PUBLIC UTILITIES DEPARTMENT

SERVING

Garner • Knightdale • Raleigh • Rolesville

Wake Forest • Wendell • Zebulon

Water Supply and Infrastructure Costs

John Robert Carman

Director of Public Utilities

Who We Serve

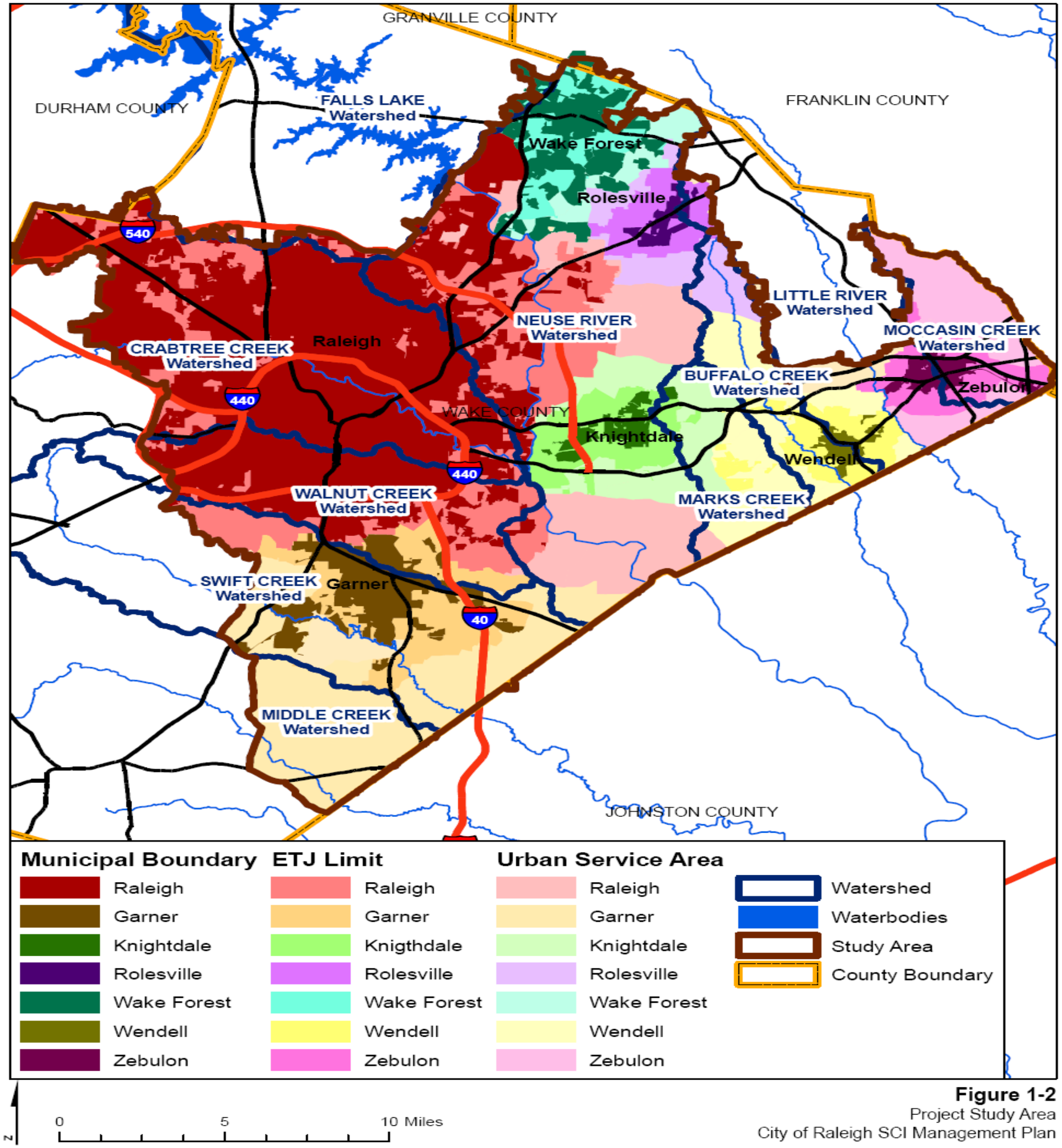
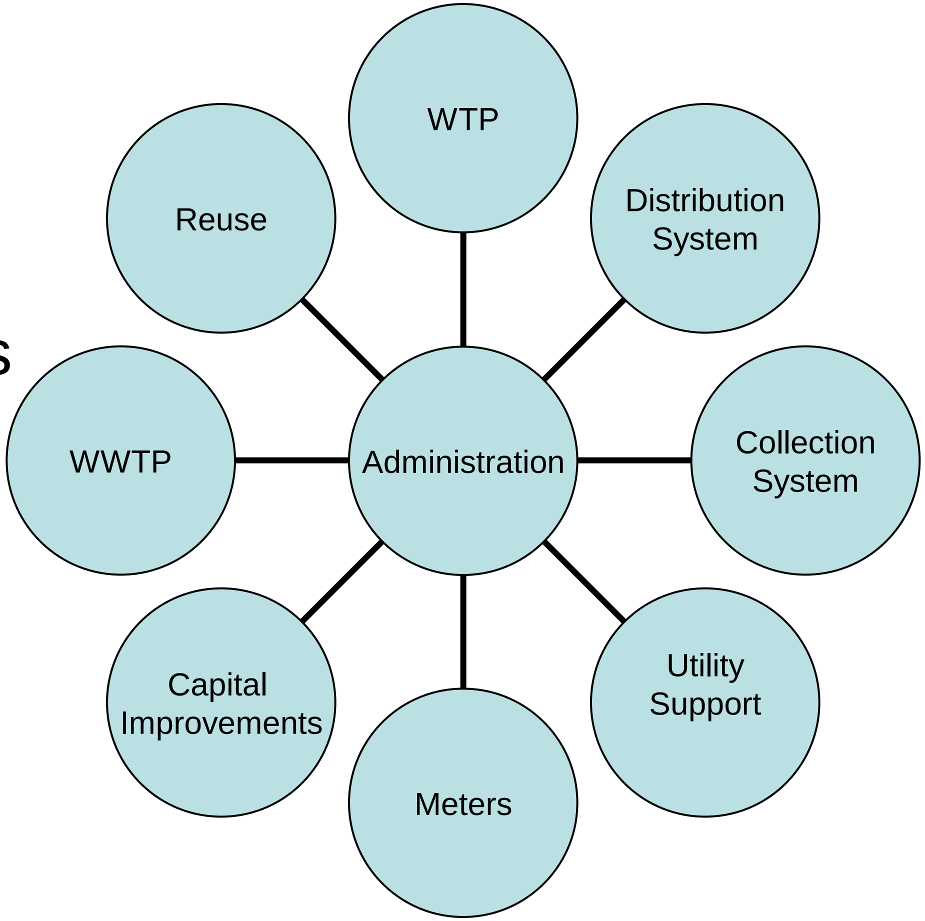
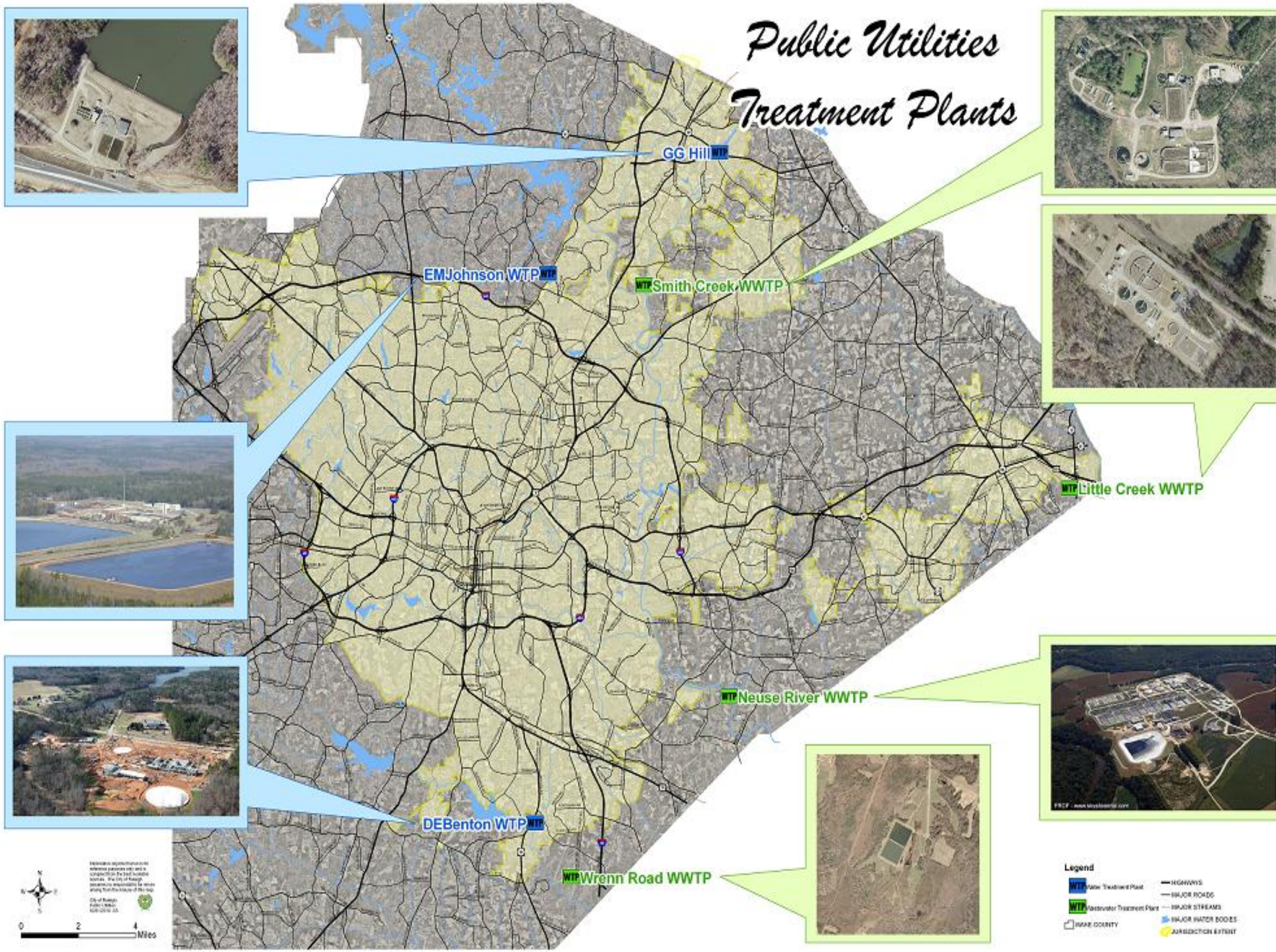


