

Fairfax County, Virginia



LINES OF BUSINESS

January 2016

WASTEWATER MANAGEMENT PROGRAM

*County Lines of Business (LOBs)
Presentation to the Board of Supervisors*



www.fairfaxcounty.gov/budget/2016-lines-of-business.htm



OUTLINE OF TODAY'S PRESENTATION

1. Department Overview
2. Wastewater Management Program high level view
3. How the Wastewater Management Program relates to County Vision Elements
4. Metrics
5. Financial Management
6. Trends and Challenges
7. Looking Forward
8. Discussion



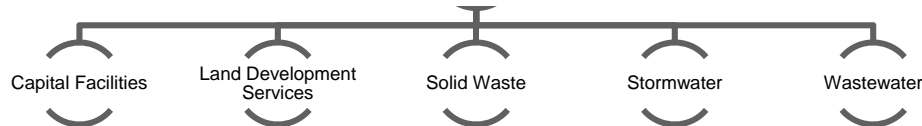
Note: See www.fairfaxcounty.gov/budget/2016-lines-of-business.htm to access all LOBs documents and presentations.
County of Fairfax, VA – 2016 Lines of Business Presentation



DEPARTMENT OVERVIEW



Working For You!



DPWES Mission – As one department, create and preserve a sustainable community

DPWES Values – Safety, Accountability, Initiative, Innovation, Integrity, Open Communication, Personal and Professional Growth, and Teamwork

County of Fairfax, VA – 2016 Lines of Business Presentation



DEPARTMENT OVERVIEW

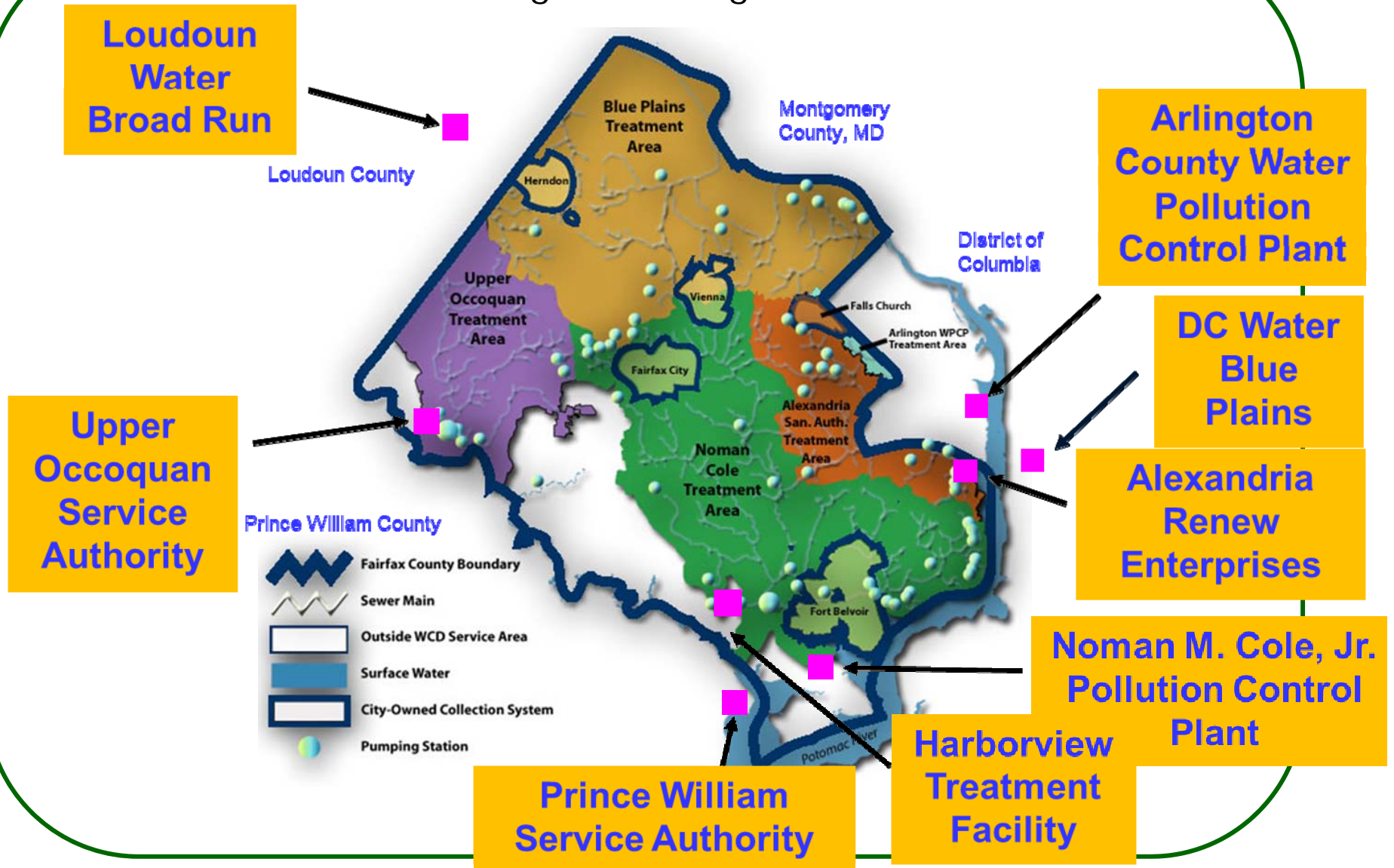
- Within the Department of Public Works
- Consist of three divisions
 - Collections
 - Treatment
 - Planning and Monitoring
- Enterprise Fund – No General Fund Support
- County's wastewater system profile
 - 3,412 miles of sewer line 8 inches to 72 inches in diameter
 - 63 pumping stations
 - 157 million gallons per day treatment capacity at 8 treatment plants
 - 7 service agreements with neighboring jurisdictions to maximize efficiencies
 - Average County wastewater flow is 100 million gallons per day



