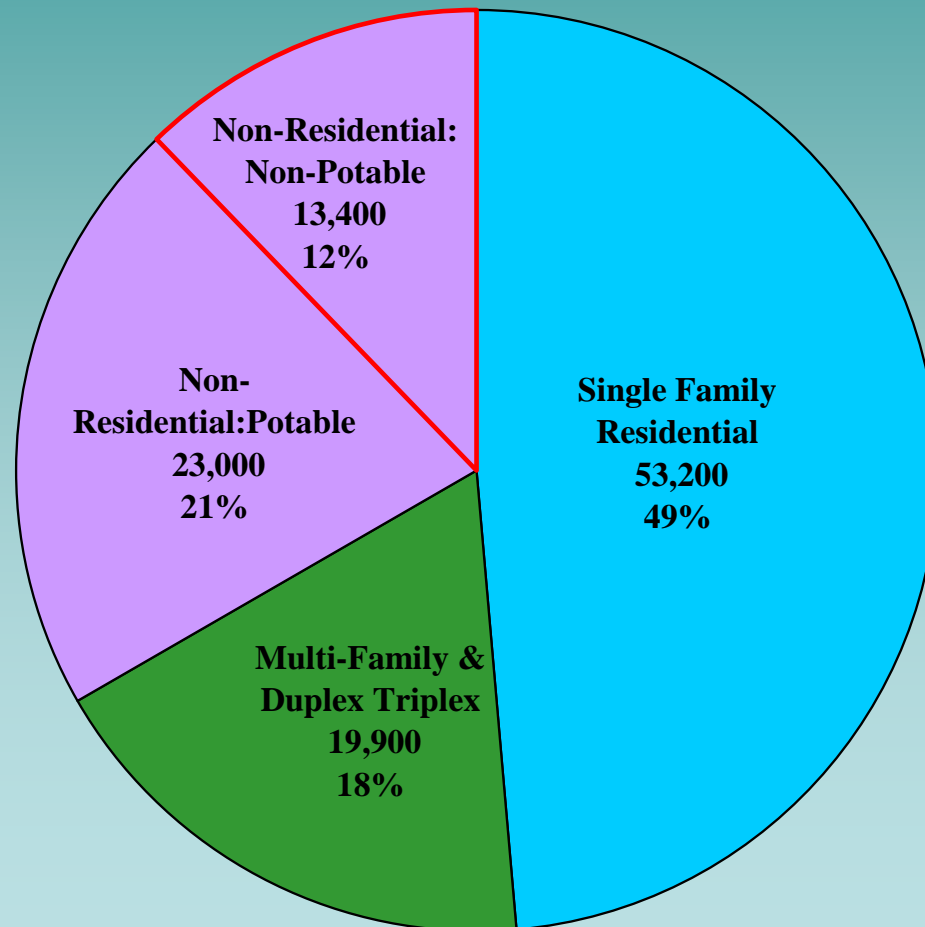


- **Active Services: 225,000**
- **Population: approx: 710,000**
- **Potable Water Produced: 104,000 AF**
- **Non Potable Production: 12,500 AF**
- **Potable Per Capita Water Use: 130**
 - Down from a max of 170 in 2002
- **Water Resource Goal: Convert Fully from Groundwater to CAP and Store Excess CAP Underground**

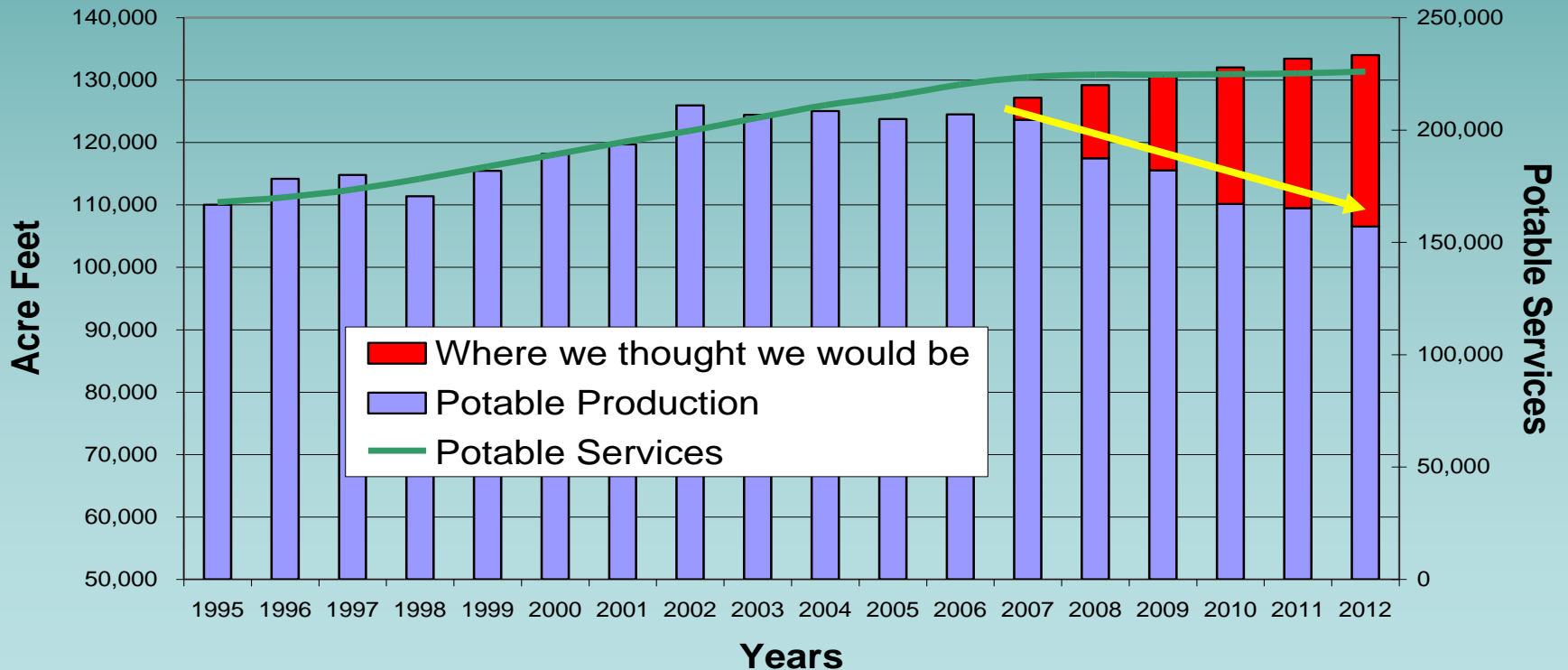
When including non-potable, non-residential demand increases to 33%

