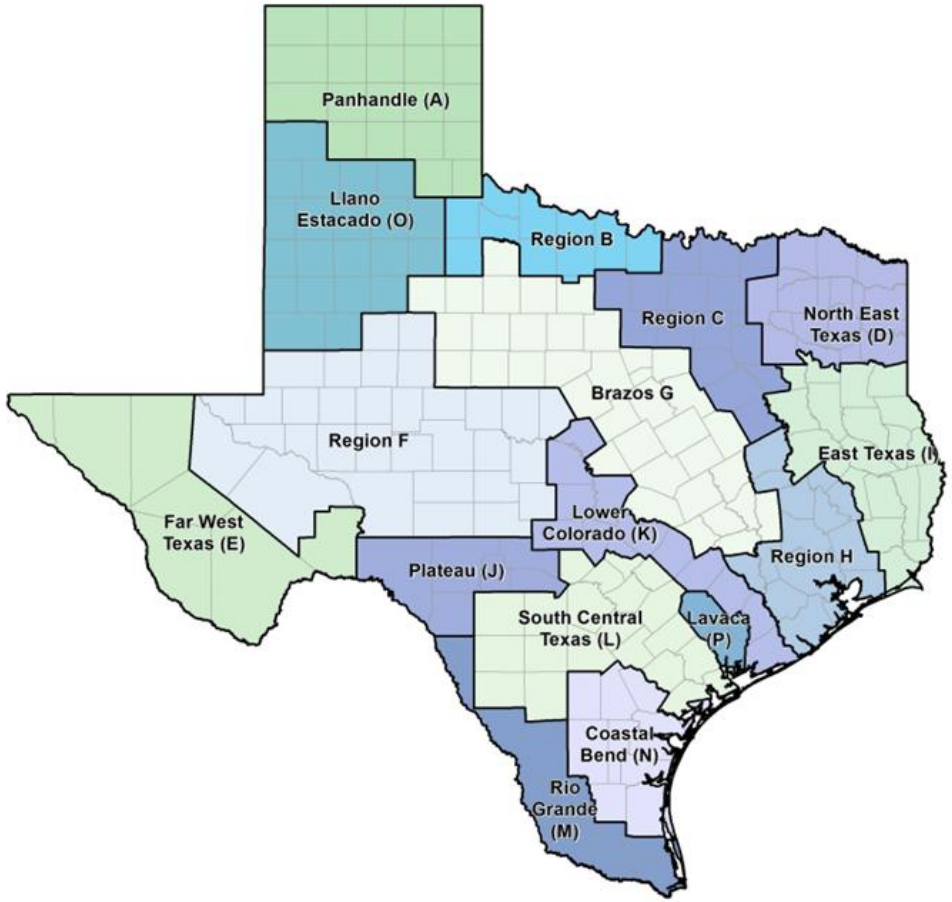
Water Planning in Texas

- ~$6 billion in economic losses in 1996 due to severe drought conditions
- Passage of Senate Bills 1 & 2 in 1997 and 2001 which established regional water planning
- 16 regional water planning areas created by the Texas Water Development Board (TWDB)
- Grass-roots bottom-up approach to plan for future water needs

Fundamentals of Water Planning

- Goal is to meet drought of record water needs
- 50-year planning horizon, 5-year planning cycle
- Water User Groups (WUGs): municipal, manufacturing, mining, irrigation, livestock, and steam-electric power
- Water Management Strategy (WMS) = a plan to meet a need for additional water for an entity
- Units in Acre-Feet per Year (AF/Y)
  - 1 acre-foot = 325,851 gallons



Surface Water: A Shared Resource

"The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the **property of the state**."

- Texas Water Code §11.021

Groundwater

Rule of Capture

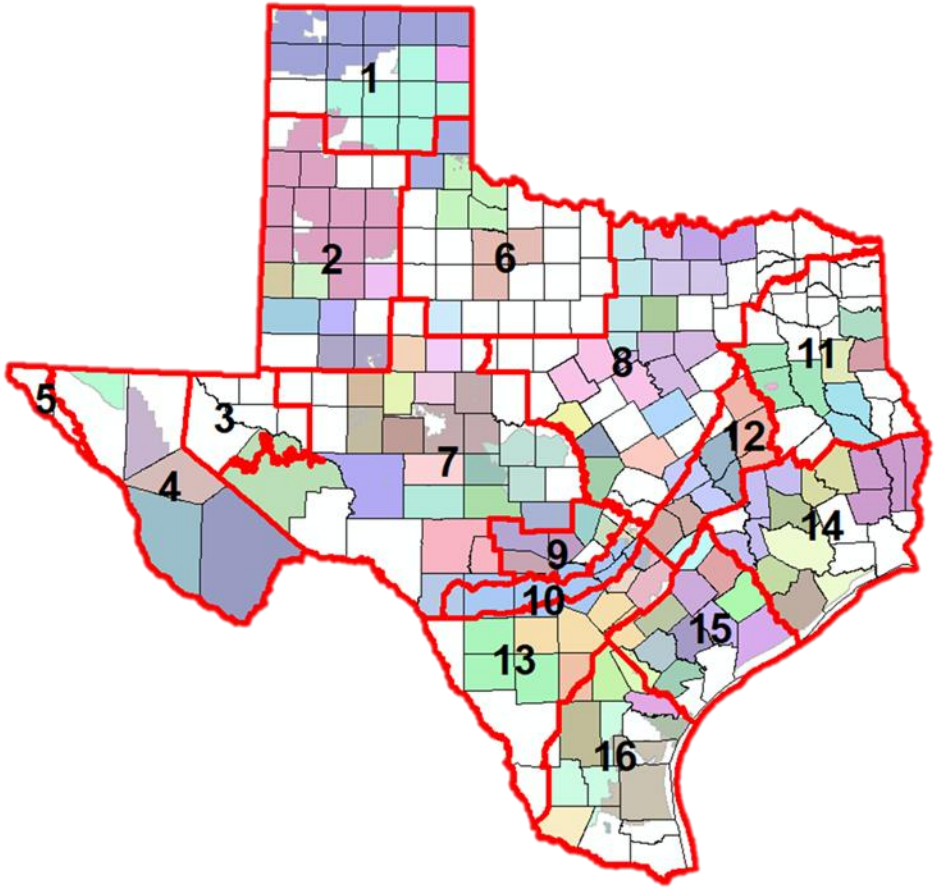
- English common law doctrine
- Landowner can pump water beneath land
- “Rule of the biggest pump”

Groundwater Conservation Districts

- Authority to regulate well spacing and production
- May establish permitting and registration

Groundwater Management Areas

- Determine desired future conditions for aquifers
  - Groundwater availability for Regional Planning



Things to Keep in Mind:

- The 2026 Region C IPP presents a comprehensive overview of the water supply issues in the region.
- The report presents planning level analysis of the recommended water management strategies. Additional engineering studies and design will be needed prior to the implementation of the strategies.
- The surpluses and needs are estimates based on the best information available at the time of publication. Actual values may vary based on changing conditions or assumptions.
- The RCWPG has **no authority** to regulate water supplies or implement water management strategies. The identified water management strategies are assumed to be **implemented by the respective sponsor**.

2026 Initially Prepared Region C Water Plan

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Overview of Initially Prepared Plan

- Region C Initially Prepared Plan
  - Volume I: 10 Chapters
  - Volume II: Appendices

- Available for review at:
  - County Clerk offices
  - 1 public library in each county
  - https://regioncwater.org/
  - https://www.twdb.texas.gov/waterplanning

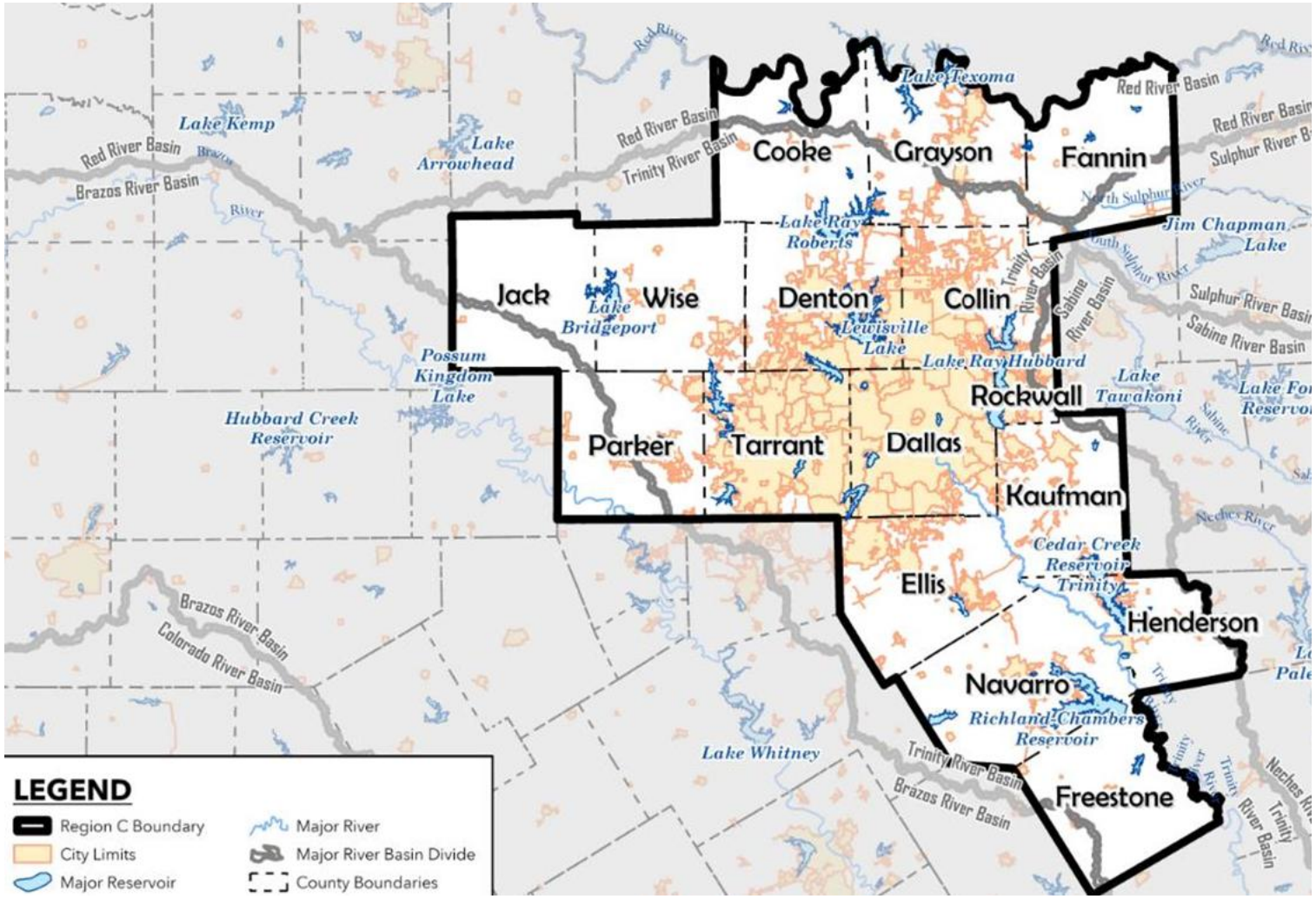
Chapters

1. Description of Region C
2. Population and Water Demand Projections
3. Analysis of Water Supply
4. Water Needed
5. Water Management Strategies
6. Impacts of Region C Plan
7. Drought Response
8. Legislative Recommendations
9. Comparison to Previous Plan
10. Public Participation

Acronyms and Terminology

- AF/Y – Acre-Feet per Year (1 acre-foot = 325,851 gallons)
- GPCD – Gallons Per Capita per Day
- IPP – Initially Prepared Plan
- MAG – Modeled Available Groundwater
- MWP – Major Water Provider
- RCWPG – Region C Water Planning Group
- RWP – Regional Water Providers
- TCEQ – Texas Commission on Environmental Quality
- TWDB – Texas Water Development Board
- WAM – Water Availability Model
- WMS – Water Management Strategy
- WWP – Wholesale Water Provider
- WUG – Water User Group

Description of Region



Region C at a Glance

16 Counties

2021 Population: 7.7 Million

26% of State's Population

30% of State's Economy

10% of State's Water Use

56 Cities over 20,000 population

89% of Demand Met by Surface Water

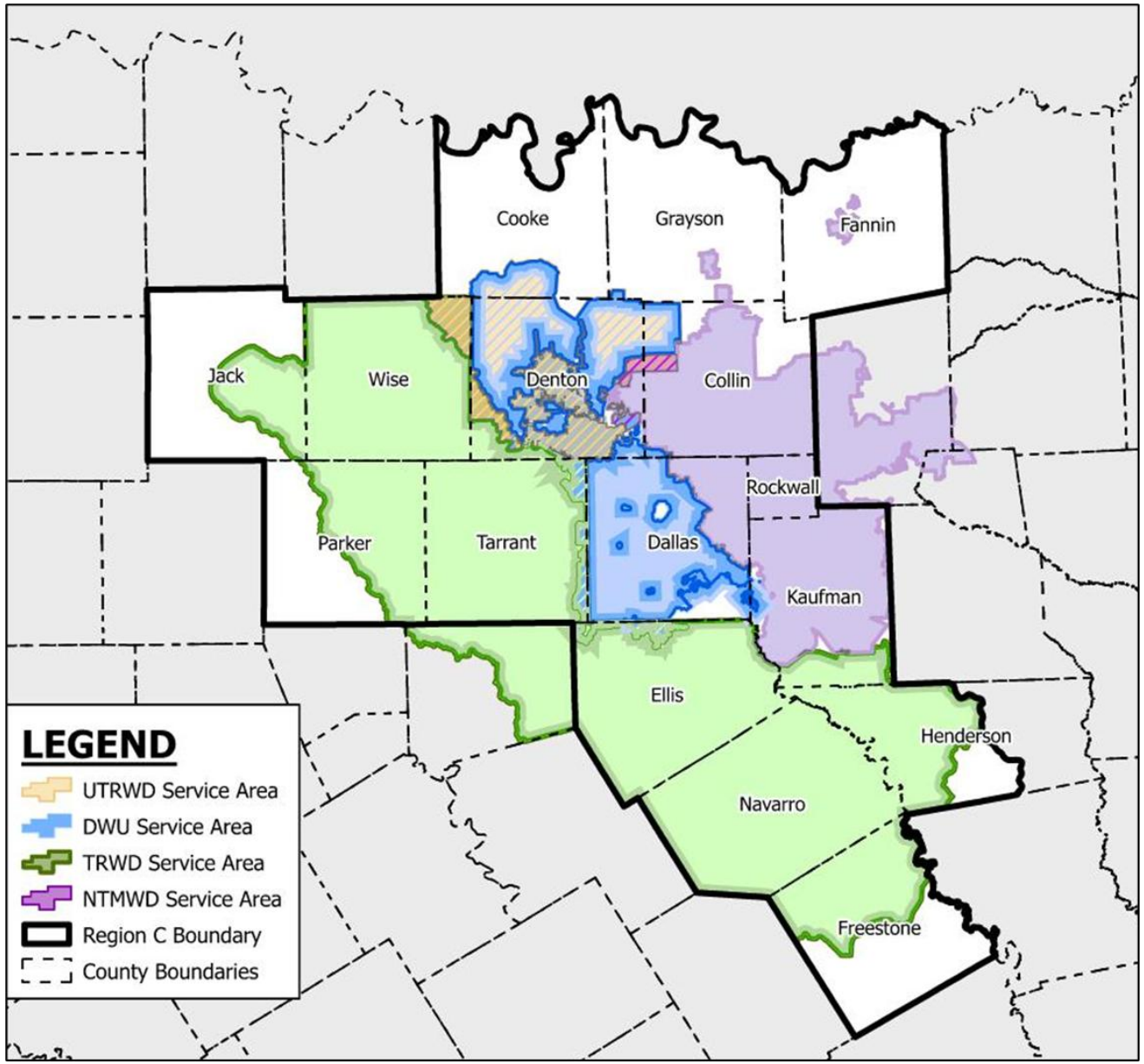
Major Water Providers

Four MWPs provide over 90% of Region C municipal demand:

