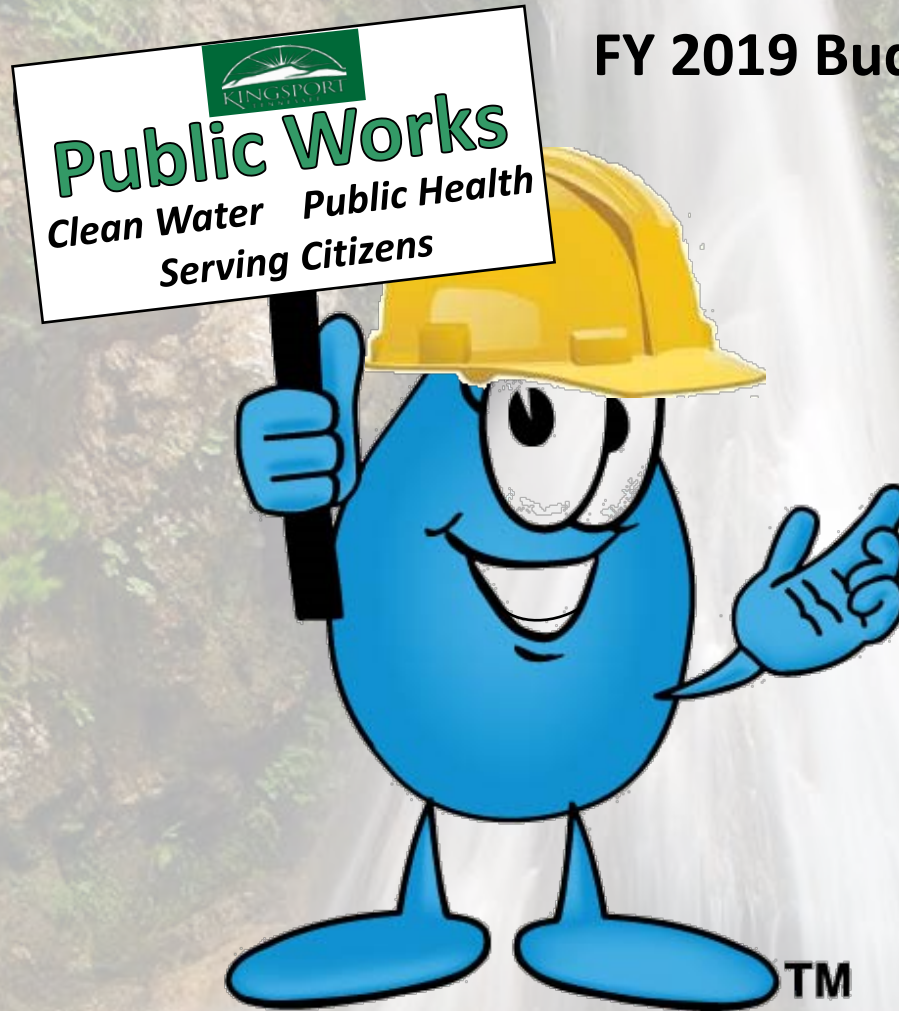


Kingsport Water Resources

FY 2019 Budget Presentation



Common Goal

**Integrated
Water**

***Where are we
going?***

**Strategic
Plans**

***How do we
get there?***

Master Plans

CIP and Operating Budgets

**Drinking
Water**

Wastewater

Stormwater



Strategic Plans

Performance Management

Asset / Workflow Management (Cartegraph)

Operational Programs

Industry Standards of Excellence (AWWA, NACWA)

Permit Compliance

Continuous Improvements

Leak Detection

Acoustic Inspections / Hot Spot Identifications

Communication

Social Media

Customer Call Out

Public Works Day / Consumer Confidence Reports

Safety

Training

Equipment Specifications



Drinking Water Master Plan

- **100+ Year Investment**
 - New Raw Water Tunnel
- **New Raw Water Pumping Station**
- **Chemical Feed (Proposed FY 2019 Budget) & Pipe Gallery**
- **System Line Replacement**
- **High Service Pumps and Clearwell Improvements**



Drinking Water CIP

FY 2019-2023 Water Requests					
Project Name	FY19	FY20	FY21	FY22	FY23
WTP Chemical Feed	\$2,000,000	\$2,400,000	\$0	\$0	\$0
Fire Protection & Water Age Upgrades	\$1,442,000	\$0	\$1,000,000	\$0	\$0
Main St Replacement	\$400,000	\$0	\$0	\$0	\$0
Tank Rehabilitation*	\$150,000	\$500,000	\$0	\$0	\$0
Master Plan Water Upgrades	\$0	\$500,000	\$2,500,000	\$0	\$3,000,000
WTP Clearwell / High Service Pumps	\$0	\$517,000	\$500,000	\$8,475,000	\$0
Bonds	\$3,992,000	\$3,917,000	\$4,000,000	\$8,475,000	\$3,000,000
Project Name	FY19	FY20	FY21	FY22	FY23
Water Pump Station Improvements	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000
Water Line Improvements	\$650,000	\$650,000	\$650,000	\$675,000	\$700,000
Trackhoe with Rock Breaker	\$50,000	\$0	\$0	\$0	\$0
Maintenance Facility Improvements	\$100,000	\$0	\$0	\$0	\$0
Cash	\$925,000	\$775,000	\$775,000	\$800,000	\$825,000
Total	\$4,917,000	\$4,692,000	\$4,775,000	\$9,275,000	\$3,825,000

Wastewater Master Plan

- **Permit Compliance**
 - Capacity (System)
 - Emerging Regulations
- **Reliability**
- **75+ Year Investments**
 - Reedy Creek Trunk Line
 - West Kingsport Trunk Line
 - Continual I/I
 - Equalization Basin (Future)



Lomax Street



Center Street

Kingsport Water – BMA – May 8, 2018



Reedy Creek Sewer Replacement – Under Constr.