Potable and Non Potable Water Deliveries in Acre Feet by Customer Type: Calendar Year 2011



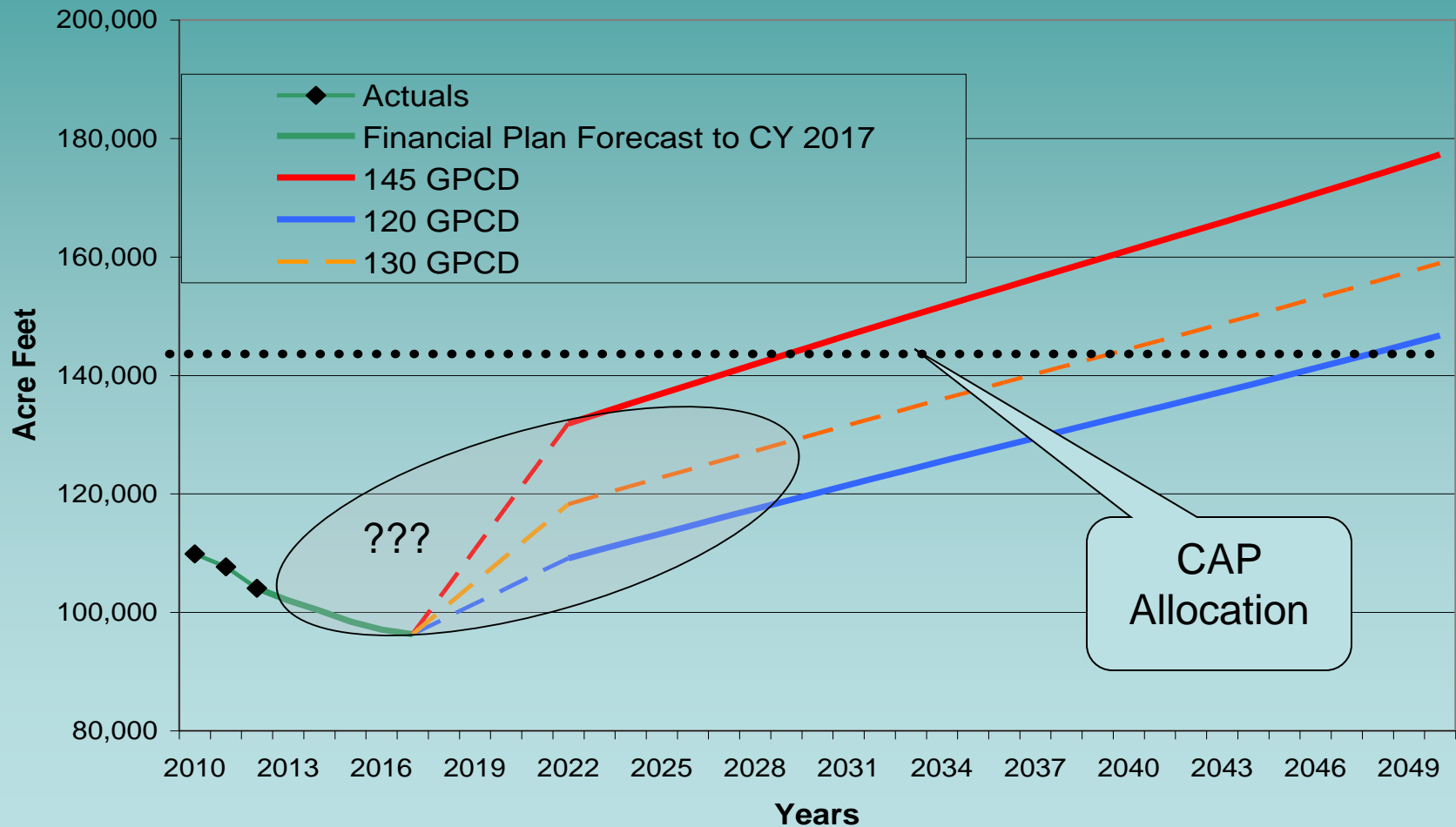
Falling Total Potable Demand and No Growth: Potable Demand in 2012 < Demand in 1995

Total Potable Production, Service Growth and Past Potable Demand Forecast 1995 to 2012