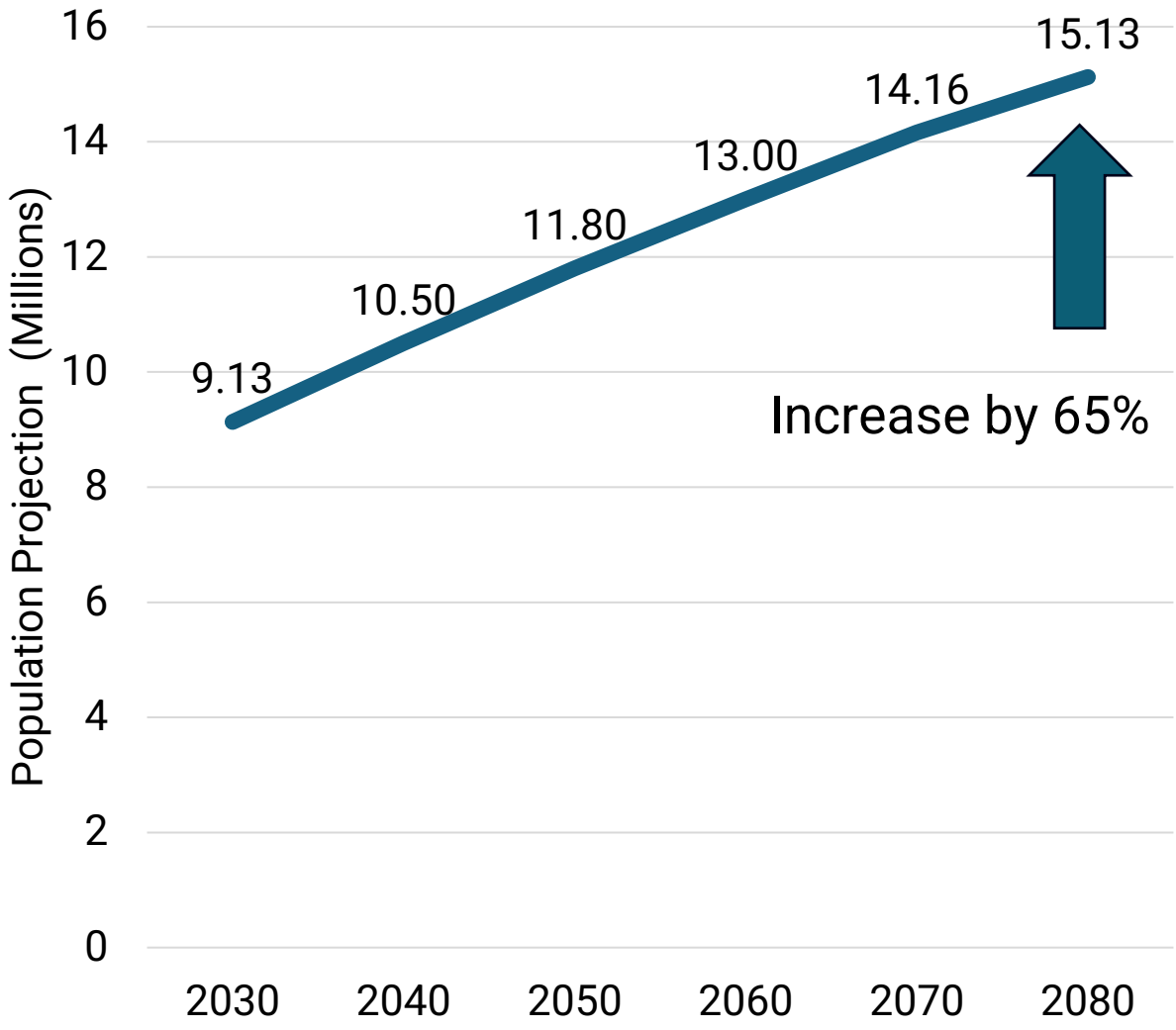
- Tarrant Regional Water District
- Dallas Water Utilities
- North Texas Municipal Water District
- Upper Trinity Regional Water District

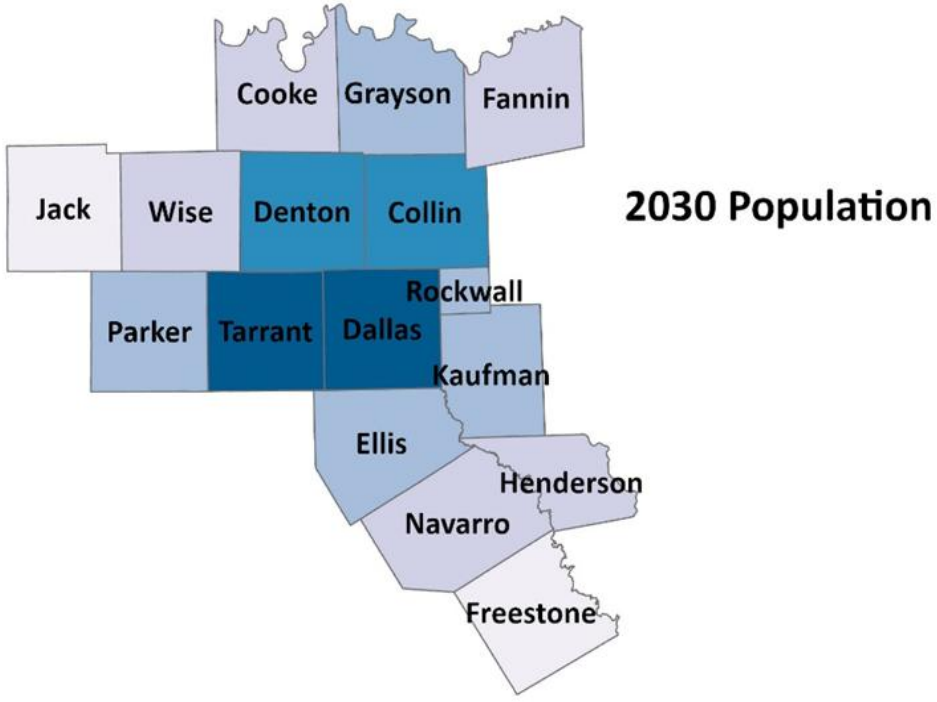
Two other MWPs receive water from TRWD:

- City of Fort Worth
- Trinity River Authority

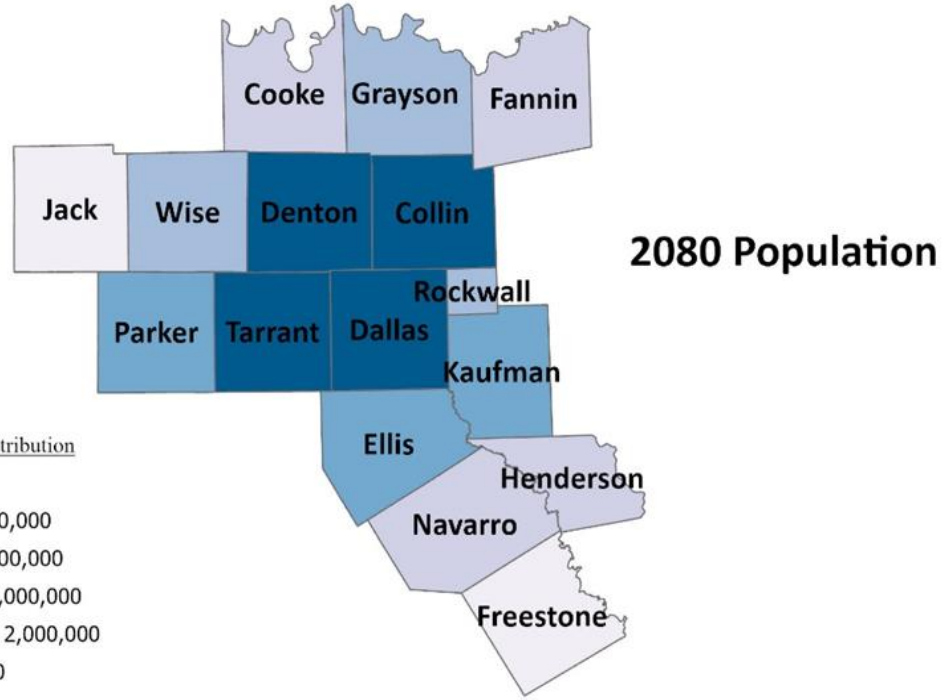


Population Projections



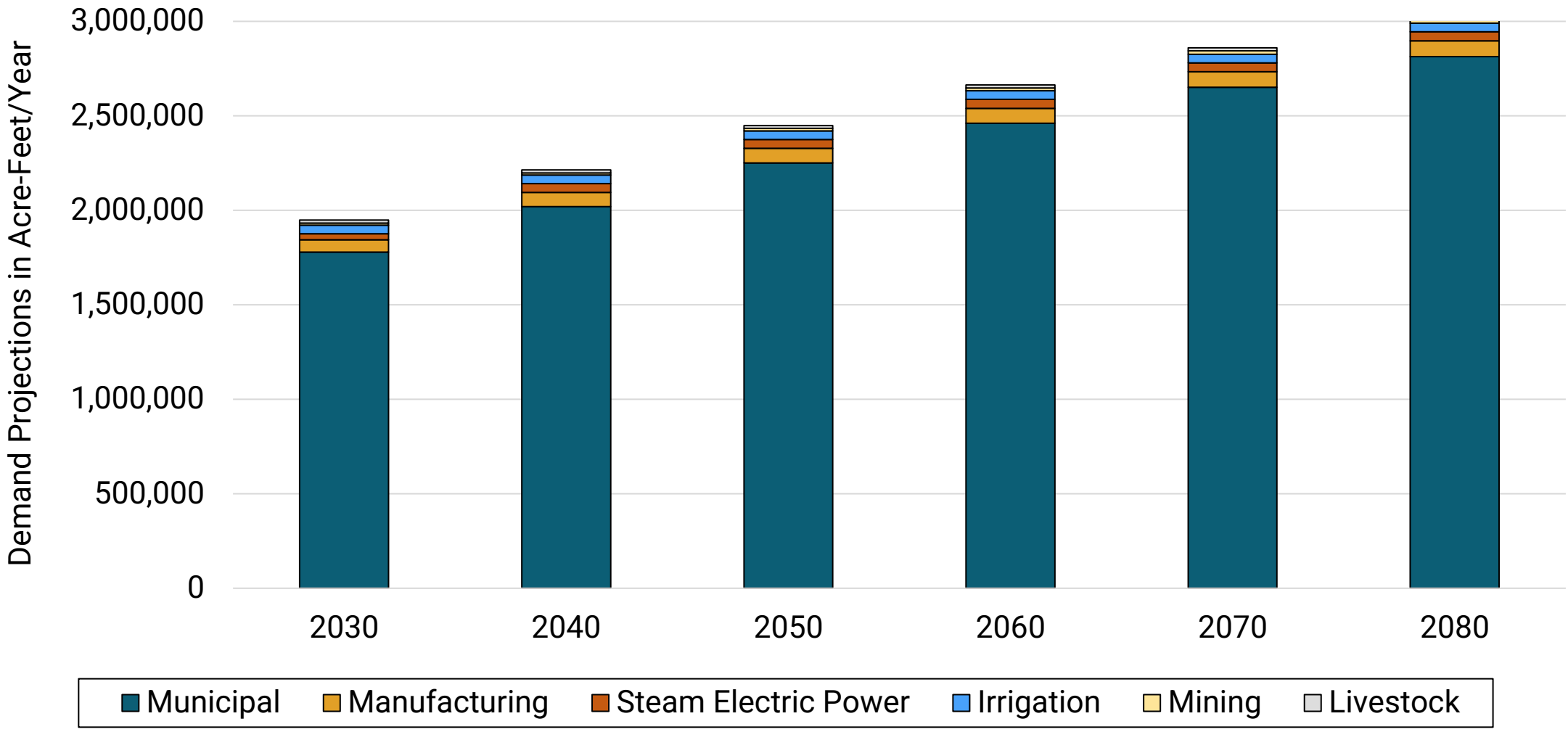


2030 Population

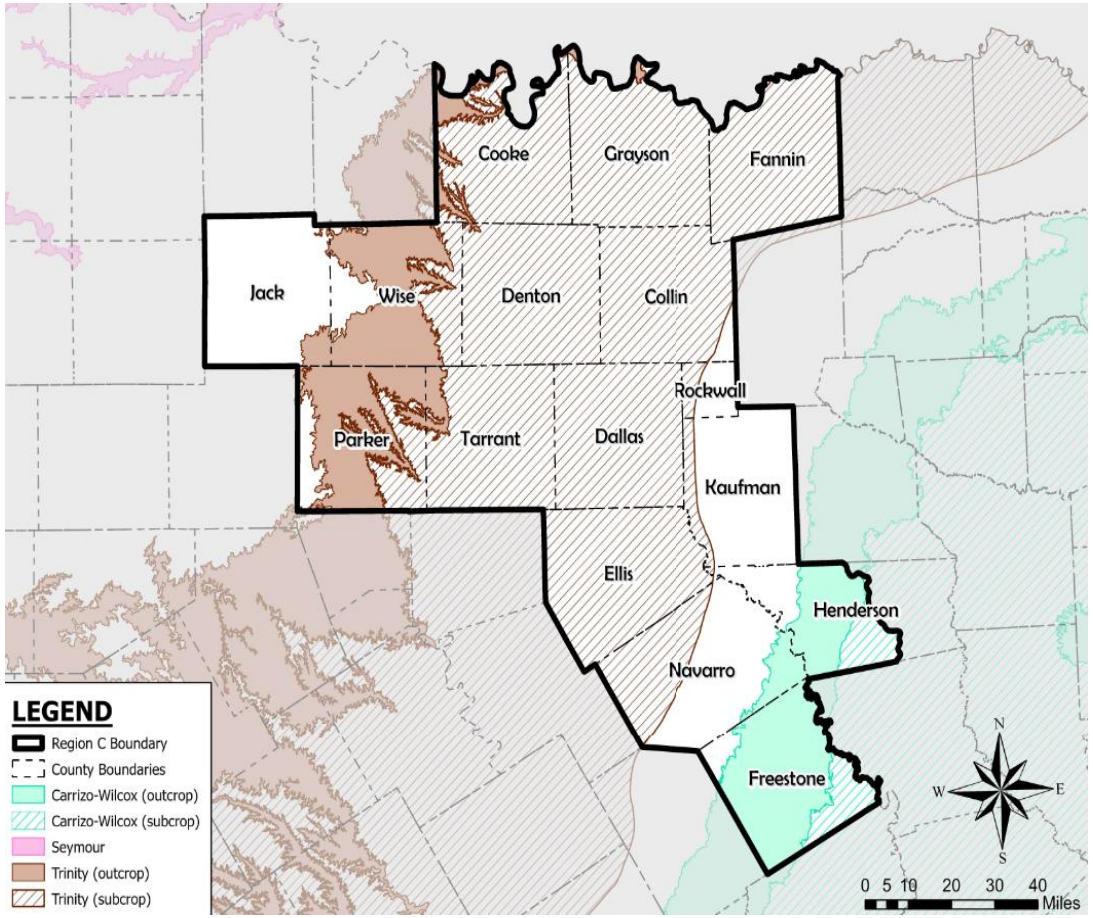


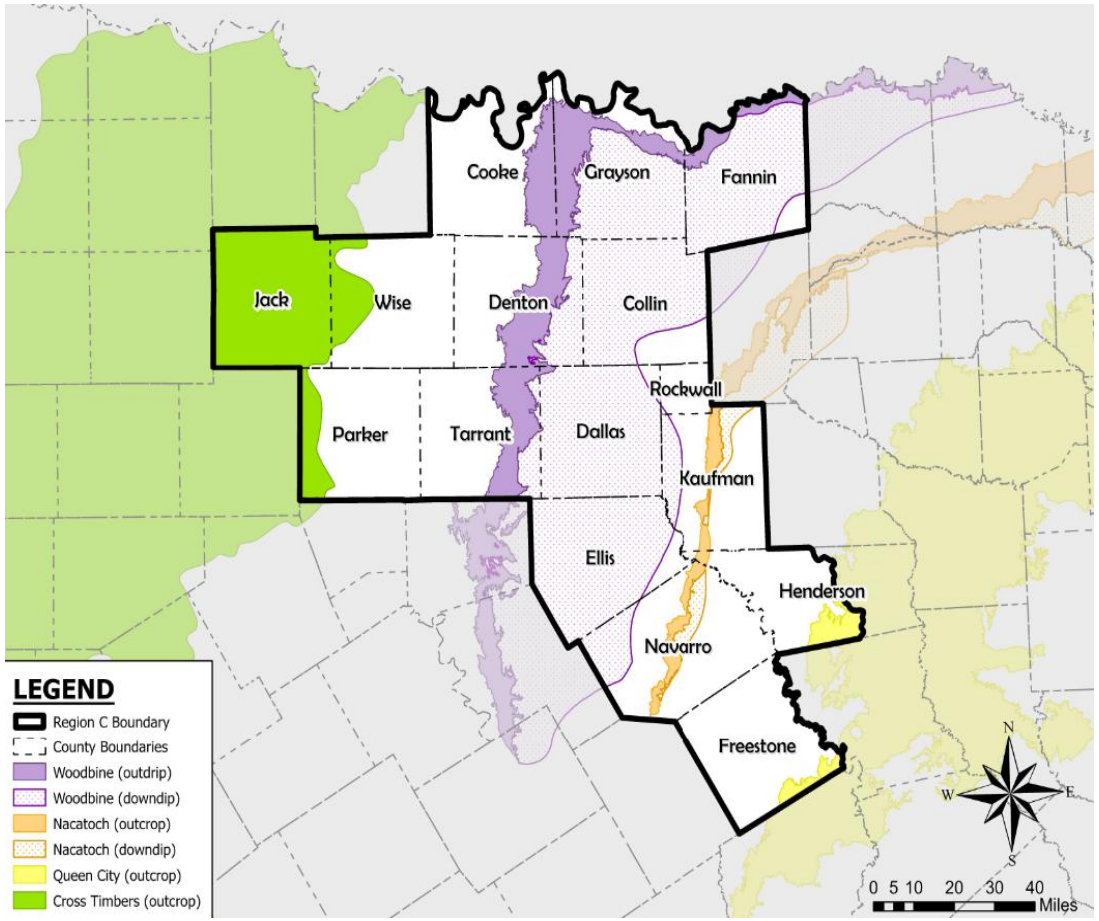
2080 Population

Demand Projections



Major and Minor Aquifers





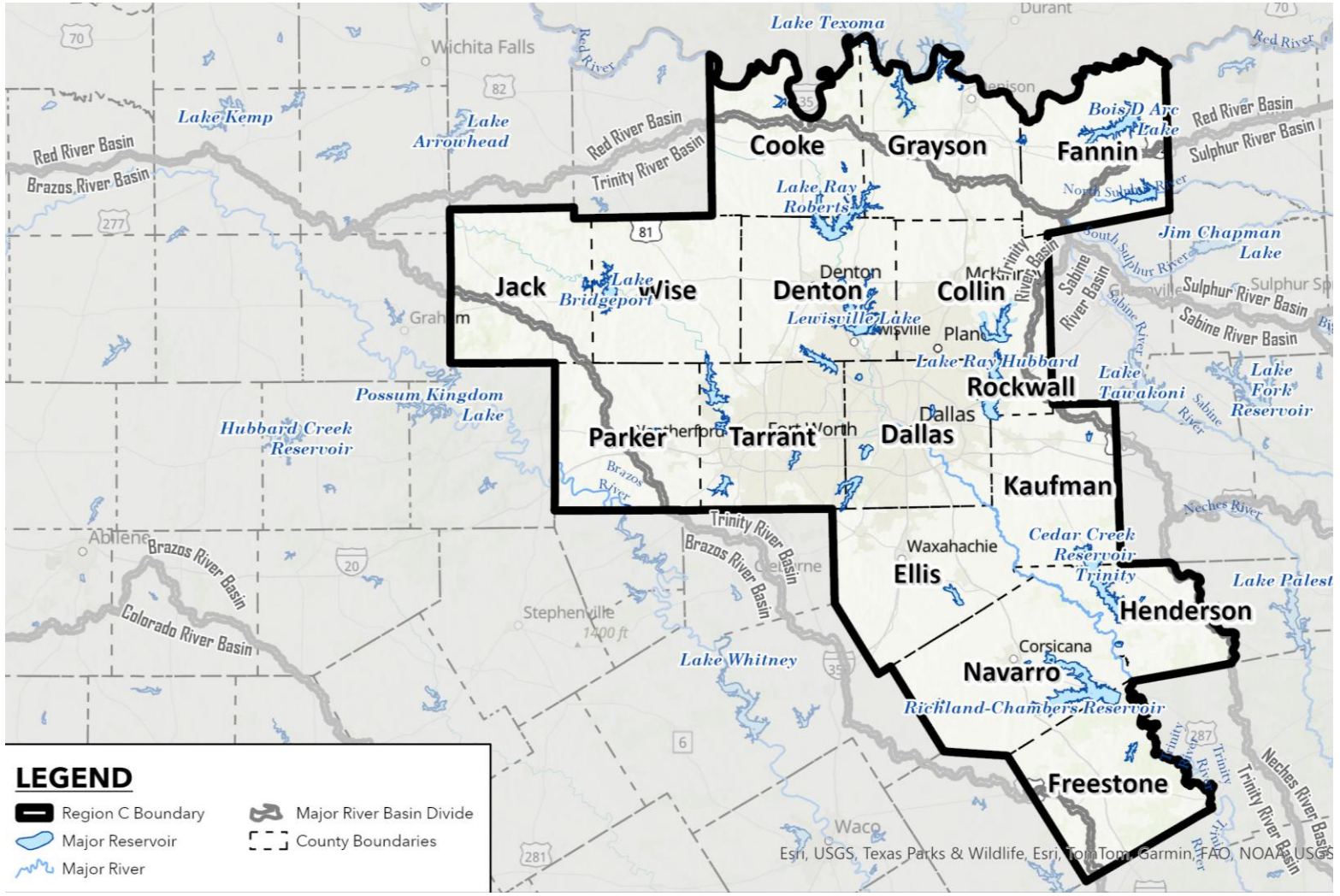
Surface Water

5 river basins

- Mainly the Trinity

Over 30 reservoirs

- 26 actively providing water supplies



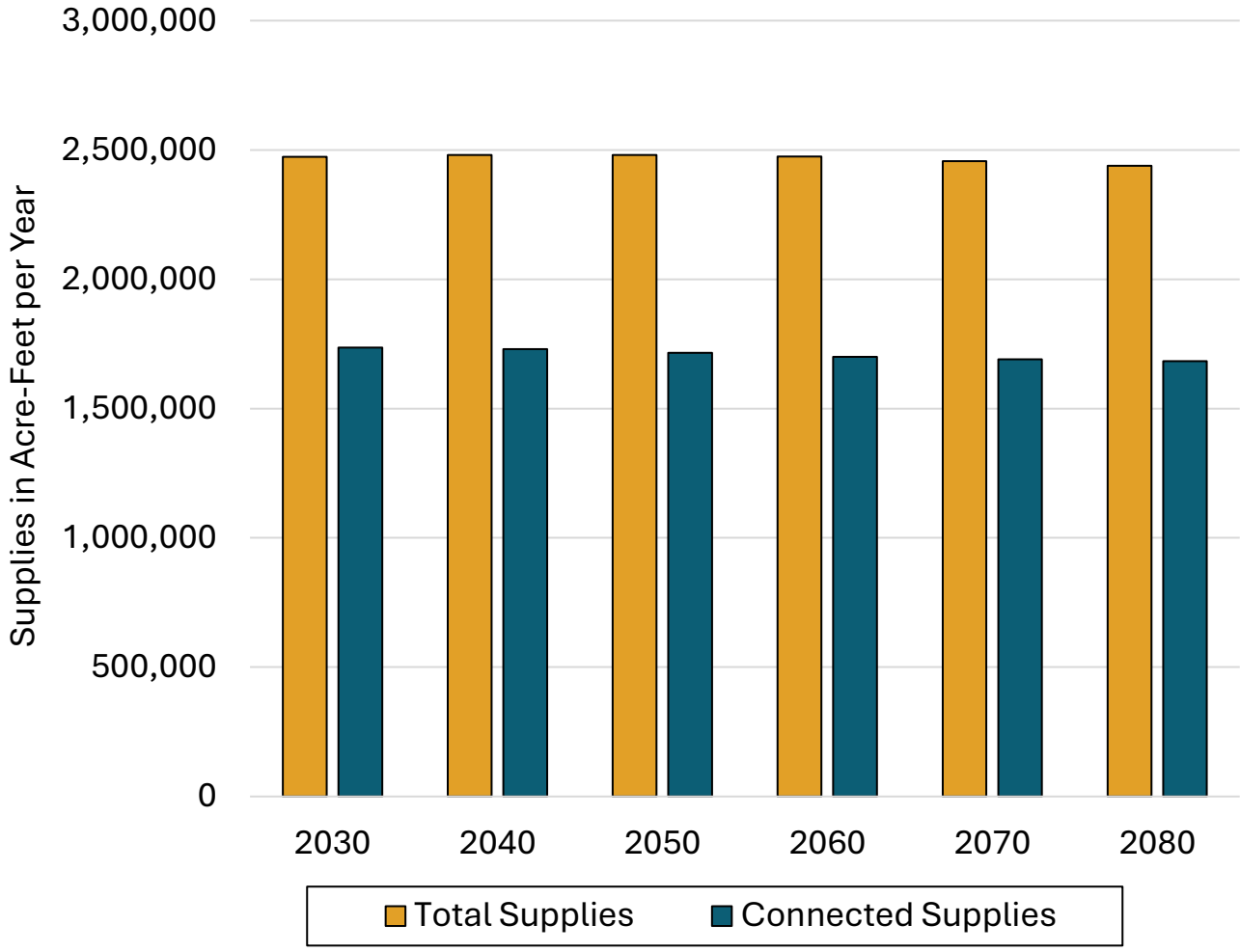
Total Versus Connected Water Supplies

Total Water Supplies

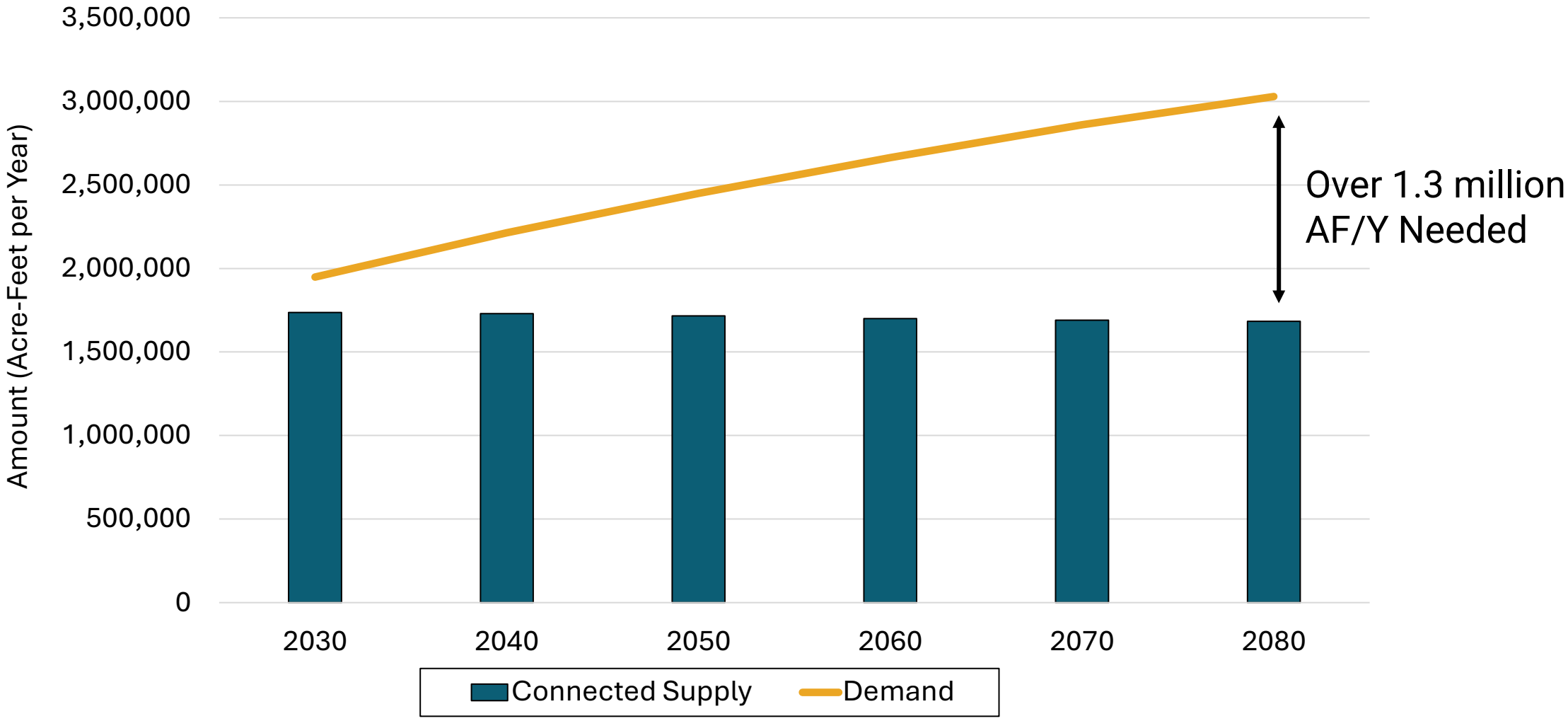
- Total availability at the source
- Reliable supply during a repeat of the drought of record
- **Not limited by infrastructure or what an entity can actually use**

Connected Water Supplies

- Supplies that can be used with currently existing water rights, contracts, and facilities
- **Limited by infrastructure constraints, permits, contracts**

