Storm Water Rate Study
Marshalltown Storm Water Utility
Marshalltown, Iowa

March 4, 2013

Global Service Provider

Buildings Energy Environment Transportation Water

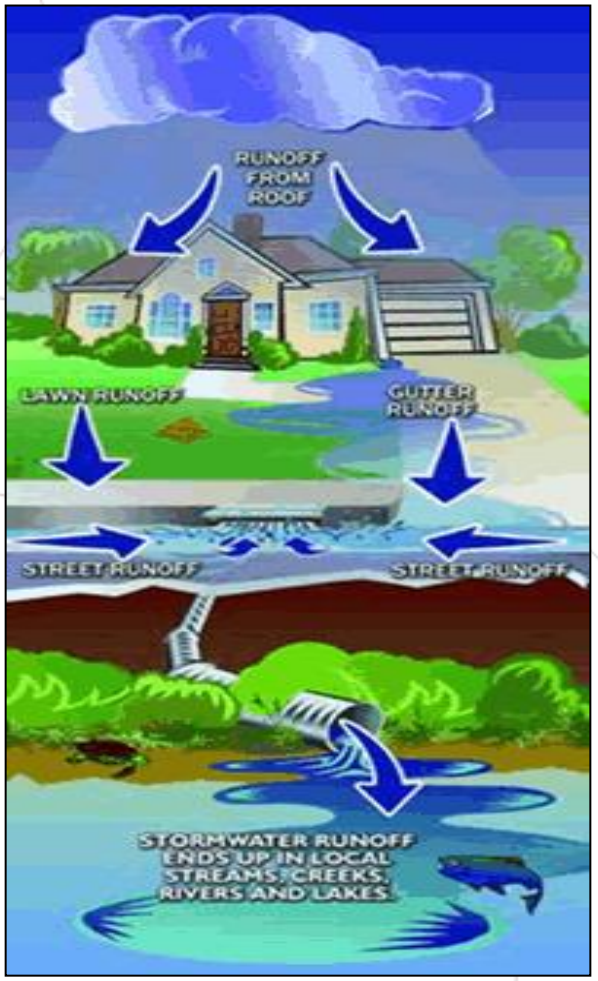
Riverview Park
Woodland St
Leo St
Edgewood St
N 5th Ave
Linwood St
Riverside Cemetery
Innes Blvd
N Center St
N 2nd St
Braeburn Ln
Riverside St
E Marion St
W North St
E North St
E Swayze St
14


11/5/2012

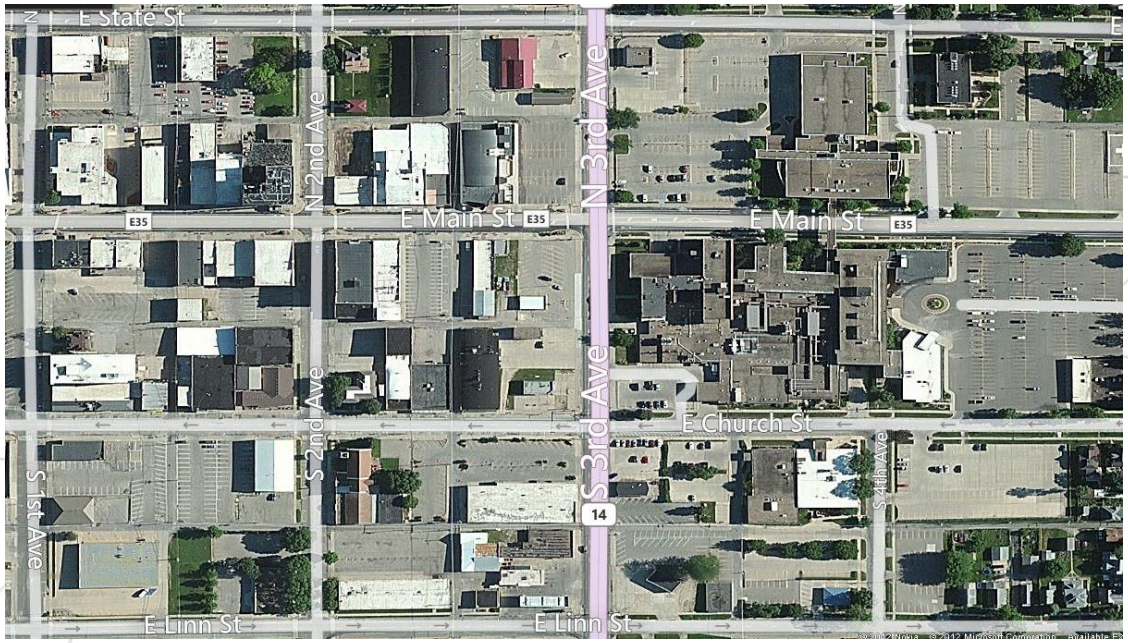

11/5/2012

Storm Water Utility's Responsibility is to Manage Storm Water

- Protect public health, safety, welfare
- Transport flow in defined channels so random flooding does not occur
- Keep streets drained and cleared so travel is safe
- Protect water quality and quantity impacts
- Correct drainage problems to reduce erosion and loss of property
- Conduct ongoing inspection and maintenance