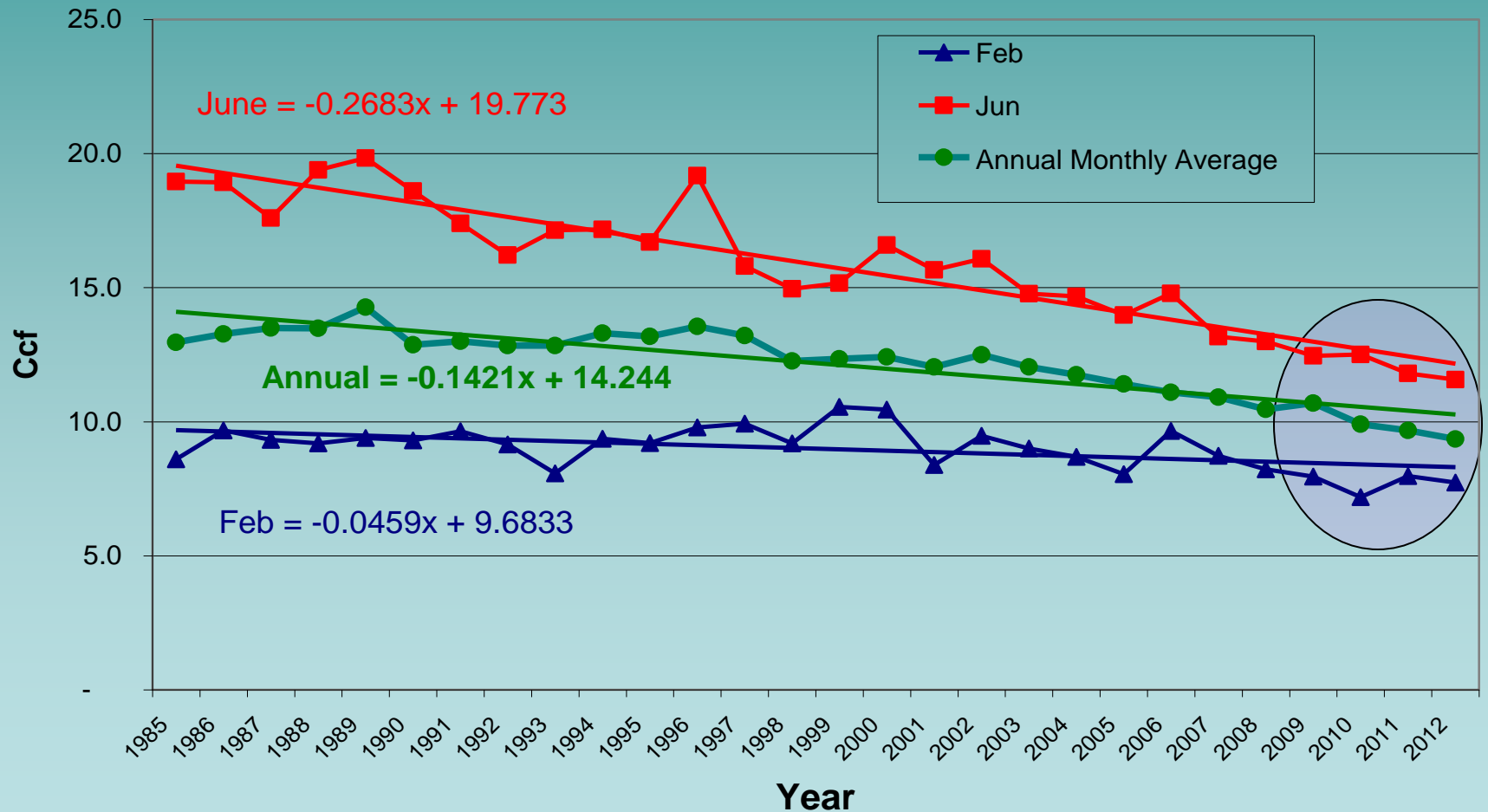
Where we Think We Are Headed

Draft Potable Demand Forecast for Tucson Water Service Area to 2050



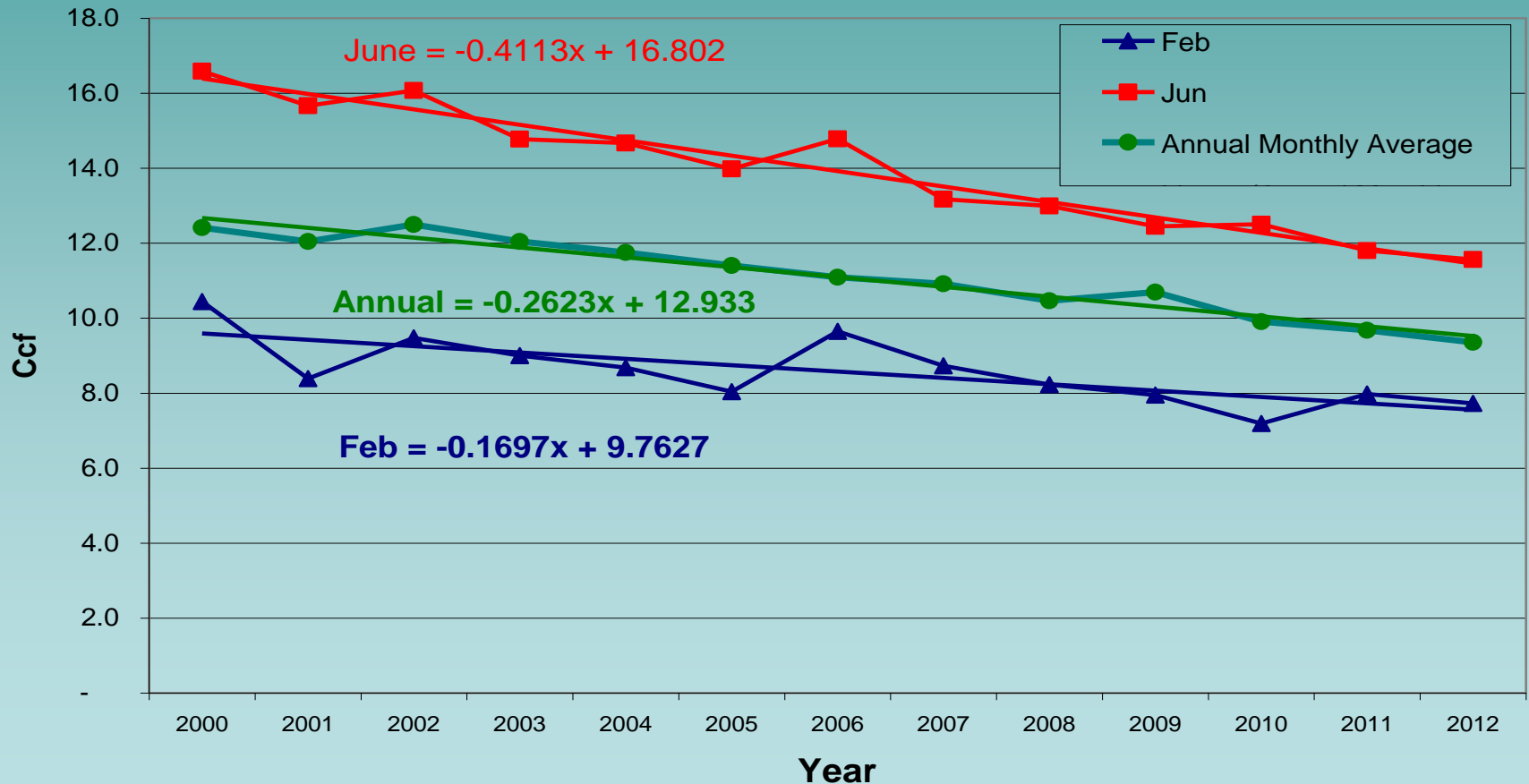
Demand Falling Faster in Summer than in Winter