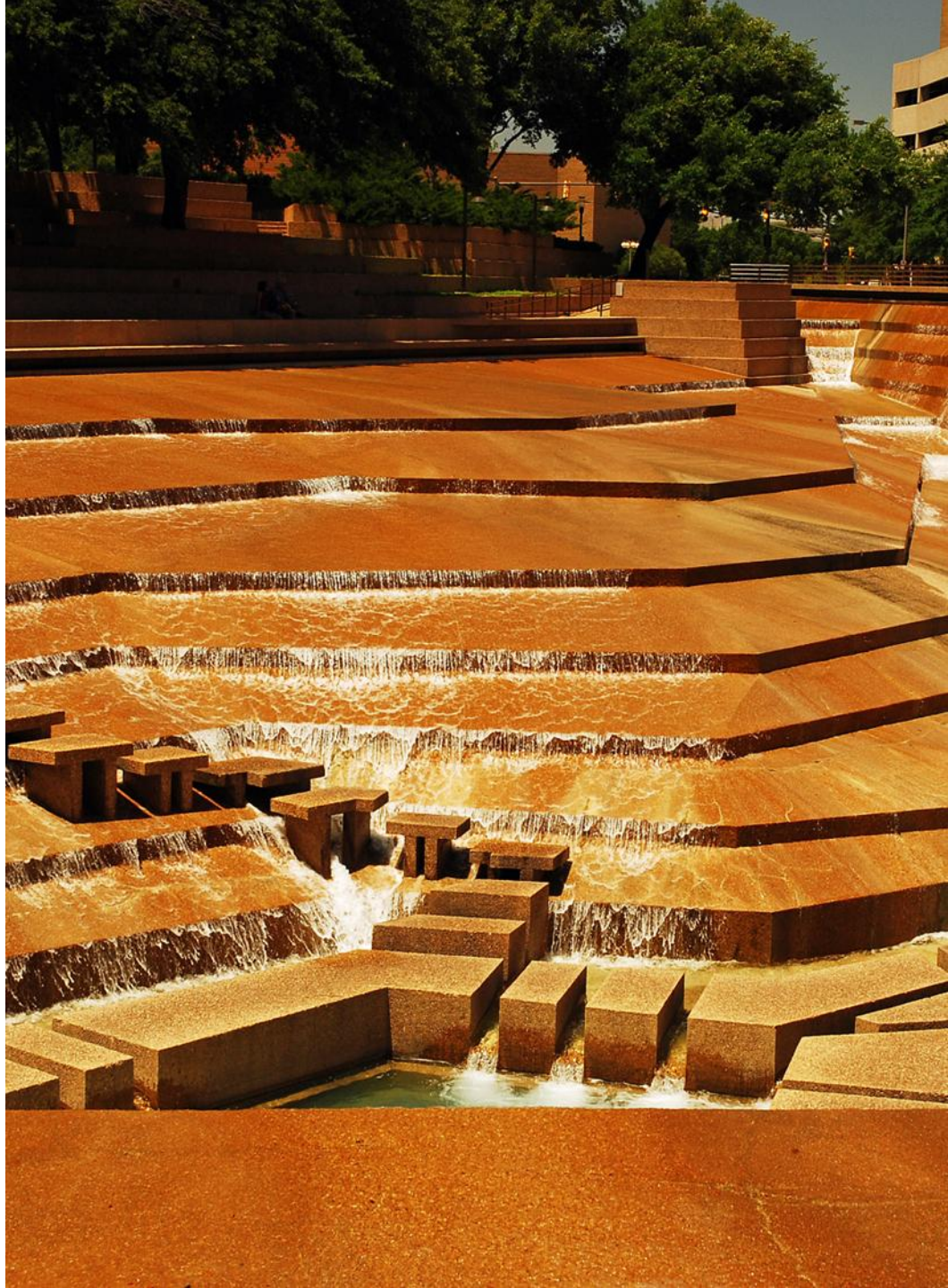


Connected Supplies versus Demand



Potential Water Management Strategies

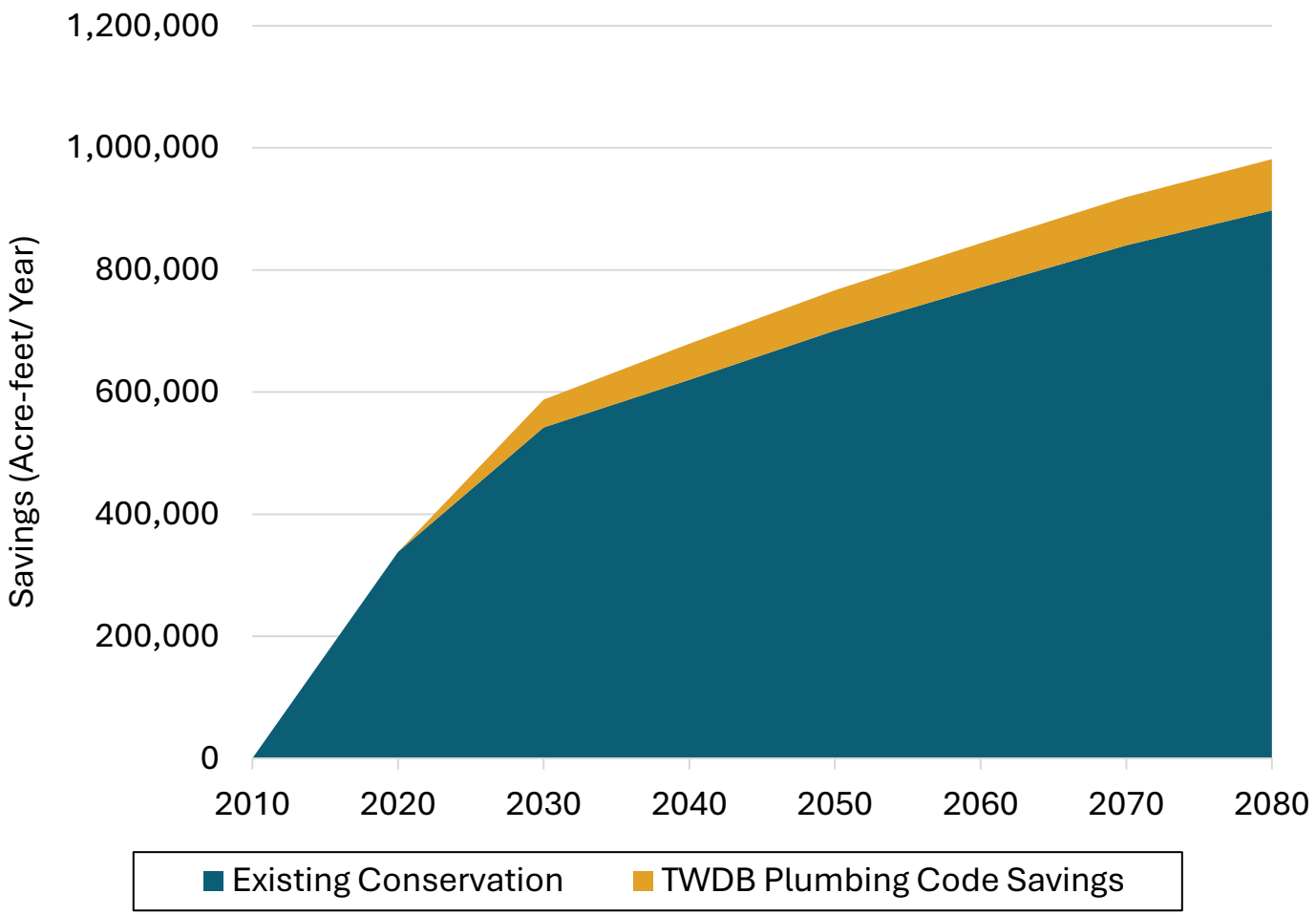
- Conservation
- Reuse
- Connect to existing supplies
- New surface water supplies
- Groundwater



Process to Identify and Evaluate Water Management Strategies

Conservation and Reuse

Existing Conservation and Plumbing Code Savings

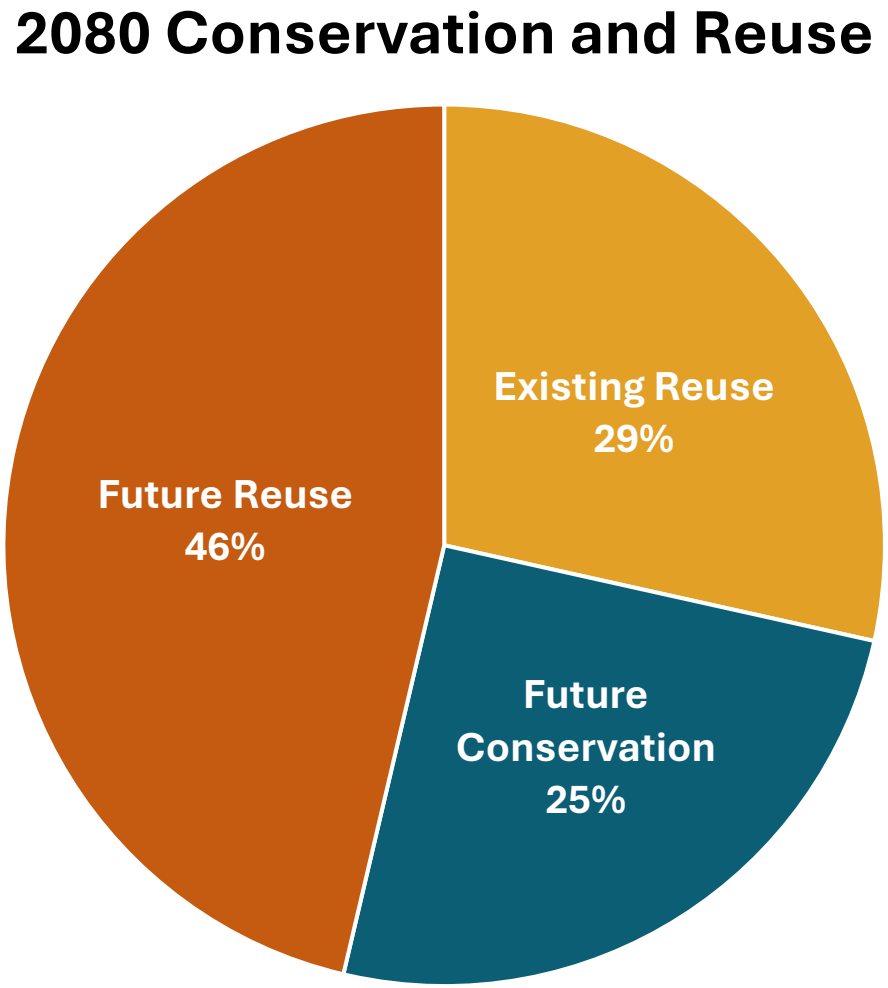


- Region C will save nearly 900,000 AF/Y by 2080 from already implemented conservation measures
  - Expected future plumbing code savings would further reduce water use
- Future active conservation will reduce water use by another 296,000 AF/Y by 2080

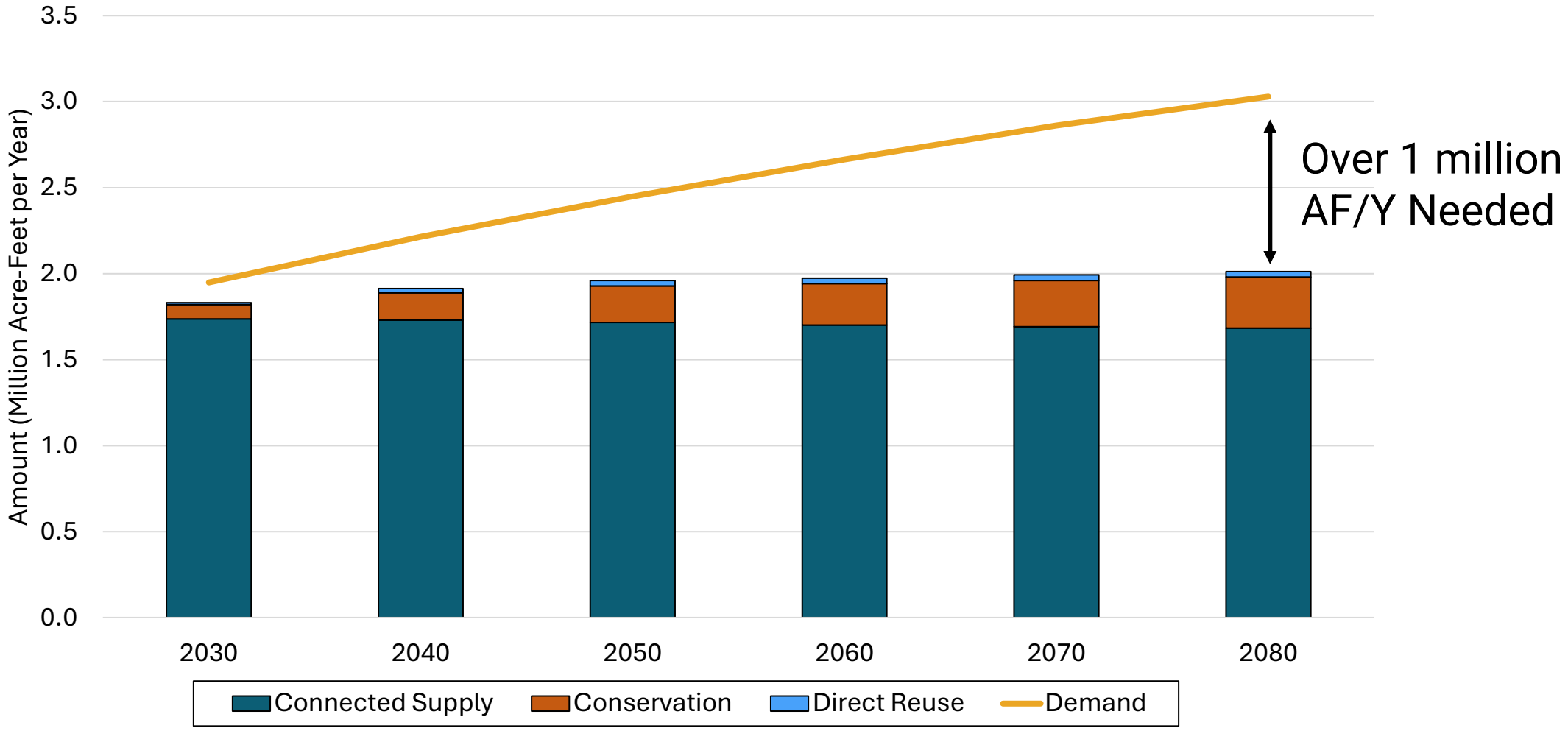
Conservation and Reuse

- ~1.2 million AF/Y of current and future reuse and future active conservation in 2080
- Major Reuse Strategies
  - Marty Leonard Wetlands
  - Reuse from TRA Central RWS
  - Reuse from Mary's Creek WRF
  - Indirect Reuse Implementation
  - Main Stem Balancing Reservoir
  - Expanded Wetlands Reuse
  - Lake Ralph Hall Indirect Reuse

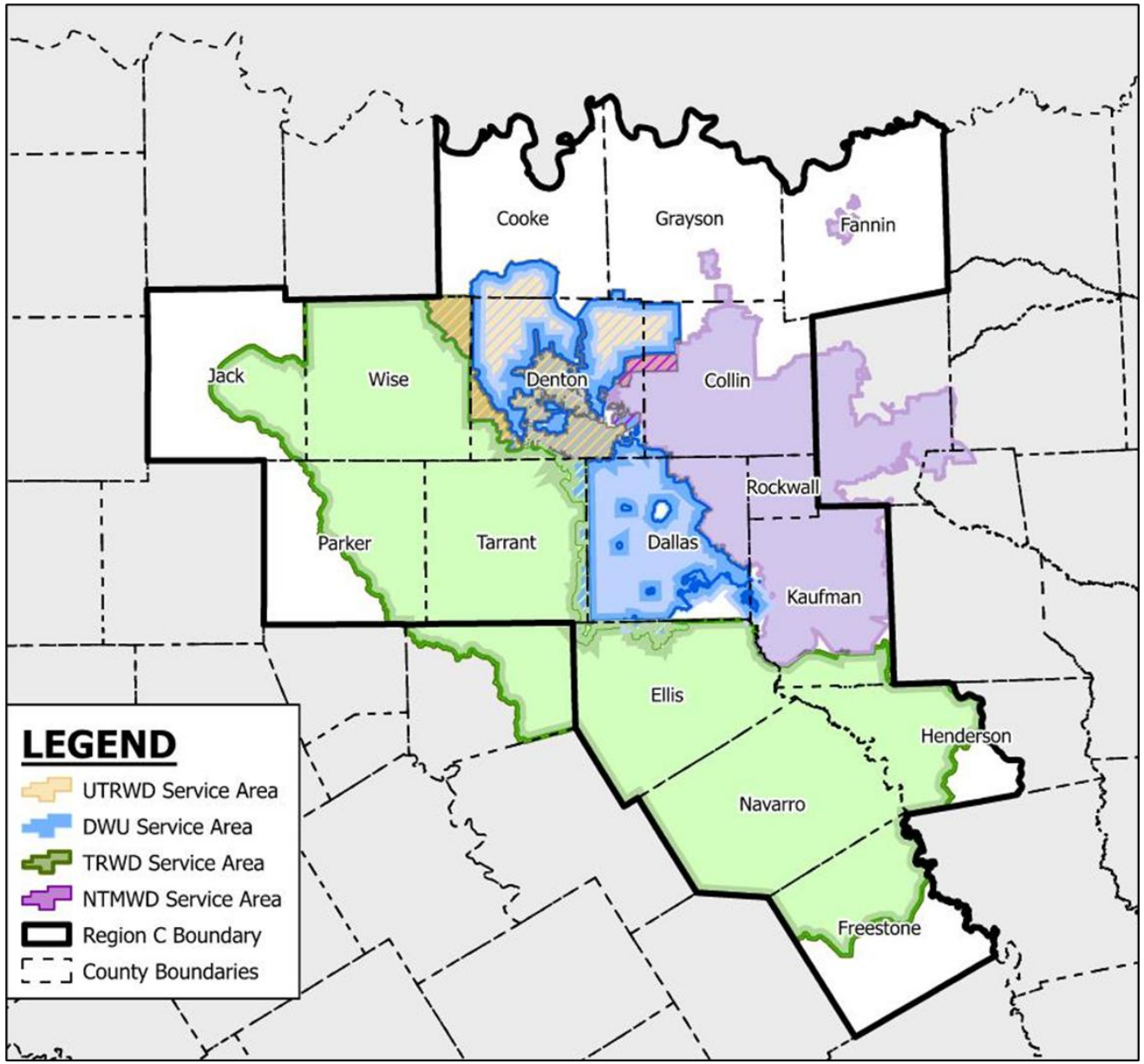
Region C is a statewide and national leader in planning for and implementing conservation and reuse



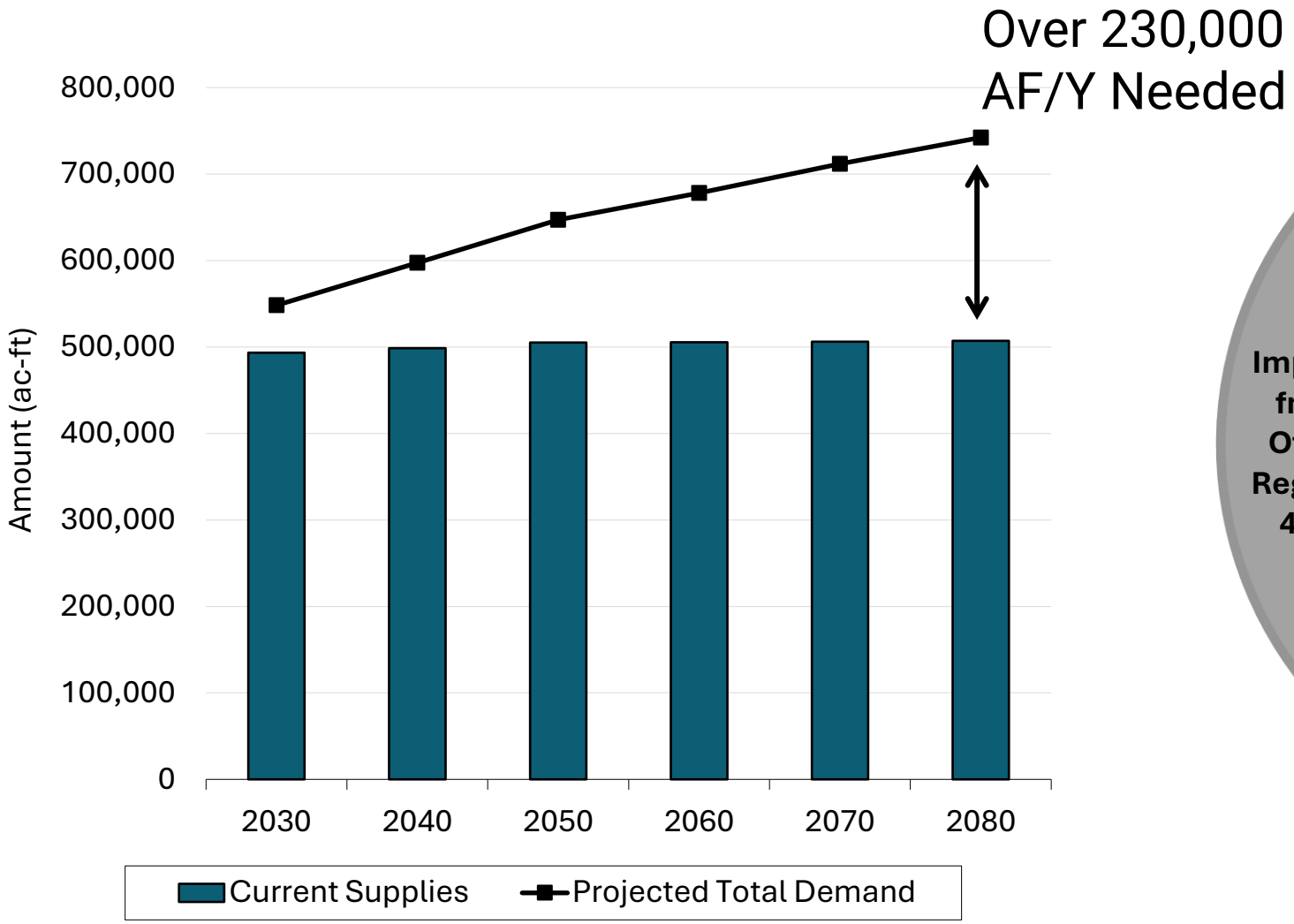
Needs After Conservation and Direct Reuse

