

# OUR WATER, OUR WAY

MAJOR WET WEATHER ISSUES FACING PEORIA

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Watershed Partnership

November 29, 2015



## **“Wet weather” =**

The rain and melting snow that our city infrastructure must handle, in the form of runoff and infiltration

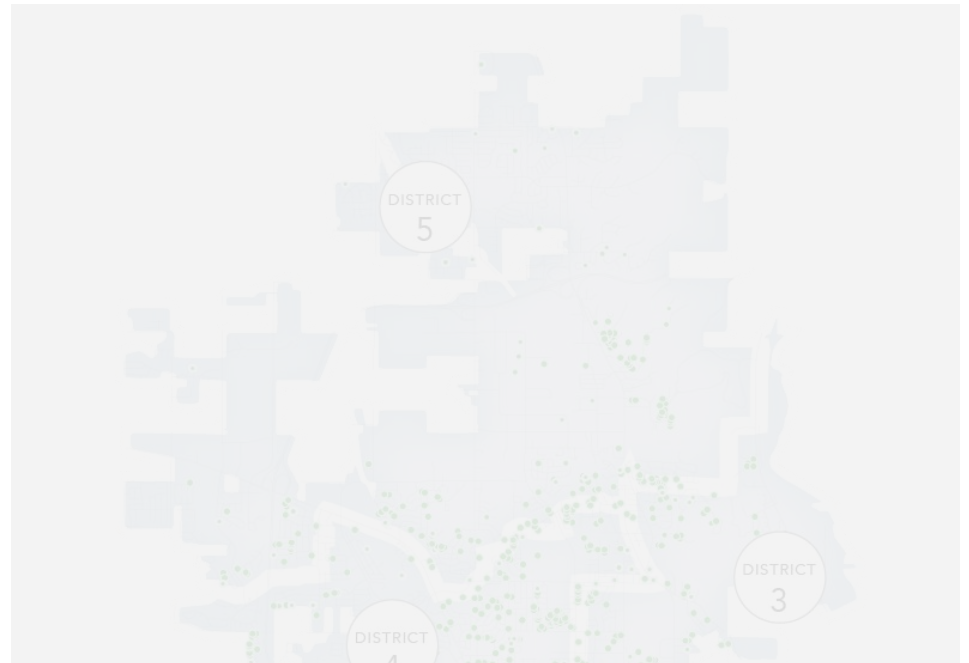
## **It can affect your ...**

- Safety
- Property
- Wallet
- Quality of life



## CITYWIDE STORMWATER PROBLEMS

# EVERY PART OF PEORIA SUFFERS FROM WET WEATHER PROBLEMS.



*“When we moved into this house 20 years ago, our kids could jump across the creek.*