Impervious Area Most Significant Factor in Volume & Quantity of Runoff From Parcels



Runoff: major contributing factor in erosion and water pollution

Impervious surfaces decrease infiltration, increase runoff and allow pollutants to accumulate. Runoff determines size of storm sewer system.

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Regulatory Requirements Mandate Runoff Quality Compliance

- USEPA's Phase II of the National Pollutant Discharge Elimination System (NPDES) – federal storm water program
  - Public education
  - Public participation
  - Illicit discharge detection and elimination
  - Construction site runoff control
  - Post-construction site runoff control
  - Good housekeeping/pollution prevention

Storm Water Fee Provides Revenue to Maintain and Improve Storm Water System

- Current Storm Water Management deficit spending due to:
  - Inflation
  - Rising costs
  - Increased deterioration
  - LOST funding no longer available for storm water projects
- Operating and Maintenance Requirements
  - Storm intake / Storm pipe repairs and replacements
  - Cleaning ditches, waterways, & other storm water conveyance structures
  - Street sweeping
  - Storm sewer cleaning
  - Stream inspection and sampling
  - Coordinate NPDES storm water program mandates

Capital Projects Identified to Address Deficiencies

- Major repairs for levee system required for FEMA accreditation
  - Raising height
  - Replace poorly functioning flap gates
- Other projects required to:
  - Relieve flooding in streets/yards
  - Provide detention
  - Add intakes; Enlarge sewers
  - Divert storm water
  - Relieve backups in basements

Storm Water Capital Projects

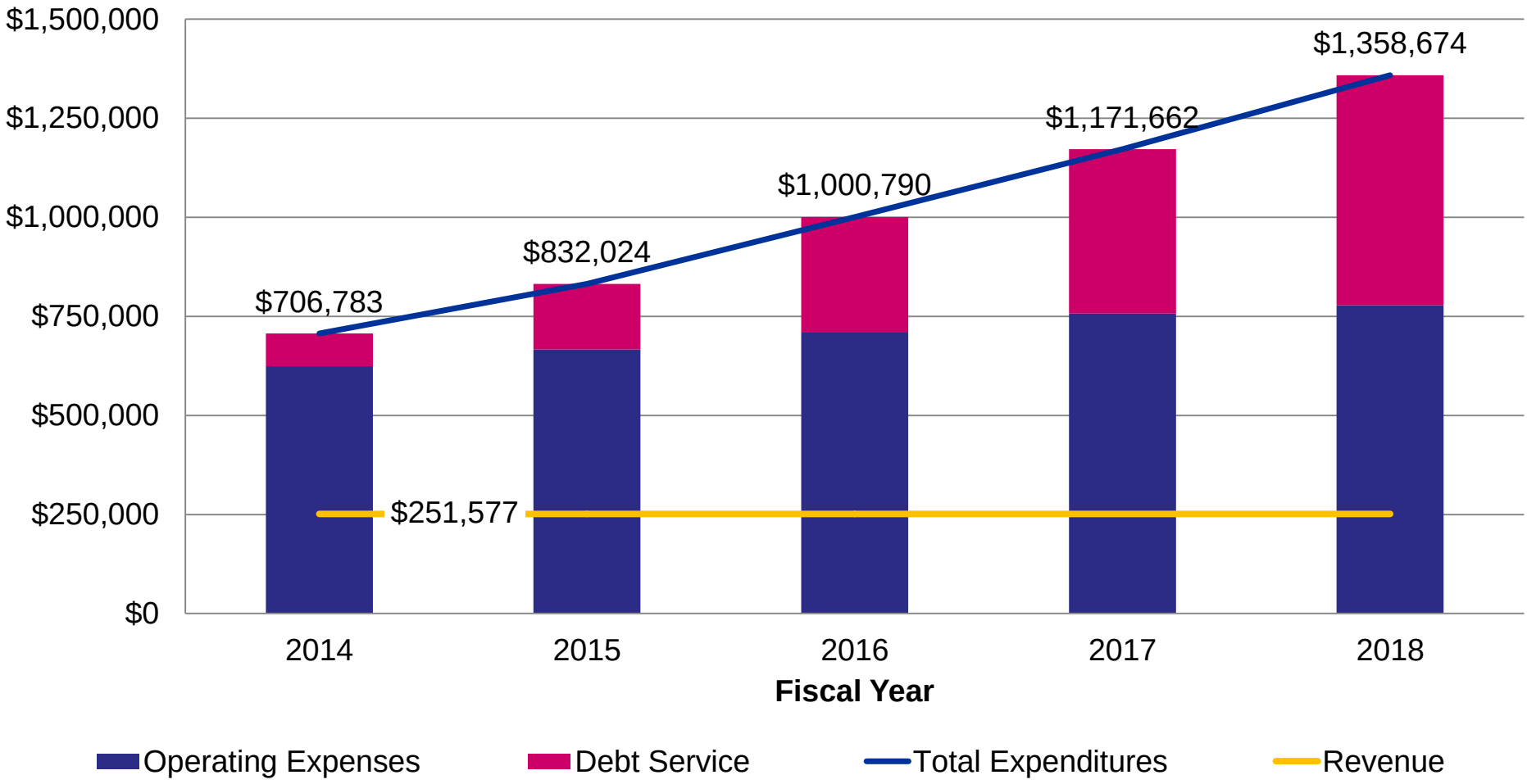
Fiscal Year 2014-2015	
Levee Upgrade	**$2,000,000**
Fiscal Year 2016-2021	
Anson Creek	$500,000
4th Street and Meadow Lane Storm Sewer	$350,000
1st/2nd Avenue & Ingledu Storm Sewer	$800,000
13th Street and Church Street Intersection & Sewer	$1,500,000
MHS Soccer Field Storm Sewer	$350,000
Edgebrook Storm Relief Sewers	$600,000
3rd Street and Park Storm Sewer Rerouting	$350,000
Swayze Street to Woodland Street Channel	$1,250,000
Dredge Detention Ponds & Install Sediment Ponds	$1,200,000
Dredge Flood Holding Areas	$600,000
Upsize Various Undersized Storm Sewers	$2,000,000
Re-establish 1st Street Storm Sewer Under UPRR	$1,000,000
Sub-Total	**$10,500,000**
TOTAL	**$12,500,000**