Aerial view Noman M. Cole Jr. Pollution Control Plant



» Wastewater Management Program Treatment Areas





DEPARTMENT RESOURCES

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
FUNDING			
<u>Expenditures:</u>			
Compensation	\$17,912,610	\$17,838,002	\$20,395,584
Benefits	8,015,712	8,035,227	8,773,795
Operating Expenses	64,123,446	66,568,211	66,371,146
Work Performed for Others	(597,579)	(713,878)	(345,468)
Capital Equipment	775,148	2,324,677	1,233,615
Bond Expenses	47,169,669	45,820,906	47,225,170
Capital Projects	120,011,186	90,125,917	99,389,000
Total Expenditures	\$257,410,192	\$229,999,062	\$243,042,842
General Fund Expenditures	\$145,600	\$145,600	\$145,600
<u>Transfers Out:</u>			
Transfer Out to General Fund	\$1,800,000	\$1,800,000	\$2,850,000
Total Transfers Out	\$1,800,000	\$1,800,000	\$2,850,000
<u>Revenues:</u>			
Other Revenue	\$213,378,378	\$210,862,965	\$222,332,902
Total Revenue	\$213,378,378	\$210,862,965	\$222,332,902
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
<u>Positions:</u>			
Regular	315 / 315	315 / 315	315 / 315
Total Positions	315 / 315	315 / 315	315 / 315



LOBS AT A GLANCE





LOBS SUMMARY TABLE

LOB #	LOB Title	FY 2016 Adopted	
		Disbursements	Positions
385	Wastewater Treatment	\$23,302,862	130
386	Wastewater Collections	18,965,714	132
387	Wastewater Planning and Monitoring	56,864,496	53
388	Debt Management	47,225,170	0
389	Capital Improvement Program	99,389,000	0
390	Wastewater (General Fund)	145,600	0
Total		\$245,892,842	315



LINES OF BUSINESS SUMMARY

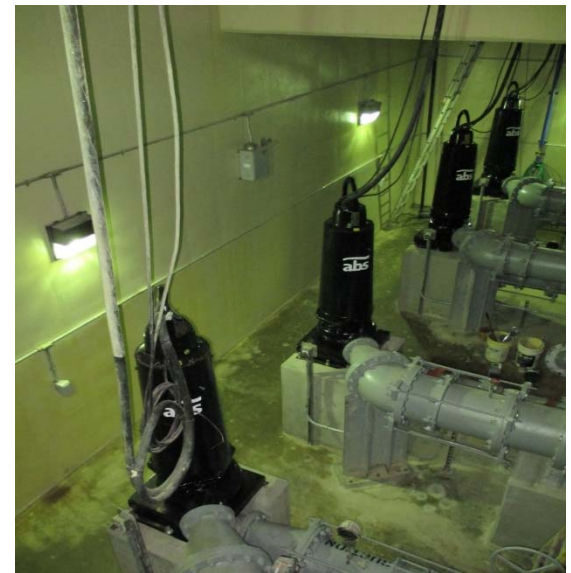
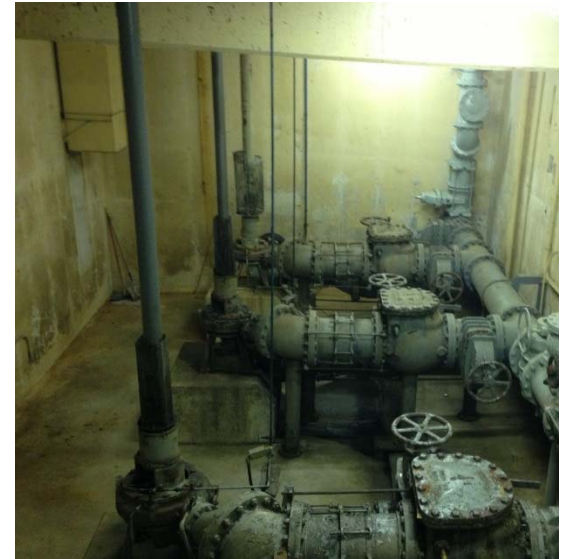
- Wastewater Treatment
 - Provides state of the art wastewater treatment for approximately 40 million gallons of wastewater per day
- Wastewater Collection
 - Operation and maintenance of 3,412 miles of wastewater conveyance system & 63 Pump Stations
- Wastewater Planning and Monitoring
 - Determines future capacity needs for the Wastewater Management Program & Works with Treatment Partners
 - Manages the Program's finances to ensure rates are competitive with surrounding jurisdictions
 - Reviews construction plans for new developments
- Debt Management
 - Maintains Program's triple and double A ratings



LINEs OF BUSINESS SUMMARY

- Capital Improvement Program
 - Highly capitalized program, total gross program assets are valued at \$2.4 Billion
 - FY 2016-FY2020 CIP totals \$616.5 million for rehabilitations, upgrades and improvements
- Wastewater (General Fund)
 - Allows Utilities Inc.(Harbor View) customers to pay the same sewer rates as Program customers