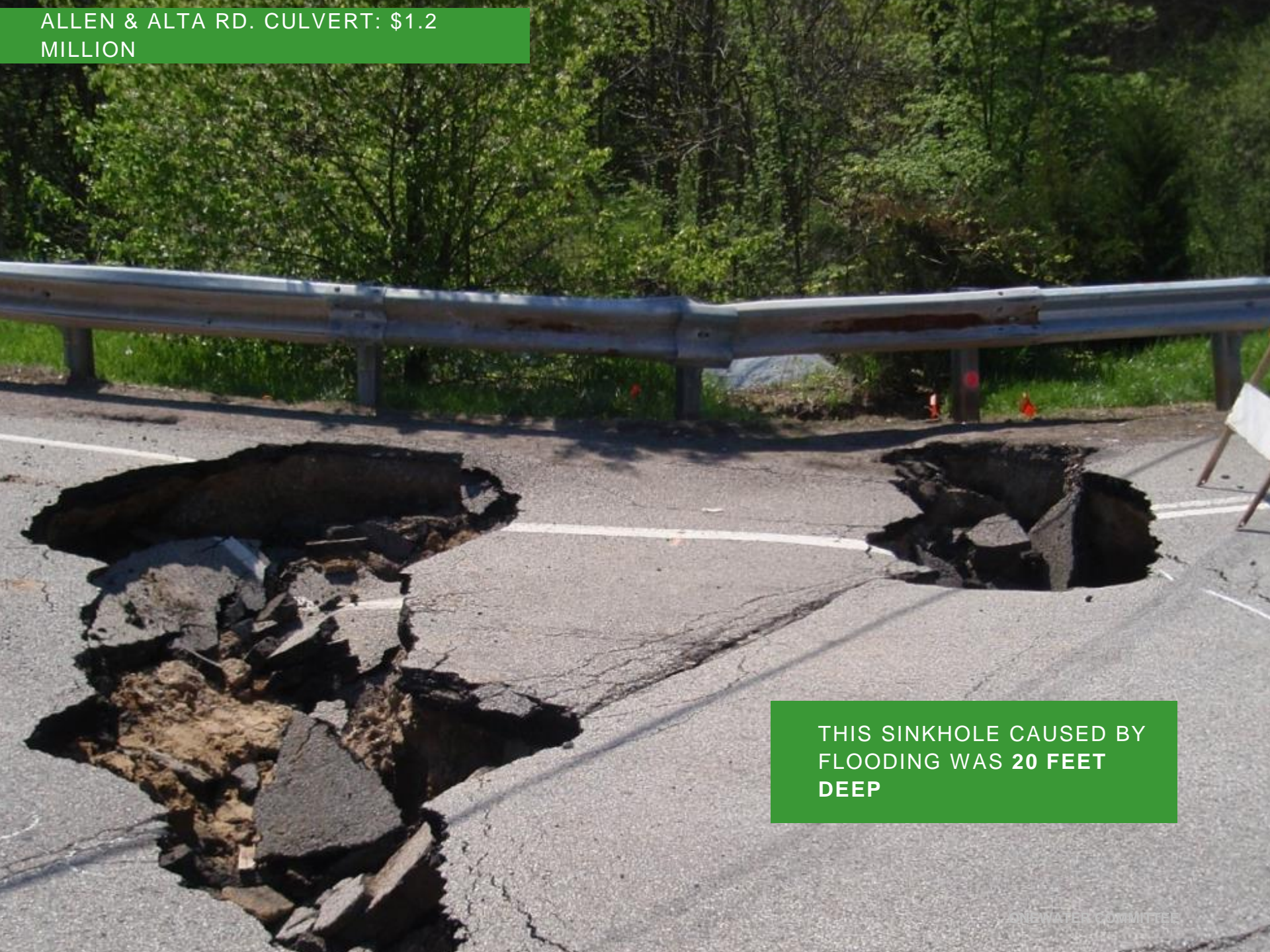
*Now it is significantly wider and deeper. Every time it rains, there is a raging river flowing through it.*

*We lose several inches of our yard each year.”*

**-Citizen service call to Public Works (condensed). One of 400 received since 2012.**



ALLEN & ALTA RD. CULVERT: \$1.2  
MILLION



THIS SINKHOLE CAUSED BY  
FLOODING WAS **20 FEET**  
**DEEP**

## WE ARE NOT KEEPING UP WITH NEEDS

Capital needs include...

86

PROJECT BACKLOG,  
INCL. 15 HIGH-SEVERITY

**\$6.6 million**

FUNDING NEEDED TO TACKLE  
BACKLOG

**\$1.2 million**

CURRENT AVG. YEARLY FUNDING  
LEVEL



EVEN MORE REPAIRS TO BE  
IDENTIFIED THROUGH TV



PIN OAK OUTFALL: \$27,250



MAPLE RIDGE PIPE REPAIRS  
AND LINING: \$60,420

THE LONGER WE WAIT,  
THE WORSE PROBLEMS  
LIKE THESE GET...  
AND MORE COSTLY TO FIX.



## WE ARE NOT KEEPING UP WITH NEEDS

Operations & maintenance includes...