West Kingsport – Designed, Funded

Wastewater CIP

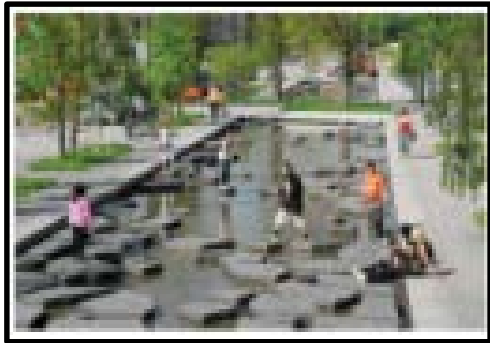
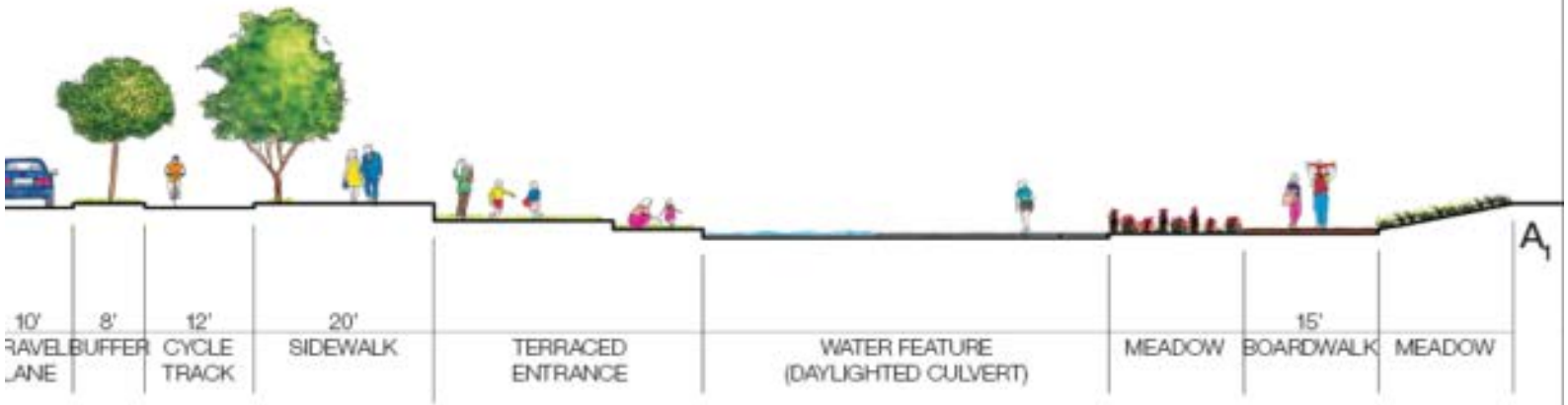
FY 2019-2023 Sewer Requests					
Project Name	FY19	FY20	FY21	FY22	FY23
WWTP Improvements (SCADA)	\$917,000	\$0	\$0	\$0	\$0
Main St Replacement	\$400,000	\$0	\$0	\$0	\$0
WWTP MCC Replacements	\$0	\$600,000	\$0	\$0	\$0
WWTP Equalization Basin	\$0	\$350,000	\$0	\$11,000,000	\$0
Reedy Creek Trunk Sewer	\$0	\$500,000	\$4,500,000	\$500,000	\$4,500,000
System Improvements SLS	\$0	\$2,000,000	\$0	\$0	\$2,000,000
Miscellaneous I&I Rehab	\$0	\$1,000,000	\$1,000,000	\$0	\$2,000,000
Bonds	\$1,317,000	\$4,450,000	\$5,500,000	\$11,500,000	\$8,500,000
Project Name	FY19	FY20	FY21	FY22	FY23
Miscellaneous Sewerline Rehab	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Pump Station Improvements	\$245,000	\$245,000	\$245,000	\$245,000	\$245,000
System Improvements SLS	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Sewer Line Improvements	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Maintenance Facility Improvements	\$100,000	\$0	\$0	\$0	\$0
Trackhoe with Rock Breaker	\$50,000	\$0	\$0	\$0	\$0
Cash	\$1,245,000	\$1,095,000	\$1,095,000	\$1,095,000	\$1,095,000
Total	\$2,562,000	\$5,545,000	\$6,595,000	\$12,595,000	\$9,595,000

Stormwater Master Plan

- Sustainable Stormwater System Maintenance
- Historic Chronic Problematic Areas
- Greenbelt/Floodplain
- Urban Foresty
- Downtown Master Plan
 - Stormwater
 - Redevelopment