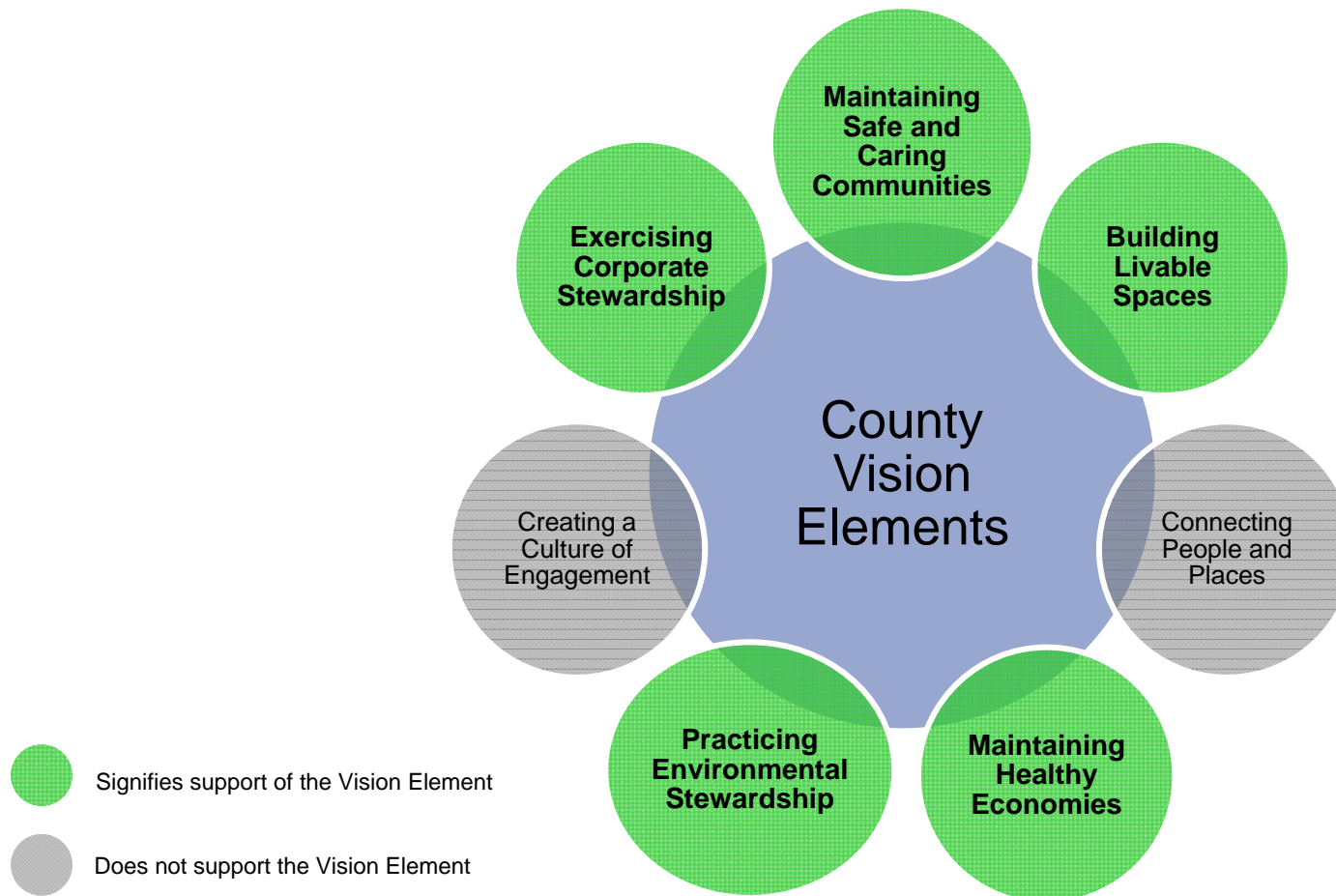
50/66 Pump Station before and after rehabilitation





COUNTY VISION ELEMENTS

- The purpose of the LOBs process and the validation process performed by staff and management is to array the relevance of all LOBs according to the County's Vision Elements. This agency's LOBs support:





METRICS

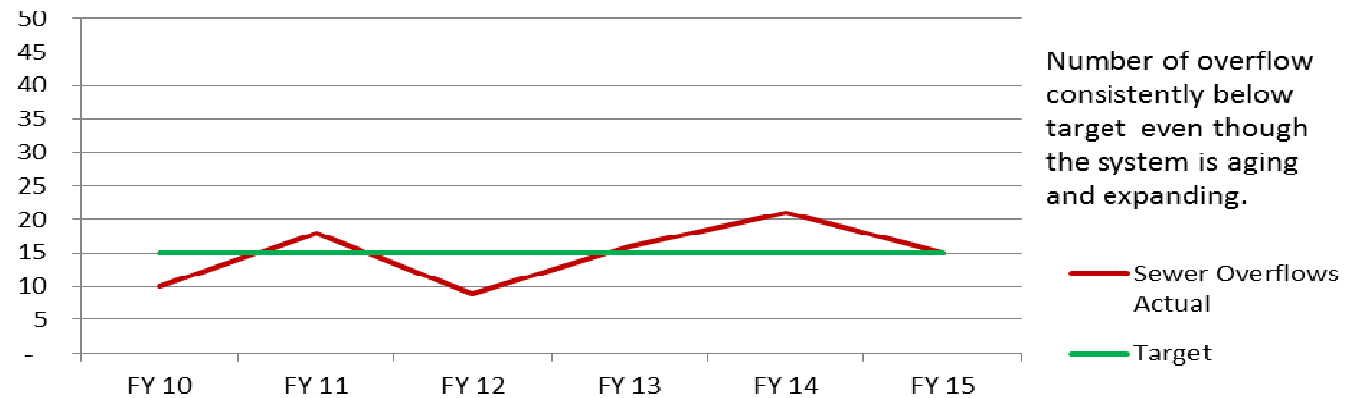
- 17 years of consecutive 100 percent compliance Virginia Pollutant Discharge Elimination System (VPDES) permit
- Wastewater Treatment 100 percent compliance with Title V Air Permit and State Water Quality Permit
 - March 2016 new stricter air quality regulations go into effect
- Wastewater Collection has selected a target of less than 15 sewage overflows per year or 0.44 per 100 miles of sewer. The Water Environmental Federation "Median Overflow is 4.3 per 100 miles of sewer"
- Wastewater Planning and Monitoring manages the finances to fully fund all of the Program's reinvestment needs and Maintain Bond Rating
- Capital Improvement Program maintains adequate working capital to respond to emergency repairs or sewer line failures



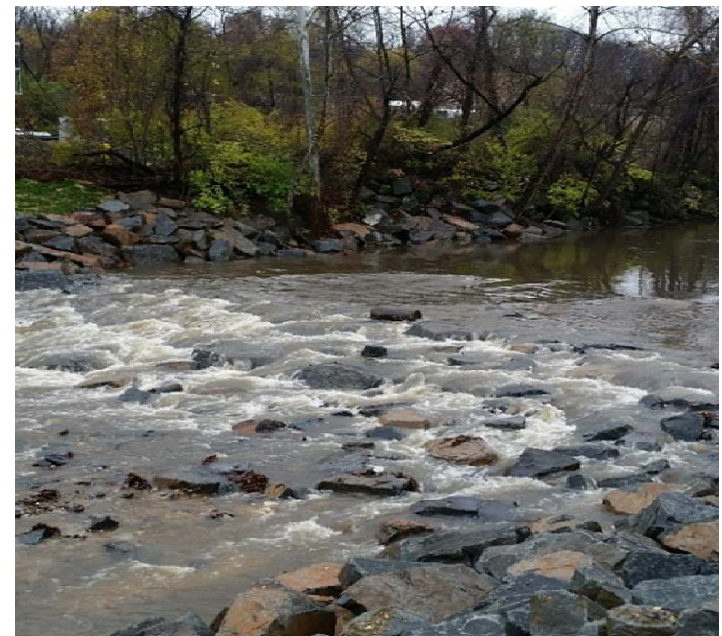
METRICS

Sewer Overflows per Year

EPA estimates that about 40,000 SSO events occur in the United States each year
Water Environmental Federation "Median Overflow is 4.3 per 100 miles" equates to 145 overflows for a collection system of our size. One overflow is a violation of our permit.

