

“Tracking Water Usage in Texas
is a High Priority”

Is GPCD the Best Measurement
of Water Use Efficiency?

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Water Usage in Texas for FY 2000

Water Use Category	Percentage of Total Use
Municipal	24%
Manufacturing	9%
Mining	2%
Steam-Electric	3%
Livestock	2%
Agri/Irrigation	60%

Source: Water for Texas 2007



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GPCD Background

- Gallons Per Capita Day (GPCD)
 - GPCD is a metric that has been used to track and compare water usage among cities in Texas
- No Standard Methodology
 - a. Texas Commission on Environmental Quality (TCEQ) Method
 - b. Texas Water Development Board (TWDB) Method
 - c. Water Conservation Implementation Task Force (SB 1094) Method
 - d. Water Conservation Advisory Council (SB 3 & HB 4) Method



Why is it Important to Accurately Measure Water Usage/Conservation Progress?

- TCEQ must consider before issuing permit for new water supply
- TWDB must consider before providing State funding
- Planners must consider whether savings can be relied upon for future water supply
- Suppliers must consider to assess value of investment in water efficiency strategies



The GPCD Issue

- Agencies and others generally rely on GPCD as indication of water usage/conservation progress
- Agencies and others generally rely on GPCD to compare water usage among cities
- GPCD as reported is most often inappropriate, inaccurate, and misleading to the public



Factors Affecting GPCD Calculation

- I. Water Usage Volume
 - A. Population Related Usage
 - 1. Single Family Residential
 - 2. Multi-Family Residential
 - B. Commercial Water Usage
 - C. Institutional Water Usage
 - D. Recreational/Public Water Usage
 - E. Active Conservation Programs
 - F. Water Use Accounting
 - G. Regional Economic Condition
 - H. Climate
 - I. Availability of Water Supply
 - J. Self-Supplied Users
 - K. Water Pricing
 - L. Amount of Reuse/Recycle



Factors Affecting GPCD Calculation

II. Population

- A. Service Area Population
- B. Accuracy of Population Count
- C. Timeliness of Data
- D. Commuter Influx
- E. Growth vs. Mature Cities
- F. Regional Economic Condition