Kingsport Water – BMA – May 8, 2018



Stormwater CIP

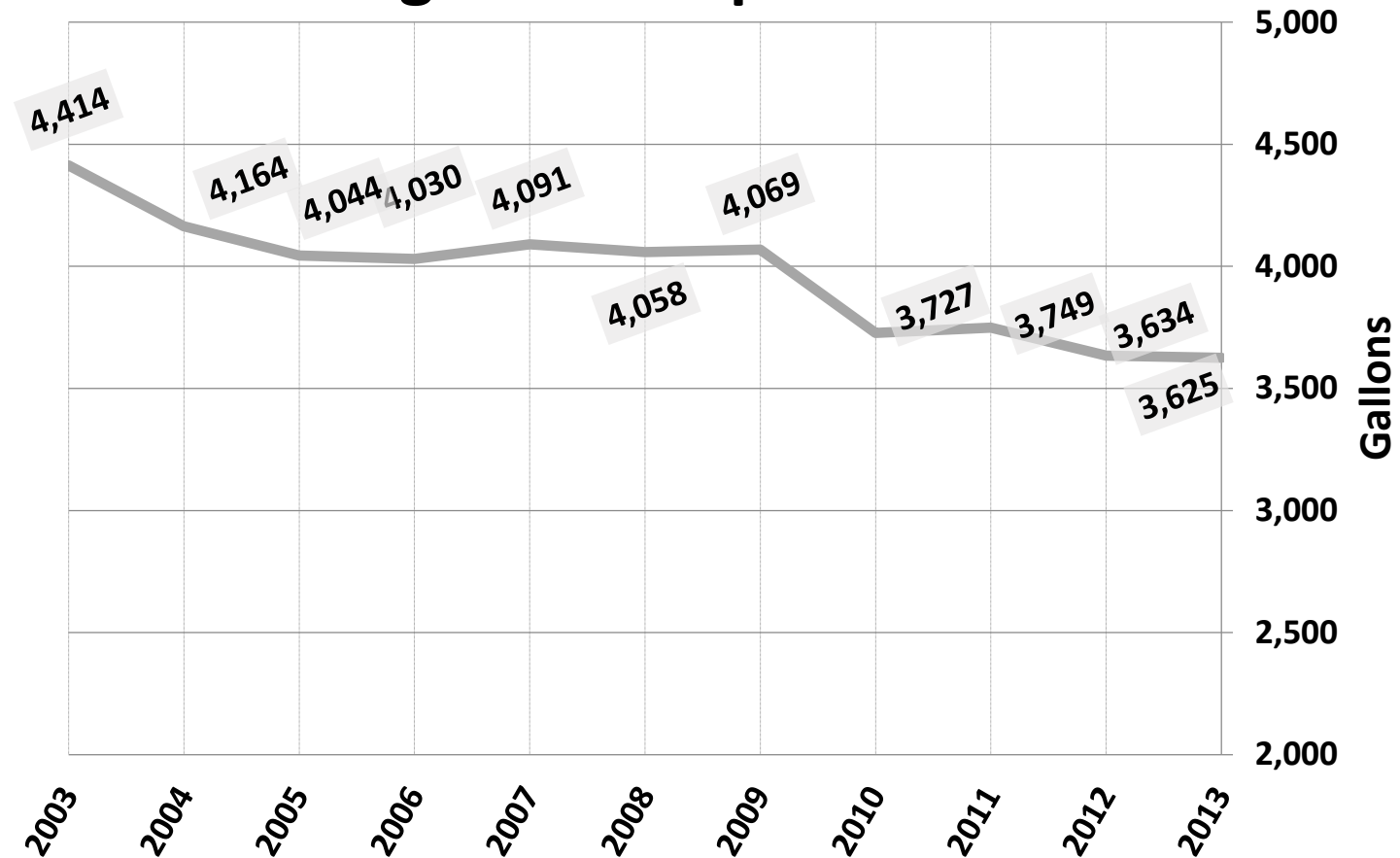
FY 2019-2023 Stormwater Requests

Project Name	FY19	FY20	FY21	FY22	FY23
Dump Truck & Maintenance Truck*	\$90,000	\$0	\$0	\$0	\$0
Buffer Land Purchase/Easement	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Stormwater Infrastructure Improvements	\$134,000	\$224,000	\$224,000	\$224,000	\$224,000
Urban Forestation	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Stormwater Fund Request Total	\$244,000	\$244,000	\$244,000	\$244,000	\$244,000

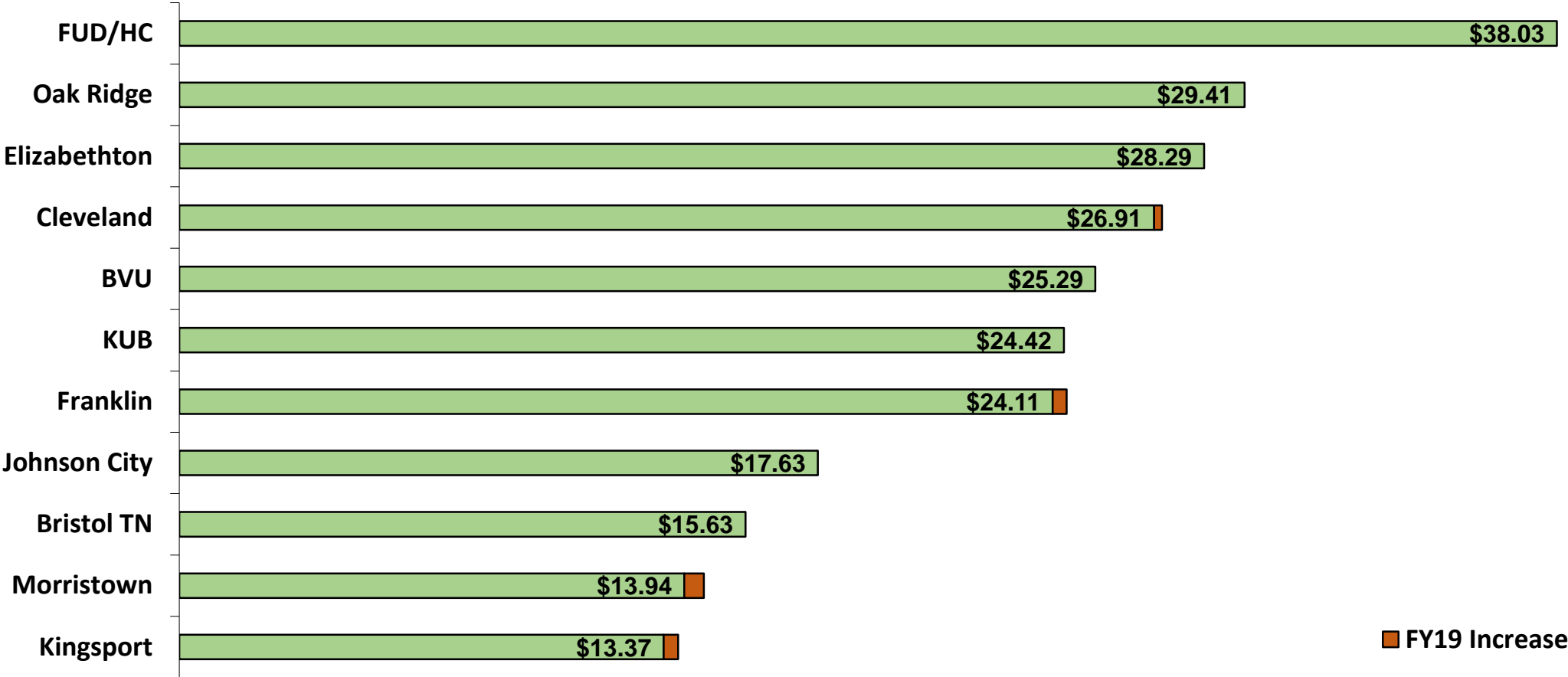
Pressures on Utilities

- Flat Revenue
- Regulatory Environment
- Aging Infrastructure
- Impact of Annexations
 - Investment - Sewer
 - Erosion of Customer Class
- Reduced/Maintained Employee Count