Single Family Usage Per Service in Ccf: February, June and Average Monthly 1985 to 2012

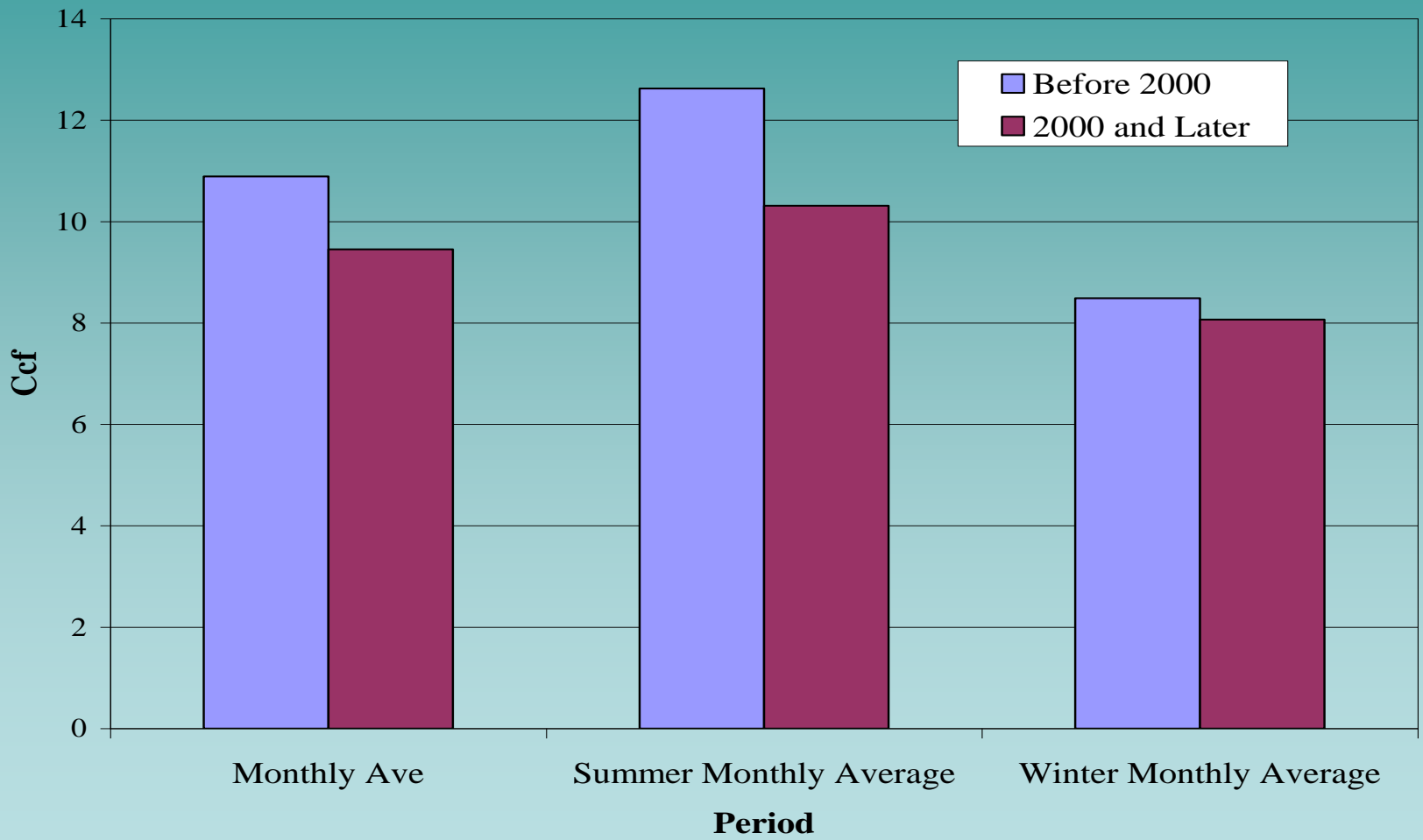


And Faster In Recent Years

Single Family Usage Per Service in Ccf: February, June and Average Monthly 2000 to 2012