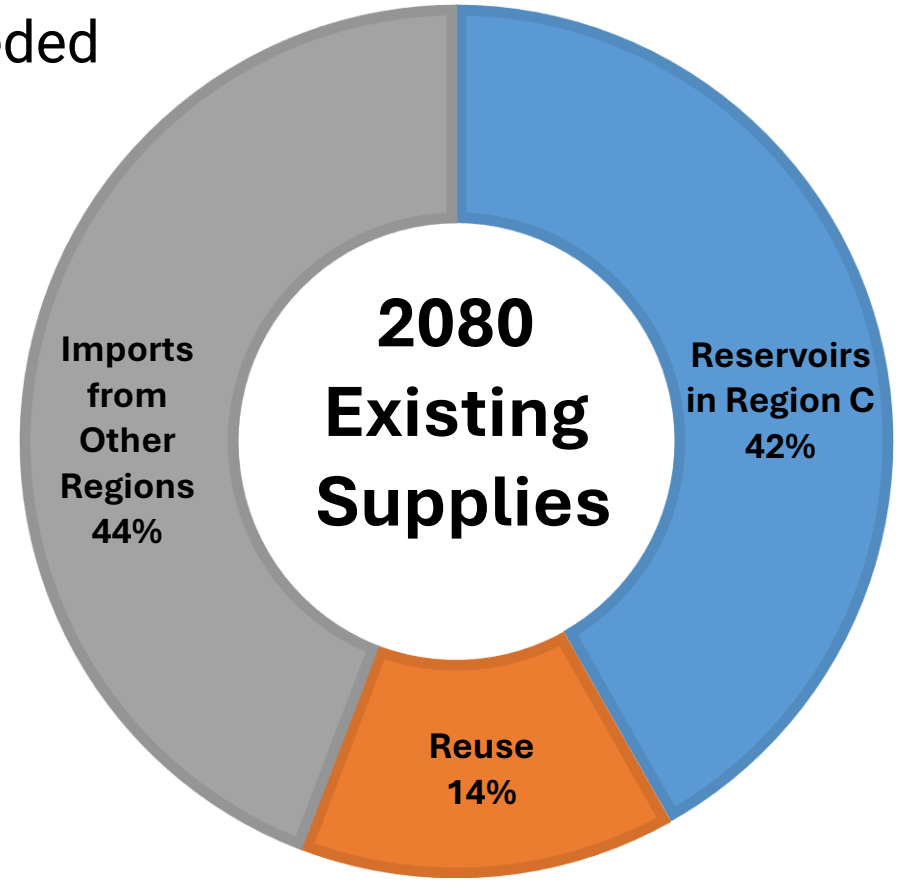


Major Water Providers

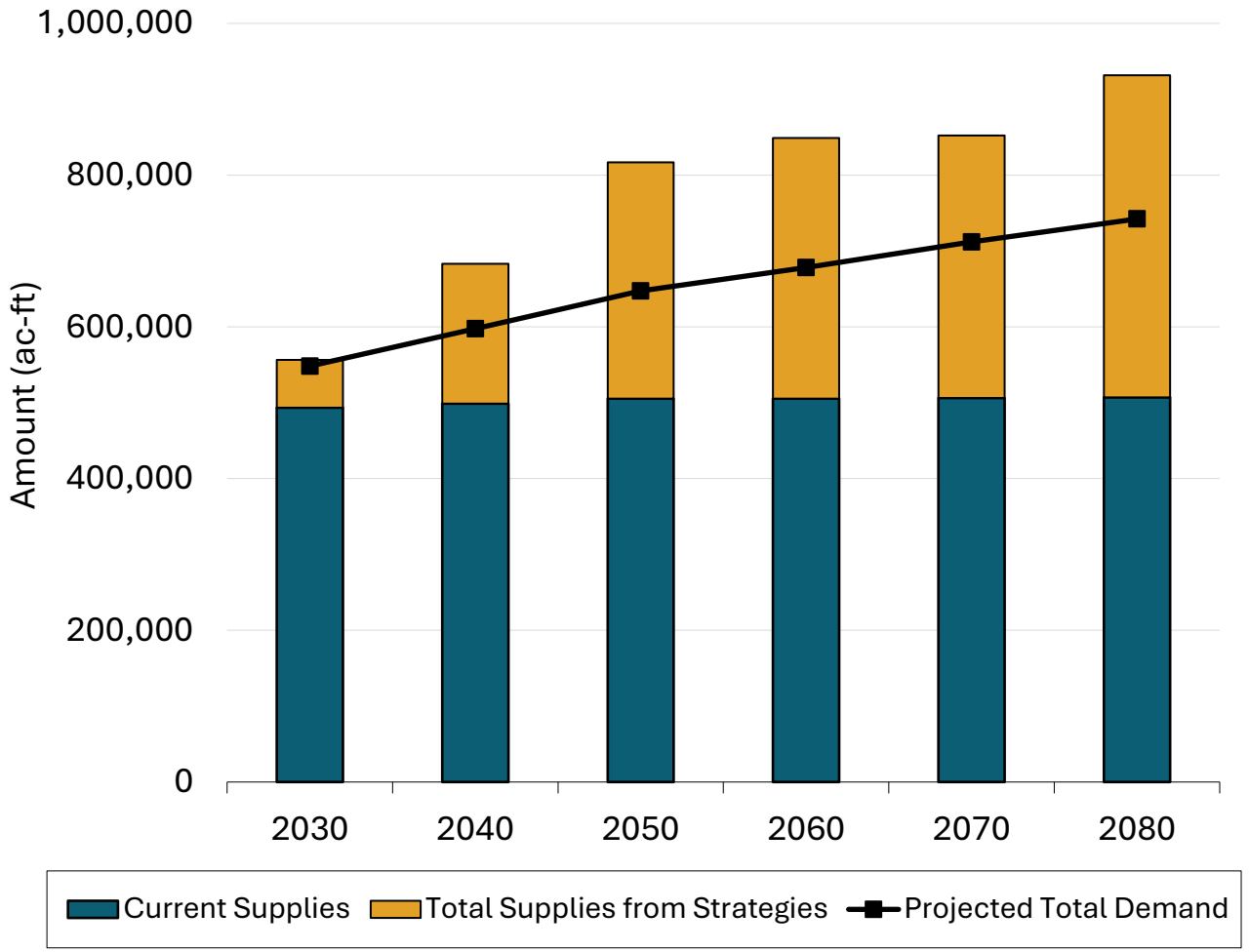


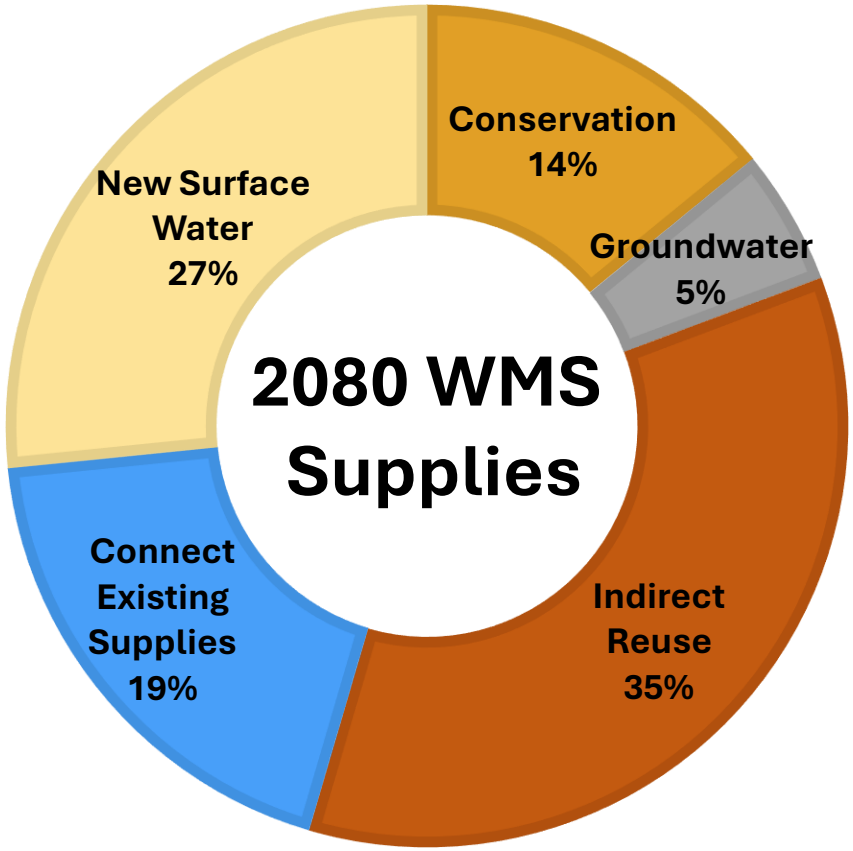
Dallas Water Utilities Needs



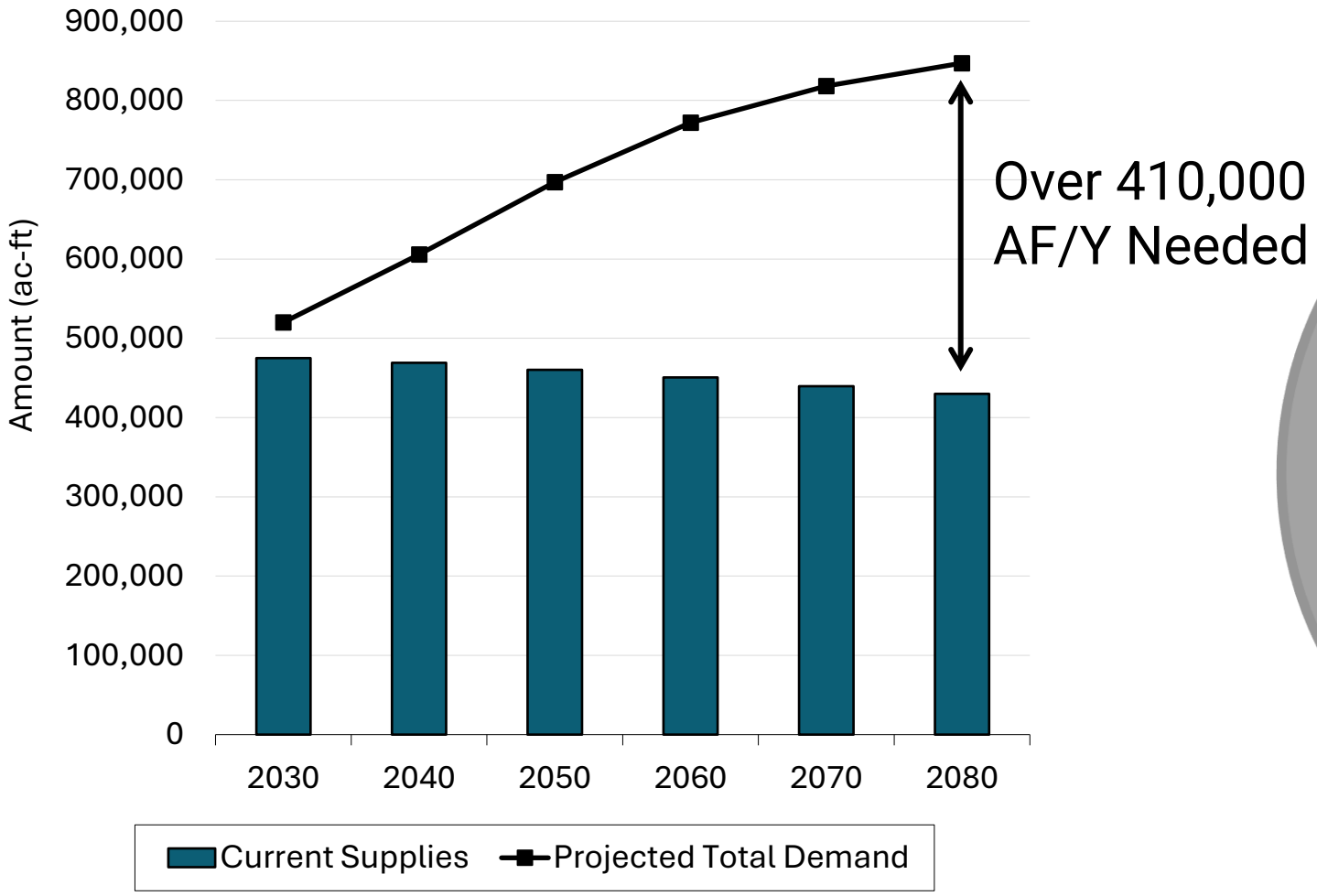


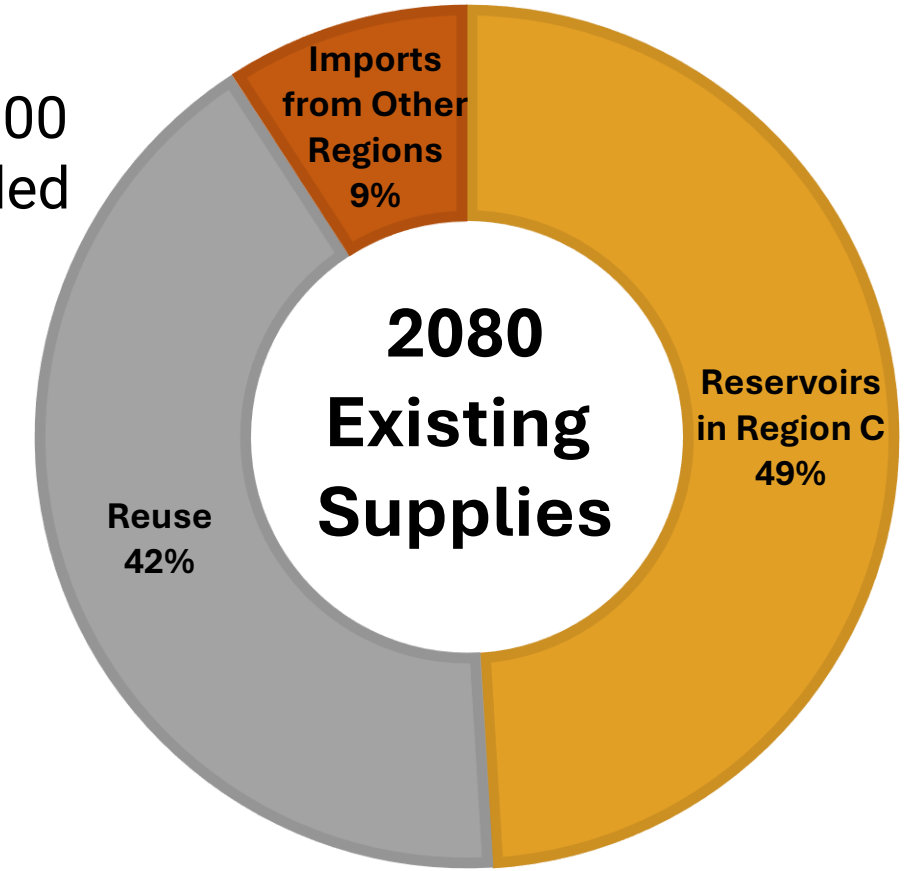