Figure 1-2
Project Study Area
City of Raleigh SCI Management Plan
CH2MHILL

Who We Are

- 9 Divisions
- 571 authorized positions
- 500 positions currently filled
- Serve 485,000 customers
- Regional System serving – Raleigh, Zebulon, Wendell, Rolesville, Garner, Wake Forest, Knightdale

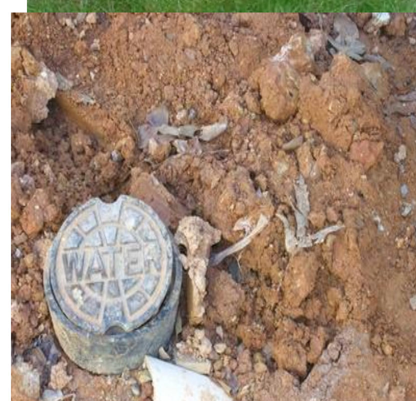



Public Utilities
Treatment Plants
GG Hill WTP
EMJohnson WTP
WTP Smith Creek WWTP
WTP Little Creek WWTP
WTP Neuse River WWTP
DEBenton WTP
WTP Wrenn Road WWTP
Legend
WTP Water Treatment Plant
WTP Wastewater Treatment Plant
WAKE COUNTY
HIGHWAYS
MAJOR ROADS
MAJOR STREAMS
MAJOR WATER BODIES
JURISDICTION EXTENT
0
2
4
Miles
N
S
E
W