New Construction Using Less Water: Difference Greatest in Summer



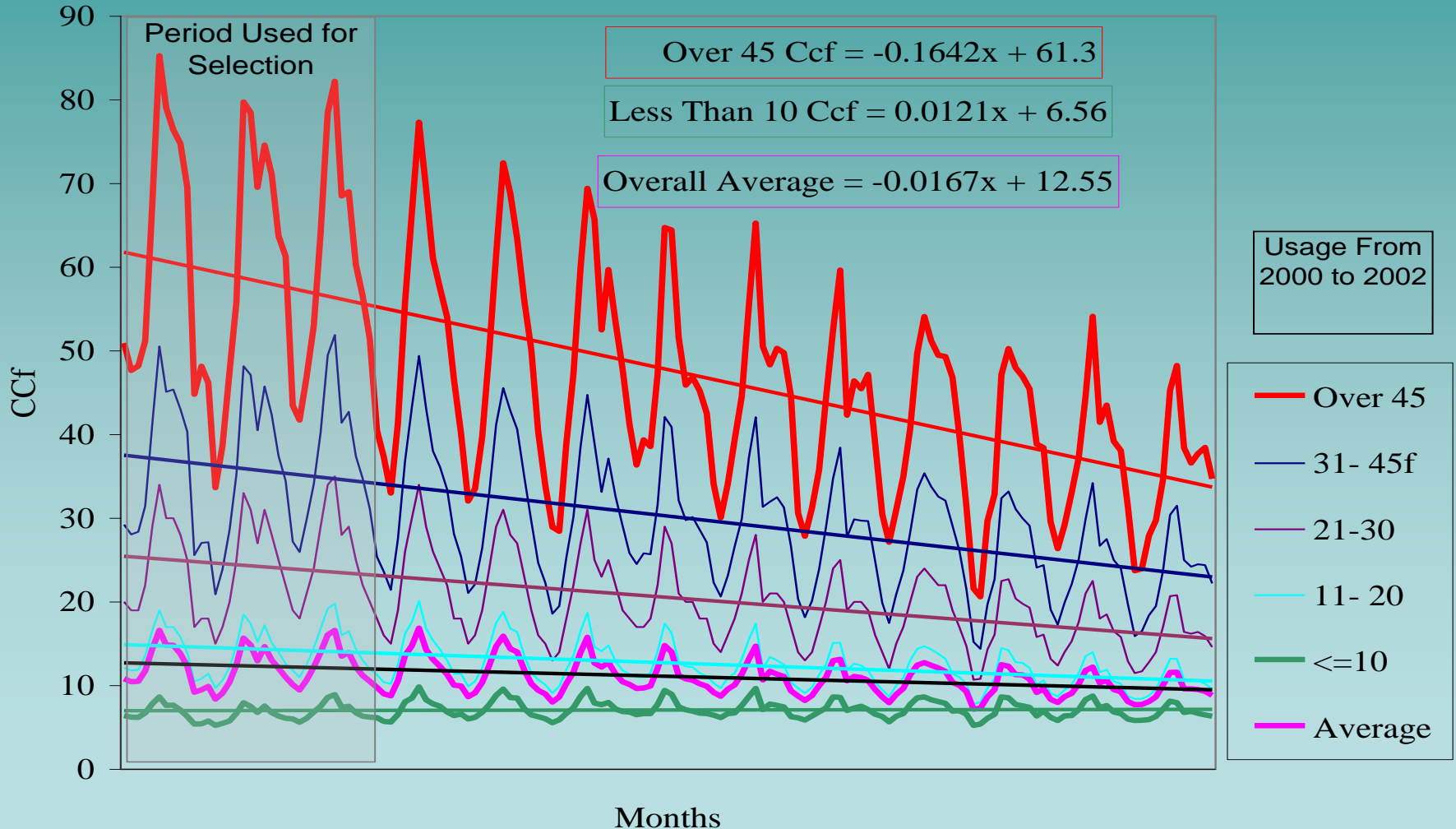
New Construction Using Less Water: Difference Greatest in Summer

- Larger Houses and Garages on Smaller Lots Means Fewer Pools and Less Area to Landscape Per Lot
 - No Evaporative Coolers
 - Net Effect: Less Consumptive Demand During the Summer
-
- Growth has stopped, so effect has diminished. What explains continued declines?

Decline in Usage from Existing High Volume Users

Change in Usage Per Service by Water Usage Cohort 2000 - 2012

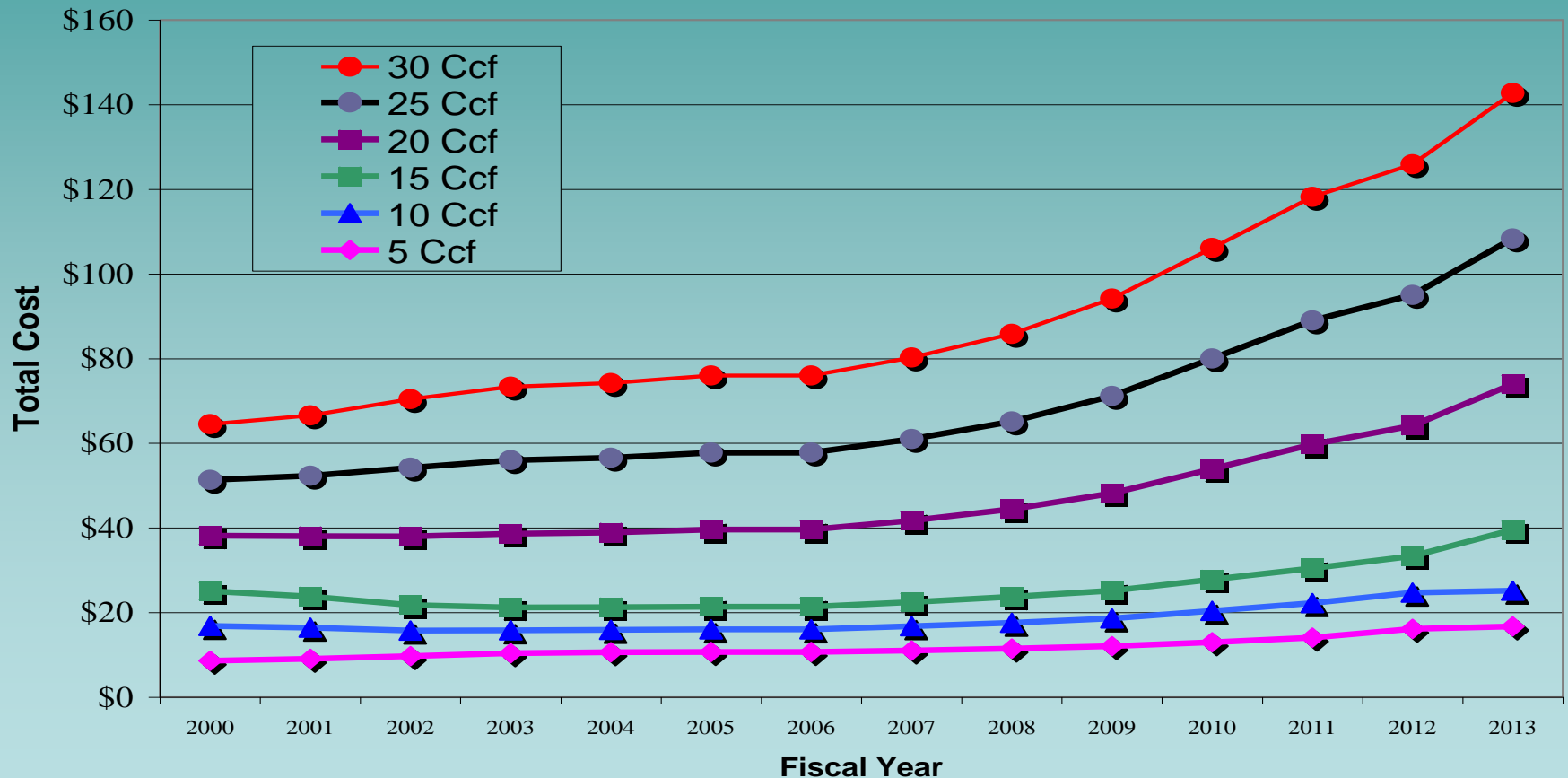
Cohorts based on Usage from 2000 through 2002