Source: City of Marshalltown Storm Sewer System Master Plan for Rehabilitation and Capacity Improvements, 2006

Storm Water Expenses

	FY2014	FY2015	FY2016	FY2017	FY2018
Operating & Maintenance	**$623,883**	**$666,224**	**$710,590**	**$757,062**	**$778,274**
Capital Financing					
2014 - Levee Upgrade ($1.0 M bond)	$82,900	$82,900	$82,900	$82,900	$82,900
2015 - Levee Upgrade ($1.0 M bond)	$0	$82,900	$82,900	$82,900	$82,900
2016 - CIP ($1.5 M bond)	$0	$0	$124,400	$124,400	$124,400
2017 - CIP ($1.5 M bond)	$0	$0	$0	$124,400	$124,400
2018 - CIP ($2.0 M bond)	$0	$0	$0	$0	$165,800
Sub-Total	**$82,900**	**$165,800**	**$290,200**	**$414,600**	**$580,400**
TOTAL EXPENSES	**$706,783**	**$832,024**	**$1,000,790**	**$1,171,662**	**$1,358,674**

Projected Shortfall with Present Rate



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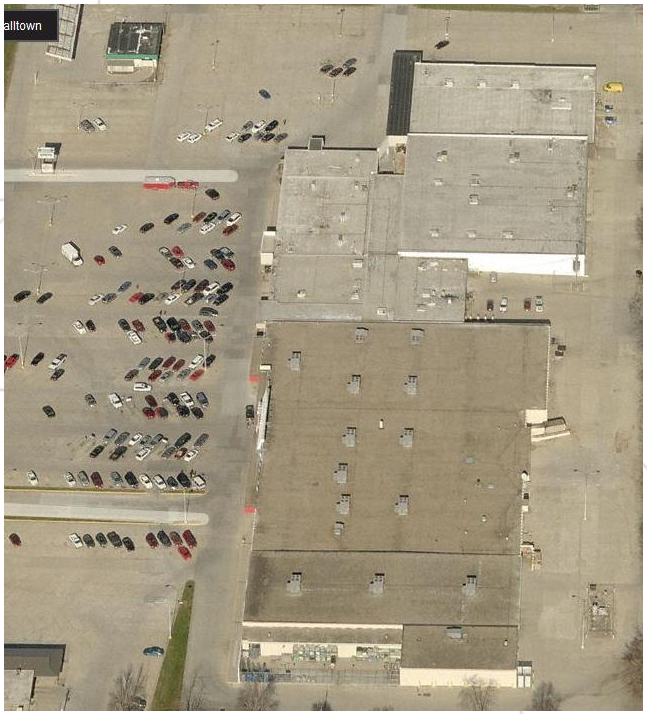
Current Storm Water Charge Not Adequate to Meet Storm Water Management Goals