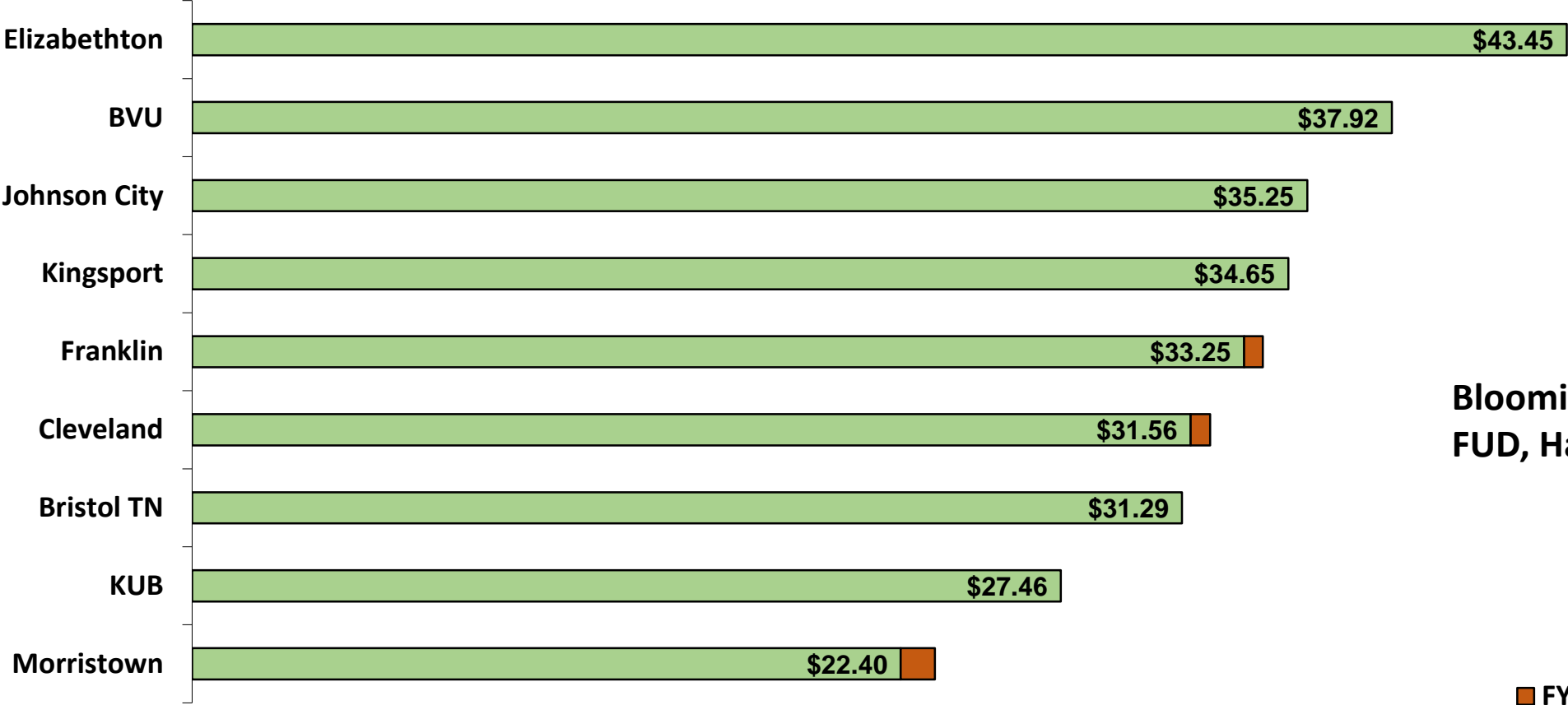
Average Consumption 2003-13



Average Water Bill for Typical Inside Residential Customer (3,600 gals)



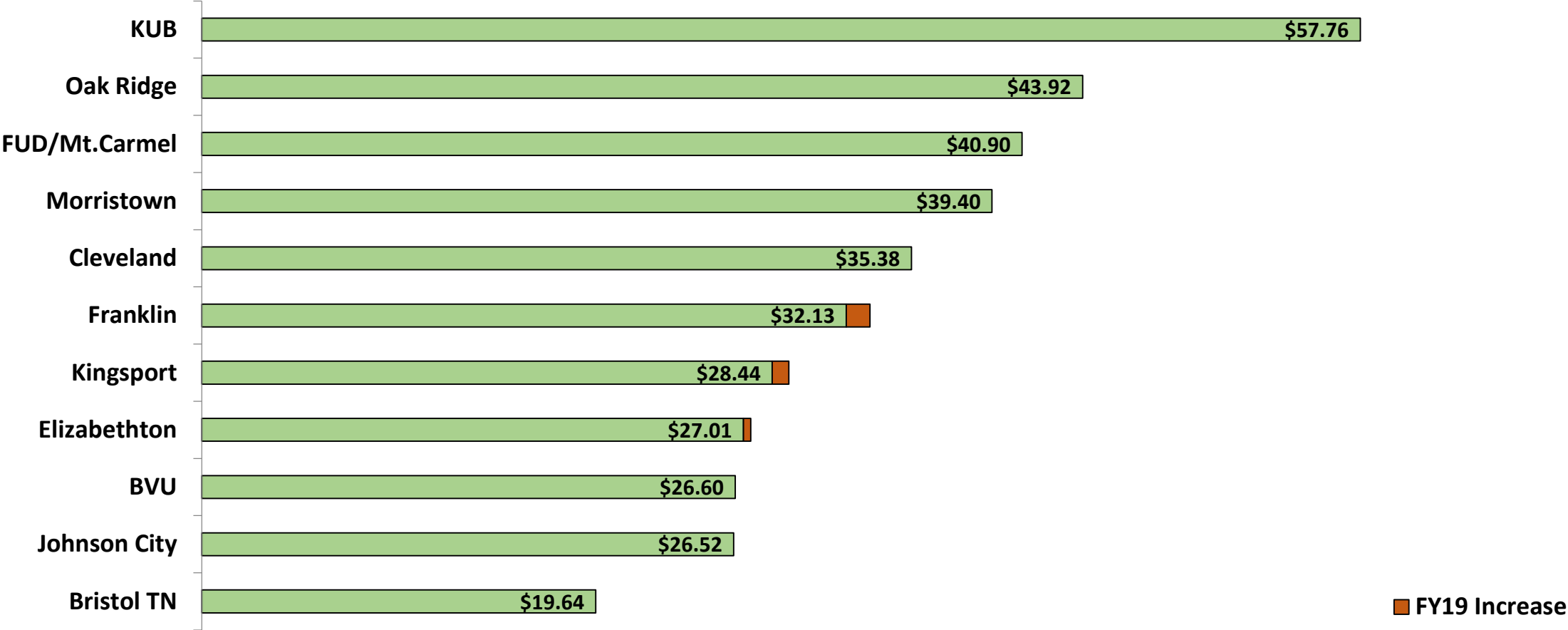
Average Water Bill for Typical Outside Residential Customer (3,600 gals)