Continued Downward Pricing Pressure on Outdoor Usage

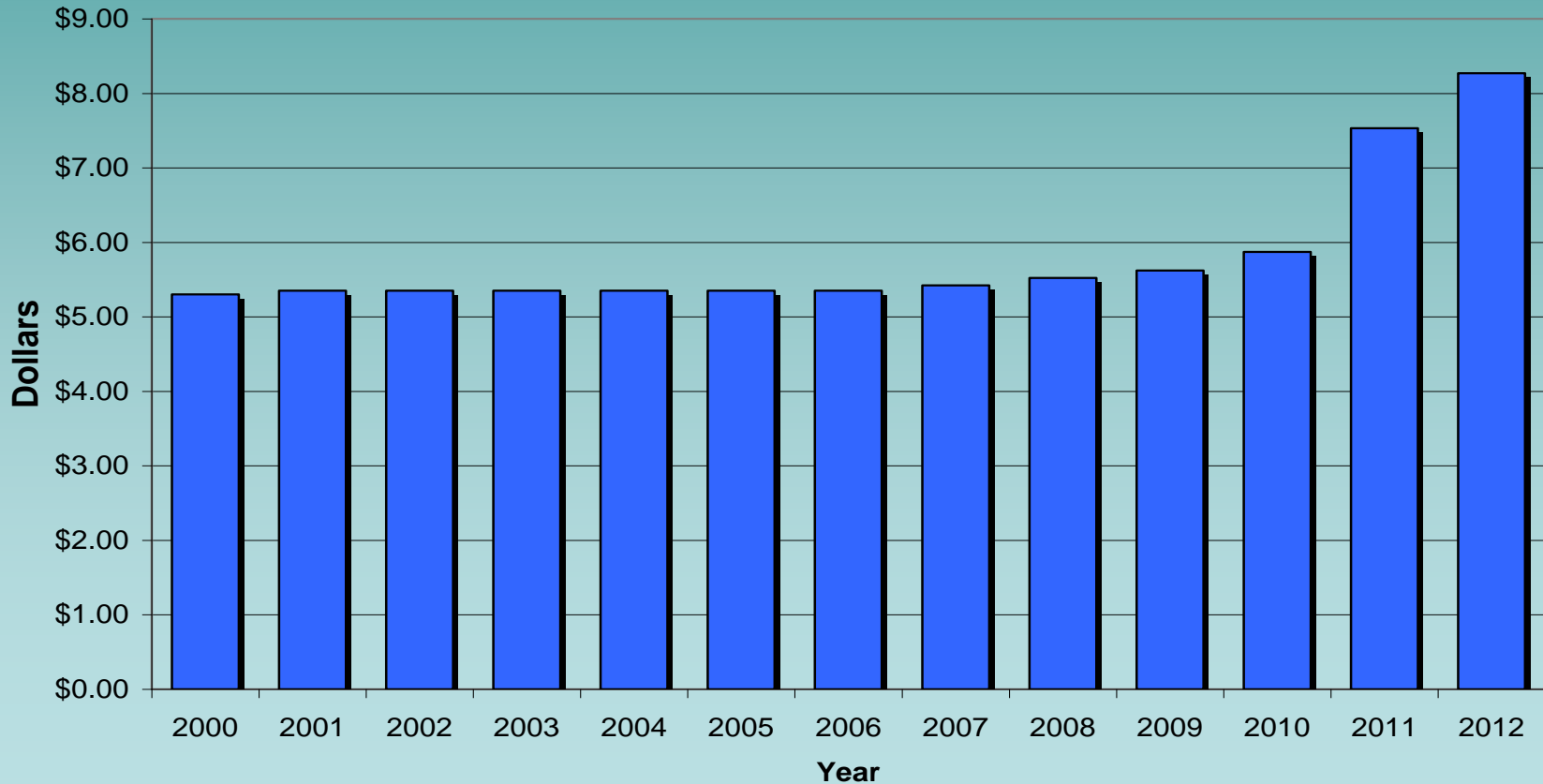
Bill by Volume for Selected Volumes

With Service Charge



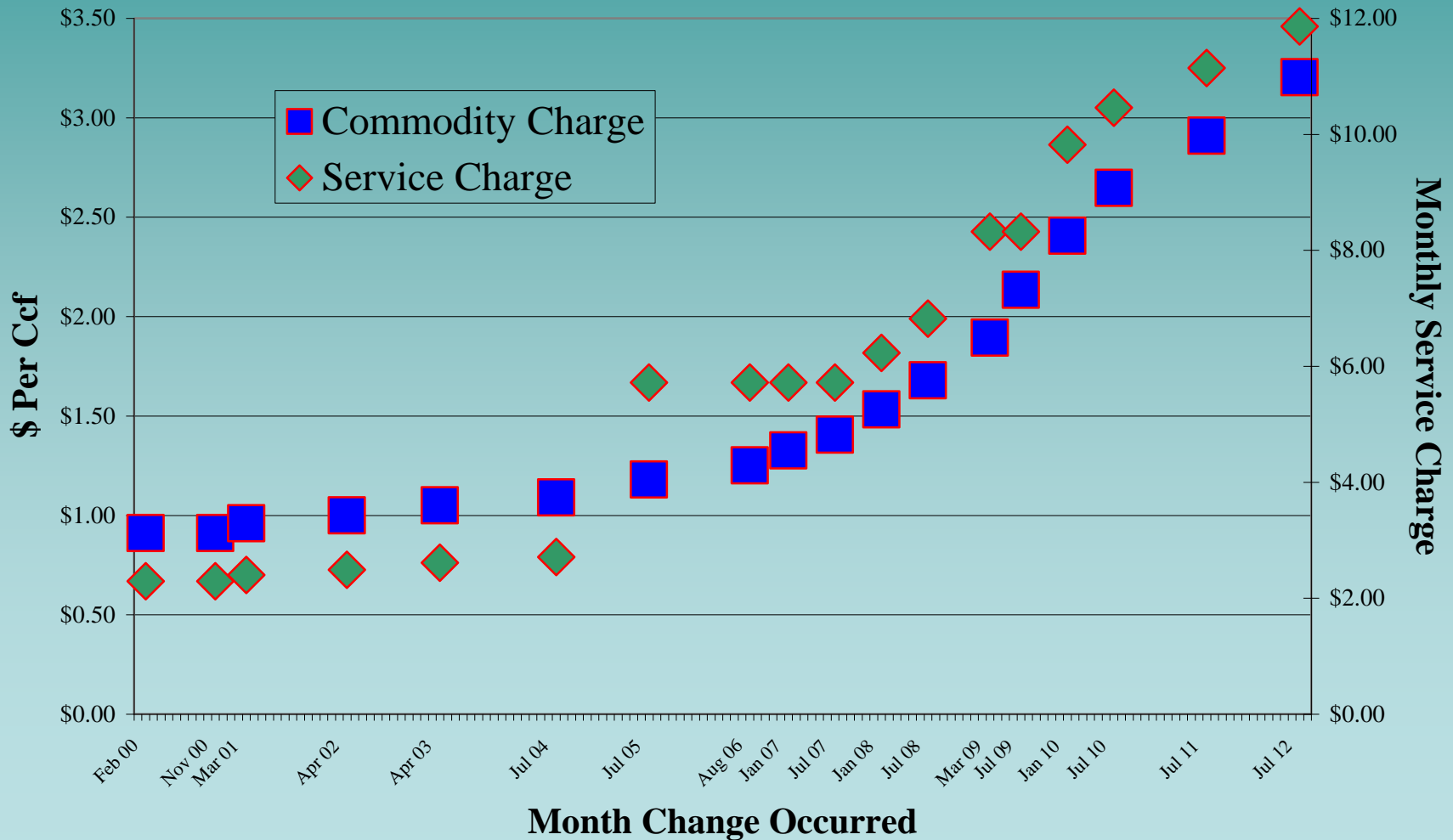
