

Cadd File Name: W:\PROJECTS\Non-CIP\2016\116 ROW Mgmt\000 VACATIONS 2016 - ENERGY\ROWV-023840-2016 Triangle @ Diagonal Drive SW\ROWV-023840-2016 Council Map.dwg



**RIGHT-OF-WAY VACATION AND DISPOSITION,
PROPOSED UTILITY EASEMENT AND
STORM SEWER EASEMENT**



0 FEET 100

ROWV-023840-2016

218 4th Ave SW URTE

West Side Wolf Pack V LLC

November 1, 2016

Background

- September 13, 2016 – City Council approves a resolution of support authorizing City participation
- Project qualifies under the City's Brownfield/Grayfield Economic Development Program:
 - Dilapidated & underutilized former industrial property
 - Property value has declined by 68% since 2008

Linn County
Sheriff's
Office

3rd St SW

2nd Ave SW

3rd Ave SW

Village Lofts

City
Beat

3rd Ave SW

Kingston
Commons

1st St SW

2nd St SW

4th Ave SW

Metropolitan

Project
Location

3rd St SW

5th Ave SW

4th St SW

1st St SW





Project Overview

- Renovation of existing 12,500 sq. ft. former industrial facility to commercial use
- Letter of Interest from brewery
- Upgrade exterior to compliance with Kingston Village Overlay District standards
- \$750,000 capital investment





Next Steps

- Today Public Hearing, 1st Ord & Resolution
- Nov. 15 2nd & Possible 3rd Ordinance reading
- Kingston Village Design Review Technical Advisory Committee

Economic Development Program Stats

	2014	2015	2016 (to date)	Totals
Approved Projects	15	21	16	52
Min. Private Investment	\$103M	\$143M	\$151M	\$397M
Est. City Incentive	\$18M	\$26M	\$8M	\$52M
Housing Units	113	281	417	811
Jobs Created/Retained	304	444	350	1,098

Stormwater & Sanitary Sewer Master Plans

Request for City Council Adoption

November 1, 2016



Objectives of Both Masterplans

The City's Planning & Capital Improvement guide for the next 10 to 20 years.

1. Aligns with EnvisionCR
2. A “living” document
3. System wide computer model for cost-effective solutions
4. Efficient asset management
5. Objectively prioritized CIP plan
6. A workable financial plan
7. Identify policy solutions
8. Annual updates

Stormwater Master Plan

November 1, 2016



The Stormwater Program

- Budgeted for:
 - Operations and Maintenance
 - Capital Improvements
 - State and Federal Permit Compliance
- How the program is funded today:
 - Stormwater Utility \$5m (under new fee structure)
 - O & M ~\$2.3M
 - CIP ~\$2.7M

Historic and Planned Improvements

- Past 20 Years:
 - CIP Investment: \$44M incl. E Avenue (\$10M)
 - Maintenance (repair, rehabilitation, replacement)

- Next 2 to 3 Years:
 - Interim Flood Protection – Valves and Gates
 - Utility Improvements for Flood Control System
 - Major CIP Projects (prioritized under masterplan)
 - Minor CIP Projects (<\$75k)
 - BMP pilot projects (Grant Funded)
 - NPDES Compliance Improvements
 - Operations and Maintenance

Stormwater Master Plan

5-Year Glance

FY16 (Year 1 – complete):

- Document Existing Conditions
- System wide Model
 - 2 Detailed Basin Models (Kenwood & O Ave)
- Identify Program Needs
- Identify Policy and Other Considerations
- Identify Financial Needs

FY17 (Year 2 – underway):

- Service to growth areas (West, Southwest, North)
- E Ave and Indian Creek Detailed Basin Models
- Framework for Green Infrastructure Program

FY18 (Year 3):

- Service to growth areas (South, Northwest)
- Czech Village Detailed Basin Model
- Asset Management Incorporation
- Policy Initiative Support

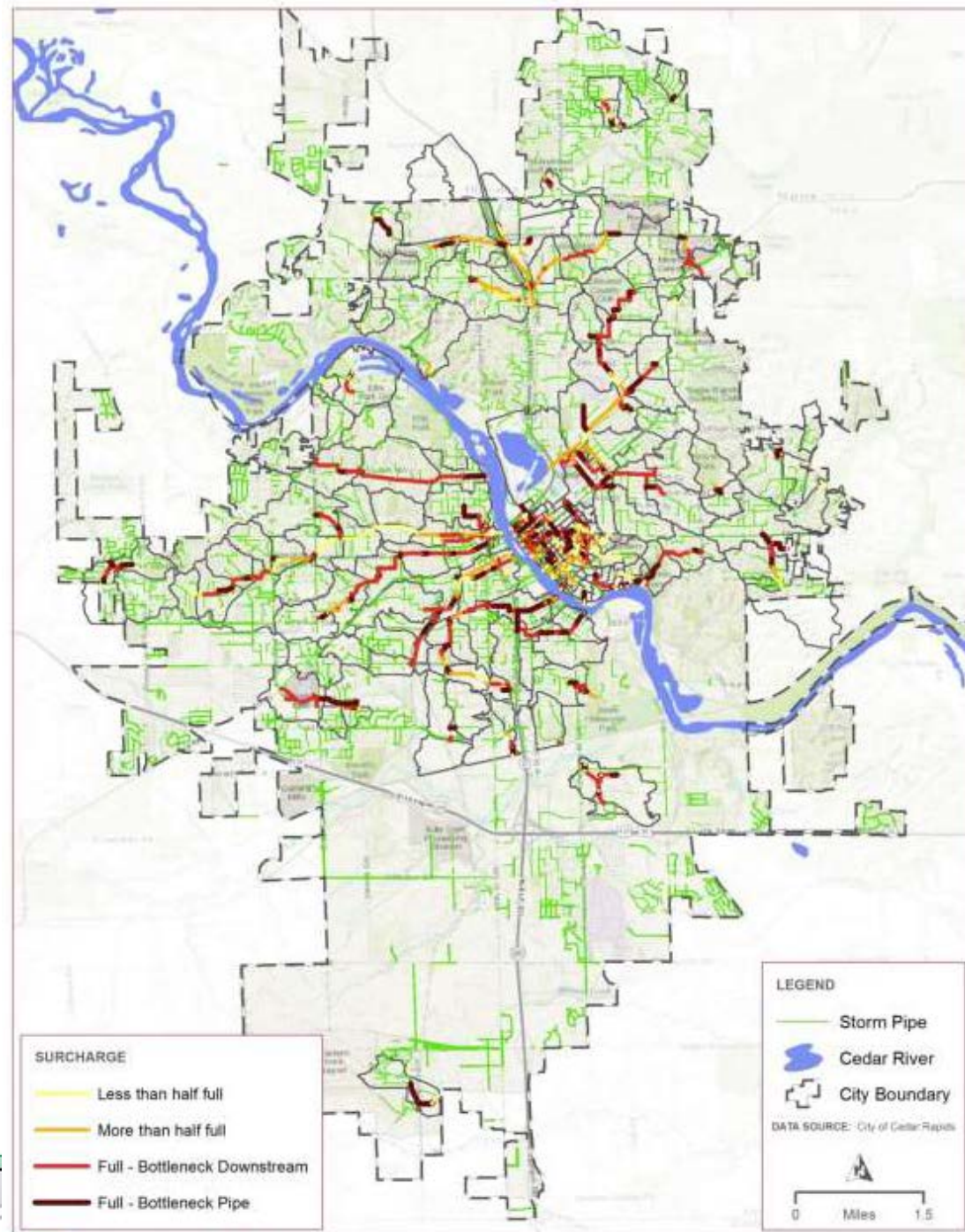
FY19 and FY20 (Years 4 and 5):