Dallas Water Utilities Strategies



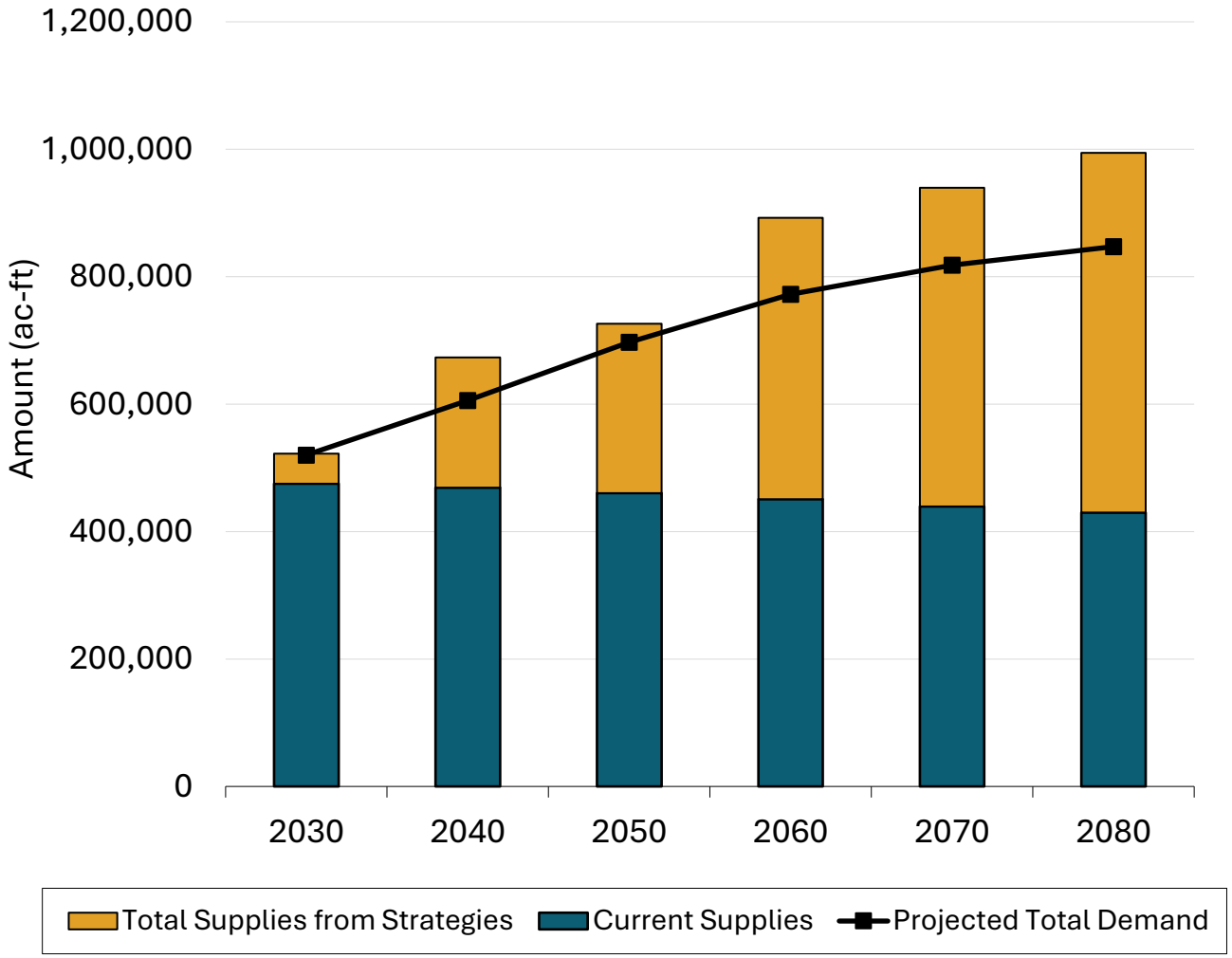


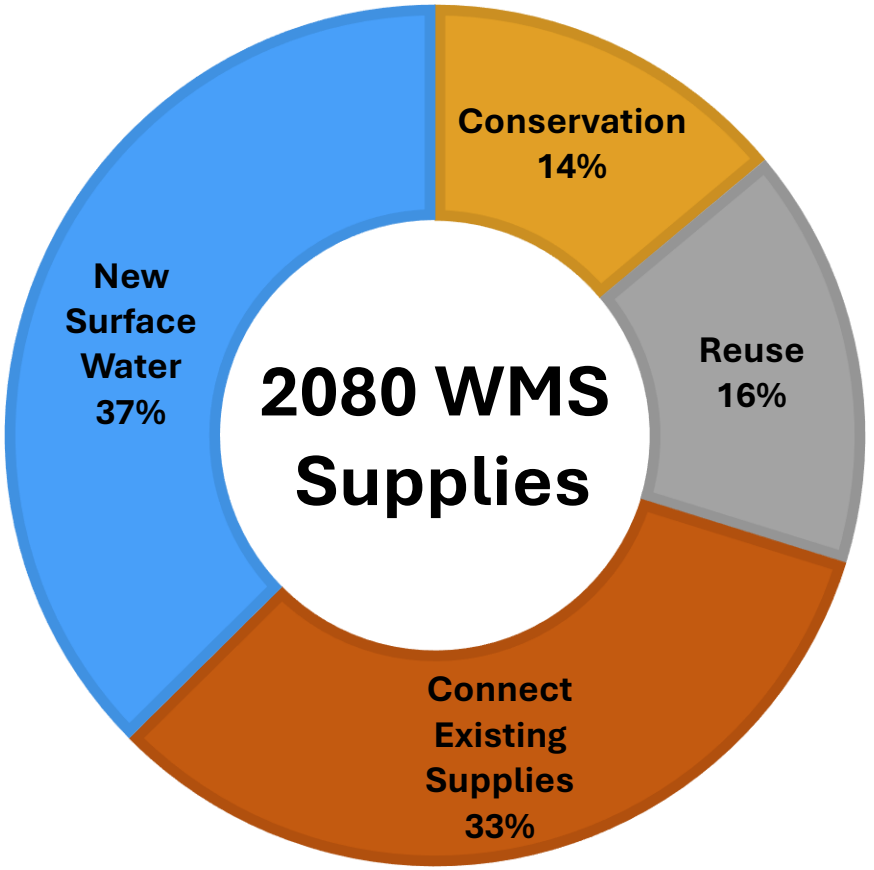
North Texas Municipal Water District Needs



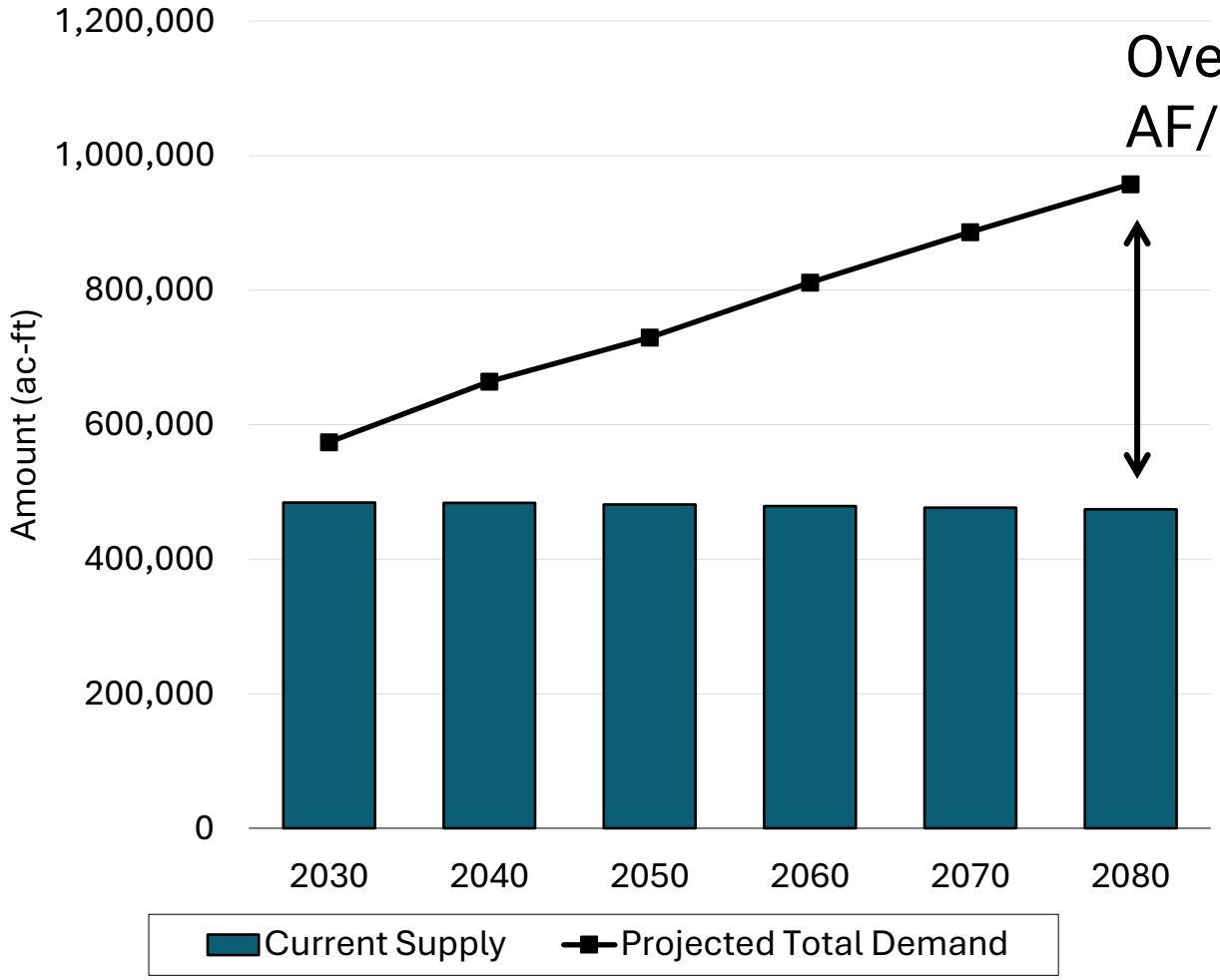


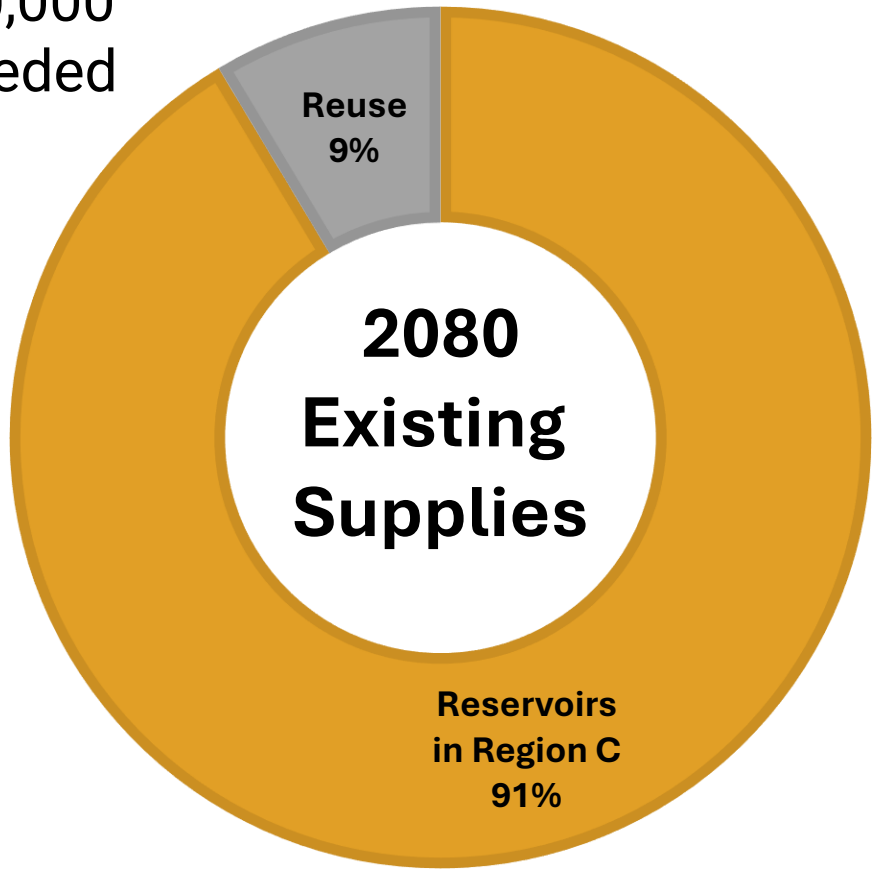
North Texas Municipal Water District Strategies