Move Toward Revenue Stability

Nominal Service Charge Overtime 5/8 Inch



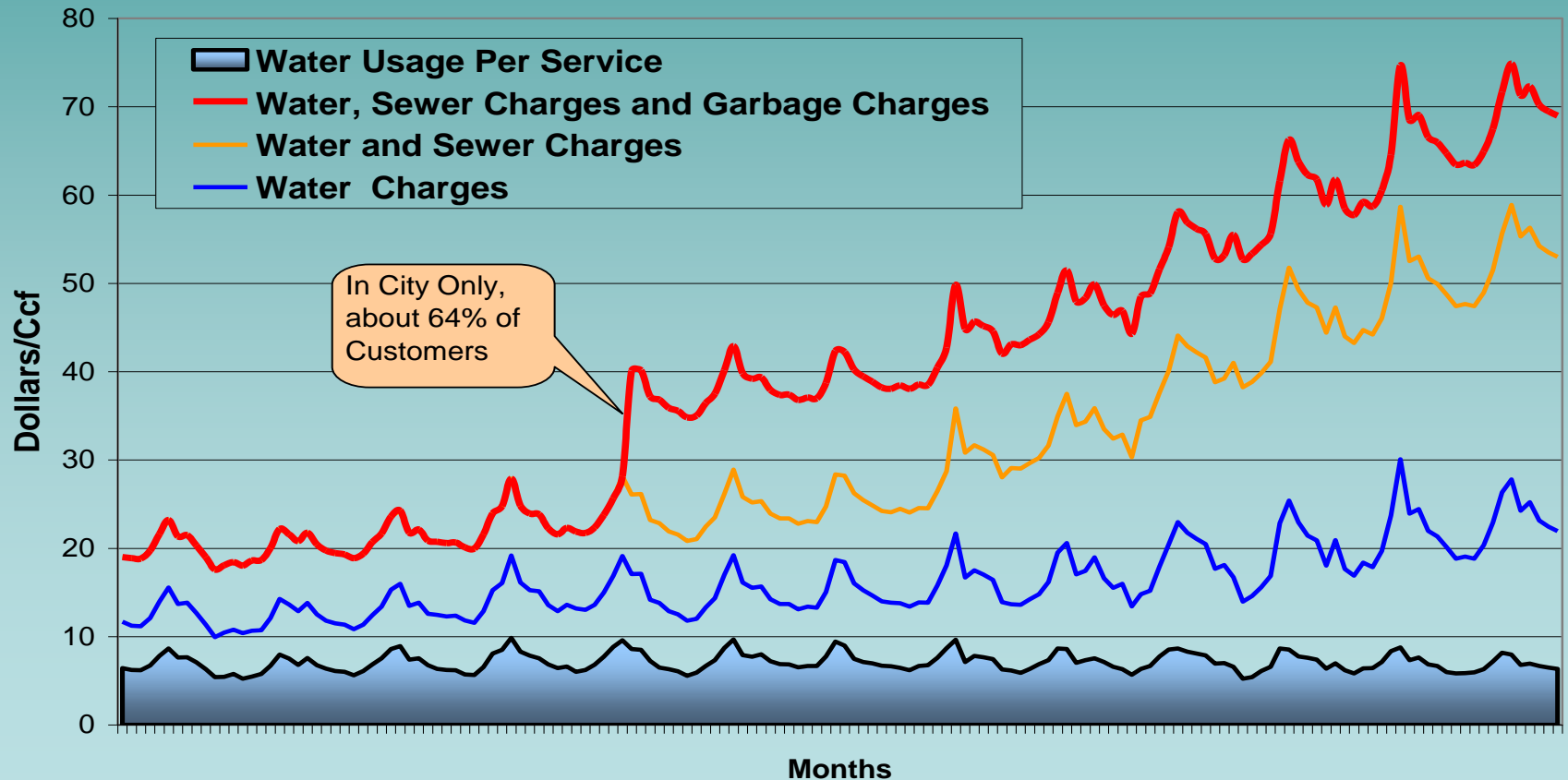
Considerable Downward Pressure on Demand Coming From Sewer Charges