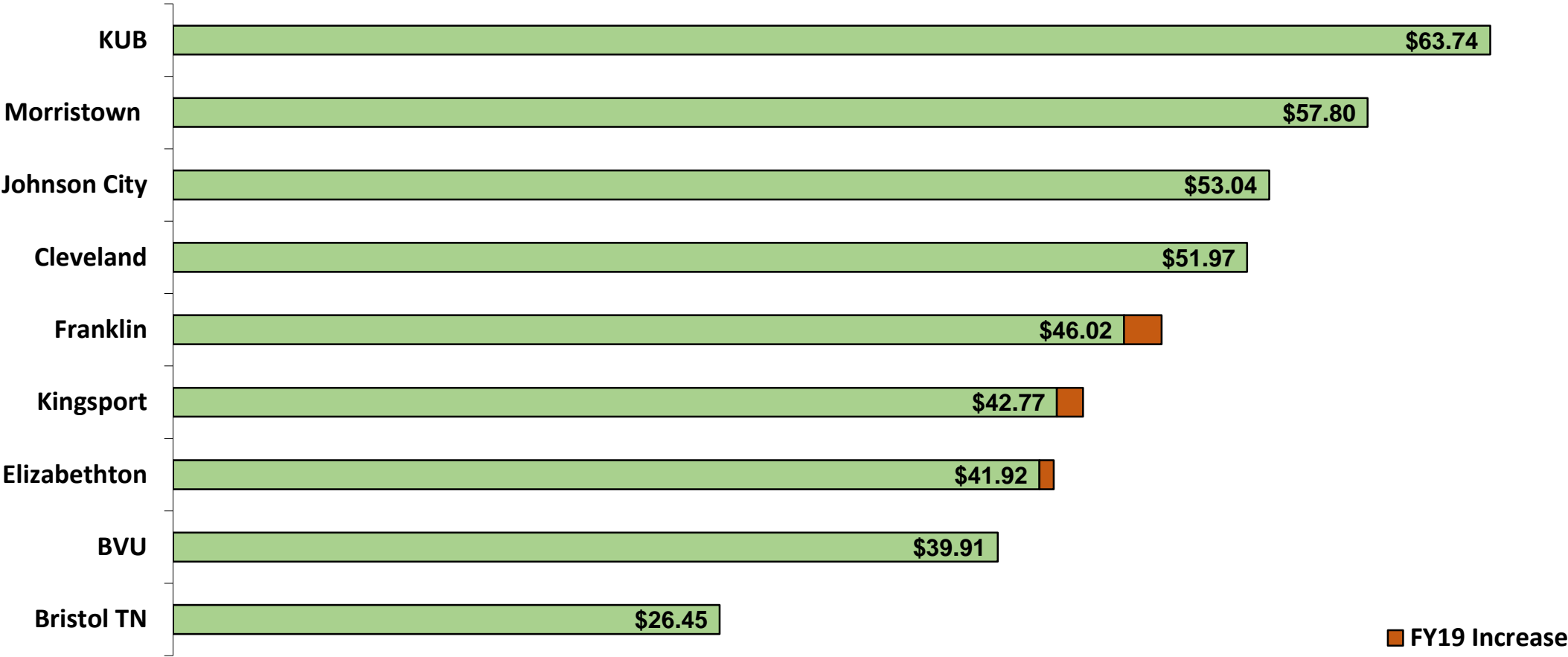
Bloomingdale (\$30.78)
FUD, Hawkins (\$35.63)

■ FY19 Increase

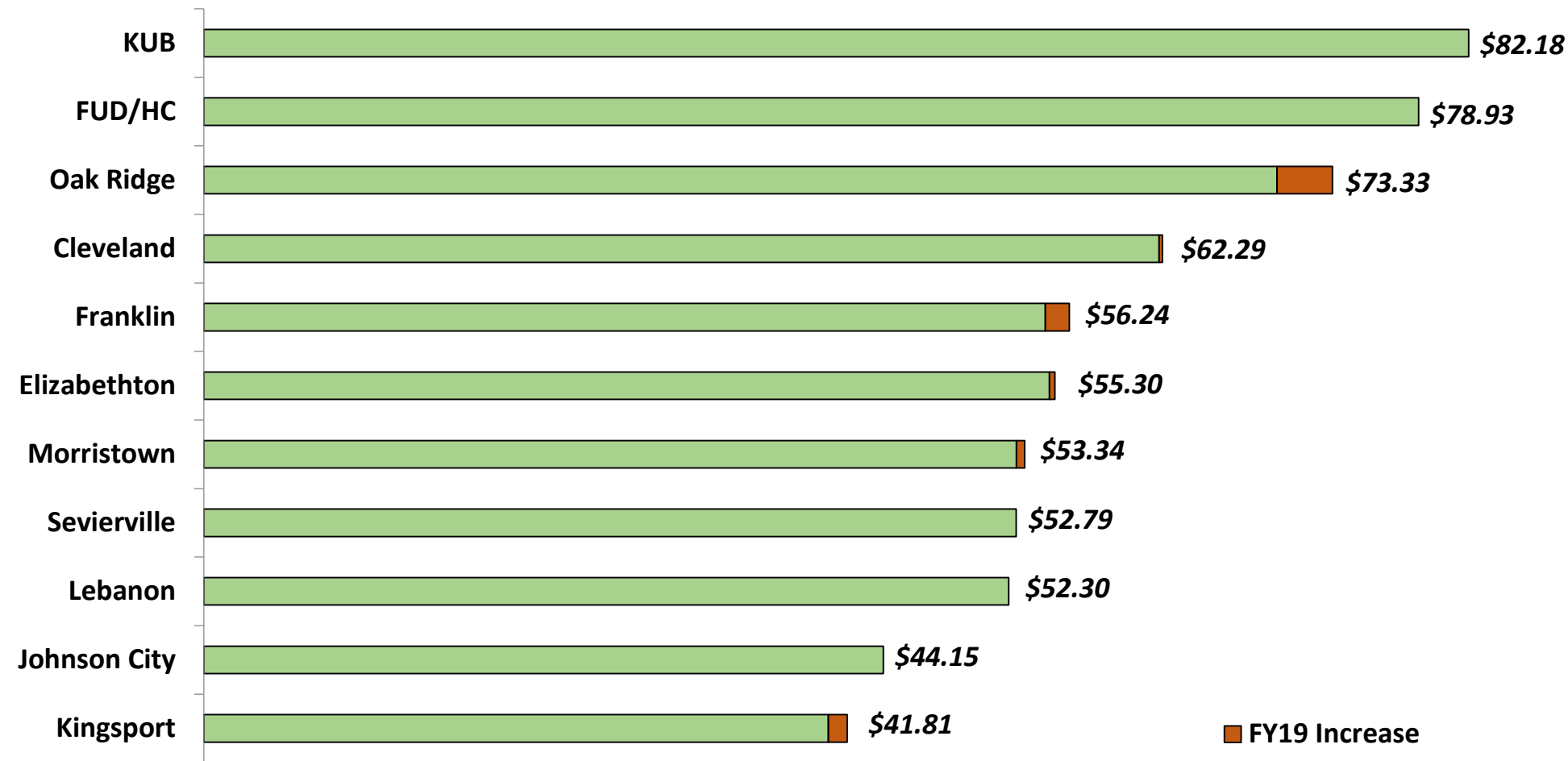
Average Sewer Bill for Typical Inside Residential Customer (3,600 gals)