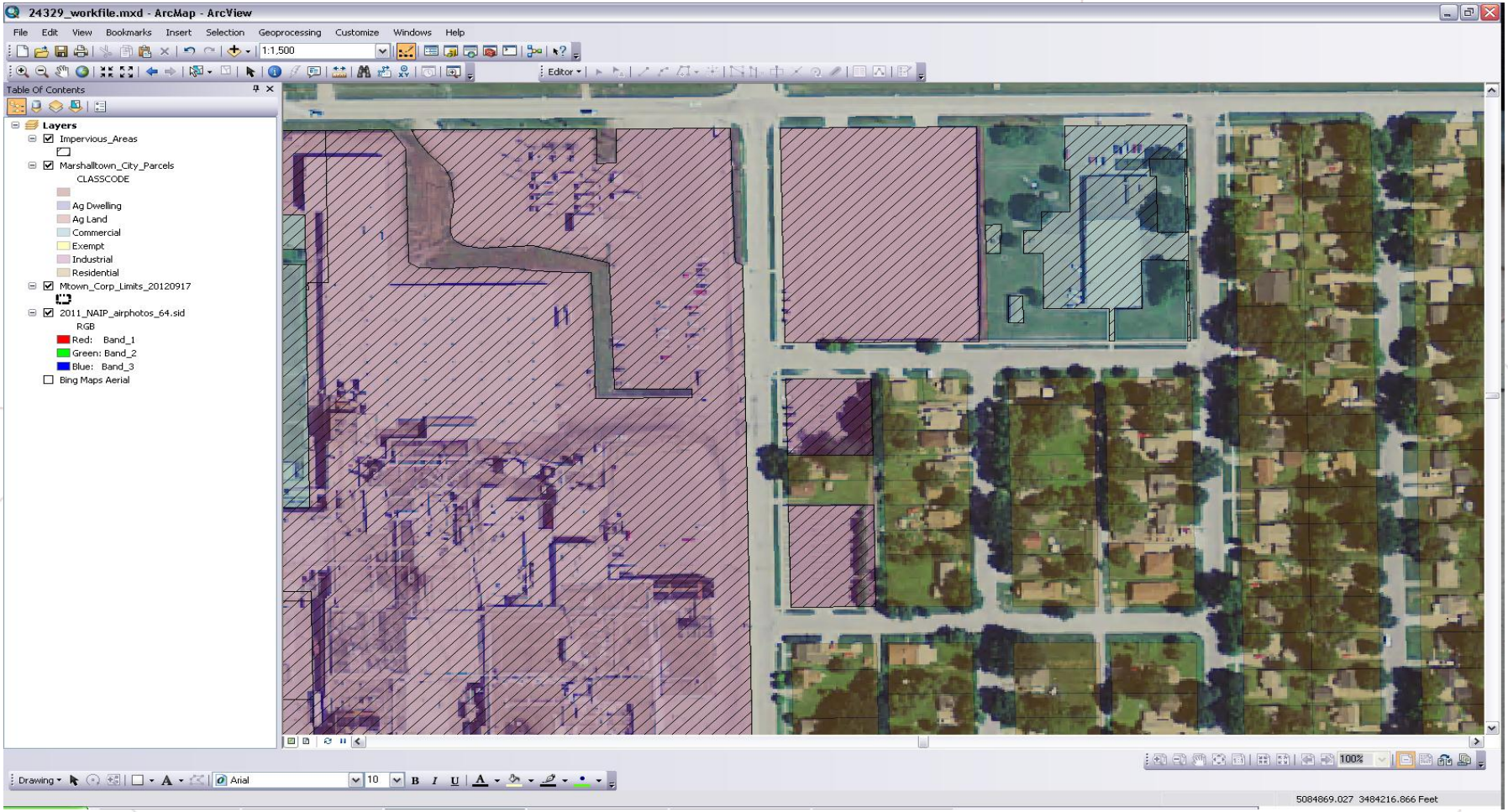
- Current Storm Water Charge
  - $2.16 (established 2003)
- All customers pay same amount regardless of contribution
- All properties owners who receive drainage services do not share in cost
- Federal and state funding for water and wastewater systems but not for storm water systems