Residential Sewer Commodity Charges/Ccf and Service Charge: 2000 to 2013



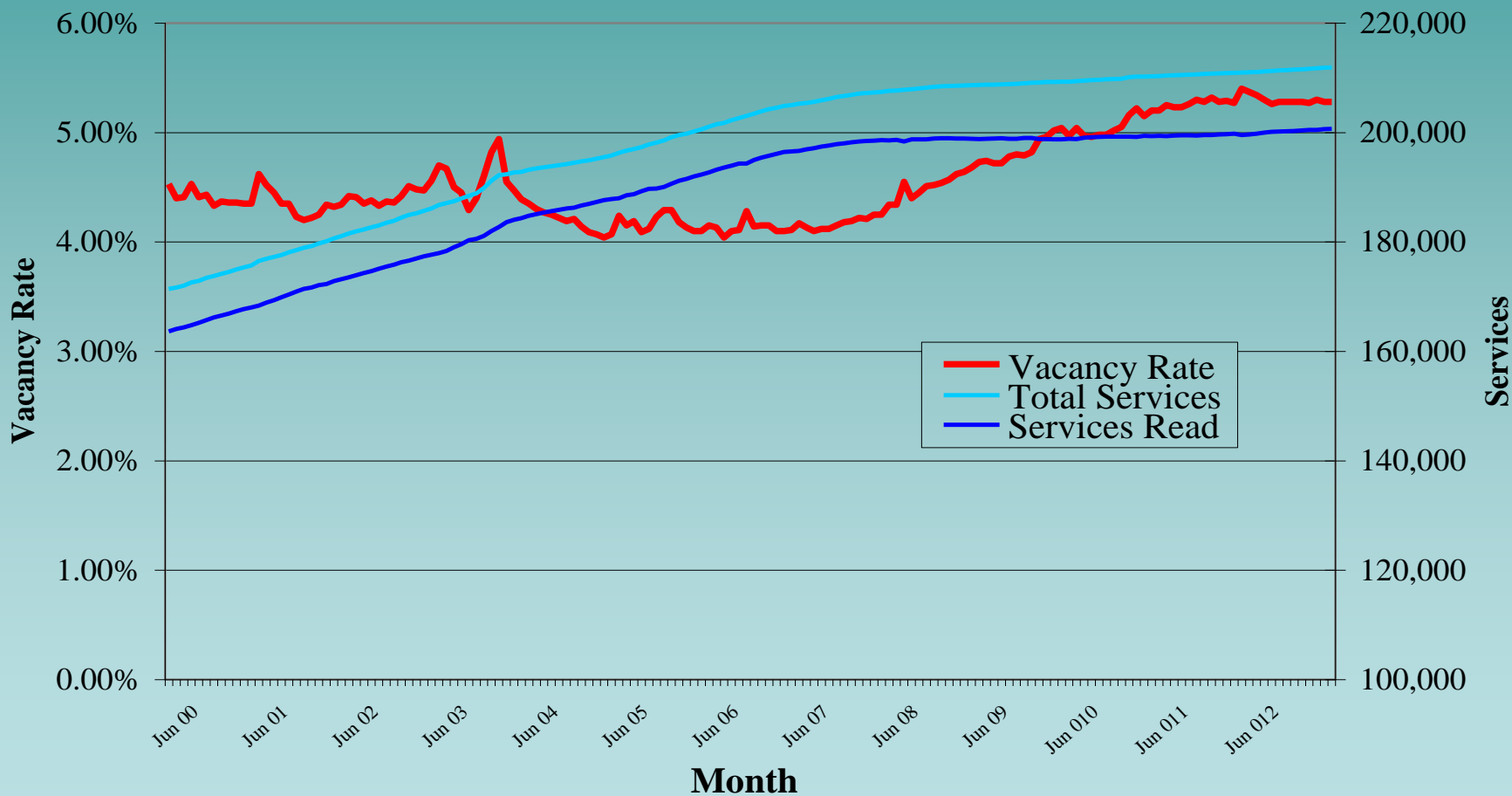
Non Water Charges Are Now the Largest Part of the “Water” Bill

Customers Who Averaged Less than 10 Ccf from 2000 to 2002:
Average Water Usage in Ccf and Water Bill Components
2000 to 2012



Vacancy Rates Undermining Service Growth

**Single Family Vacancy Rate:
Percent of Single Family Residential Water Services Without a Read
In the Period Ending: January 2000 to December 2012**

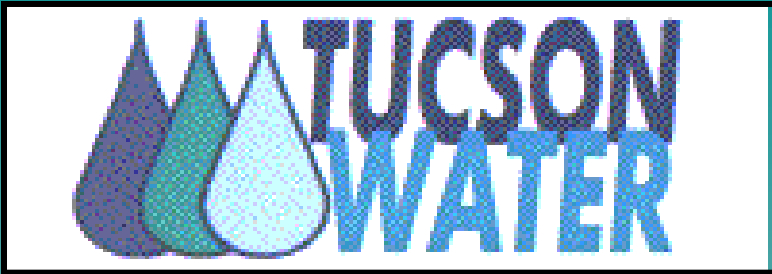


Continued Aggressive Conservation Programming

Dedicated fund: ~\$2.8 Million/Year

- **Rebates**
 - **Toilets: residential and commercial**
 - **Urinals**
 - **Single Family Graywater Systems**
 - **Single Family Rainwater Harvesting Systems**
 - **Commercial and MF Irrigation Systems**
- **Extensive Education, Training & Public Information Programming**

Ordinances requiring gray water stub out in new residential and water harvesting in new commercial



Near term forecasting has Improved as trend in falling usage per service remains strong and service growth low and steady.

Next error to occur when the next inflection point occurs; cost of this error is low as it will result in more revenue than forecasted.

Longer range forecast error risk low:

No system capacity constraint e.g substantial excess capacity to grow into.

No resource constraint – worse case demand does not approach CAP allocation for well over 10 years.

Can any long term decisions be made regarding resource acquisition under current demand conditions e.g. should we risk forgoing pursuing additional resources?