- Detailed Basin Models
 - Prairie Creek
 - Morgan Creek
 - Ushers Ferry
 - McLoud Run
 - Cedar River SE and NE

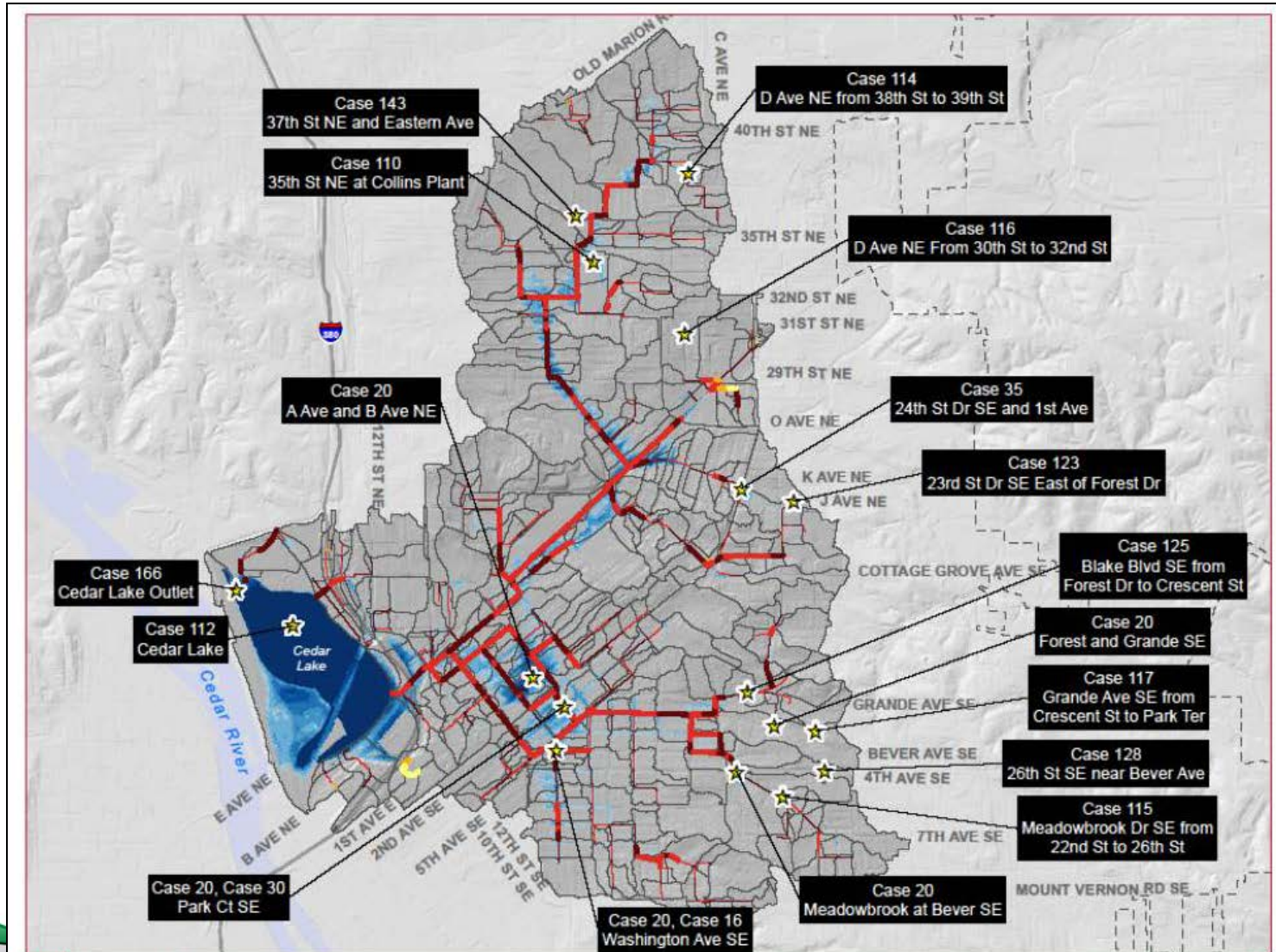
FY21 (Year 6):

- Comprehensive Update

High Level Modeling (*complete*)