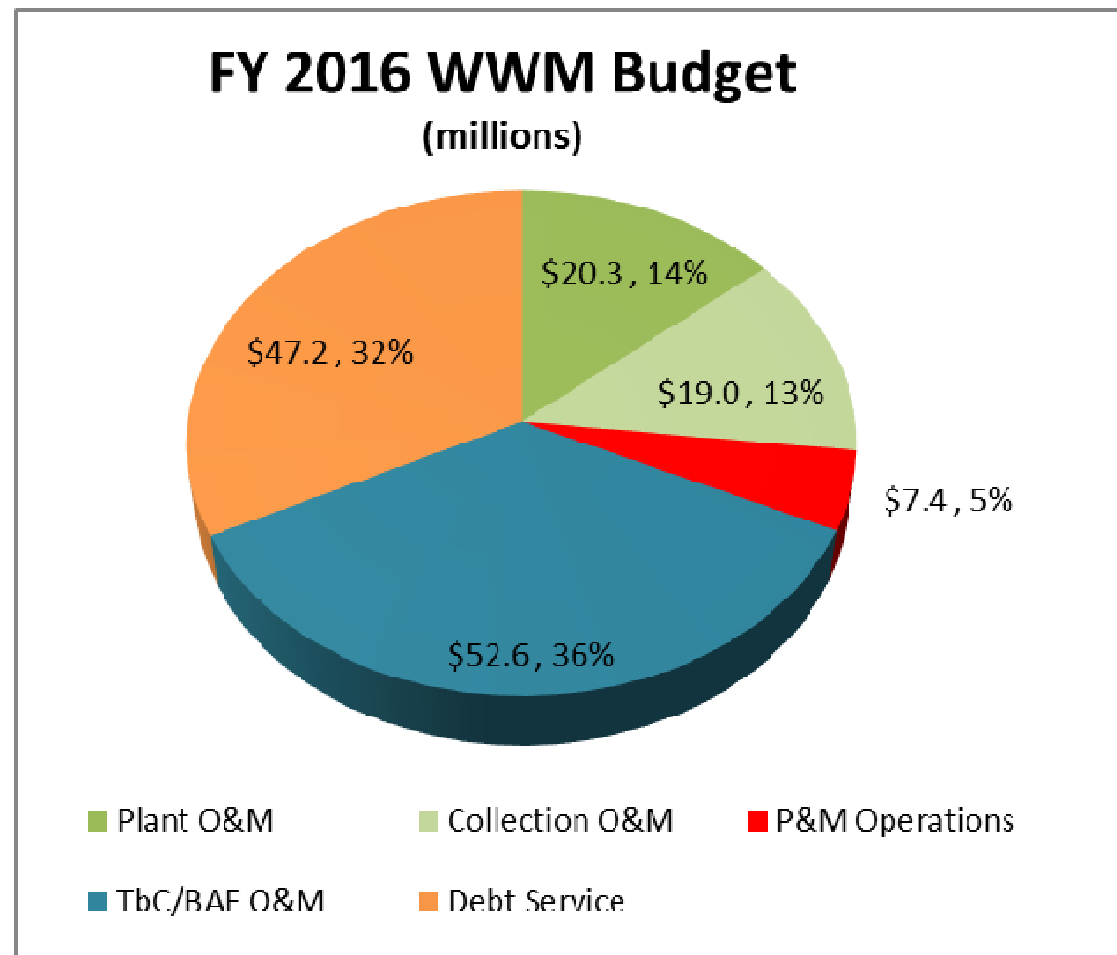


South Van Dorn
Emergency Repair
– 120 feet of 20
inch sewer line
sagged due to
stream erosion



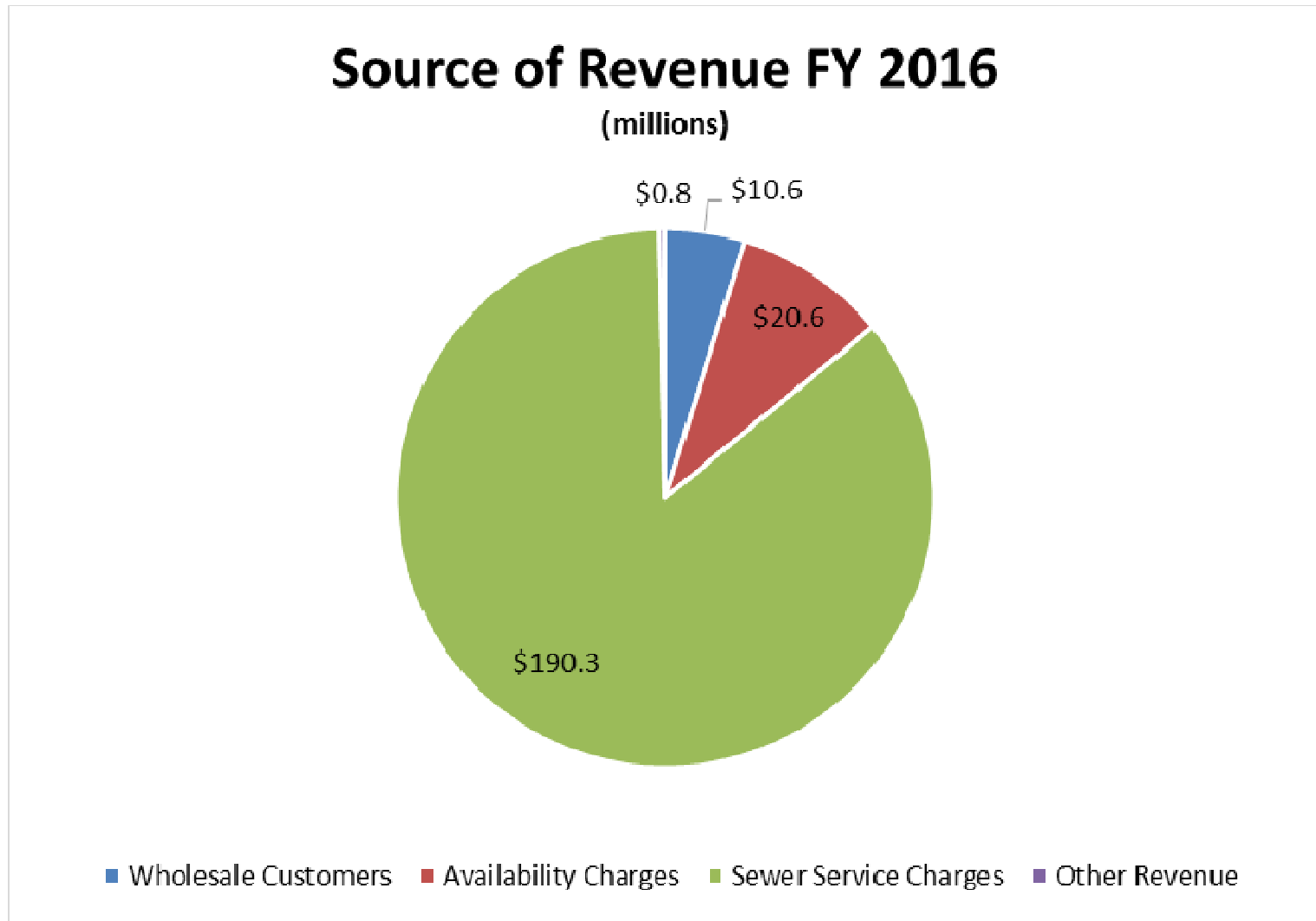


FY 16 BUDGET





BY THE NUMBERS





FINANCIAL PERFORMANCE TARGETS

Financial Strategies

- Maintain Bond Rating - AAA/Aa1 with positive outlook April, 2014
- Fund R&R via Cash vs. Borrowing

Maintain Competitive Rates

- Minimize Customer Impact
- Fixed cost rate structure ensures that a portion of the Systems fixed cost are recovered

Infrastructure Reinvestment

- Minimum 3% of Net Capital Assets funded each year (\$44M/yr.)