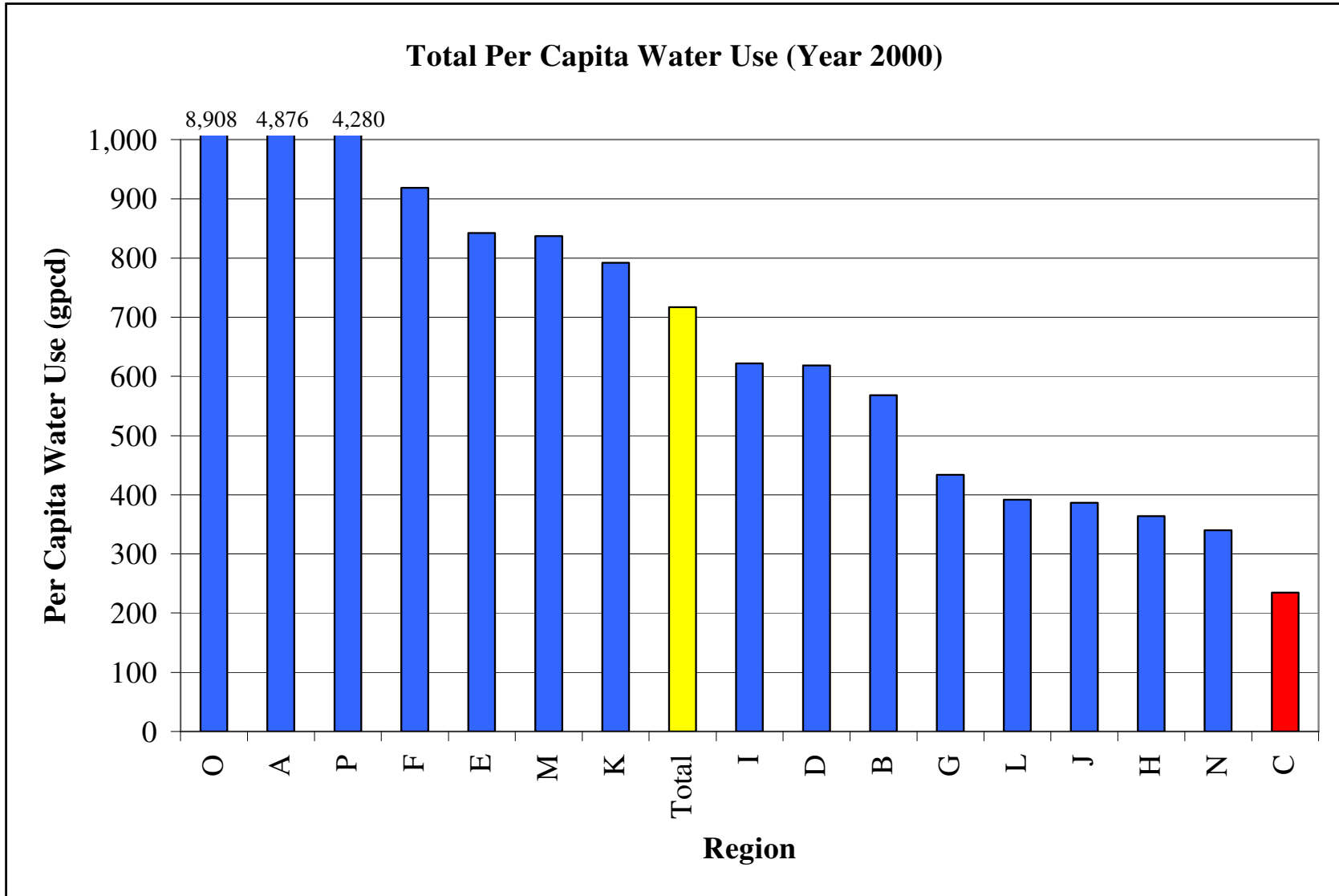
Common GPCD Categories

- Total
- Municipal
- Residential



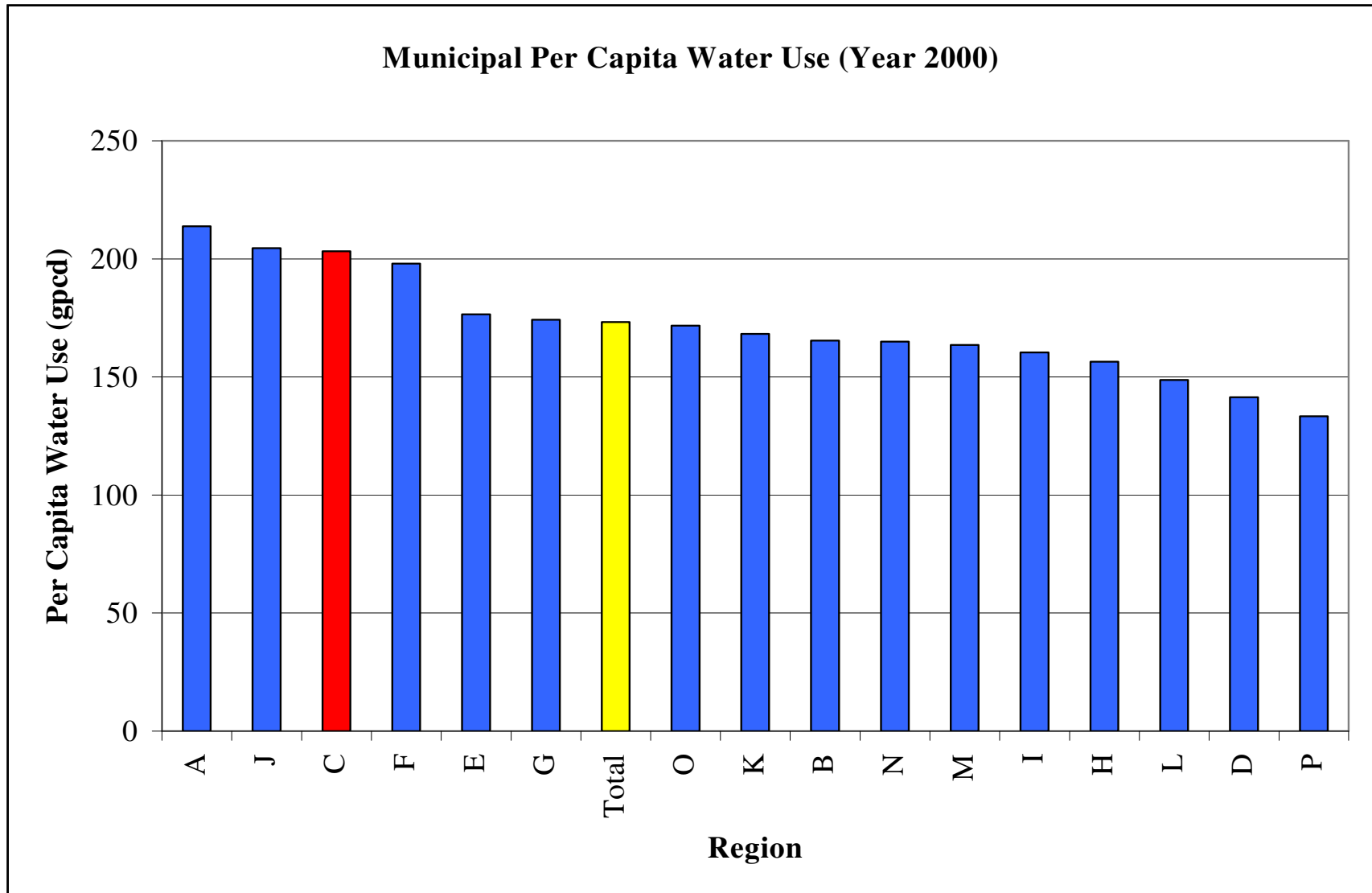
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Total Per Capita Water Use by Region