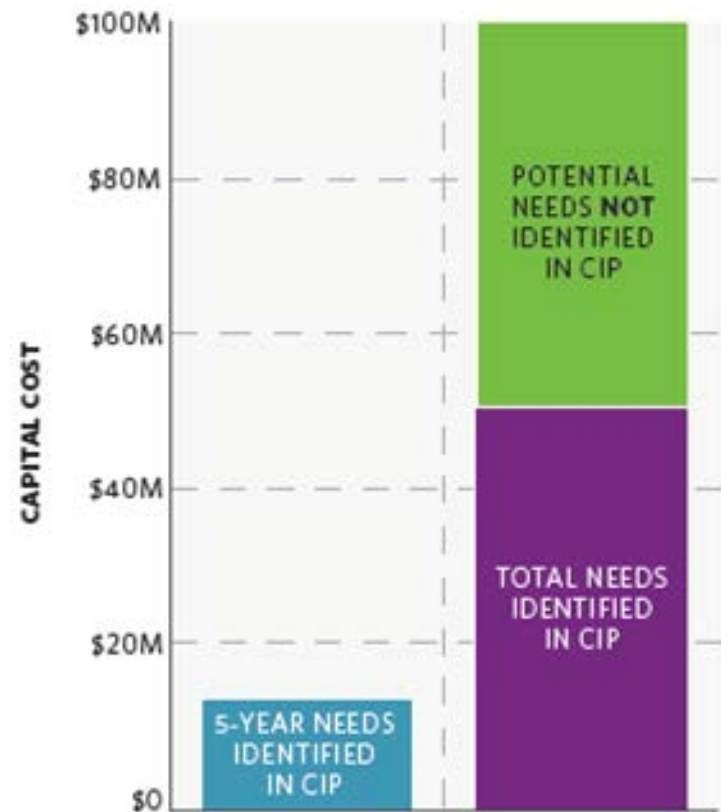


Detailed Level Modeling (ongoing)



Capital Improvements Plan

- **Current known needs**
 - 97 separate issues identified
 - Approximately \$50 million in project needs
- **Modeling Implications**
 - Potentially \$75 to \$100 million in project needs
- **New System to Prioritize Issues**
 - Ranks issues based on 8 weighted criteria
 - Focus on Health & Safety



Prioritization of Projects

- Major and Minor Projects
- Major Project Scoring Criteria
 - Health & Safety
 - Cost-Benefit
(Cost of Potential Damage / Cost of Project)
 - Current Capacity
 - Asset Functionality
 - Water Quality & Environmental
 - Associated / Other Considerations
 - Sanitary Sewer Inflow Conveyance
 - Future Growth & Sustainability

Associated / Other Considerations			
*Type of Commitment	Description of Commitment	Points, P_{AC}	
Specific considerations made to a project	Discussions with citizens on project needs (w/ or w/o timeline commitments), want to acknowledge past discussions with residents and no resolution or activity on a project. Are there other compelling reasons that would make a project a higher priority? Such as: prior commitments, political pressures, potential to partner with developers, regulatory mandates, multi-use features, quality of life, visual quality of environment, enhance sustainability, low impact development, consequences of delay, etc.	2	
Considerations with no project		1	
No commitments		0	
*Commitments may be generated internally, by City policy, or to a public bias			$P_{AC} =$
Multiplier: 3			$F = P_{AC} * 3 = 0$
Sanitary Sewer Inflow Conveyance			
Site Located in Critical Area	Comments	Points, P_{SSIC}	
Yes	Is additional storm capacity provided in area where I&I reduction will require more capacity?	2	
No		0	
Multiplier: 1			$G = P_{SSIC} * 1 = 0$
Future Growth & Sustainability			
Area Favored for Growth/Redevelopment	Comments	Points, P_{FGS}	
Yes	Growth or redevelopment area identified by EmissionCR a n/d/or compatible with City's Sustainability Initiatives/Policies (IGMCR), Progressive approach to get ahead of development, resist & enhance development	2	
No		0	
Multiplier: 3			$H = P_{FGS} * 3 = 0$
Normalized Score $[(A+B+C+D+E+F+G+H)] / \text{MaxScore} * 100] = 0$			
Maximum Score = 58			

Prioritization Ranking for Urban Drainage Improvements City of Cedar Rapids, Iowa			
Prepared By:	Project Location:	Date:	
Project Number:	Watershed:		
Health & Safety			
*Type of Risk	Description of Risk	Points, P_{HS}	
Presents public safety hazard	Higher health concern if water enters occupied structure, flooding of street is risk to vehicles &/or limits access to emergency services, flooding of parks & sidewalks is risk to pedestrians.	2	
Hazard may be mitigated with temp. control		1	
No public safety hazard		0	
*Competent person must assess site to determine all hazards and potential for hazard mitigation			$P_{HS} =$
Multiplier: 6			$A = P_{HS} * 6 = 0$
Cost-Benefit (Cost of Potential Damage / Cost of Project)			
Reference Cost-Benefit Table	Comments	Points, P_{CB}	
	Extent of projects, connectivity of different projects, etc.	2	
		1	
		0	
Multiplier: 4			$B = CB * 4 = 0$
Current Capacity			
*Interval	Description of Current Capacity	Points, P_{CC}	
Significantly below standard (2+ design intervals)	Resource Interval/level of service provided to guarantee projects to address problems that occur for rain events less than design standards. Applies to sewers, inlets, and street conveyance. City should be responsible for maintenance, design, standards.	2	
Below standard (1 design interval)		1	
At standard		0	
*Use rainfall intensity and river stage			$P_{CC} =$
Multiplier: 6			$C = P_{CC} * 6 = 0$
Asset Functionality			
Condition and Maintenance	Description of Asset	Points, P_A	
PACP Grade 5, or Permanent Reduction of Design Capacity, or Problem/Defect recurring annually or more frequent	Applicable to sewers and detention basins. Condition of asset impacting functionality, level of maintenance required to maintain capacity. Service life of asset relative to age of asset? Is operation/maintenance of system improved with the project?	2	
PACP Grade 4, or Reduction of Design Capacity, or Problem/Defect recurring every 5 years or more		1	
PACP Grade 3 or lower, or No history of recurring problems		0	
Multiplier: 4			$D = P_A * 4 = 0$
Water Quality & Environmental			
Provides Water Quality Benefits	Description of Water Quality Benefits	Points, P_{WQE}	
Yes	Sediment/nutrient/organic loading, Waters listed in 303d b/d/or impacting Muscadou Run (being & sediment) Indian Creek & Pointe Creek (impaired for bacteria. Nitrates are pollutants of concern. Potential for regulatory issues (DNR/IDNR)	2	
No		0	
Multiplier: 2			$E = P_{WQE} * 2 = 0$