Need to Establish User Fee Equal to Services Received

- Storm Water Utility is self-supported enterprise fund with dedicated revenue stream
- Businesses and residents pay user fee for services received
- Fair and equitable charge equal to demand on system
- All property owners who receive drainage services share in cost of storm water program
- Adequate charge to provide primary source of funding

Impervious Area Has Direct & Accepted Relationship to Runoff Leaving a Property



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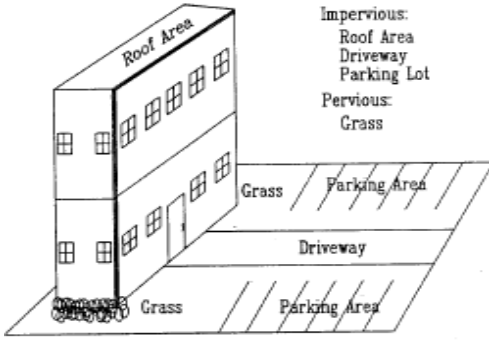
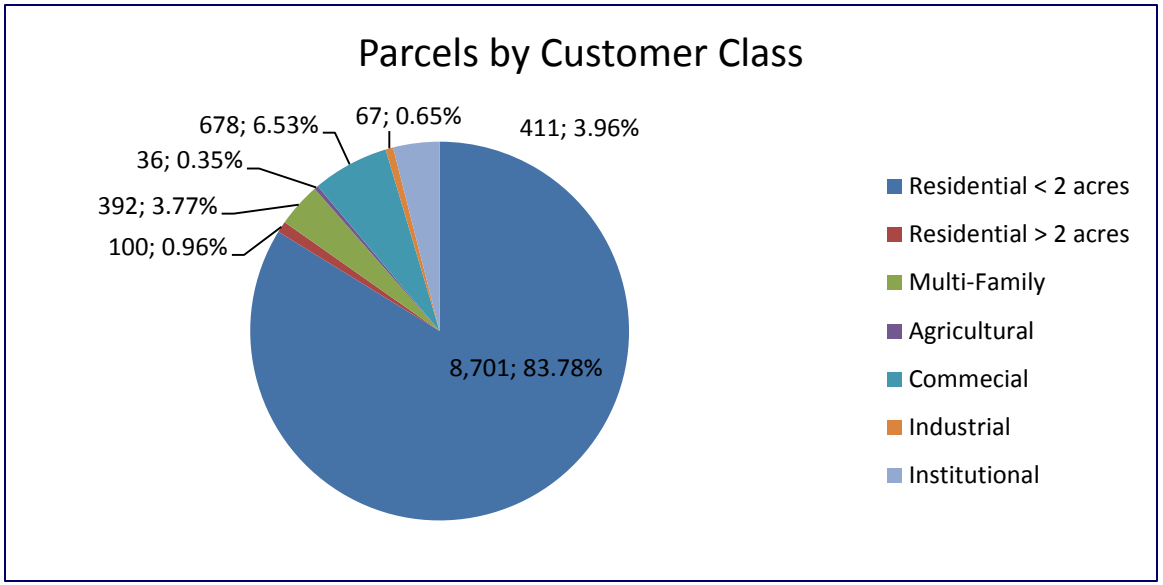
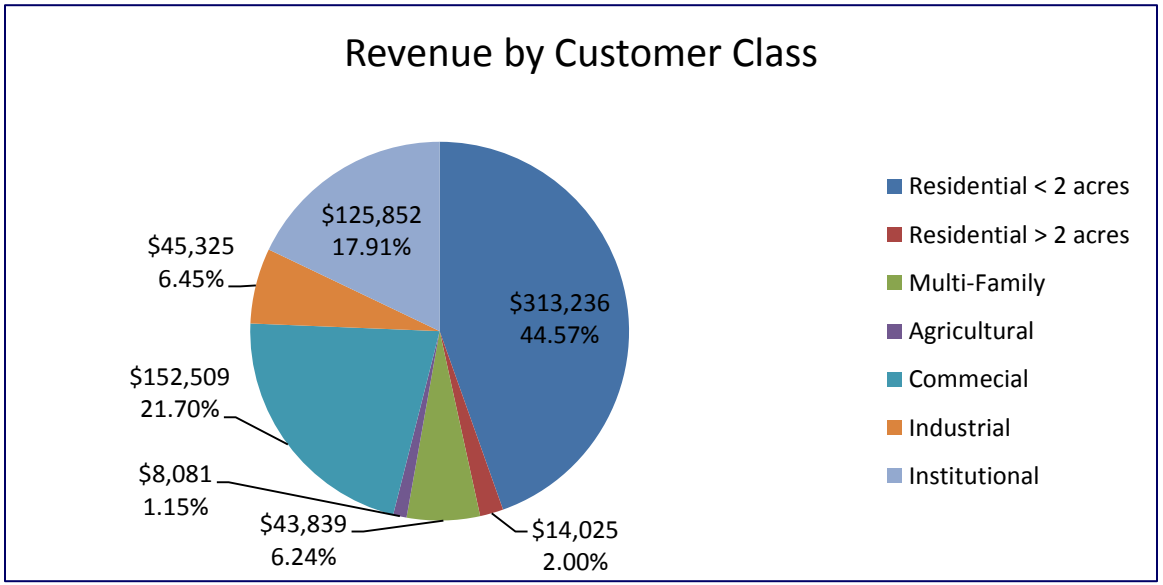
Proposed Storm Water Rate Structure