Estimated Amortized Asset Replacement			
Asset Category	Programmed Service Life	Average Service Life	Remaining Service Life
Treatment Facilities	30	23	7
Gravity Line	60	34	26
Pump Station	30	28	2
Force Main	60	17	43
Other	30	12	18



FINANCIAL PERFORMANCE TARGETS

Bond Covenants Coverage Ratios

- Gross Operating Revenues less Operating Expenses divided by Debt Service
 - Total Debt 1.25 (excluding nonrecurring revenues)
 - FY 2015 Ratio was 2.05
 - Senior Debt 2.0 (excluding nonrecurring revenues)
 - FY 2015 Ratio was 4.64
 - Moody's Aaa median for Total Debt Coverage: 2.70

O&M Reserve Goals

- Minimum: 150 days
- Target: 200 days
- FY 2015 Audited: 157 days

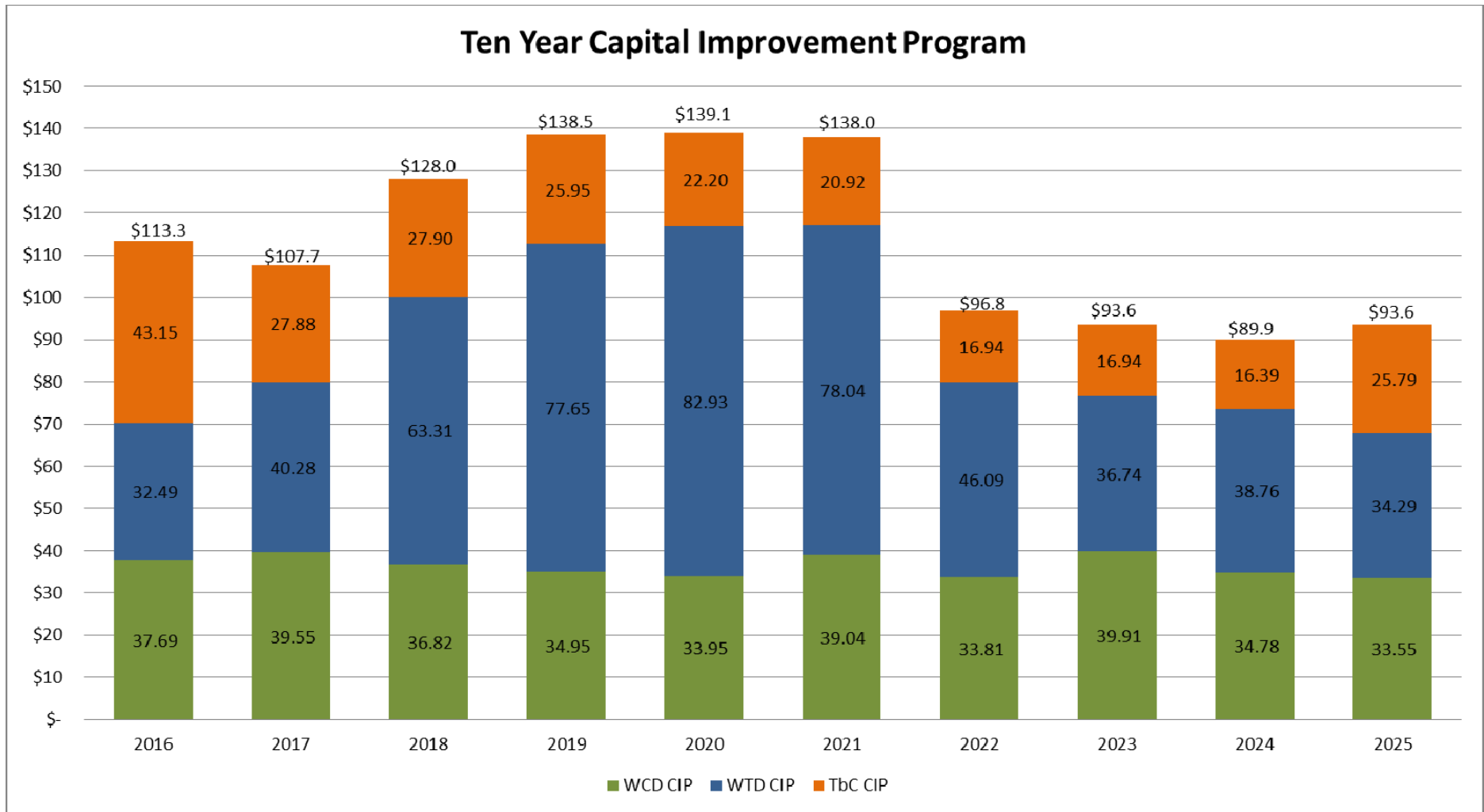


ANNUAL RATE REVIEW PROCESS

- Analyze actual vs projected revenues and expenditures from prior year
- Determine financial assumptions to be used in the financial model i.e. growth rates, inflation, new regulatory requirements, aging infrastructure, etc.
- Develop a ten year CIP cash flow projection
 - Treatment plant projects: Regulatory Compliance and Reinvestment
 - Collection system projects: Primarily Reinvestment
 - Treatment by Contract projects (Interjurisdictional plants)
- Develop a ten year O&M budget projection
- Update our 10 year projection financial model