Policy Considerations

Recent/Current Examples:

- Restructuring
Stormwater Utility Rate
(ERU System)
- Incentivizing Green
Infrastructures
- Regional detention

Future?:

- Topsoil Rule
- Private cross connections
- Post development grading
- Require final spot grades on
single lots
- Drainage easement encroachment
- Educational program
enhancements
- Integration with Flood Control
System
- Public/Private basin ownership

Sanitary Sewer Master Plan

November 1, 2016



The Sanitary Sewer Program

Budgeted for:

- Operations and Maintenance (O&M)
- Capital Improvements

How the program is funded today:

- User rates, grants, contributions, Tax Incremental Financing (TIF)
- FY17 User Fee Revenues: \$9.7M
 - O & M: \$5.0M
 - Debt Service: \$2.5M
 - CIP: \$2.2M

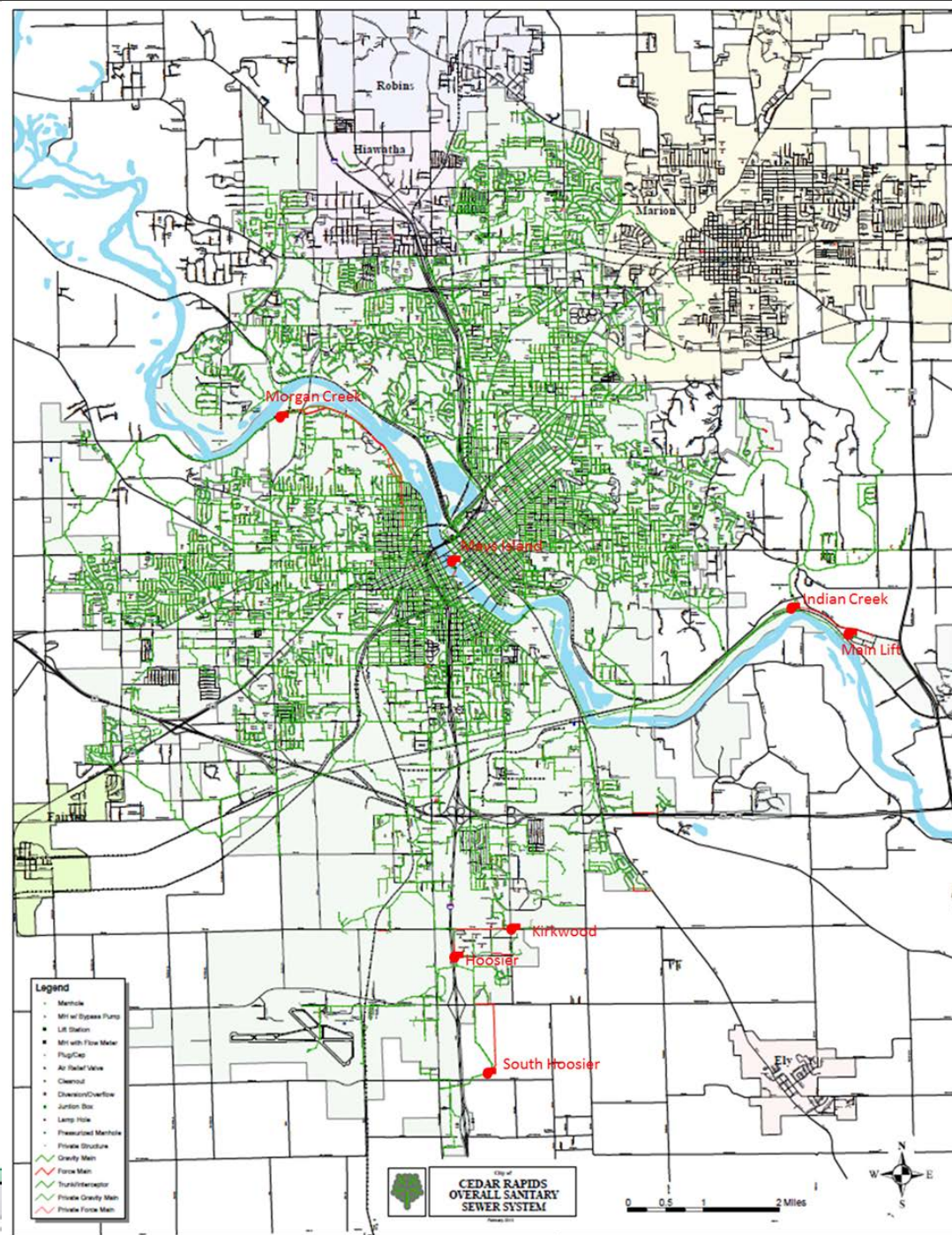
Our Sanitary Sewer At a Glance

Intended to:

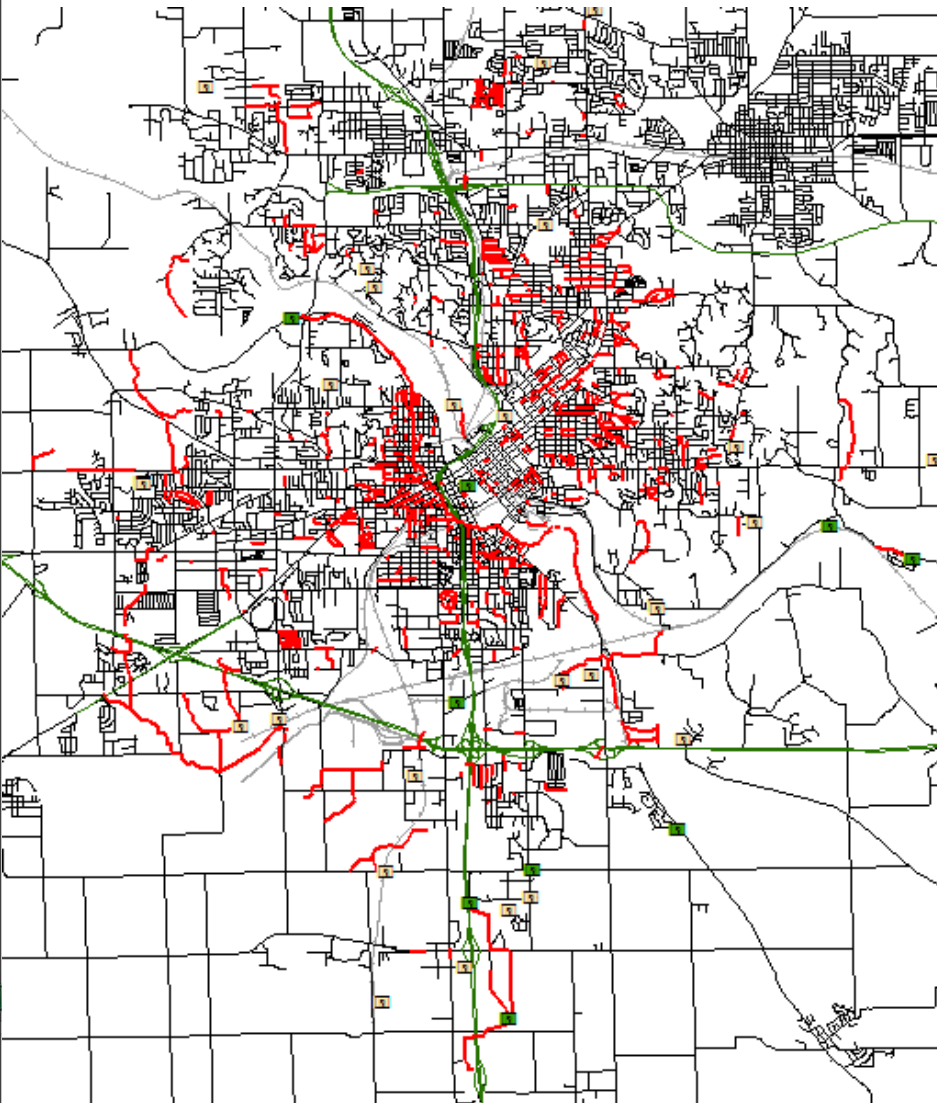
- Convey residential, commercial, and industrial wastewater without overflows or backups
- Serves Robins, Hiawatha, Marion, Palo

Multiple Assets:

- 660 miles of public sewer
- 7 public lift stations
- 50 miles private sewer
- Private service lines
- Multiple private lift stations



Historic and Planned Improvements



- Past 20 Years:
 - CIP Investment: \$90M
 - Maintenance
(repair, rehabilitation, replacement)
 - Growth:
 - Trunk sewer replacement
 - Extensions to growth areas
- Next 2 to 3 Years:
 - Prairie Creek, Indian Creek trunk sewers
 - Infiltration/Inflow reduction
 - Private lift stations upgrades
 - Maintenance

Sanitary Sewer Master Plan 5-Year Glance

FY16 (Year 1 – complete):

- Document Existing Conditions
- Hydraulic Modeling (Macro level)
- Identify Program Needs
- Identify Policy and Other Considerations
- Identify Financial Needs

FY17 (Year 2 – underway):

- Service to growth areas
(West, Southwest, North)
- Refine CIP ranking and prioritization
criteria

FY18 (Year 3):

- Service to growth areas
(South, Northwest)
- Detailed (micro level) modelling
- Asset management

FY19 and FY20 (Years 4 and 5):

- Additional detailed modeling
- Asset management

FY21 (Year 6):

- Comprehensive Update

High Level Hydraulic Modeling (*complete*)

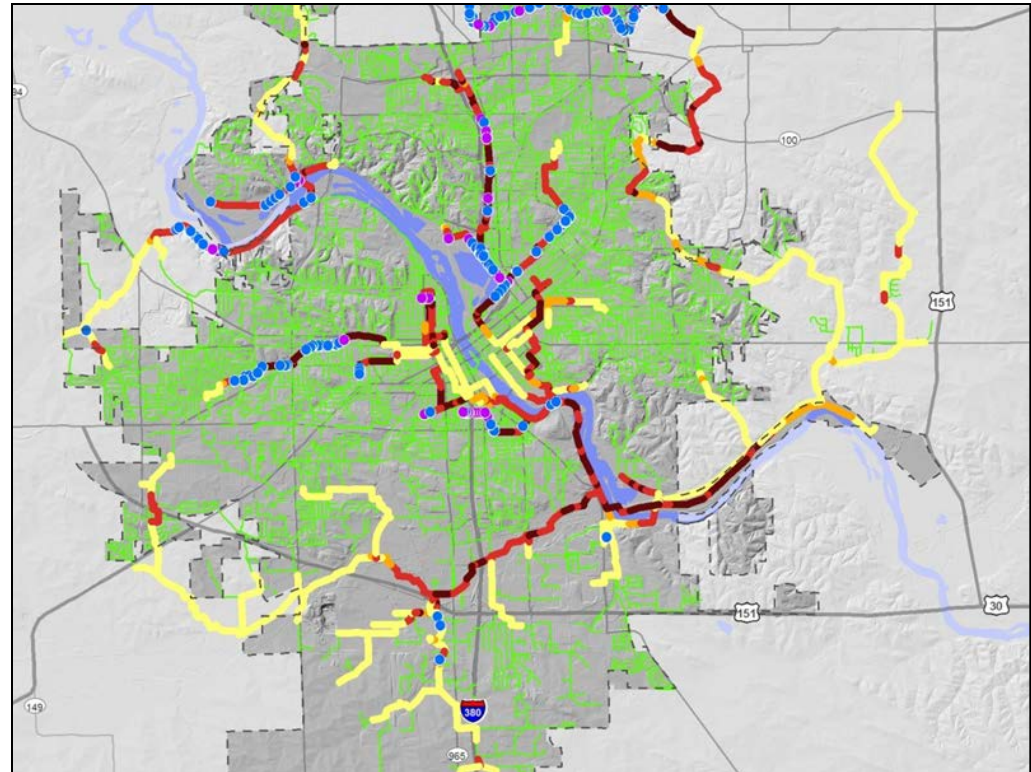
Purpose:

- Identify/confirm problem areas
- Obtain data for cost effective solutions

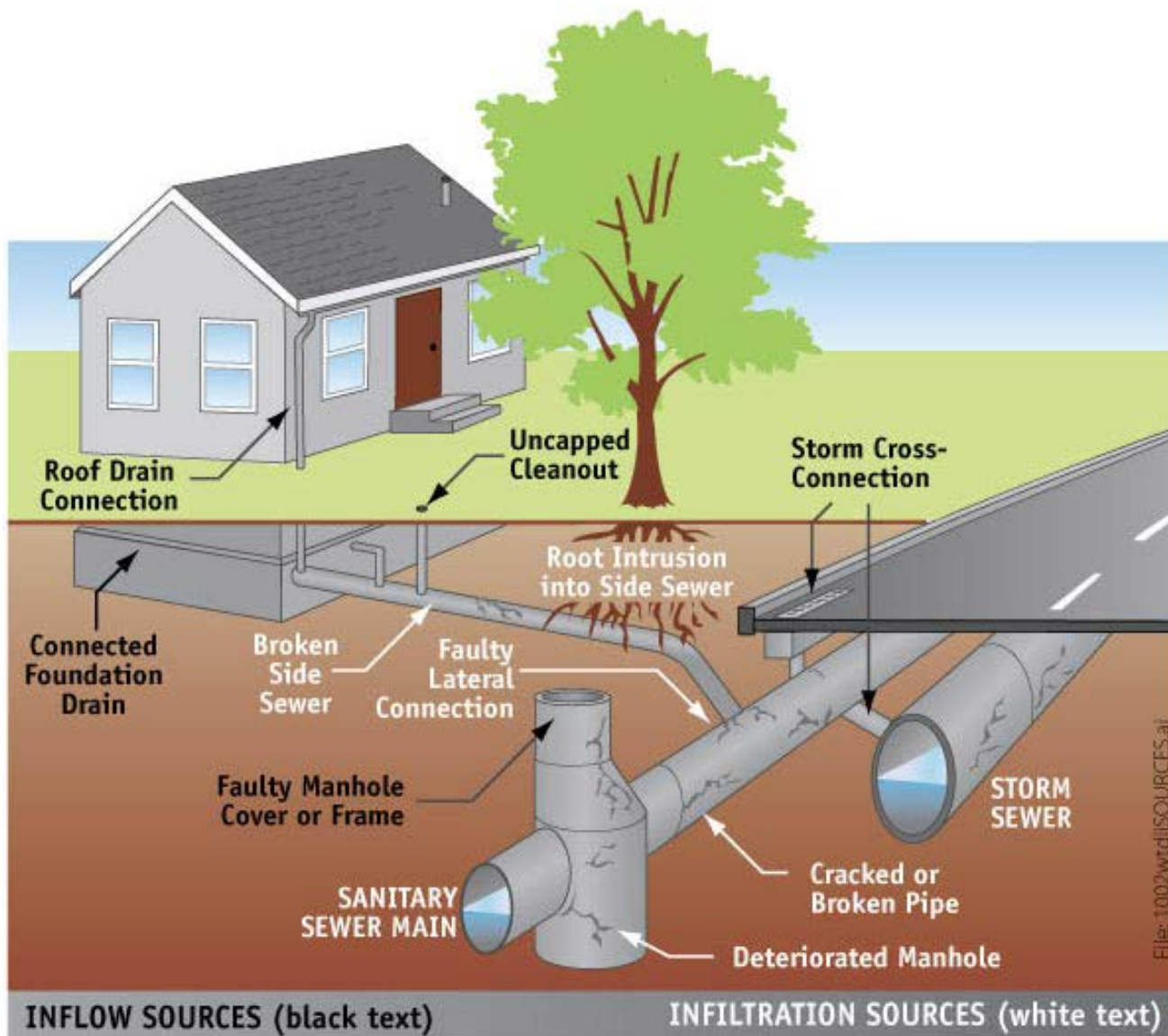
Conclusions:

Reduce infiltration and inflow
(otherwise significant capital expenditures):

- West Side Interceptor
- East Side Interceptor
- Main Interceptor
- WPC

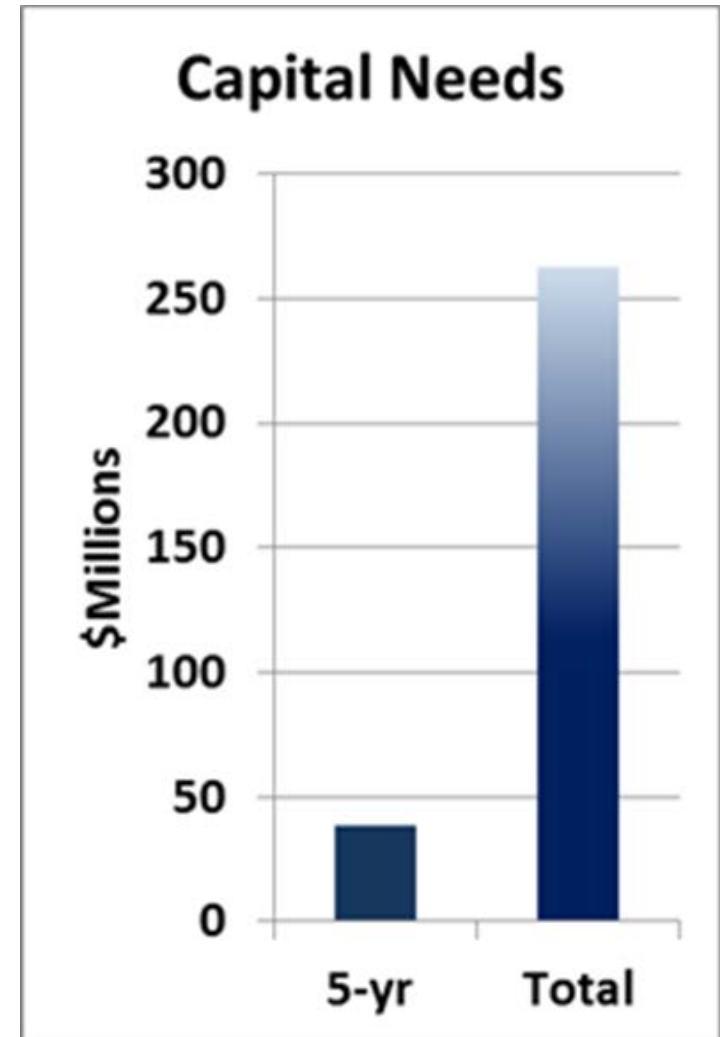


What is Infiltration and Inflow? (I&I)