- Flat rate for all residential < 2 acres.
- Tiered rate based on amount of impervious area for all non-residential parcels.

	FY 2014	FY 2015	FY 2016
	Per Parcel/Month		
Residential < 2 Acres	$3.00	$3.54	$4.26
Tiered Rates (Impervious Area)			
150 - 10,000 ft^2	$7.74	$9.11	$10.97
10,000.1 - 50,000 ft^2	$15.48	$18.22	$21.94
50,000.1 - 100,000 ft^2	$30.96	$36.44	$43.88
100,000.1 - 250,000 ft^2	$61.92	$72.88	$87.76
250,000.1 - 500,000 ft^2	$123.84	$145.76	$175.52
500,000.1 - 1,000,000 ft^2	$247.68	$291.52	$351.04
1,000,000.1 - Max	$495.36	$583.04	$702.08





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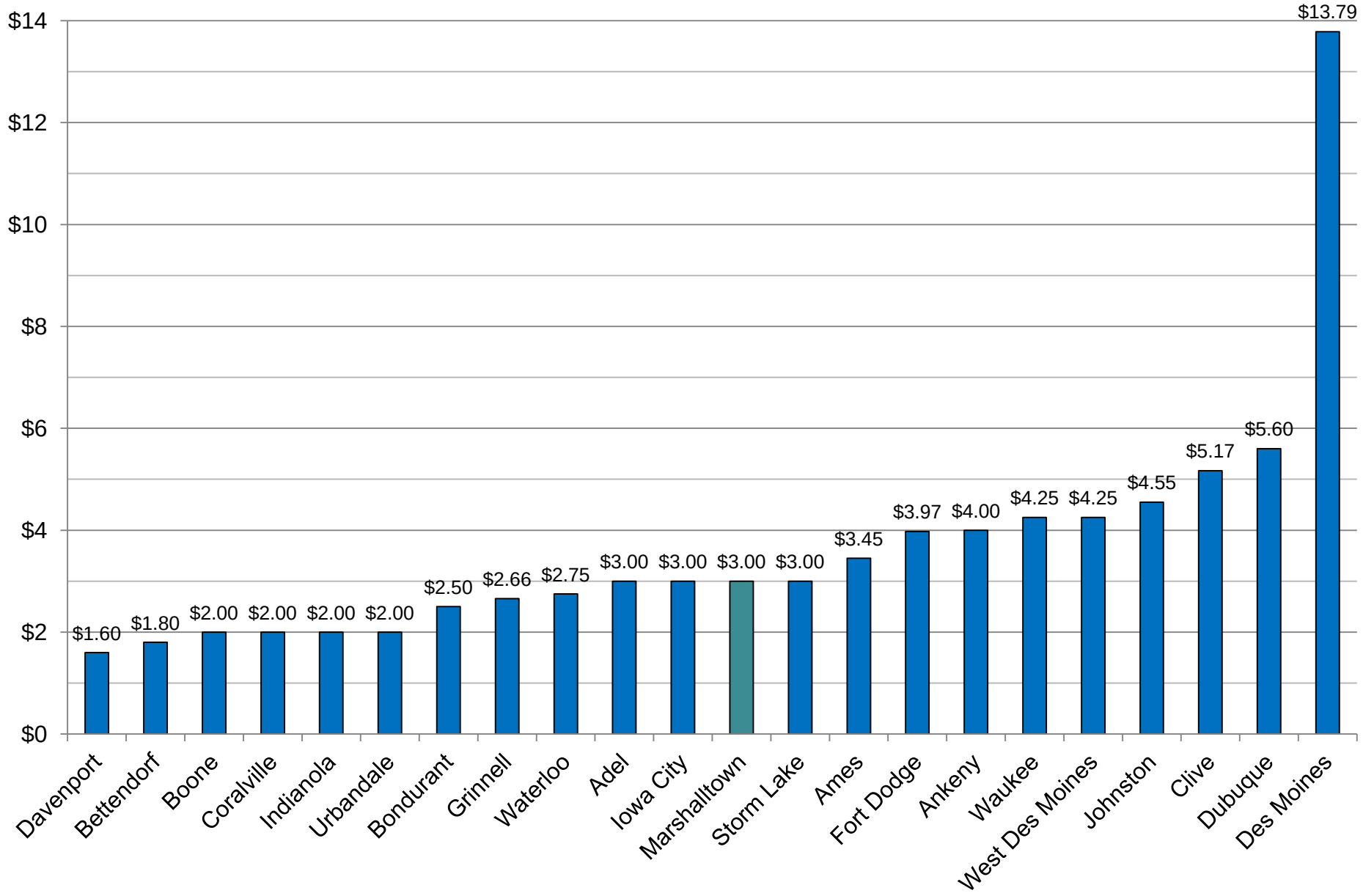
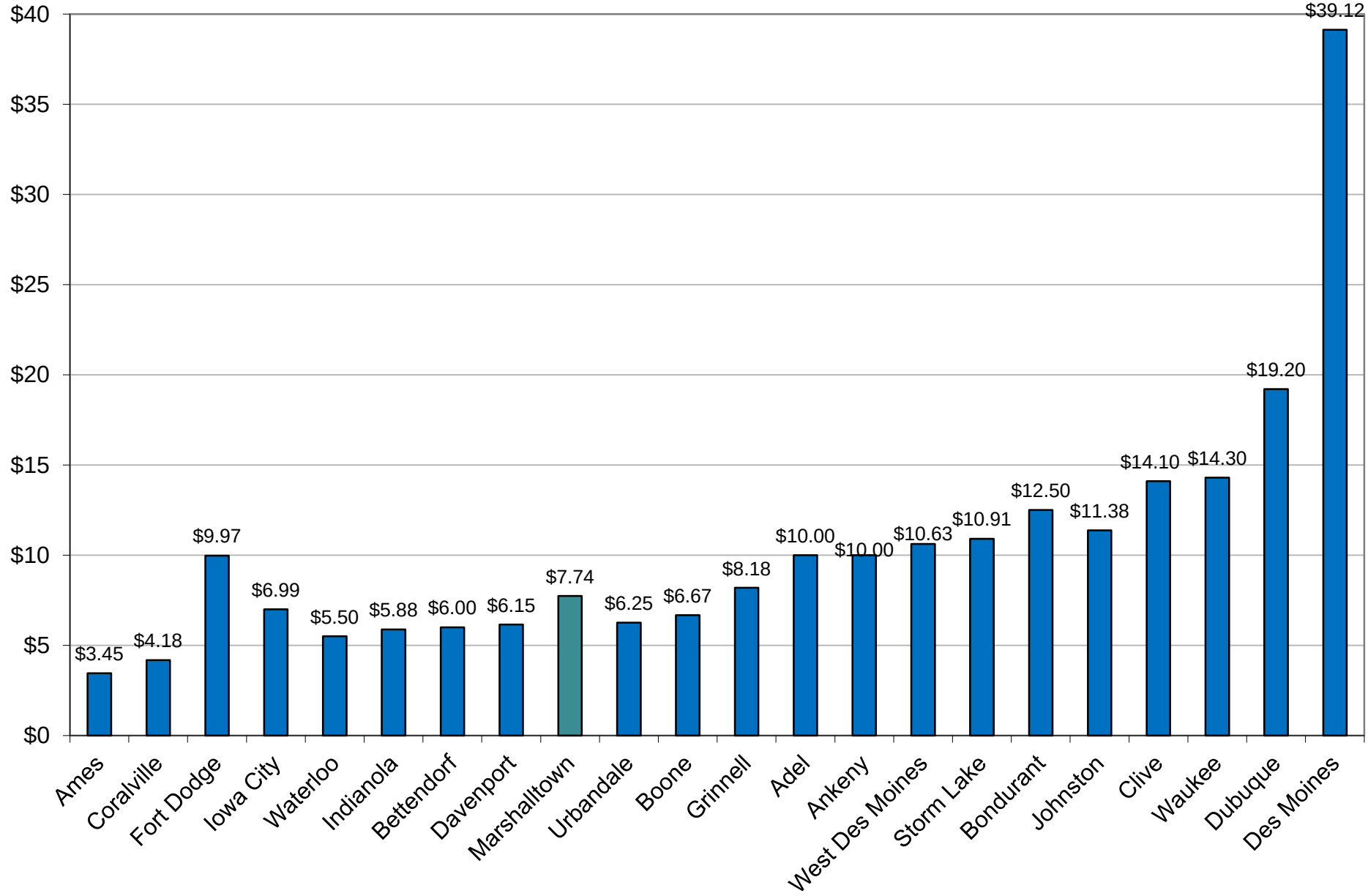