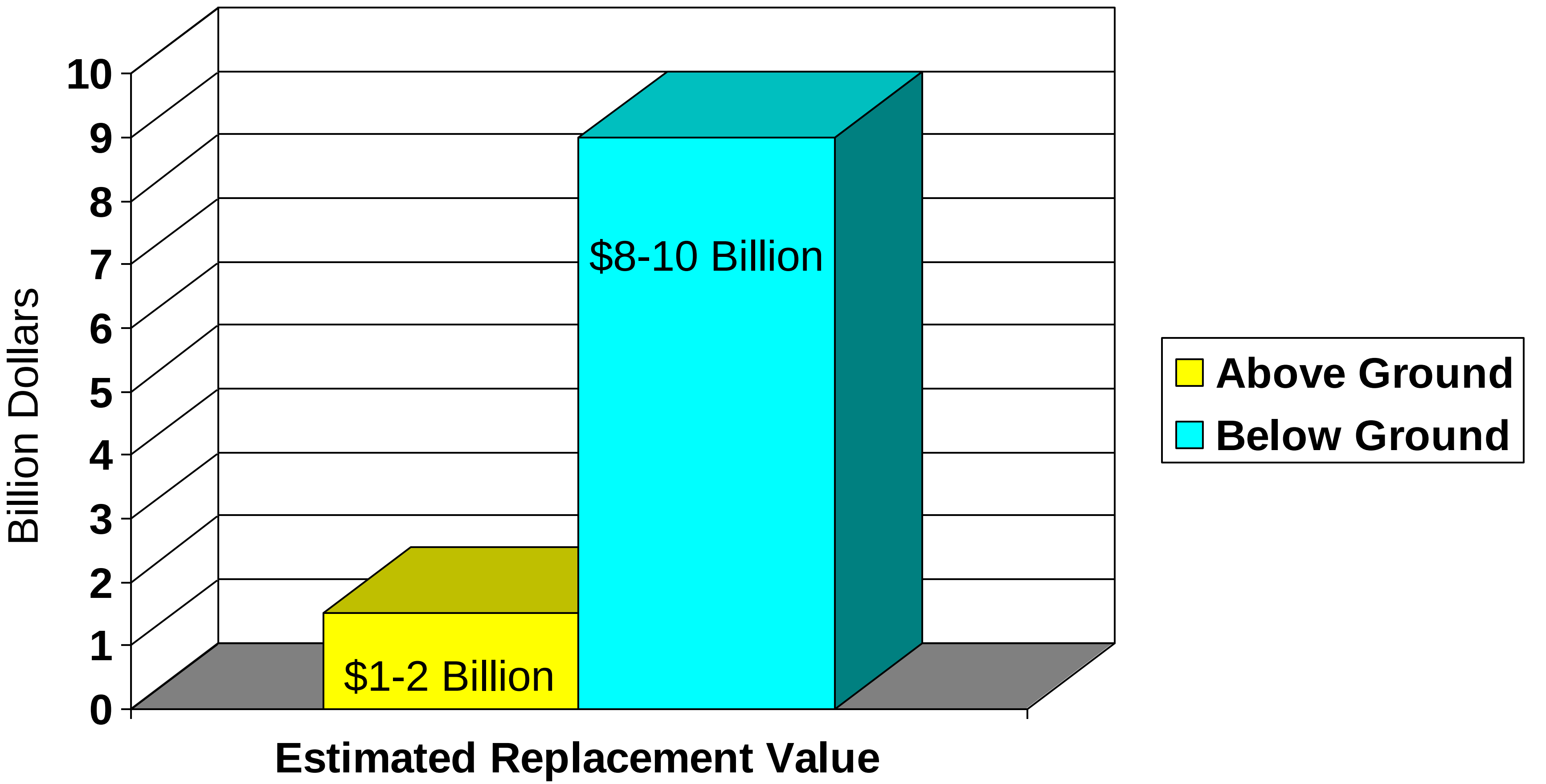
Infrastructure Assets

- 2,300 miles of distribution line
- 2,300 miles of sewer line
- 60,000 valve assemblies
- 23,000 fire hydrants
- 26 elevated storage tanks
- 114 lift stations





What is it all Worth?

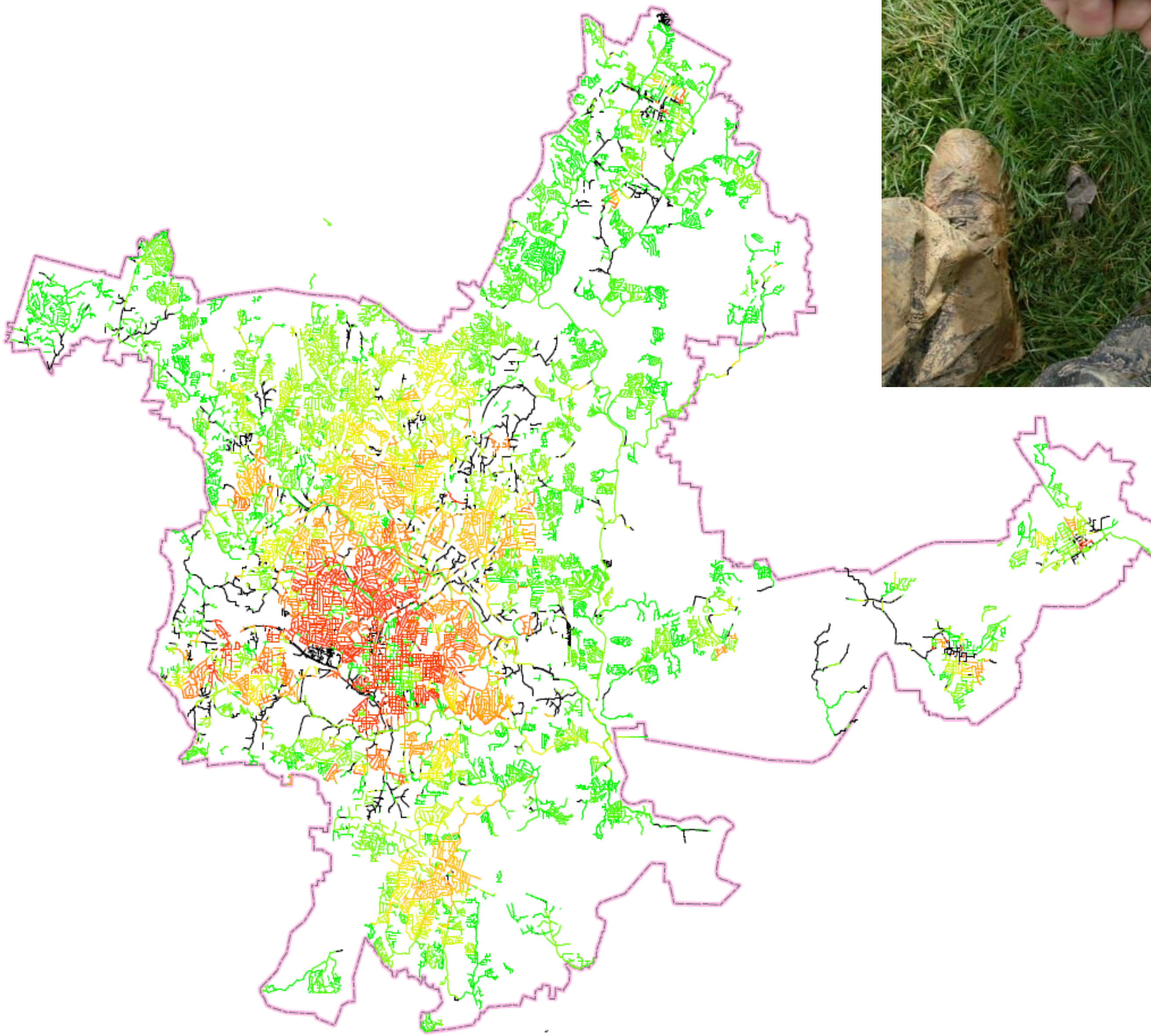


Sprawl

City	Population	Pipe Miles*	Feet Per Capita
Glendale, CA	207,000	400	10.2
Chicago, IL	2,850,000	4,400	8.2
Raleigh, NC	485,000	2,300	25