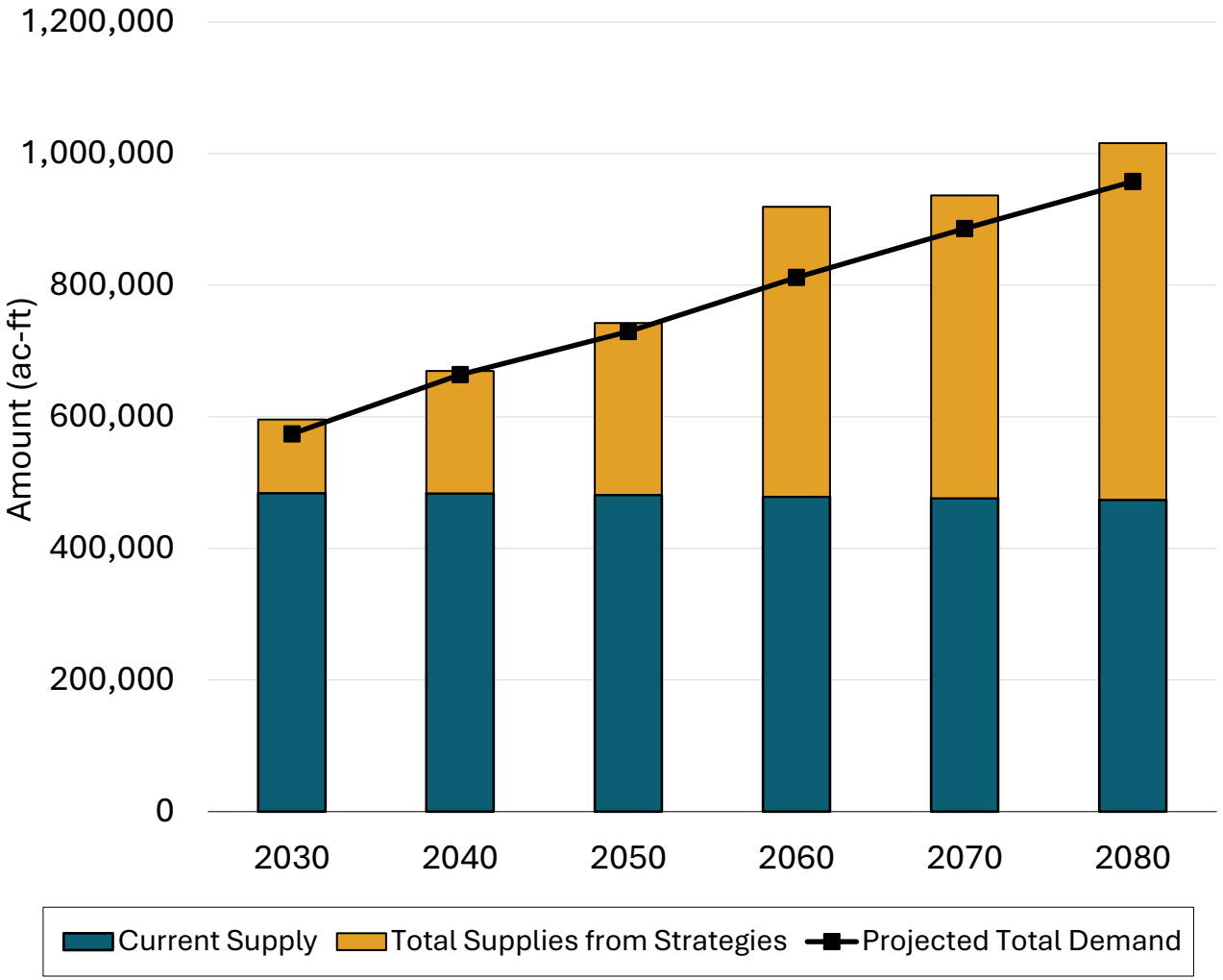


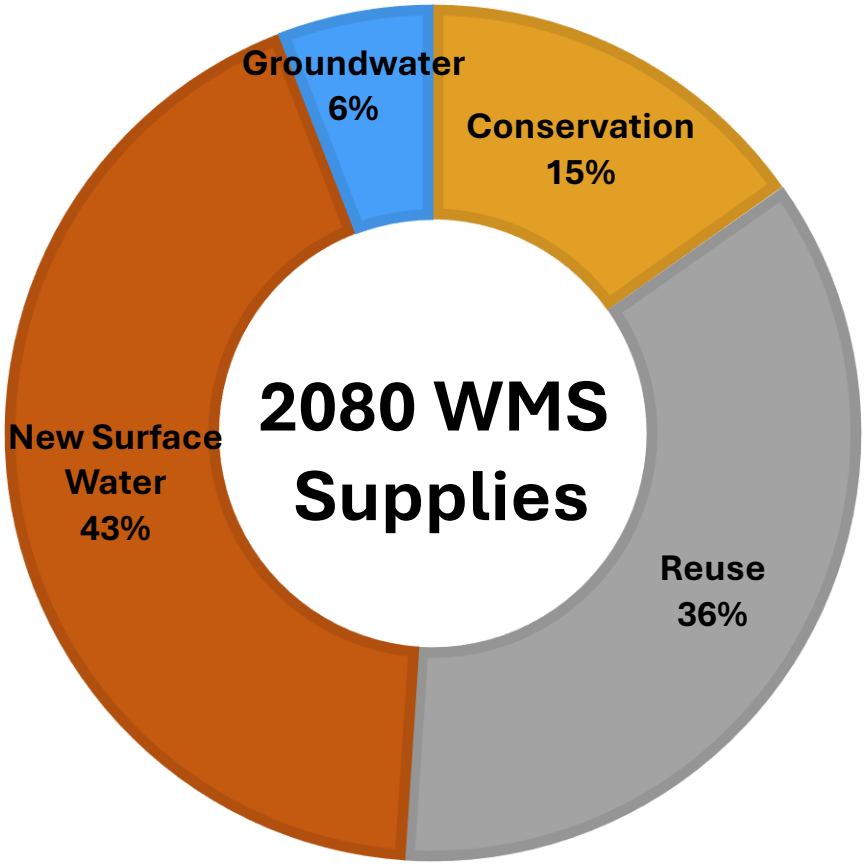
Tarrant Regional Water District Needs



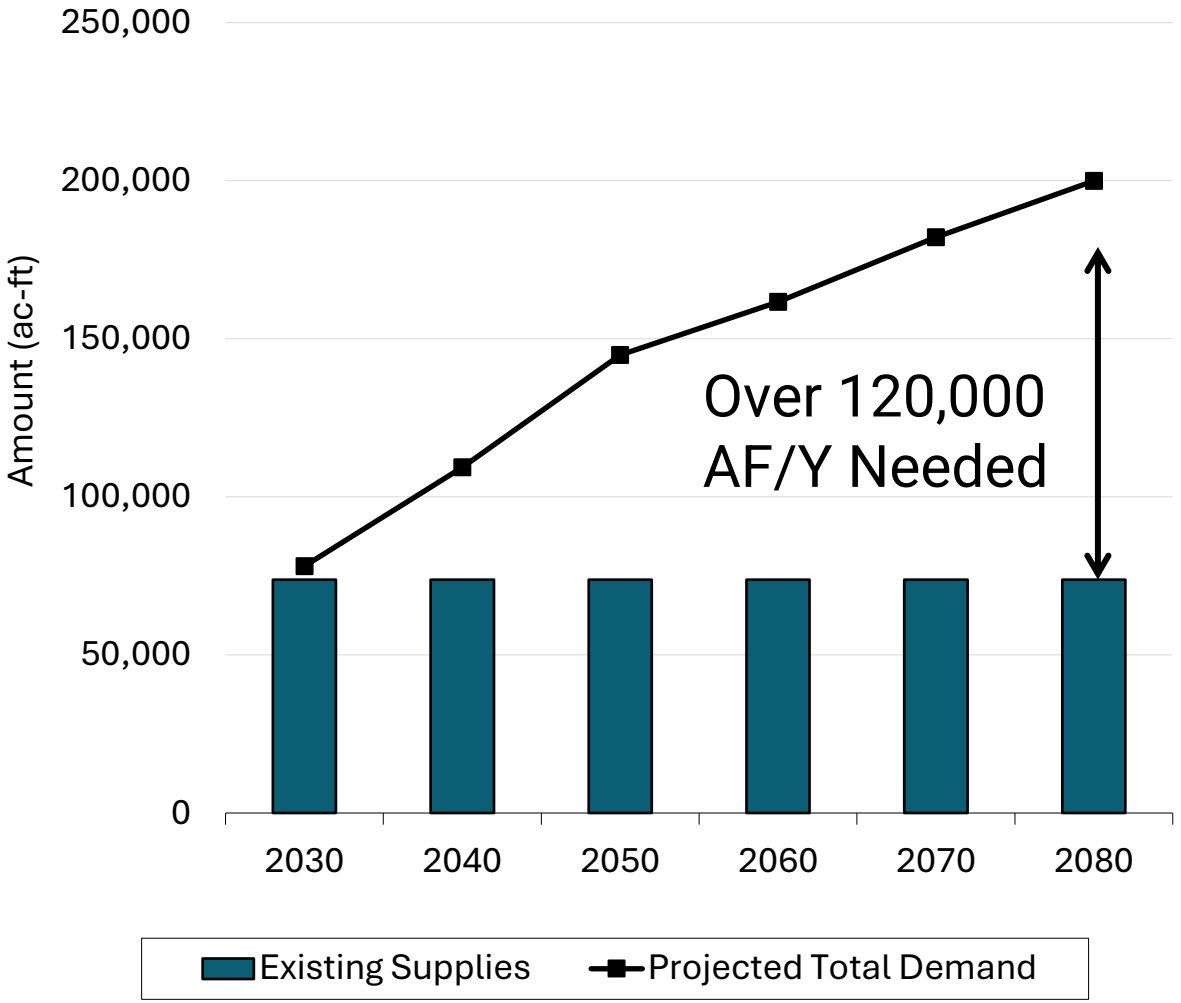


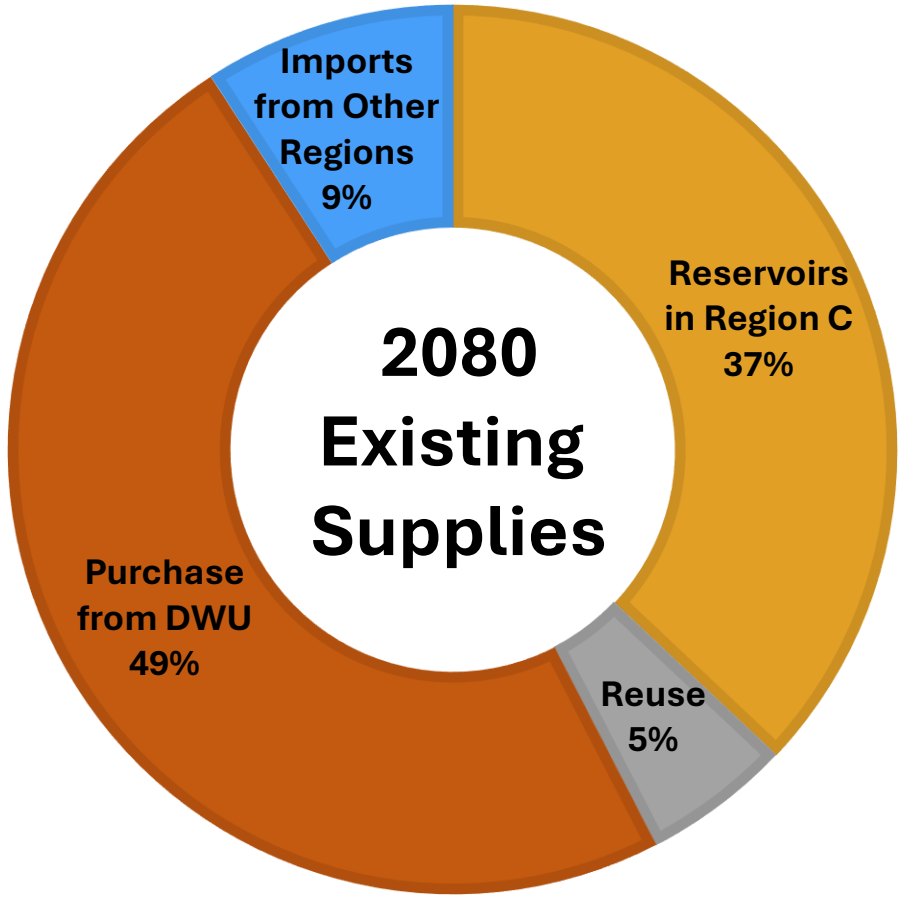
Tarrant Regional Water District Strategies



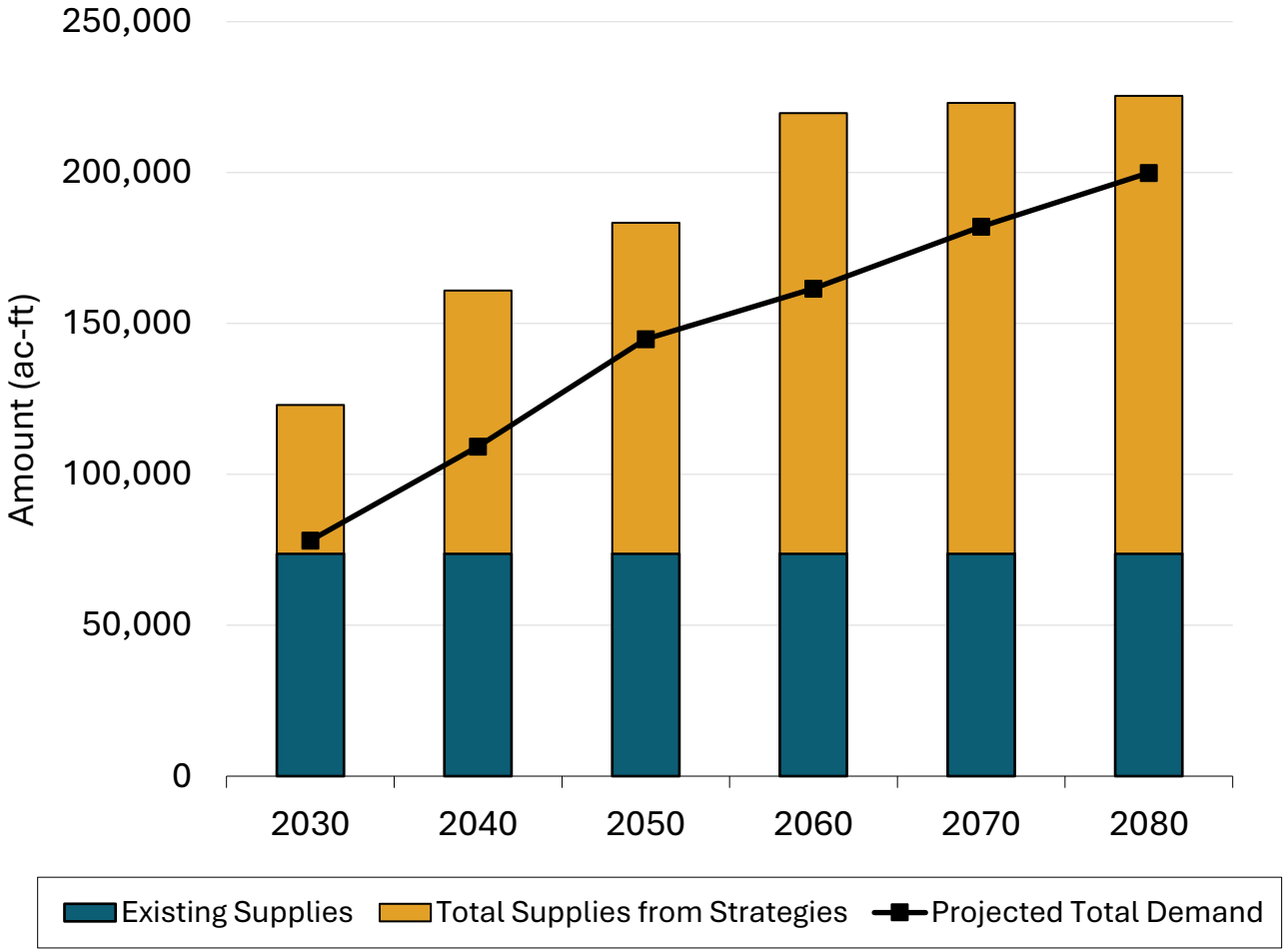


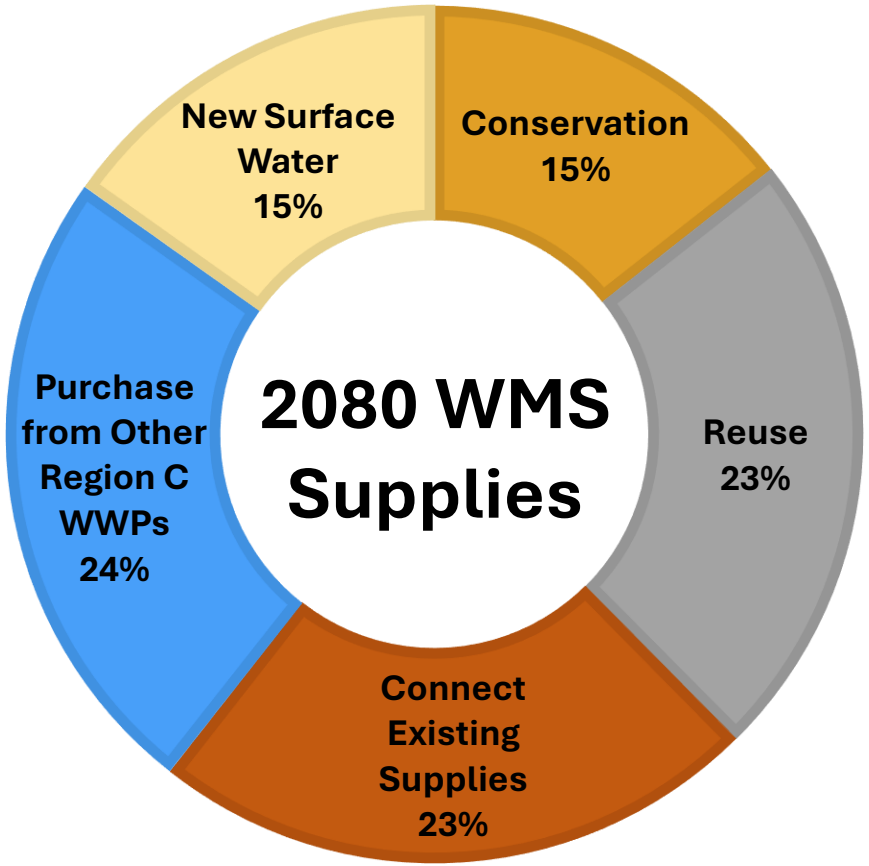
Upper Trinity Regional Water District Needs





Upper Trinity Regional Water District Strategies



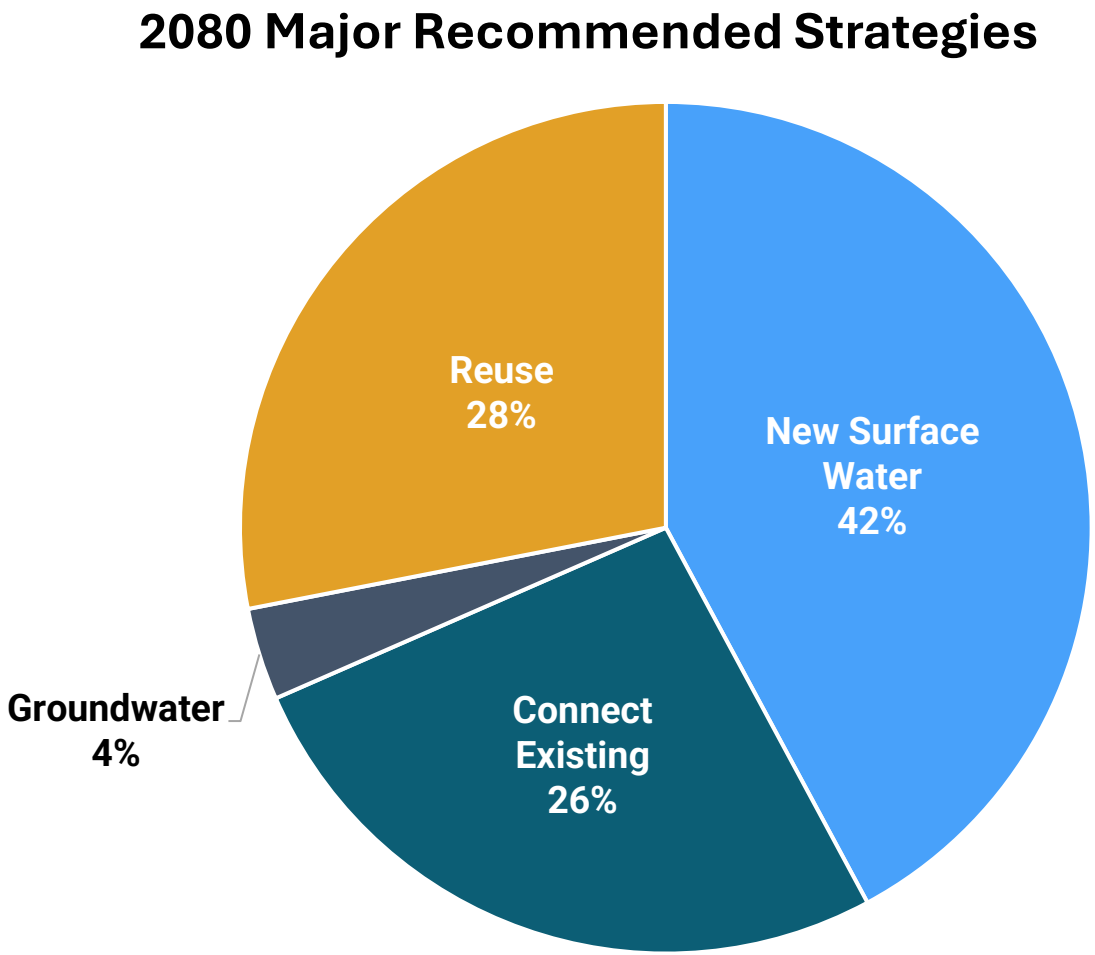


Recommended Major Strategies

Recommended Major Water Management Strategies

- 6 New Surface Water
- 7 Connection of Existing Supplies
- 2 New Groundwater
- 7 Reuse Strategies