Capital Improvements Plan

- **Current known needs:**
 - Approximately \$40 million in current CIP
 - Trunk sewer capacity
 - Maintenance
 - I&I Reductions
 - Service Extensions
- **Modeling Implications**
 - Potentially over \$250 million in project needs
 - I&I reduction key to reducing project needs



Policy Considerations

- Past and Recent Policy Examples:
 - Backwater valve reimbursement program
 - Foundation drain disconnection program
 - Replacement of Orangeburg services
 - Private to public lift stations
- Future Policy Considerations:
 - Private source I&I reduction
 - Serviceability to future growth areas and funding mechanism
 - Appropriate sanitary sewer design storm
 - Rate structure and revenue allocation

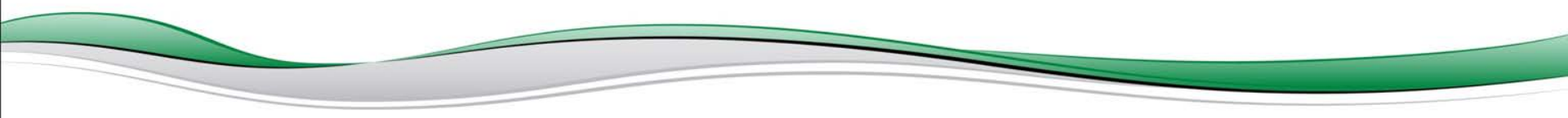
In Summary

The purpose of a masterplan is to identify the current and future needs for effective long term planning.

- Request for City Council to adopt
 - Stormwater Masterplan (FY16 work)
 - Sanitary Sewer Masterplan (FY16 work)
- FY16 Masterplans identifies:
 - Existing Conditions
 - Citywide System Modeling
 - One Detailed Basin Model (storm)
 - Program Needs
 - Policy and Other Considerations
 - Financial Considerations



www.Cedar-Rapids.org



Stormwater Funding

Revenue Bond Scenario

- Issue \$5M revenue bonds per year for 20 years will require operating revenue to have an average increase of 7.1% each year for the next 20 years. Operating revenue will increase from \$4.8M to \$17.5M over the 20 year period. (This scenario assumes 3% interest rate for revenue bonds, operating expenses increasing no more than 5% per year, and bond covenant of 1.75).

Stormwater Funding

Revenue Bond Scenario

- Issue \$10M revenue bonds per year for 10 years will require operating revenue to have an average increase of 20% each year for the next 10 years. Operating revenue will increase from \$4.8M to \$23.9M over the 10 year period. (This scenario assumes 3% interest rate for revenue bonds, operating expenses increasing no more than 5% per year, and bond covenant of 1.75).

Stormwater Funding

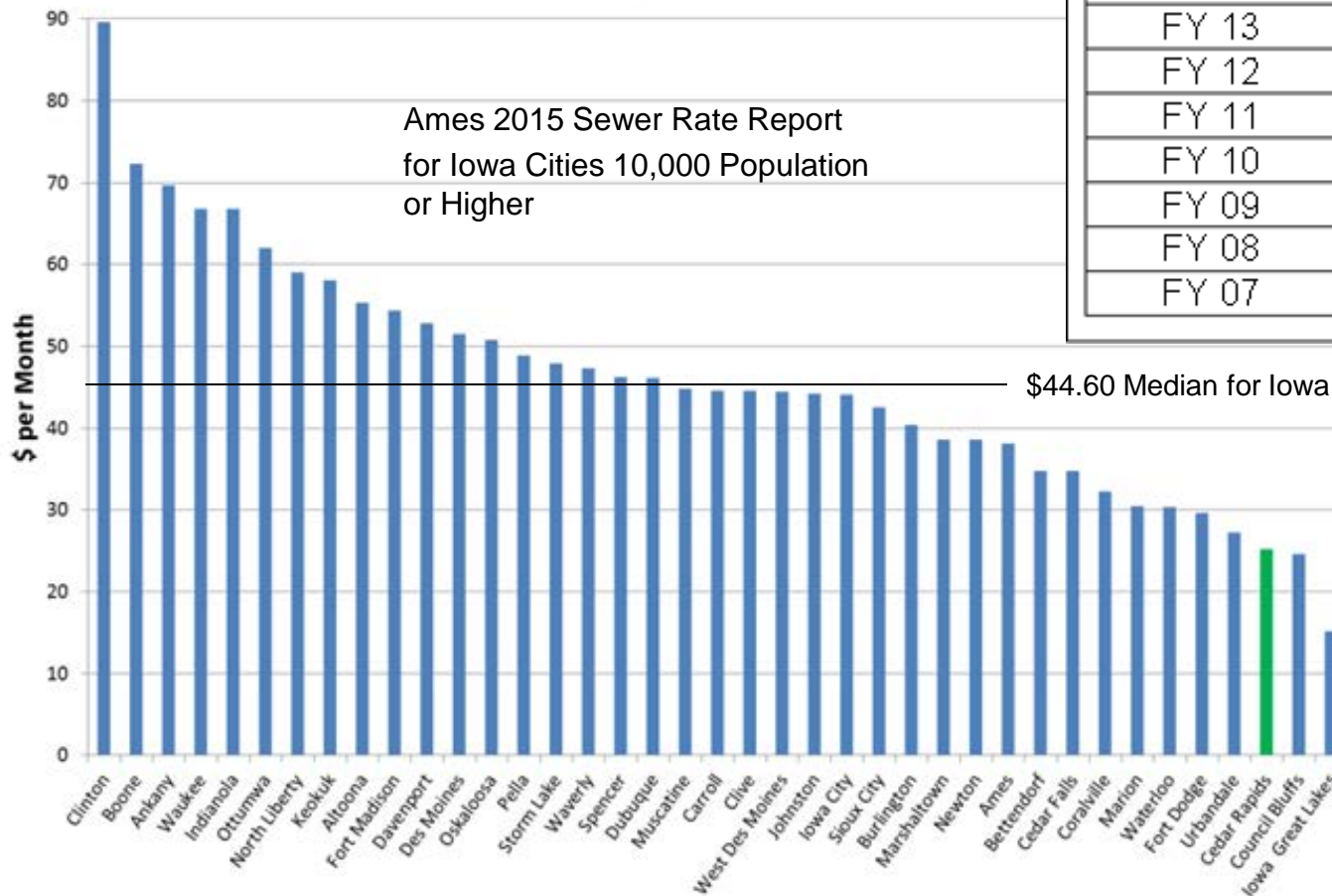
- Considerations:
 - Impact of rate increases to large ERU customers (5 year phase-in schedule now)
 - Limited financial history for rating and selling revenue bonds
 - Effect of credit program and cost share/topsoil policy initiatives
 - Rate affordability when considering needs of other utilities