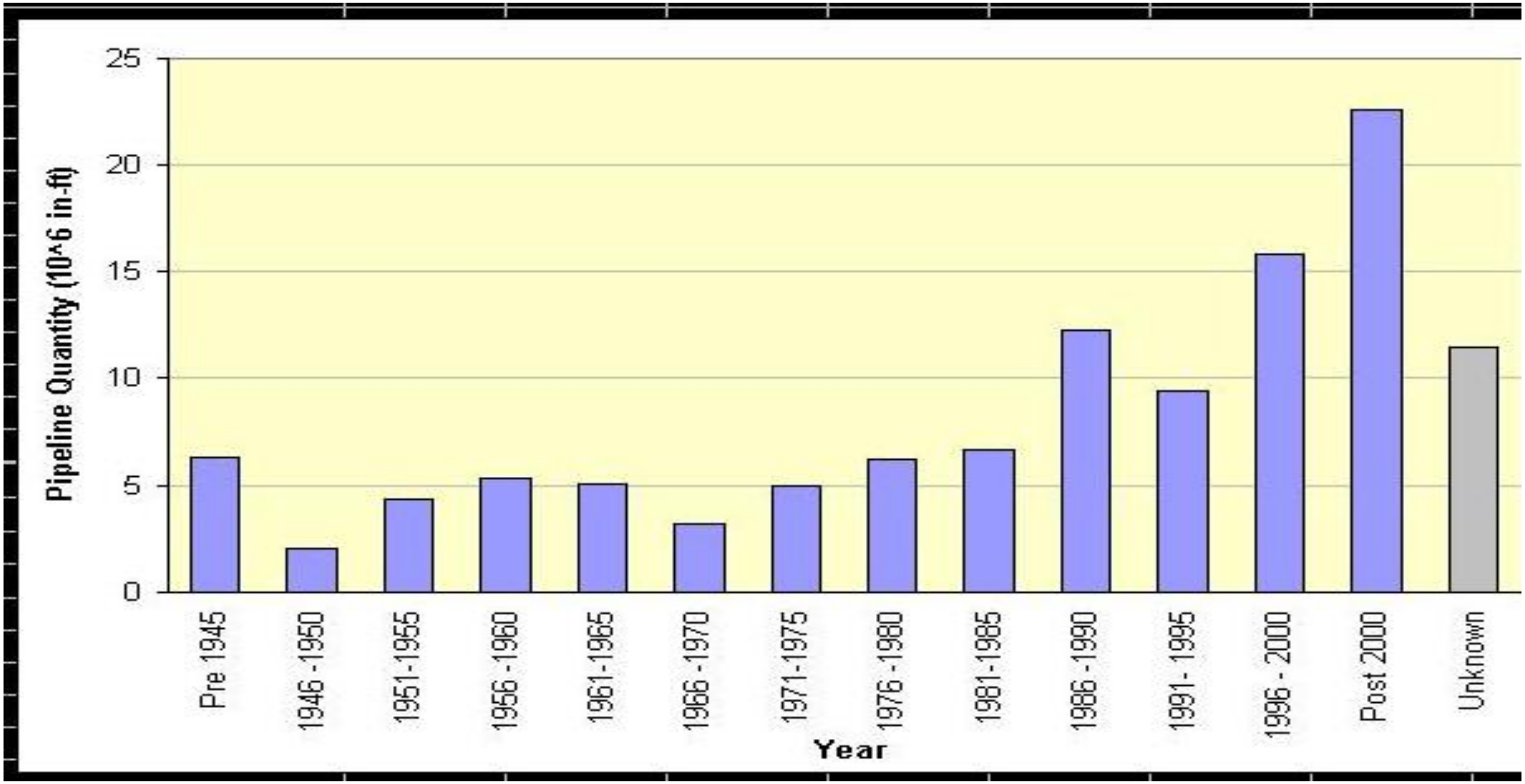
* Water Distribution Piping Only

City of Raleigh Sewer Pipeline Age

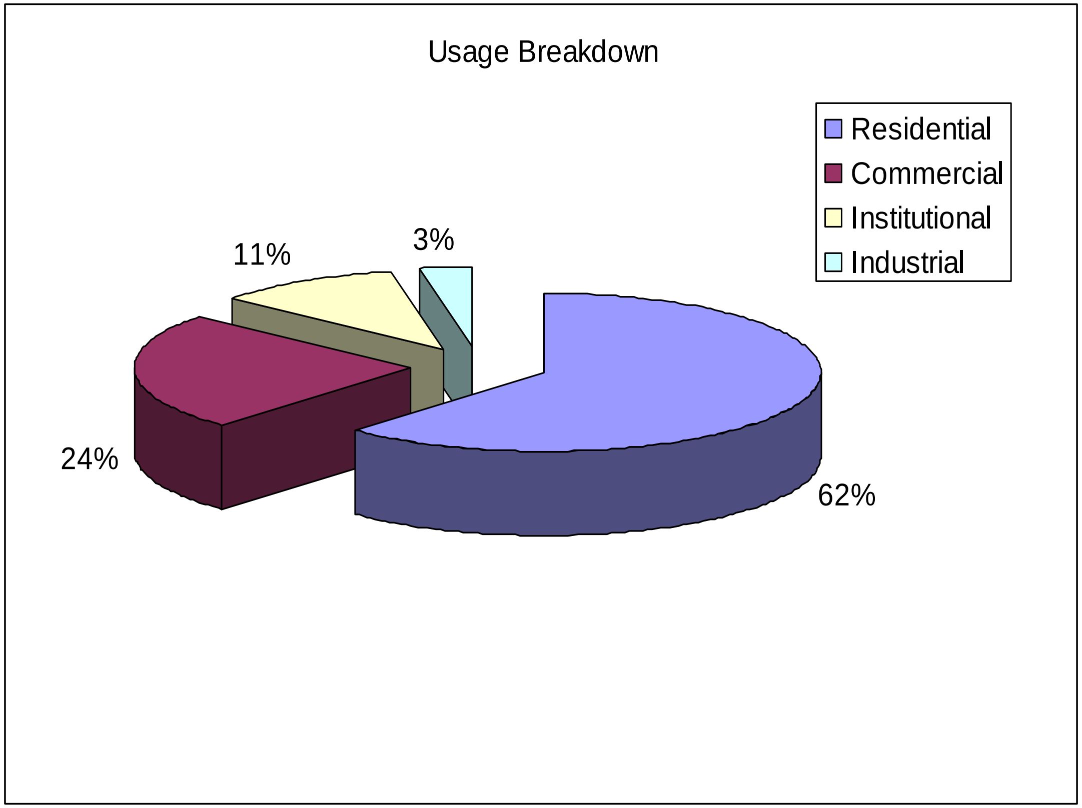


Sept 2010

Sewer Infrastructure Age



Current Usage Snapshot



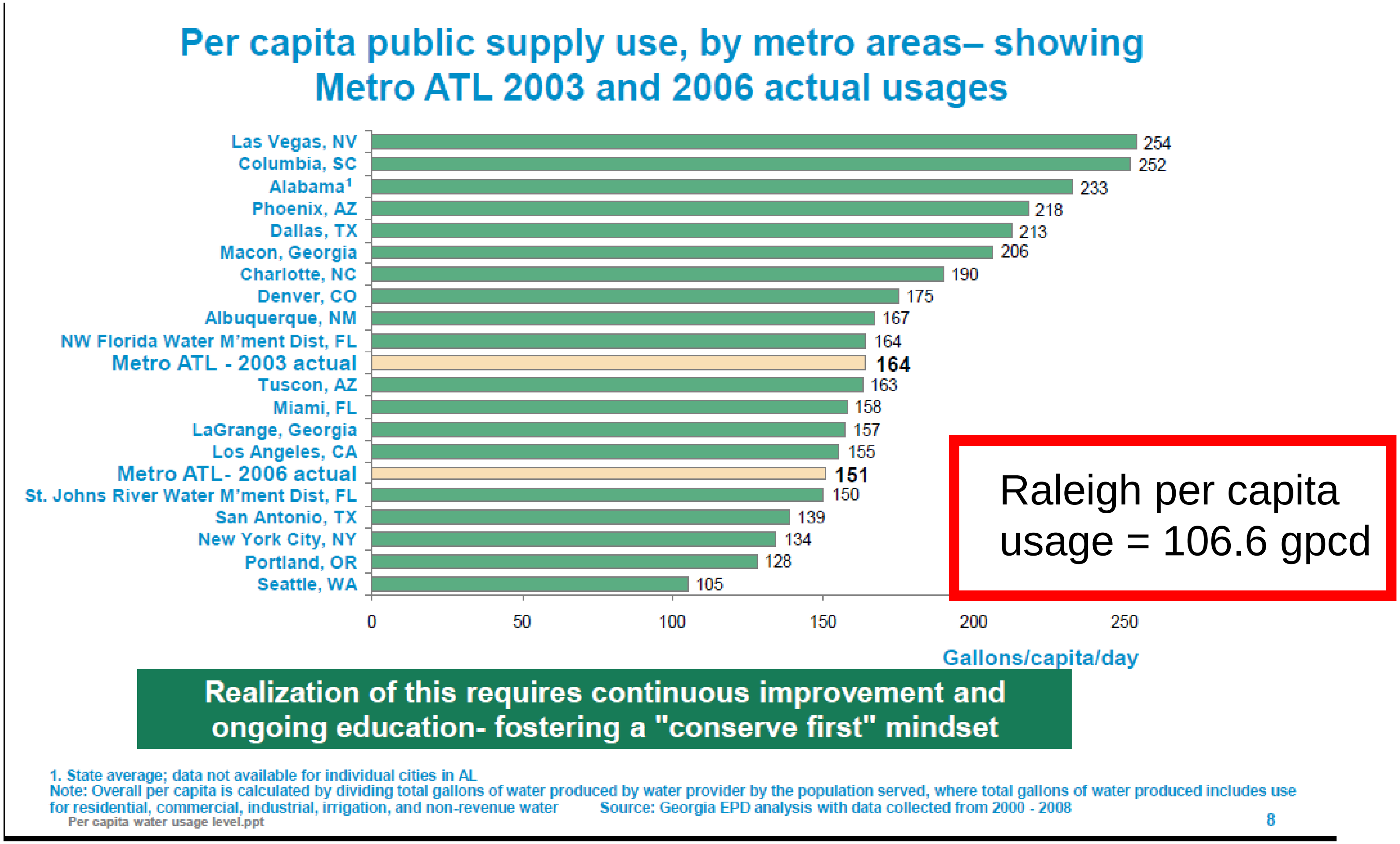
2009 Baseline – **106.6 gpcd**

(66 gpcd Residential Only)

Full implementation of Reuse = - 1.6 gpcd

Eliminate of Potable Irrigation = - 4.8 gpcd

So how do we stack up nationally?



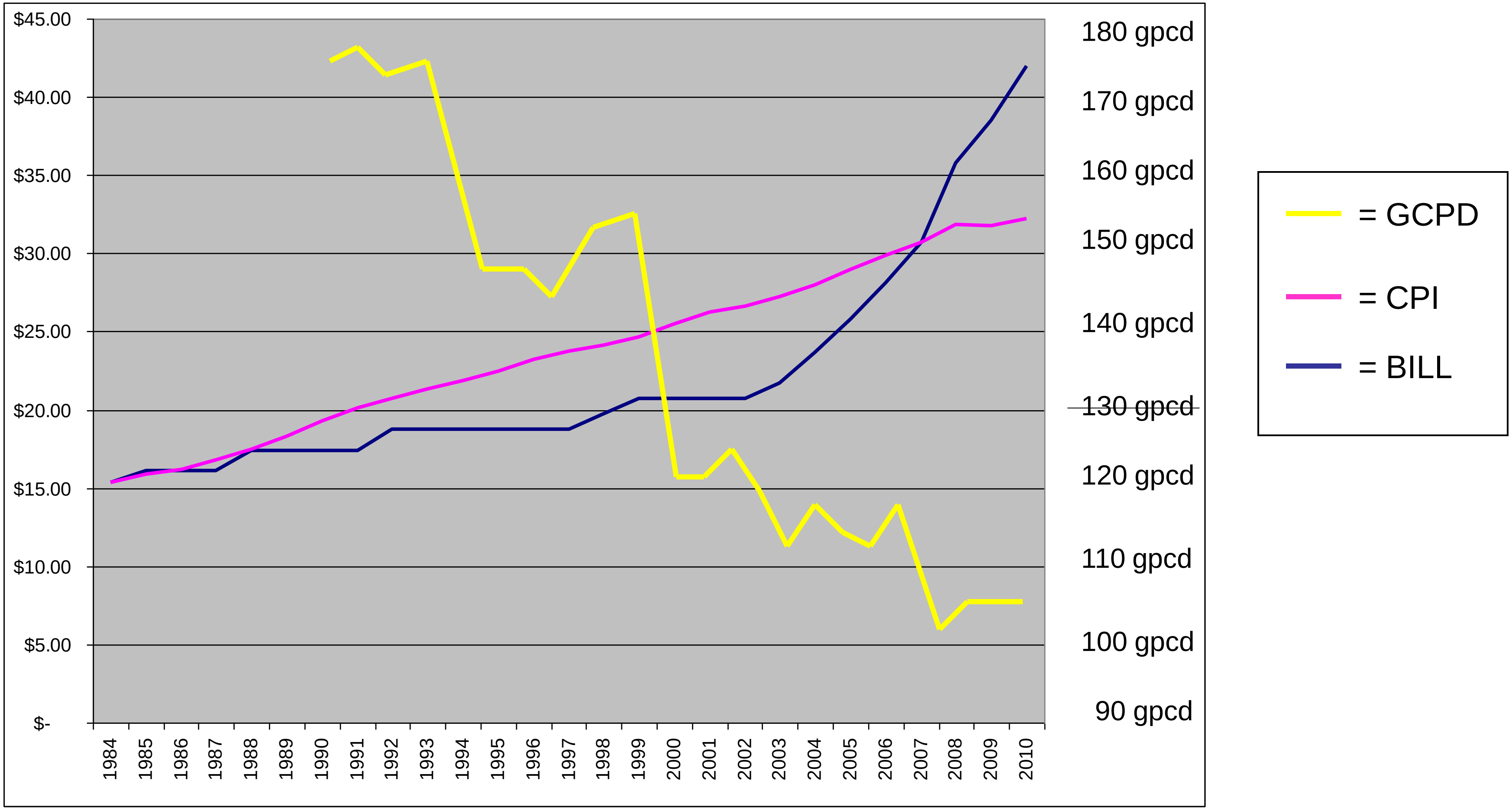
Source: Fayetteville Observer 2/6/04

City of Raleigh
History of Rate Changes
Fiscal Year 1983 to Present

	Water Rate Changes	Sanitary Sewer Rate Changes
Effective Date	**Percent Change**	**Percent Change**
July 1, 1985	No change	No change
July 1, 1986	+5%	+5%
July 1, 1987	No change	No change
July 1, 1988	No change	+16%
July 1, 1989	No change	No change
July 1, 1990	No change	No change
July 1, 1991	No change	No change
July 1, 1992	No change	+16%
July 1, 1993	No change	No change
July 1, 1994	No change	No change
July 1, 1995	No change	No change
July 1, 1996	No change	No change
July 1, 1997	No change	No change
July 1, 1998	+5%	+5%
July 1, 1999	+5%	+5%
July 1, 2000	No change	No change
July 1, 2001	No change	No change
July 1, 2002	No change	No change
July 1, 2003	+5%	+5%
July 1, 2004	+9%	+9%
July 1, 2005	+9%	+9%
July 1, 2006	+9%	+9%
July 1, 2007	+9%	+9%
July 1, 2008	+15%	+15%
May 1, 2009	+9%	+9%
December 1, 2009	+13%	+13%
July 1, 2010	+9%	+9%
November 1, 2010	Residential Tiered Rates	No change