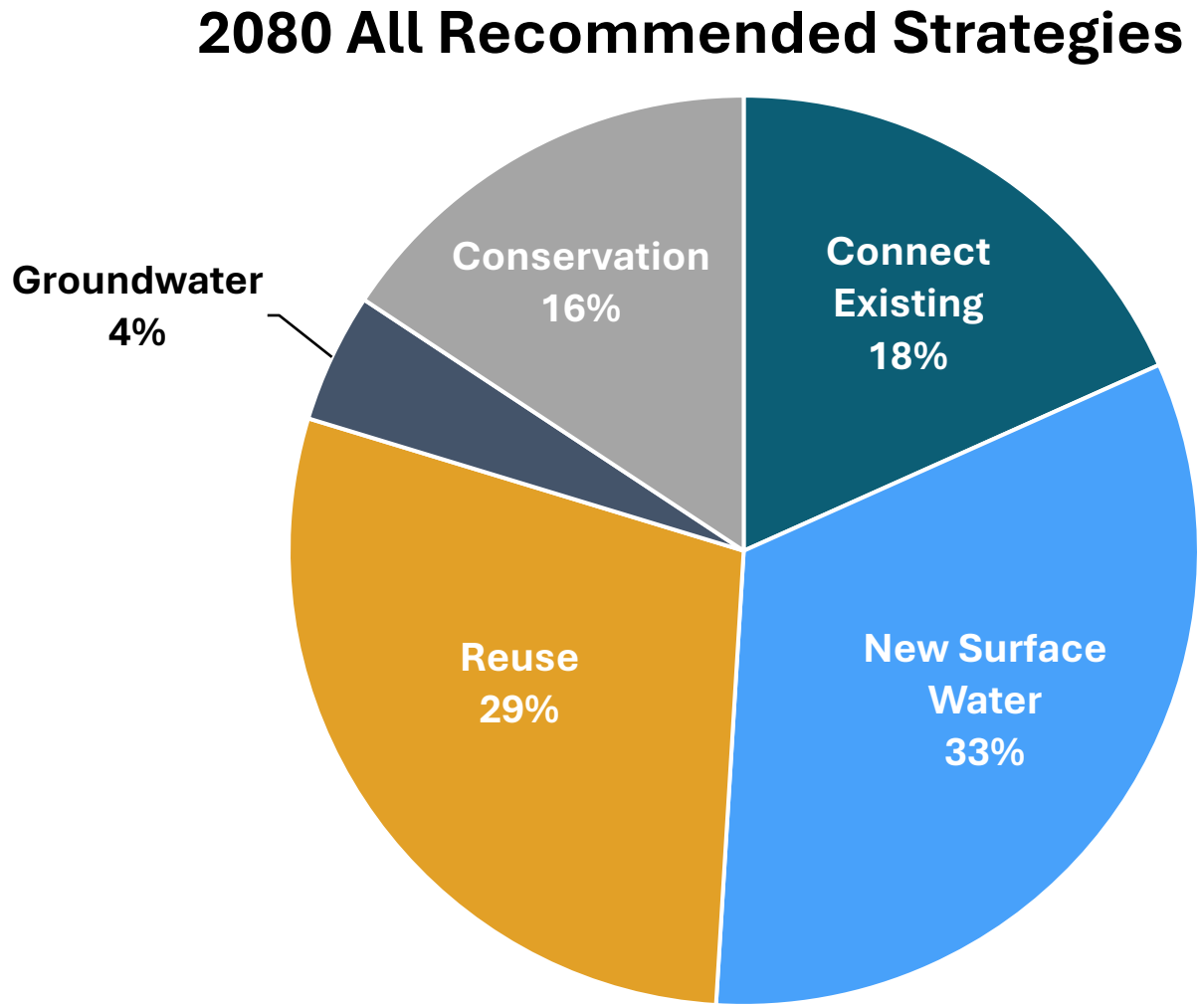
Accounts for ~80% of total additional supply for the region



All Recommended Strategies

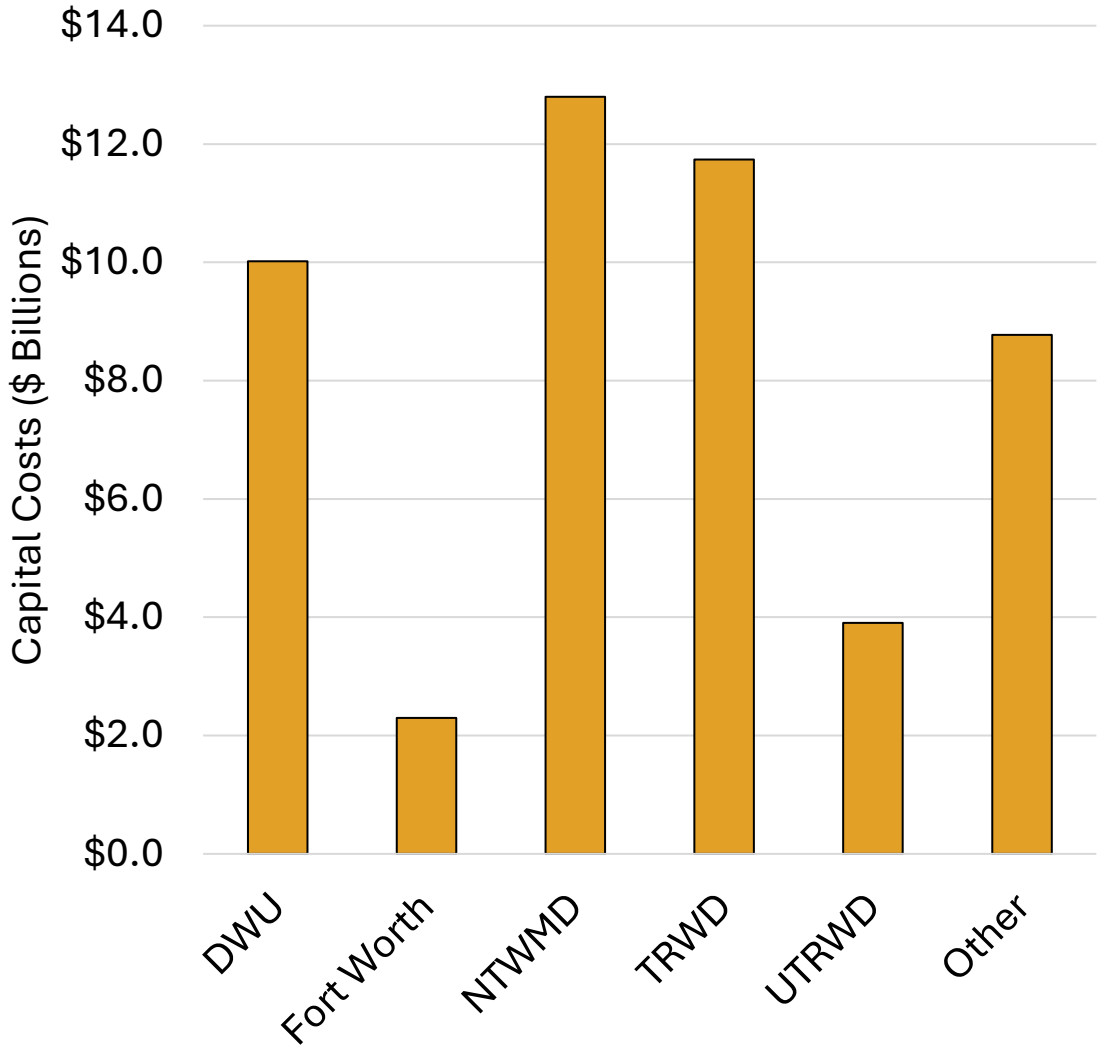
- Over 170 Recommended WMS
- 38 Alternative WMS

- Total Supply from WMS
  - 1.89 million AF/Y
  - 45% Conservation and Reuse



Capital Cost of Recommended Strategies

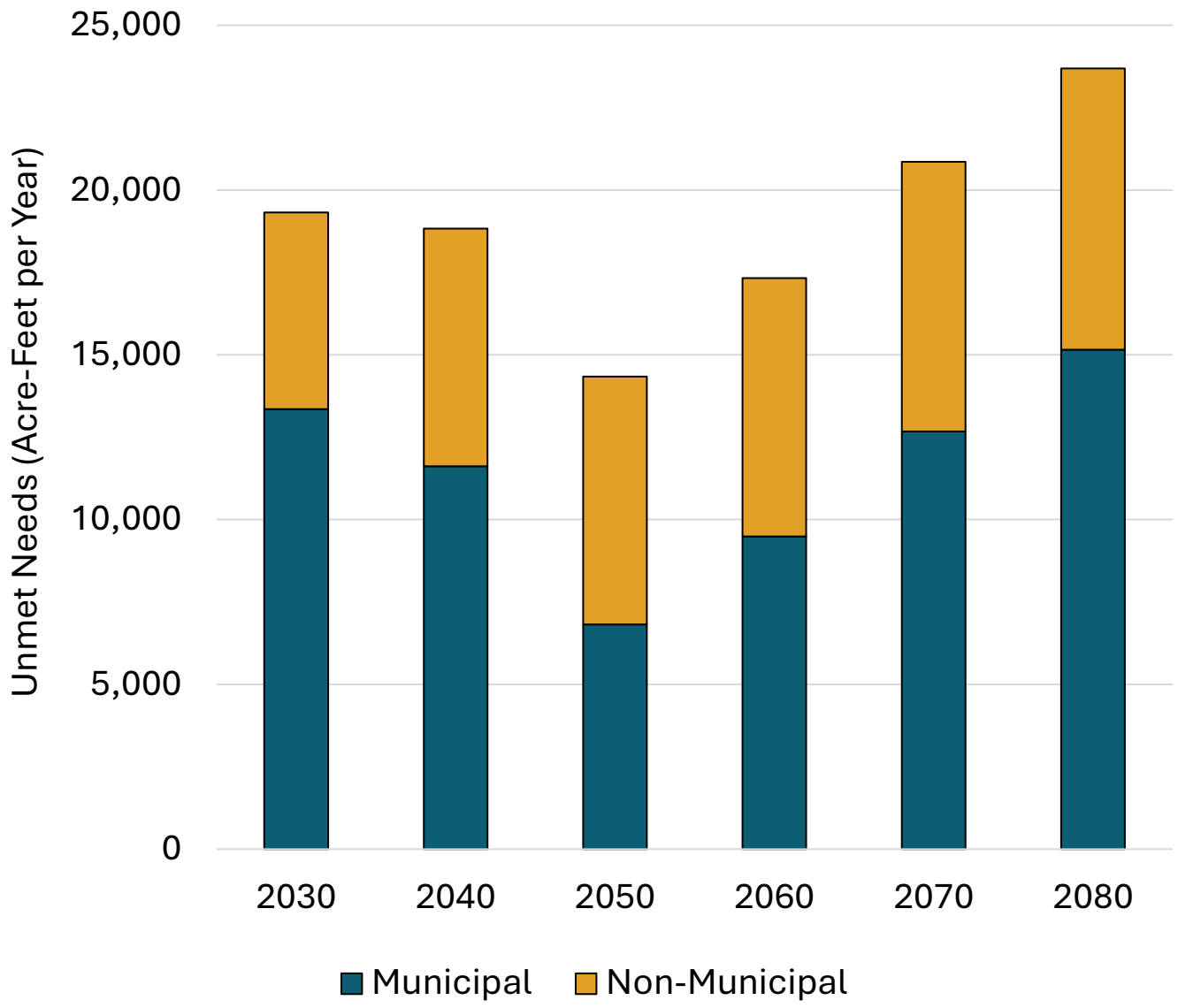
- Total Capital Cost: $49.5 billion
- 82% of cost is for MWPs
- Other
  - Regional Providers: $2.0 billion
  - WUGs/WWPs: $6.8 billion



Unmet Needs

- Three Municipal WUGs
  - Celina
  - County-Other, Parker
  - Irving

- Six Non-Municipal WUGs
  - Irrigation, Ellis
  - Irrigation, Fannin
  - Irrigation, Parker
  - Manufacturing Ellis
  - Manufacturing, Henderson
  - SEP, Freestone



Impacts of Strategies

- Impacts on
  - Water quality
  - Moving water from rural and agricultural areas to urban areas
  - Third party impacts
  - Invasive and harmful species
- Consistent with long-term protection of state resources
- Socio-economic impacts of not meeting water needs
  - TWDB Socioeconomics Impacts Analysis being conducted

Drought Response

- Drought of Record
  - 1950's for most
  - 2011-2015 for Red and Sulphur Basin
- Drought worse than drought of record
  - Considered for DWU, NTMWD and TRWD
- Current preparation for drought
  - Regional coordination
  - 52 Drought Plans

Legislative Recommendations

- No unique stream segments recommended
- 7 Reservoir sites recommended for unique designation
- 17 Policy and legislative recommendations

Public Participation and Plan Adoption

- Copies of the IPP can be found online at https://regioncwater.org/
- Public comments will be accepted up to 60 days following this Public Hearing (**July 18, 2025**)

Public Participation Elements

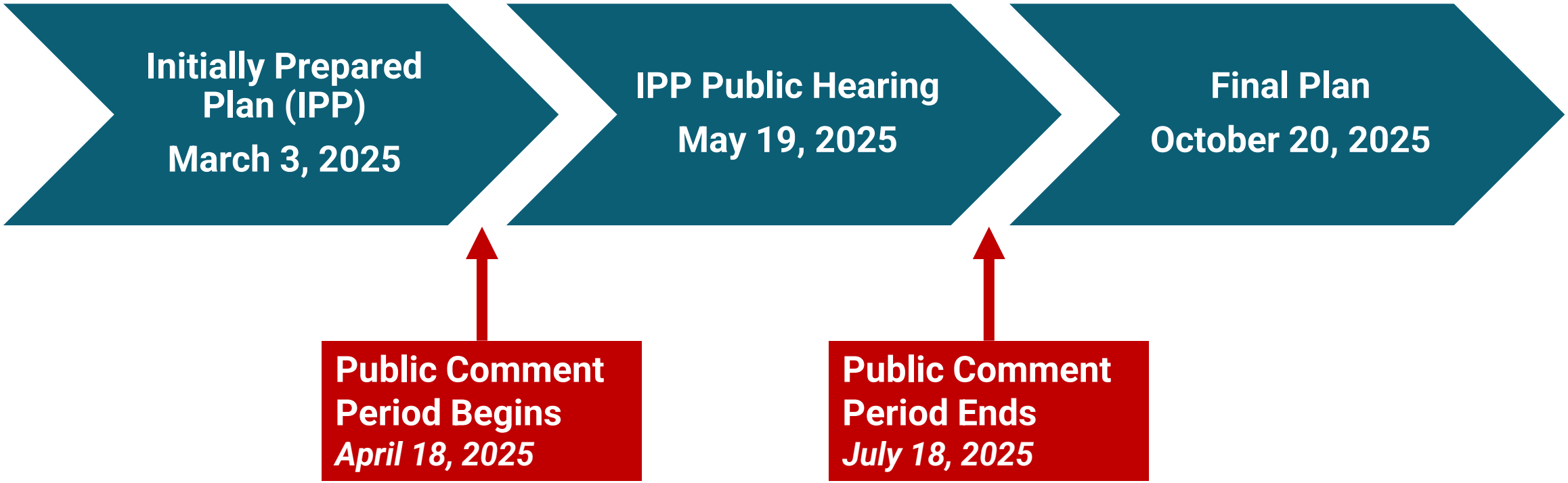
- Outreach to the Public
  - RCWPG Meetings
  - www.regioncwater.org
  - Media/ Press releases
- Outreach to Water Suppliers
  - Surveys/Emails
  - Rural Outreach
  - Meetings/Teleconferences
  - Review of Published Documents
- Outreach to Adjoining Regions
  - Region C/D Coordination
  - Regional Liaisons

Key Takeaways

- Region C is experiencing rapid growth that is outpacing current water supplies
  - Some providers are experiencing shortages today
- Conservation and reuse are an essential part of the solution but will not be able to meet the needs of the Region alone
- The water supply shortage can be solved but Region C will need to use water from other parts of the state
- The 2026 Region C IPP has unmet municipal water needs
  - Delays in project implementation can increase unmet needs
- The ability to develop new water supplies and meet future growth is critical to the State’s economy

Working Timeline – 2026 RWP Cycle

SIXTH CYCLE OF REGIONAL WATER PLANNING



Public Comments (Limited to 2 minutes per speaker)

IPP PUBLIC HEARING

MAY 19, 2025

THANK YOU

Materials are available at
www.regioncwater.org