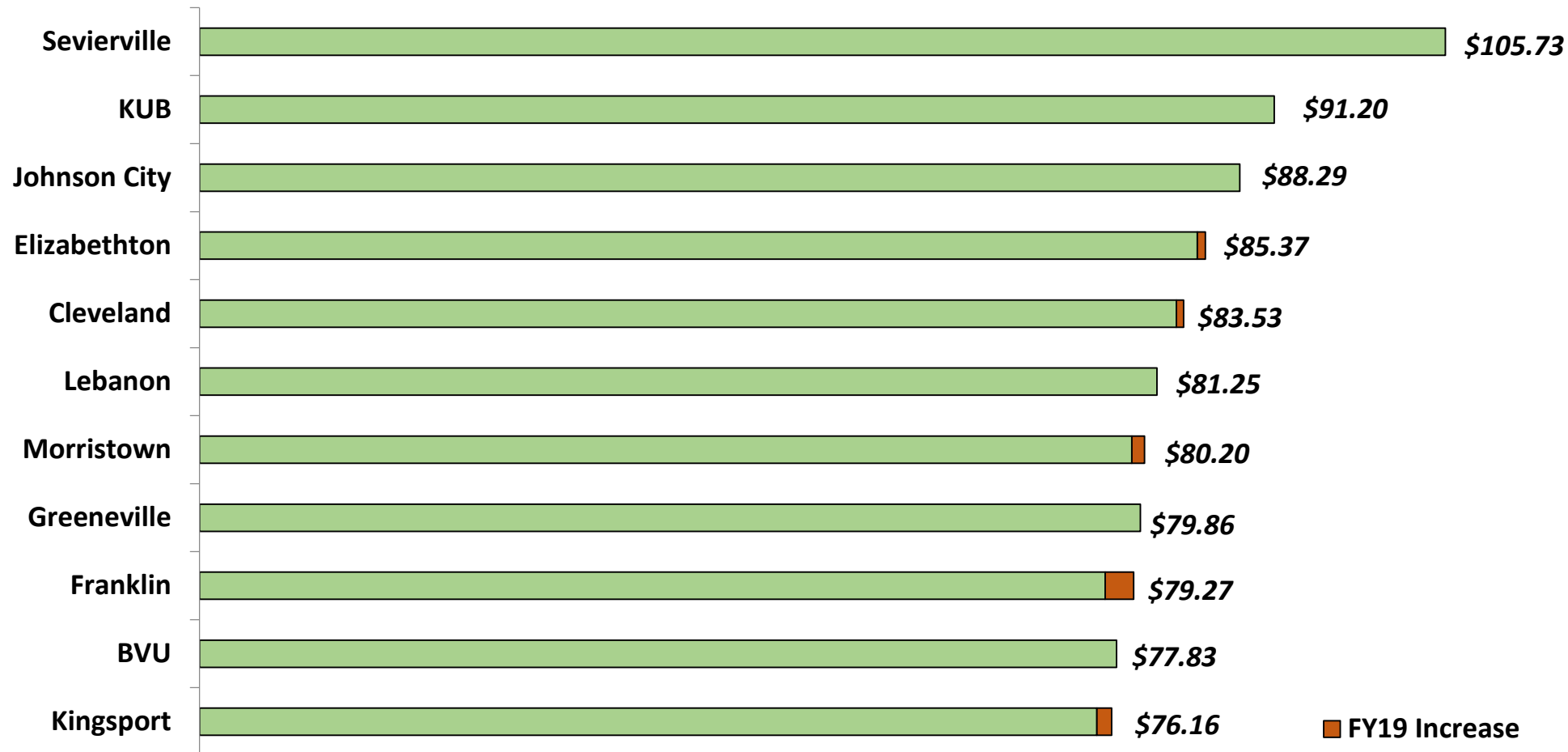
Average Sewer Bill for Typical Outside Residential Customer (3,600 gals)