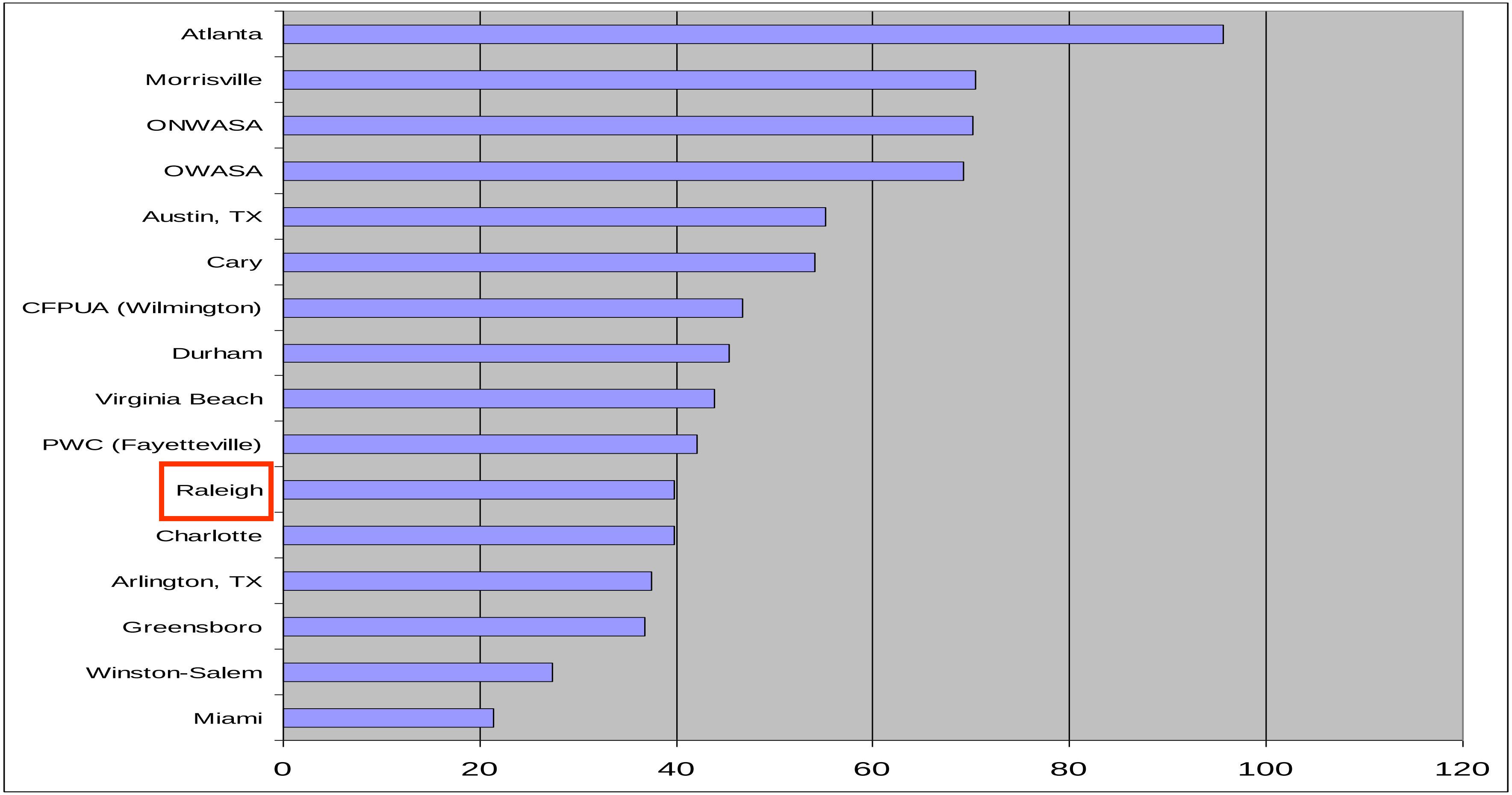
*+11% Non-residential flat rate

Rate Increases .vs. CPI



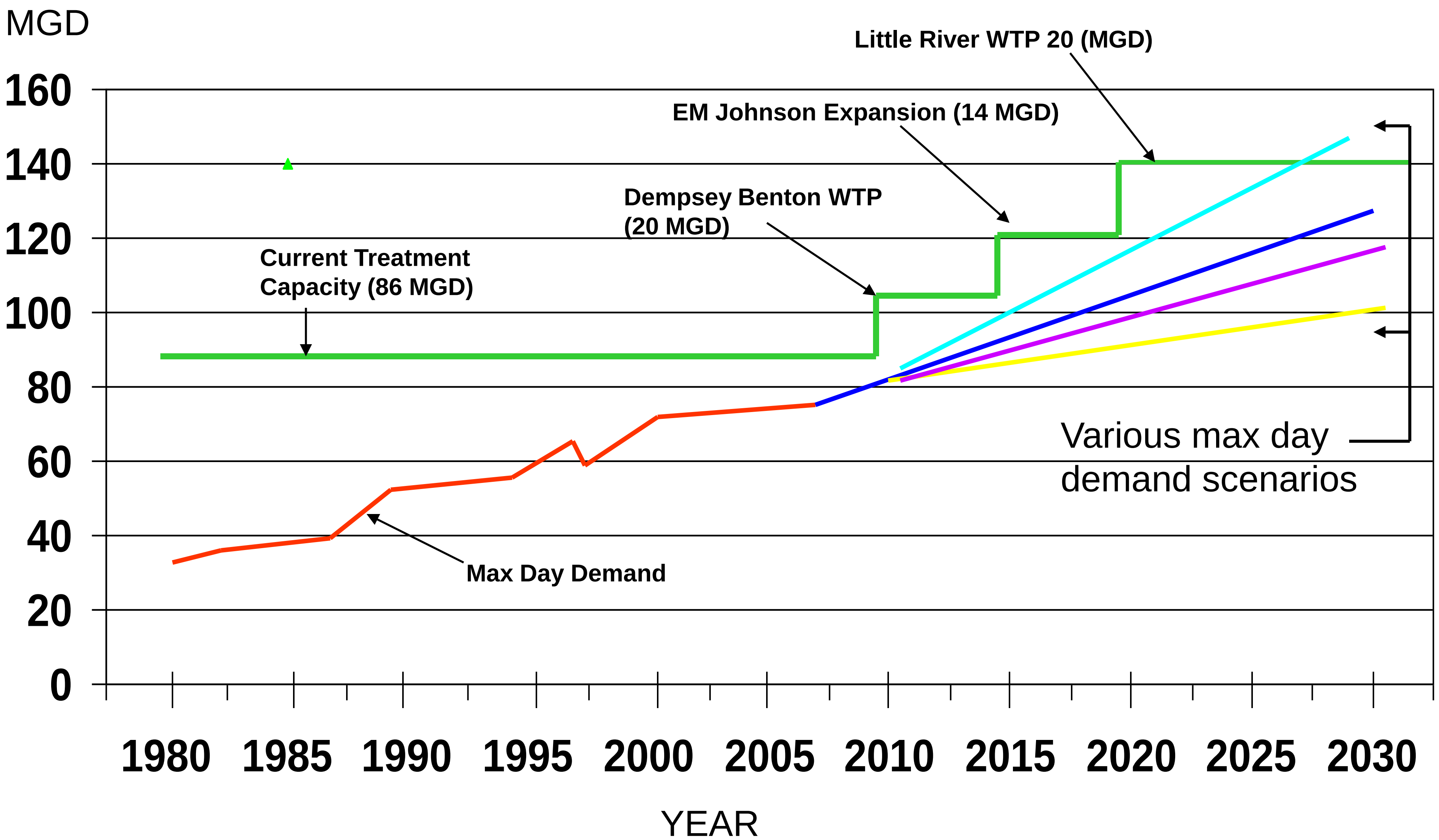
Utility Rate Comparison

Based on 6 ccf consumption

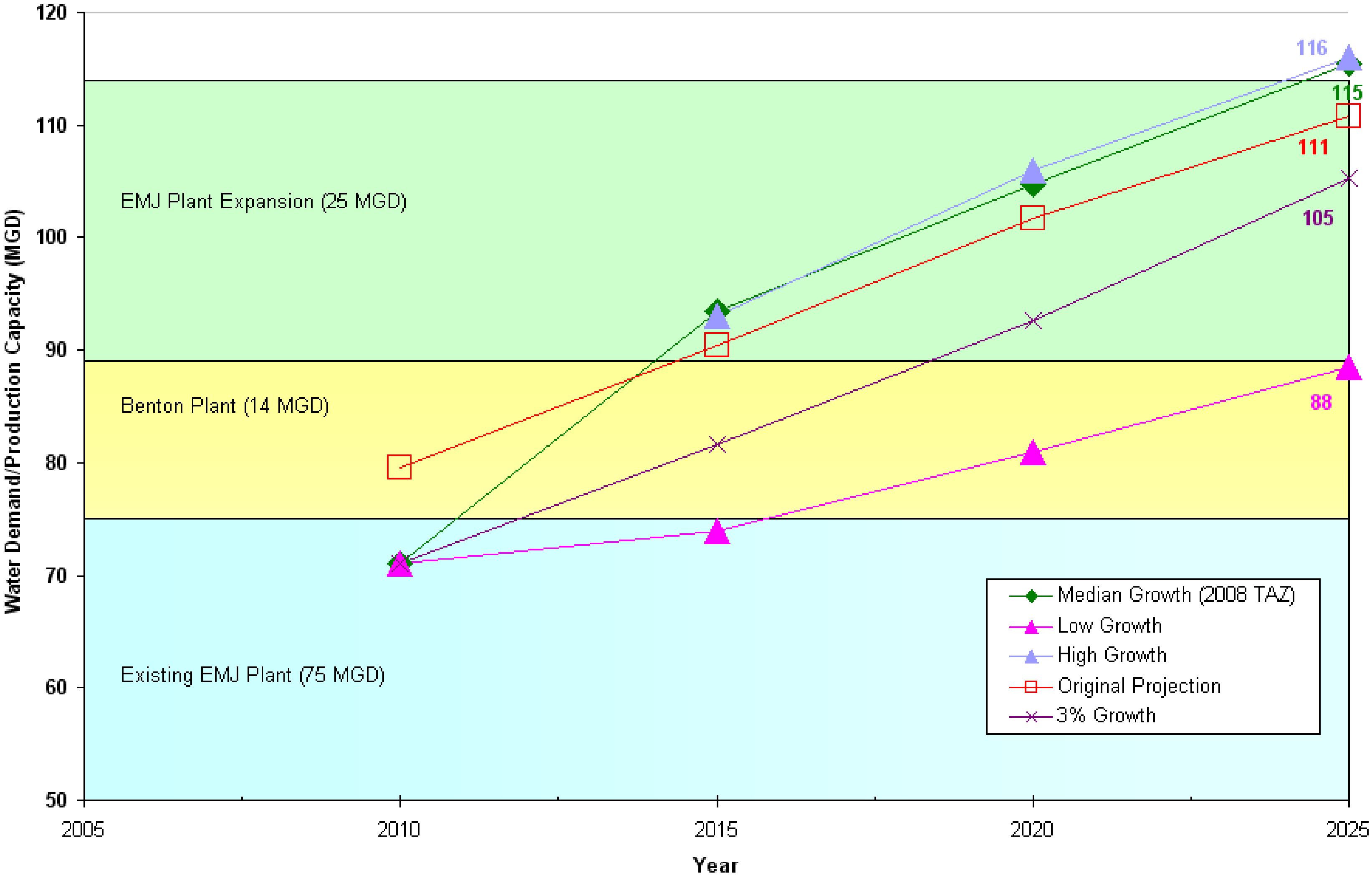


Dollars / Month

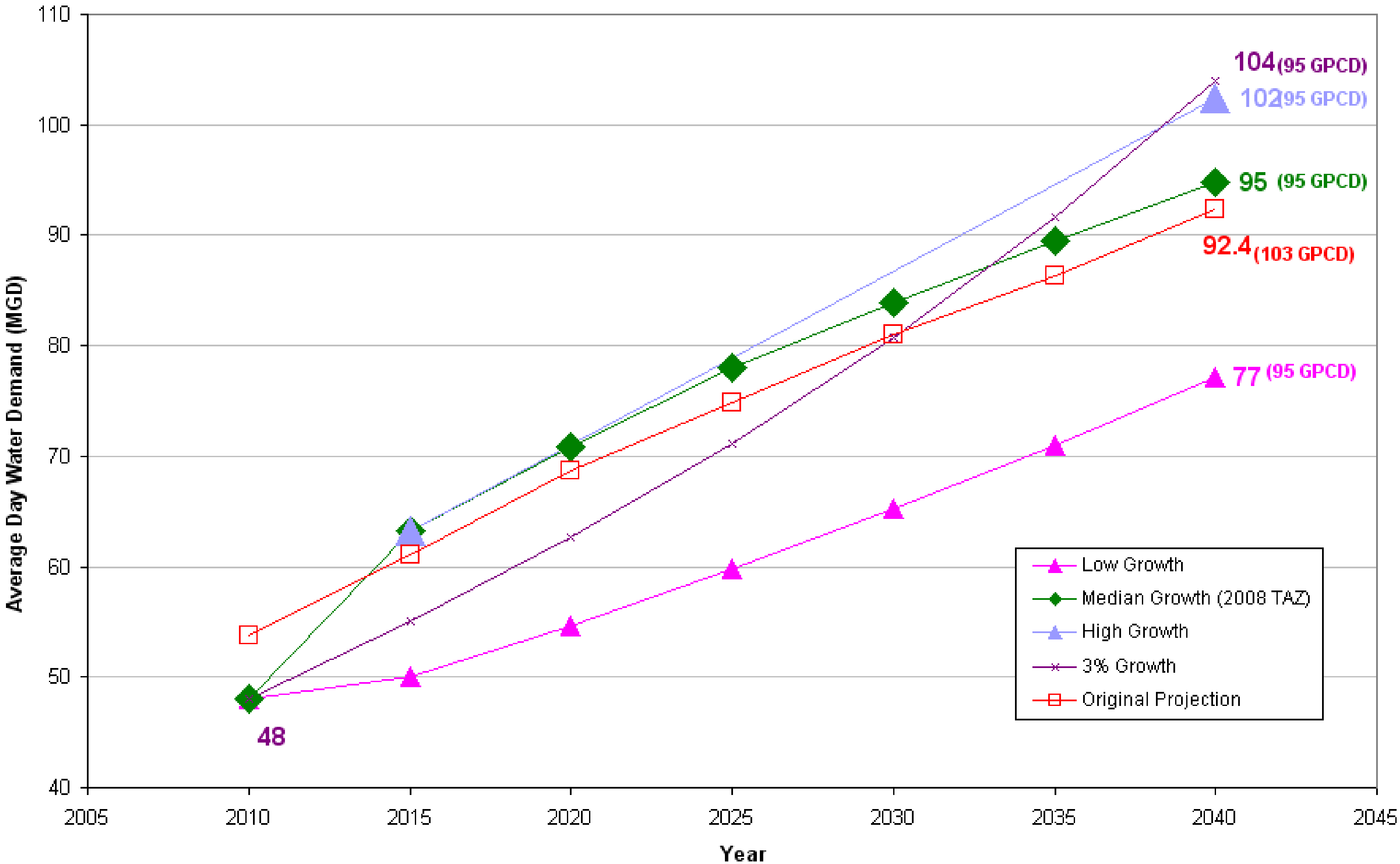
Max Day Demand and Treatment Capacity



Maximum Day Water Demand Projection



Long Term Average Day Water Demand Projection



<u>Big Ticket Utility Costs</u>