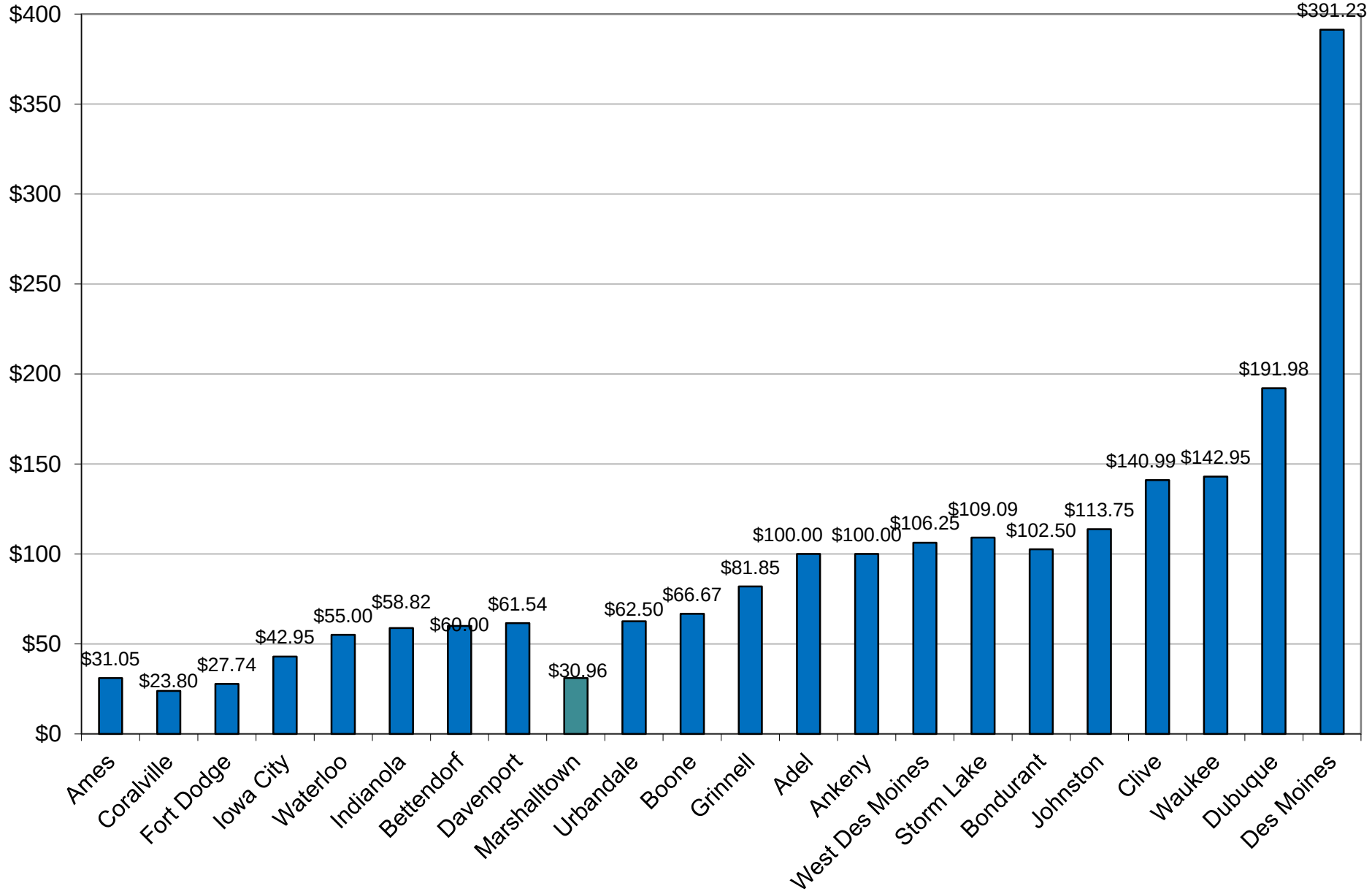
Monthly Storm Water Charge
Residential - 10,000 ft^2 Gross Area



Monthly Storm Water Charge
Non-Residential - 10,000 ft^2 Impervious Area



Monthly Storm Water Charge
Non-Residential - 100,000 ft^2 Impervious Area



Monthly Storm Water Charge
Non-Residential - 1,000,000 ft^2 Impervious Area