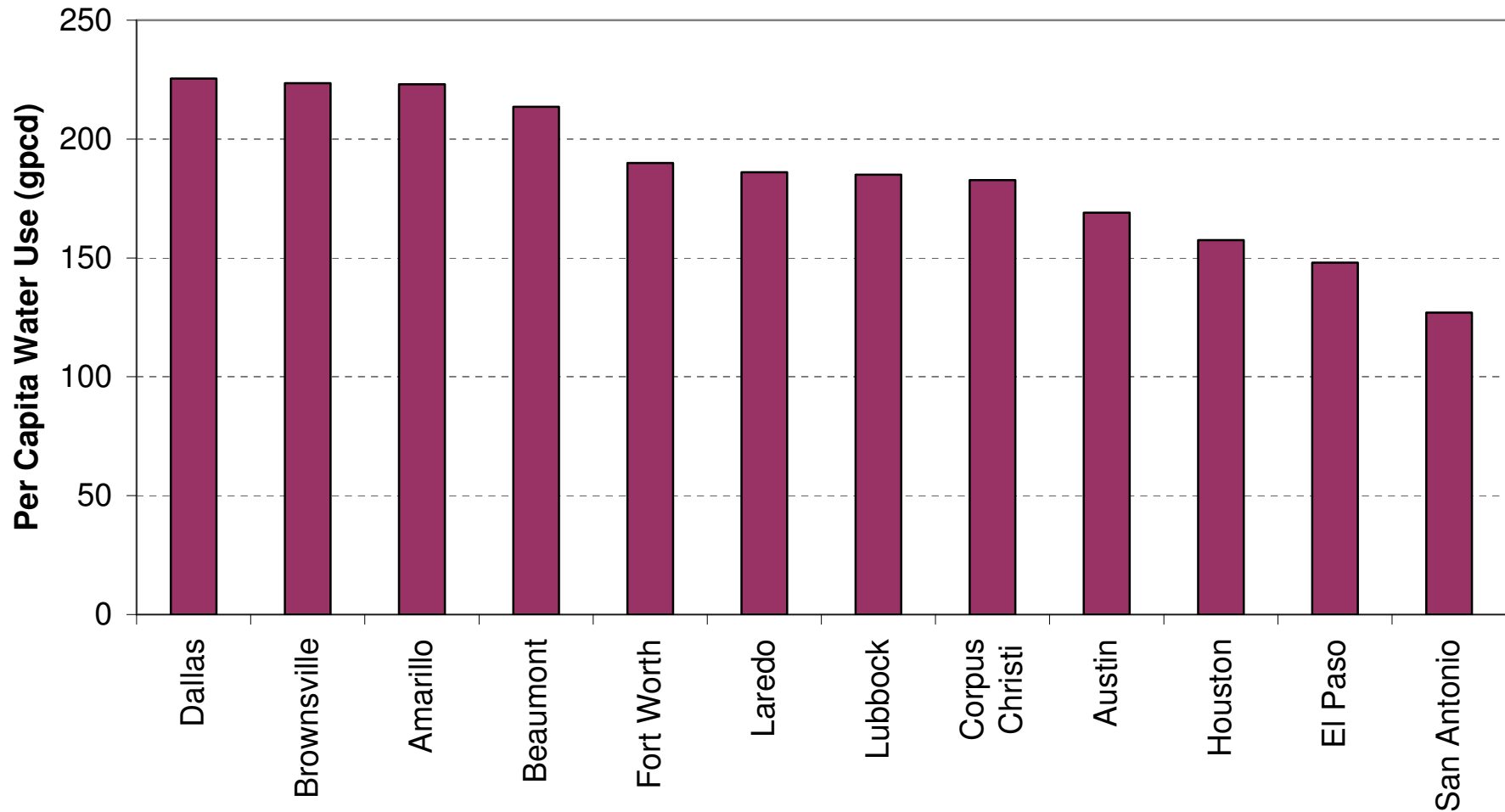
Source: 2006 Region C Water Plan

Municipal Per Capita Water Use by Region



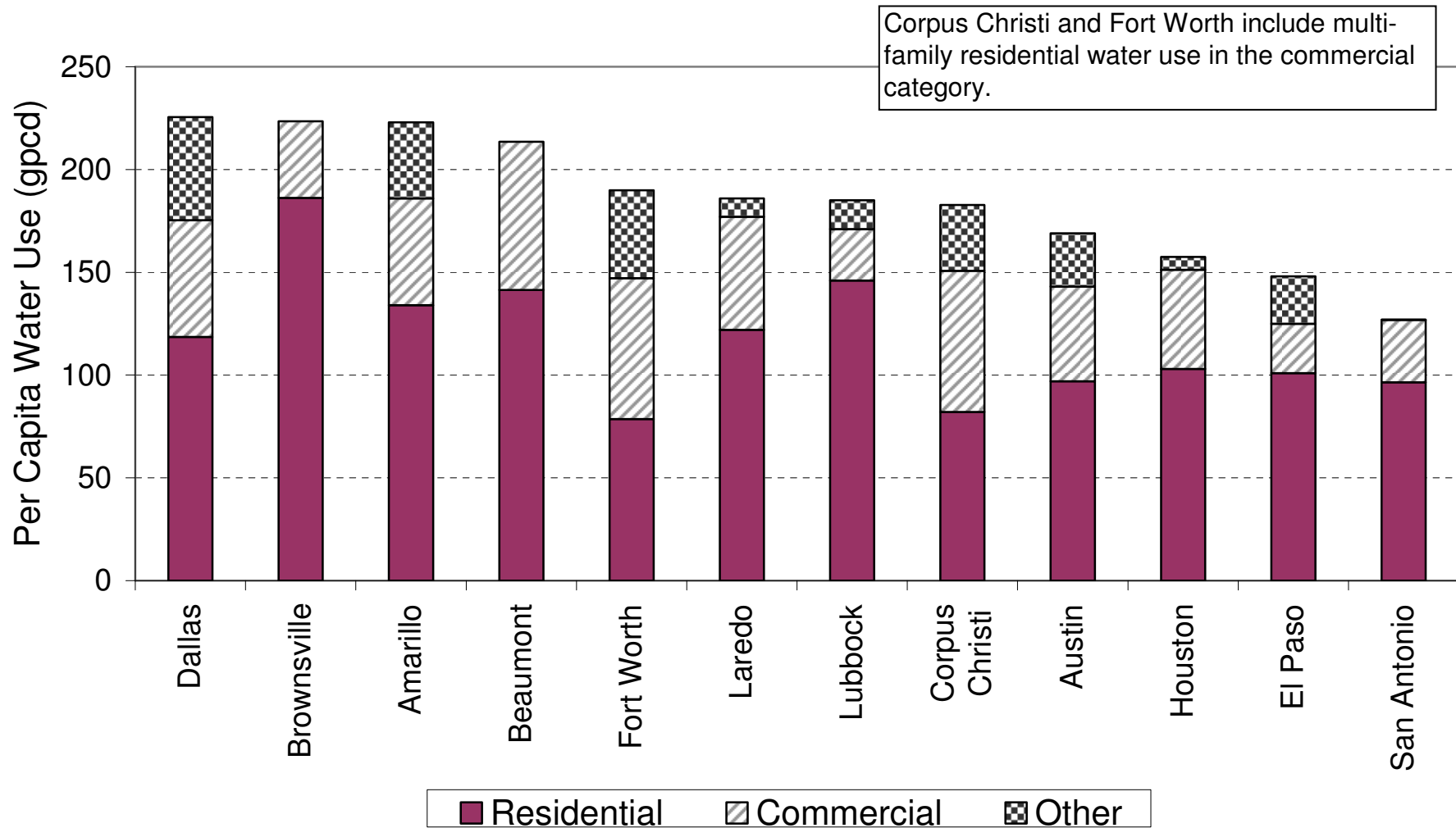
Source: 2006 Region C Water Plan

Most Recent 5-Year Trailing Net Municipal Per Capita Water Use (2006 Plan)



Source: 2006 Region C Water Plan
"Modified Version"

Most Recent 5-Year Trailing Net Municipal Per Capita Water Use by Category (2006 Plan)



Source: 2006 Region C Water Plan

Water Conservation Advisory Council (WCAC)

- Created by passage of SB-3 and HB-4 during 80th Session of Texas Legislature
- 23 members appointed by TWDB
- Created to provide the resource of a select council with expertise in water conservation
- Duties of Water Conservation Advisory Council
 - Public Awareness and Recognition
 - Data Collection and Monitoring
 - Implementation and Measurement
 - Resource Library
 - Certified Training Programs
- First Report to be filed December 1, 2008



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Initial Recommendations of WCAC Relating to Water Usage Calculation

- Development of standard methodologies for water use metrics and water conservation metrics should be a priority
- Total GPCD should not be used for comparison between utilities
- Many categories of water use such as agriculture and industry are not directly related to local population data and will need metrics appropriate to their specific water use



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