METRICS





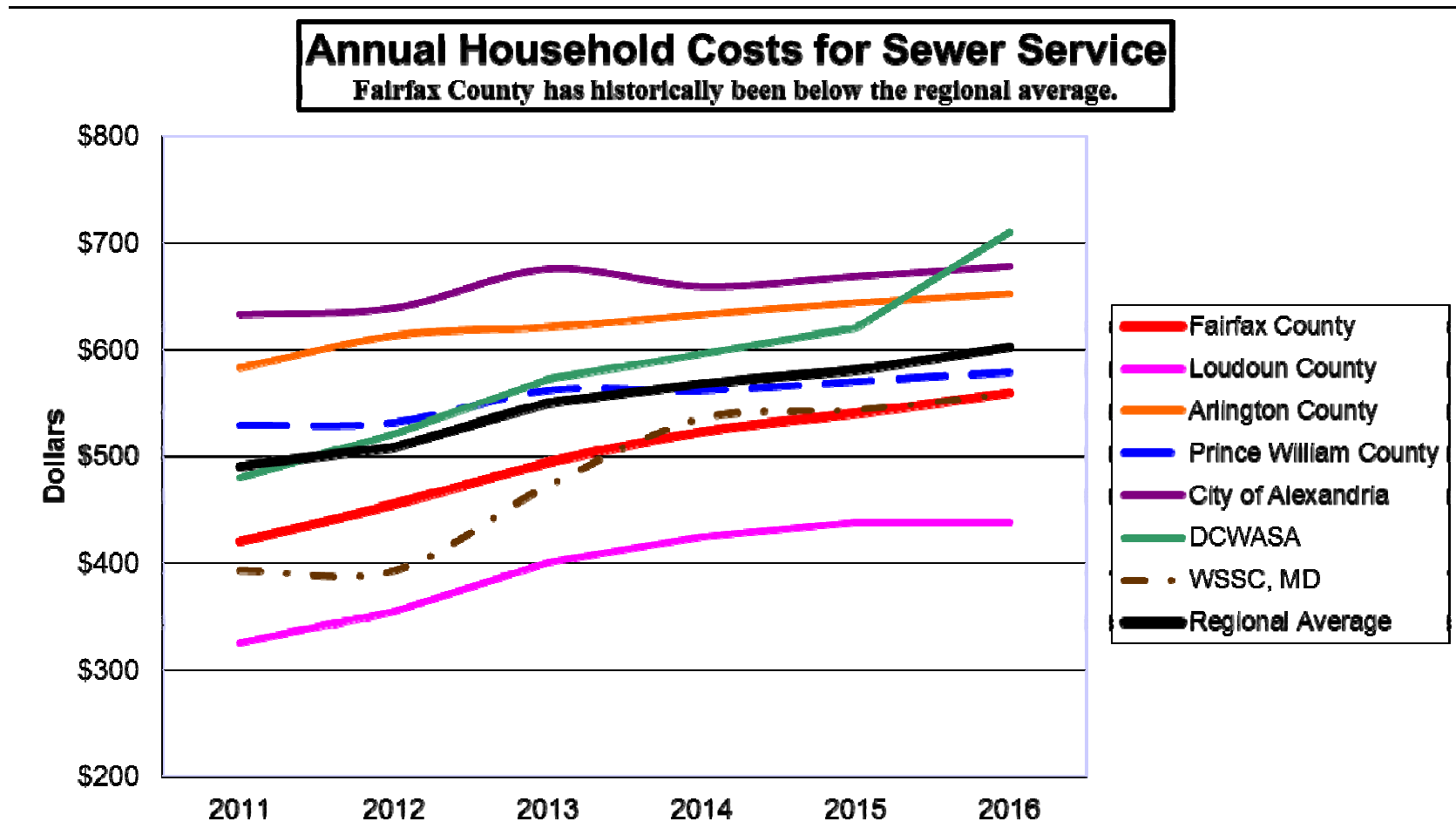
ANNUAL RATE REVIEW PROCESS

- Determine revenue requirements based financial model projections for CIP, O&M and financial performance targets
- Balance CIP funding, O&M funding, bond issuances, rate increases and financial performance targets
- Distribute rate increase between volumetric and base charges
- Present to a five year rate schedule based on results from our financial model

Recommended Rates Schedule					
	Existing	Prior Board Adopted		Identified	
Fiscal Year	2016	2017	2018	2019	2020
Base Charge	\$20.15	\$24.68	\$27.62	\$30.38	\$33.42
Sewer Service (Flow) Per 1,000 gallons	\$6.65	\$6.68	\$6.75	\$6.85	\$7.05
Rate Adjustment	N/A	3.6%	3.1%	3.0%	4.0%