Stormwater and Sanitary Sewer Funding

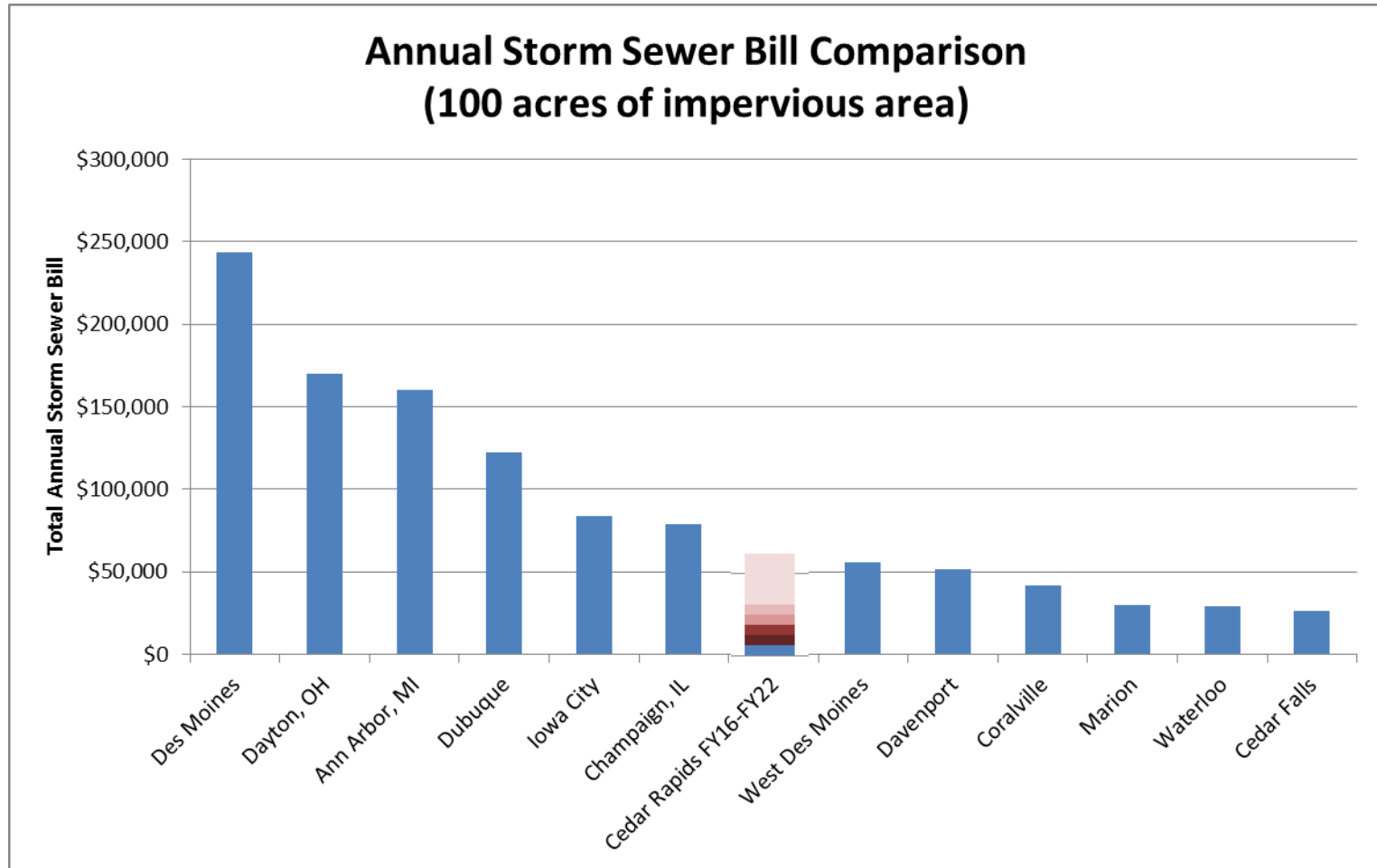
- Recommendations
 - Stormwater: “Wait and See” approach to rate increases and/or utilization of revenue bonds
 - Sanitary Sewer: Consider above average rate increases
 - All Utilities: Comprehensive/integrated review of needs and rate scenario impacts on customer utility bill

Sanitary Sewer Funding - Rates

Typical Monthly Residential Sanitary Sewer Bill
7460 gallons/month



Fiscal Year	Amount/Month	% Increase
FY 16	\$25.92	2.7
FY 15	25.24	2.3
FY 14	24.68	3.0
FY 13	23.96	4.4
FY 12	22.95	0.7
FY 11	22.80	3.5
FY 10	22.03	11.2
FY 09	19.81	12.2
FY 08	17.65	8.5
FY 07	16.27	7.0



Annual bill for a residential lot