- Expansion of E.M. Johnson - $250 Million
- Little River Reservoir & WTP - $263 Million
- Neuse River WWTP Improvements - $175 Million
- Pipeline Infrastructure Replacement over next 30 years - $460 Million
- Potential Regulatory Compliance Costs - $ 100 - $ 600 Million
- **<u>ALL</u>** projects funded through fees, water, & sewer bills!!!

Tiered Rates

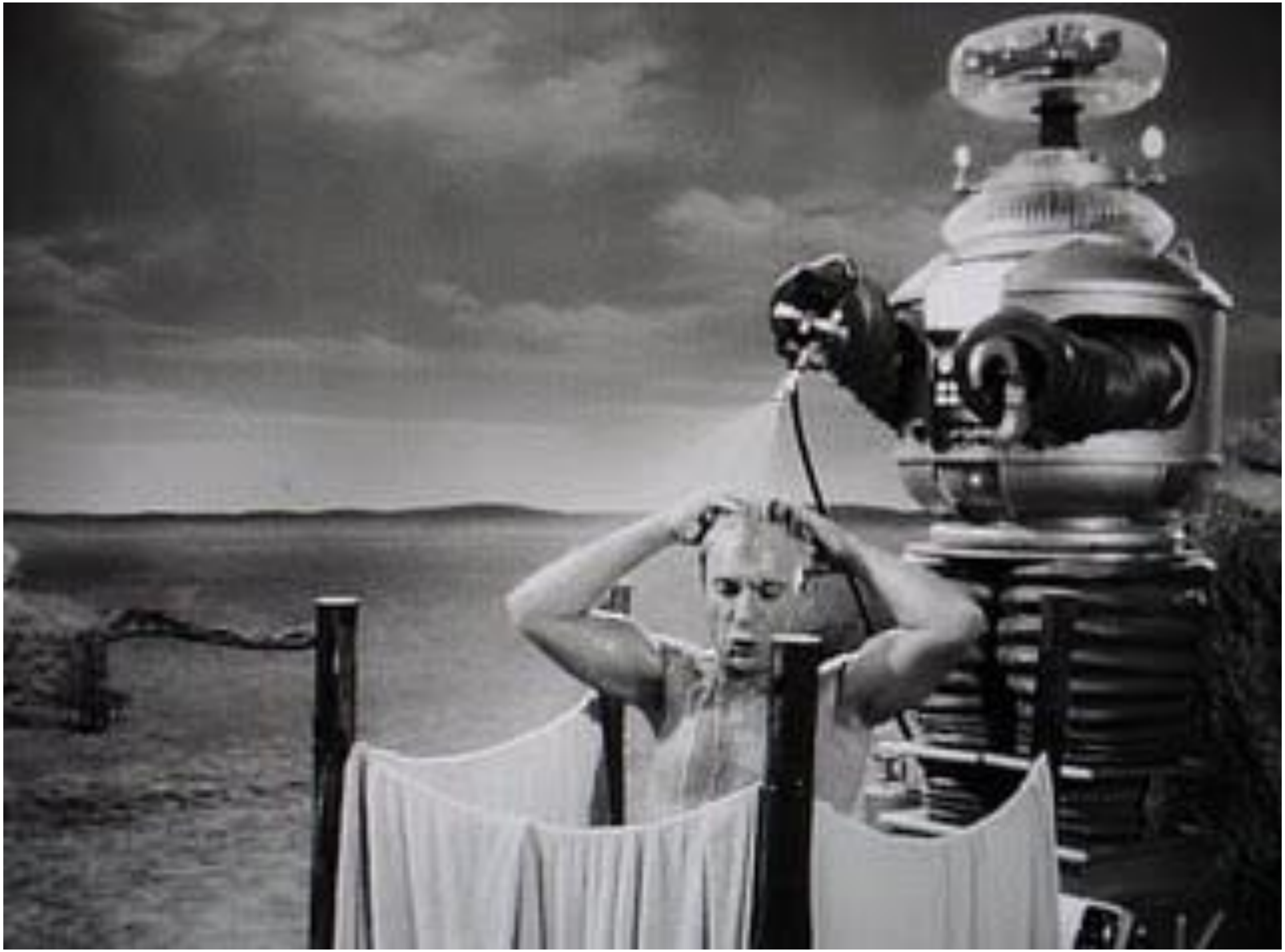
- **Residential Water Rates Inside Raleigh and Garner City Limits**
- Tier 1 = 1- 4 CCF billed at $2.28 per CCF
- Tier 2= 5 -10 CCF billed at $3.80 per CCF
- Tier 3= 11+ CCF billed at $5.07 per CCF
- Non-Residential Water Rate: $2.95
- Irrigation Rate: $5.07

** 1 CCF = 100 cubic feet = 748.1 gallons

Changing My Behavior

- Coffee Habit
  $1.90 / day
- Water & Sewer
  $1.41 / day
- Cable & Phone
  $5.33 / day

Lost in Space - Oasis



At Your Service!

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