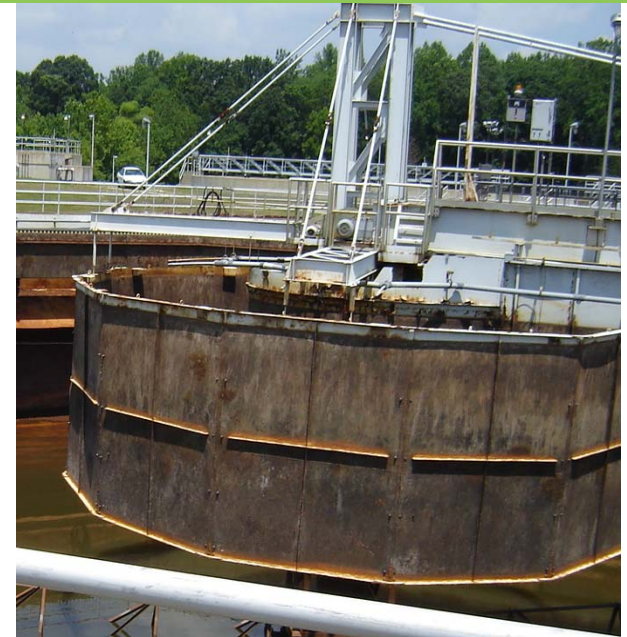
METRICS





TRENDS AND CHALLENGES

- Staff turnover
- Aging infrastructure
- Financing the Capital Improvement Program
- Timely plan reviews
- Maintaining lab certification
- Stricter Regulatory Requirements
- Resource Recovery
 - Water Reuse
 - Energy Recovery
 - Solar Panels
 - Landfill Methane Gas
- Outreach and Education



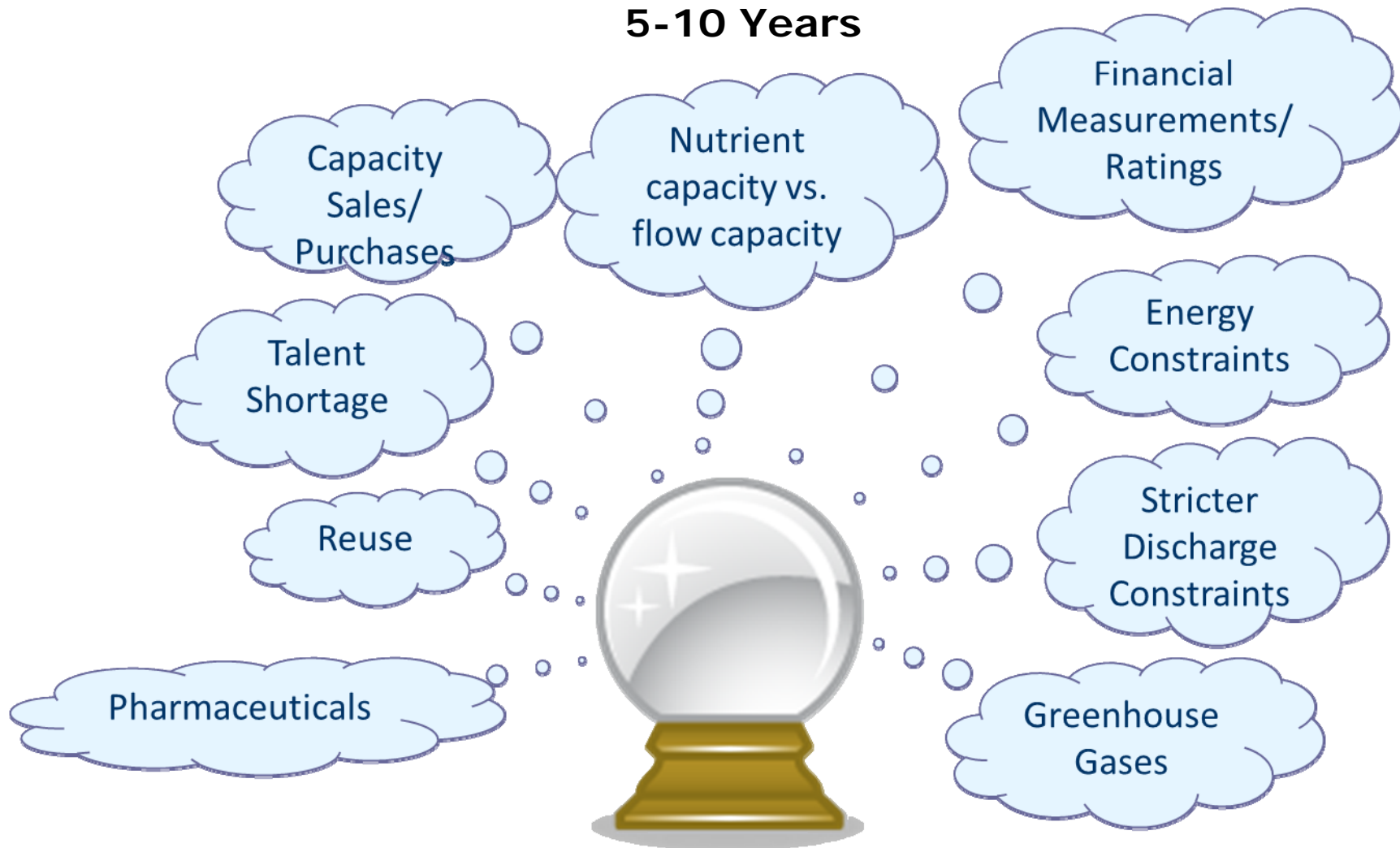
TC Tank 4 final stages of rehab project





LOOKING FORWARD

Wastewater Management Program: 5-10 Years





DISCUSSION