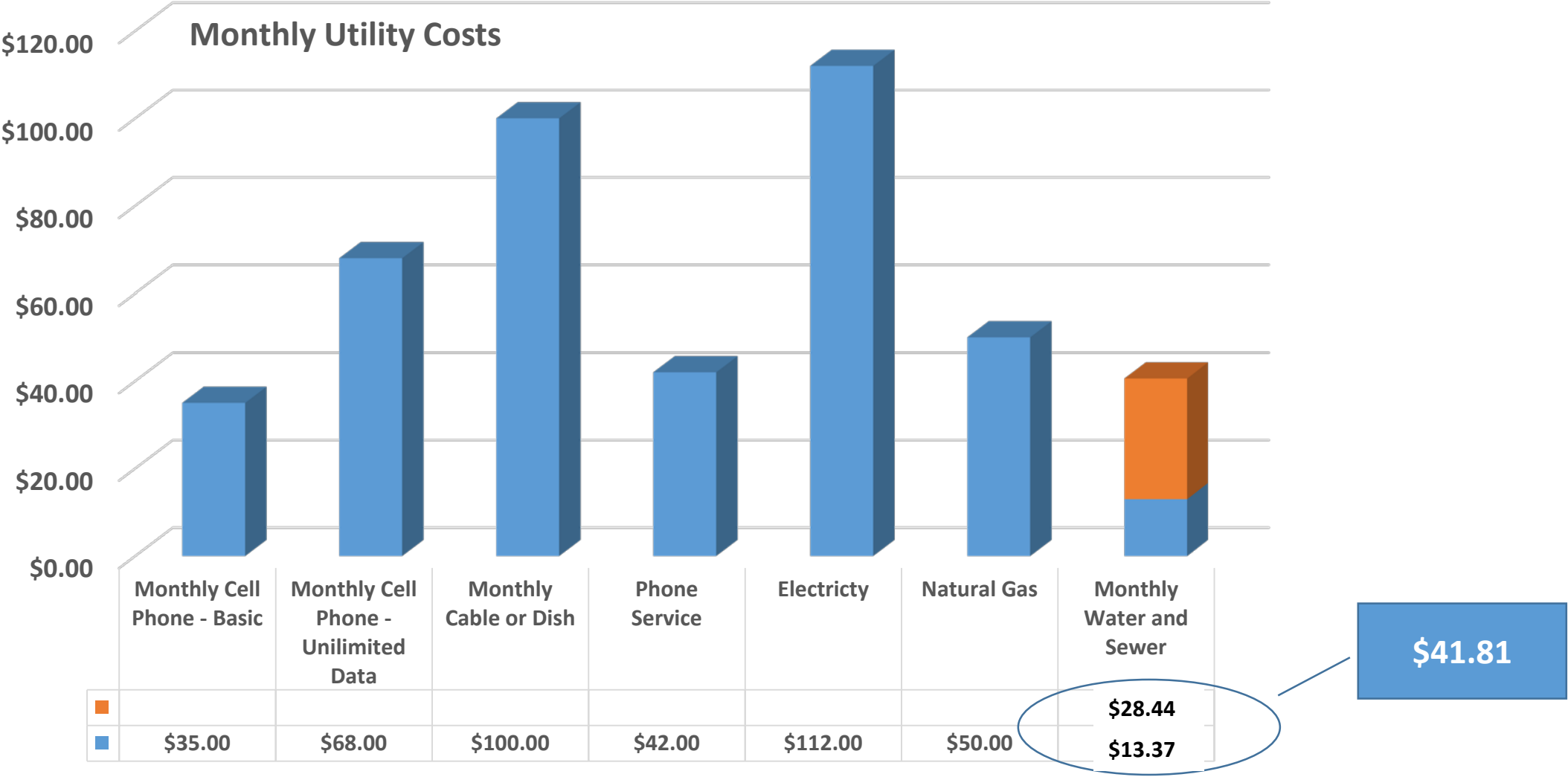
Average Combined Bill for Typical Inside Residential Customer (3,600 gals)



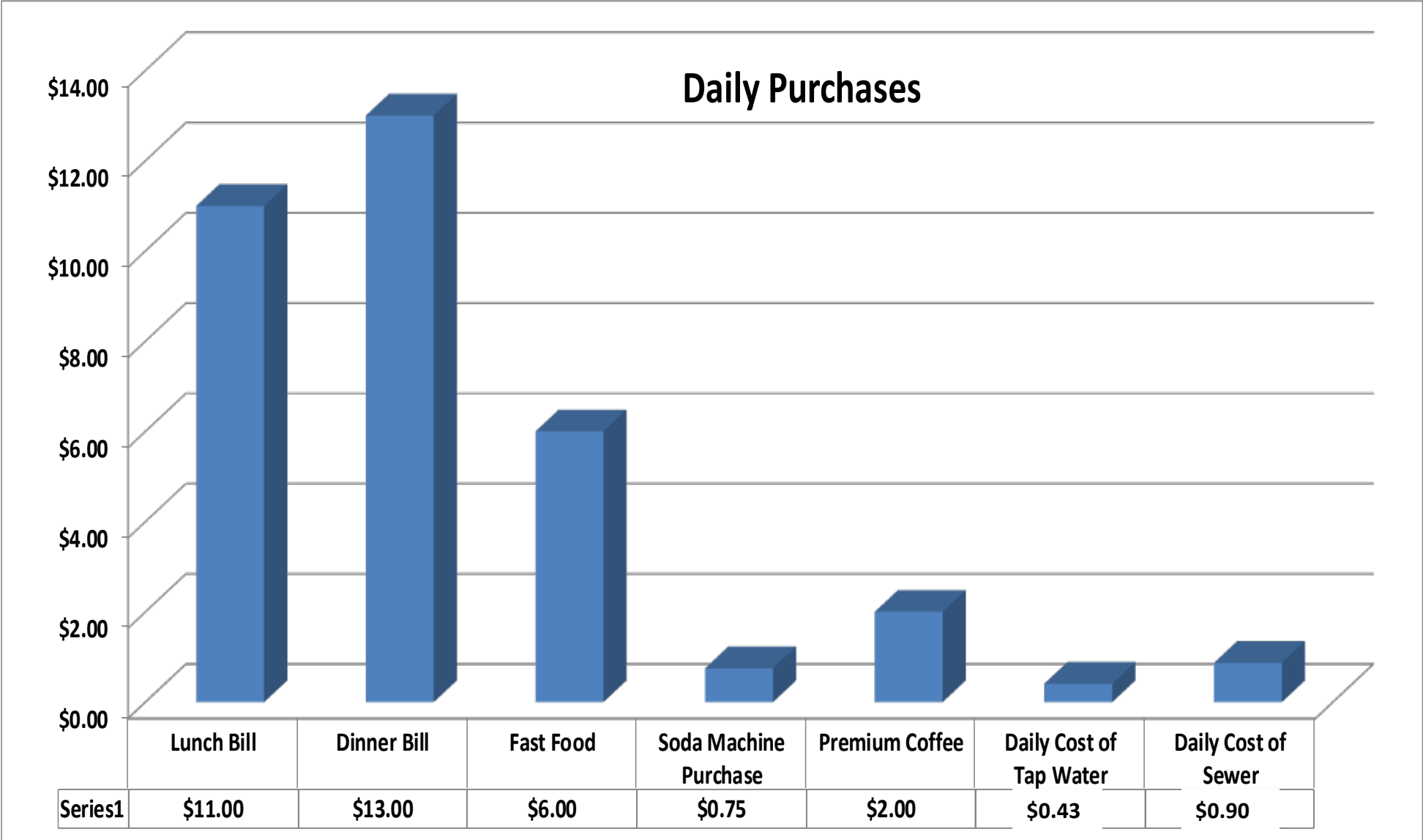
Average Combined Bill for Typical Outside Residential Customer (3,600 gals)



Kingsport Water – BMA – May 8, 2018



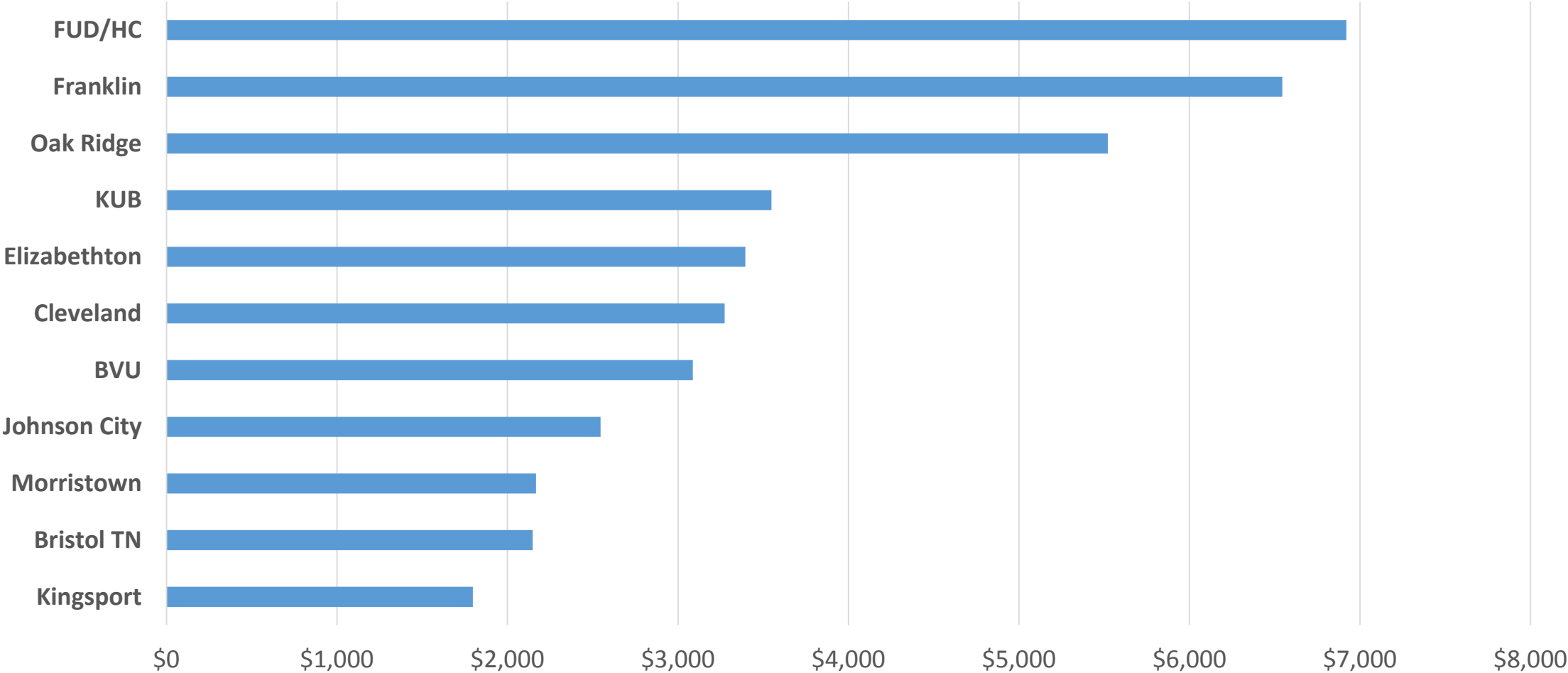
Kingsport Water – BMA – May 8, 2018



Kingsport Water – BMA – May 8, 2018



1,000,000 gallons FY18



Kingsport Water – BMA – May

- **Recommend:**
 - 3% Inside City Water
 - 3% Inside City/Outside City Sewer
- **Rate Study during FY2019**
 - Declining Block Structure
 - Fixed Cost
 - Variable Cost



Cookeville's Typical Residential Water Bill			
2015 Water Cost			
(Cities with a Population Between 11,600-133,000 Shown)			
City	Population	Minimum Bill	Residential Usage 5,000 gallons
Germantown	40,123	\$8.78	\$8.78
Bartlett	56,488	\$5.80	\$11.20
Collierville	45,550	\$6.05	\$13.55
Kingsport	51,274	\$7.74	\$17.07
Bristol	26,702	\$7.22	\$19.34
Farragut	20,676	\$10.20	\$19.65
Tullahoma	18,655	\$5.50	\$19.65
Cookeville	31,154	\$4.10	\$20.40
Smyrna	39,974	\$10.66	\$20.62
Clarksville	132,929	\$3.00	\$20.70
Morristown	29,137	\$13.40	\$20.70
Spring Hill	32,053	\$9.80	\$20.87
Maryville	27,536	\$9.05	\$20.95
Columbia	34,681	\$9.50	\$21.75
Cleveland	41,285	\$7.53	\$22.50
Johnson City	63,152	\$4.63	\$22.68
Hendersonville	51,372	\$10.46	\$22.73
Athens	13,458	\$9.50	\$23.00
Jackson	65,211	\$10.84	\$24.56
Dyersburg	17,145	\$4.94	\$25.39
Sevierville	16,011	\$8.86	\$25.46
Gallatin	30,278	\$11.92	\$25.52
East Ridge	20,979	\$13.96	\$26.38
Red Bank	11,651	\$13.96	\$26.38
Shelbyville	20,335	\$11.40	\$26.45
Murfreesboro	109,031	\$8.22	\$26.53
Springfield	16,440	\$12.72	\$27.30
Lavergne	32,588	\$15.44	\$27.41
Brentwood	40,401	\$11.62	\$28.03
Franklin	66,370	\$11.86	\$28.74
Lebanon	26,190	\$10.37	\$35.96
Oak Ridge	29,330	\$16.04	\$35.99
Mt. Juliet	28,159	\$33.14	\$57.82
Average		\$10.24	\$24.06
Total Number of Water Systems Surveyed = 33			
Jan. 2015 web page and phone survey			