**448**

O&M PROJECT BACKLOG: ABOUT ½  
ARE MEDIUM TO HIGH PRIORITY

**8,100 INLETS**

**840 OUTFALLS**

**87**

MILES OF STORM SEWERS  
MAPPED SO FAR—ABOUT ½



**FLOODING DUE TO BLOCKED INLET**



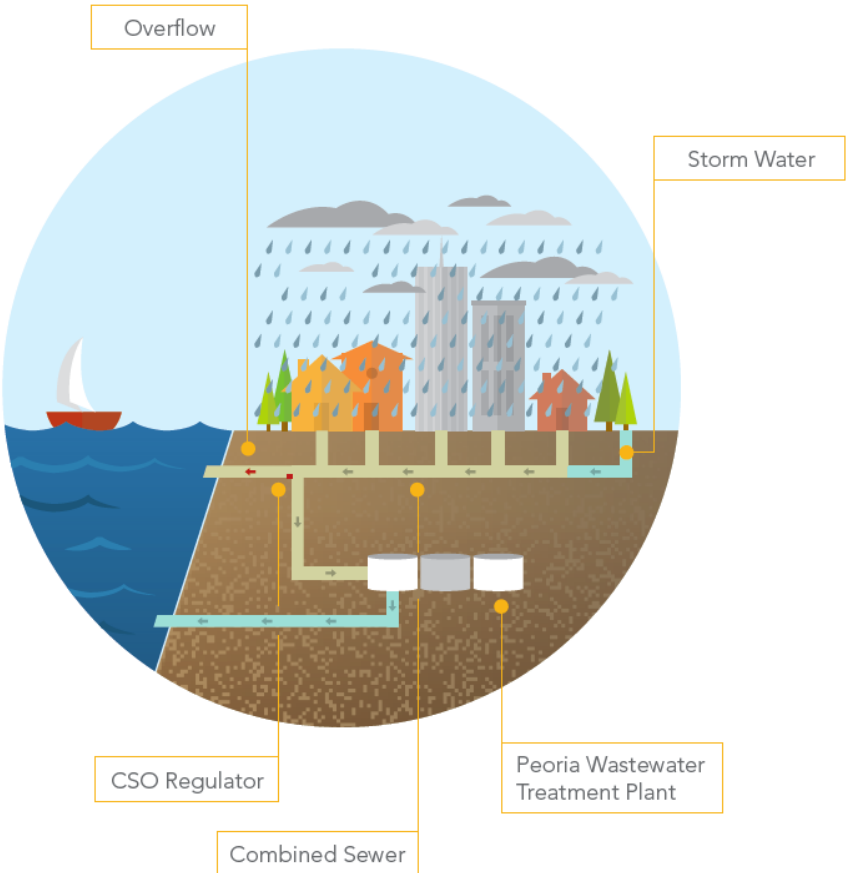
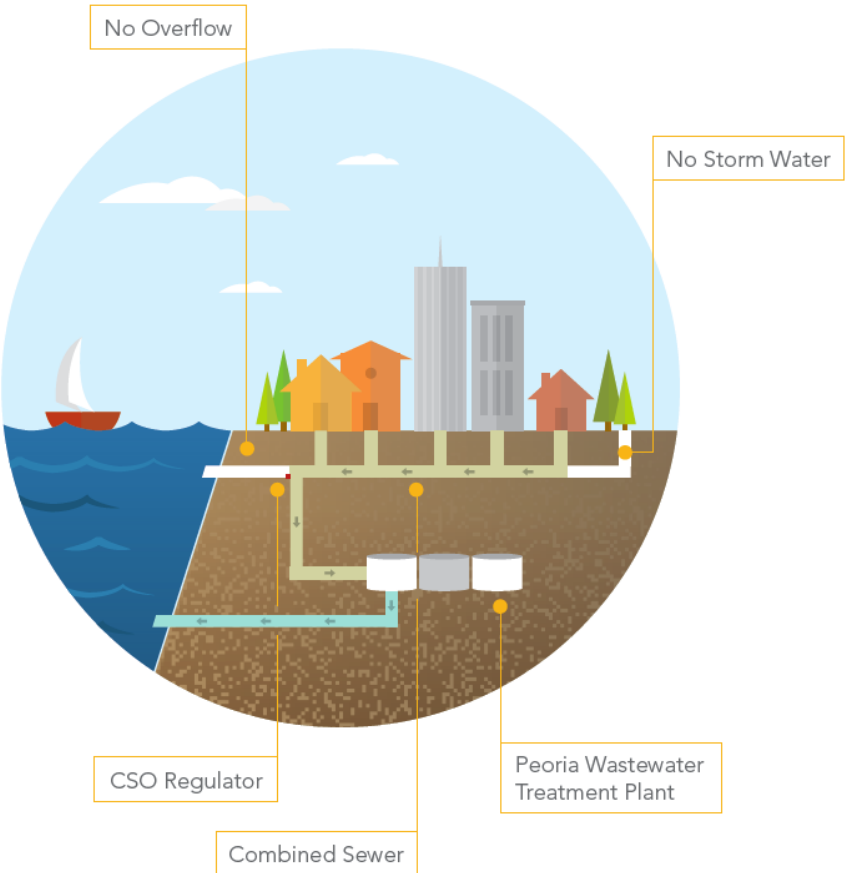
**LACK OF MAINTENANCE CLEANING REDUCES CAPACITY**



## COMBINED SEWER OVERFLOWS

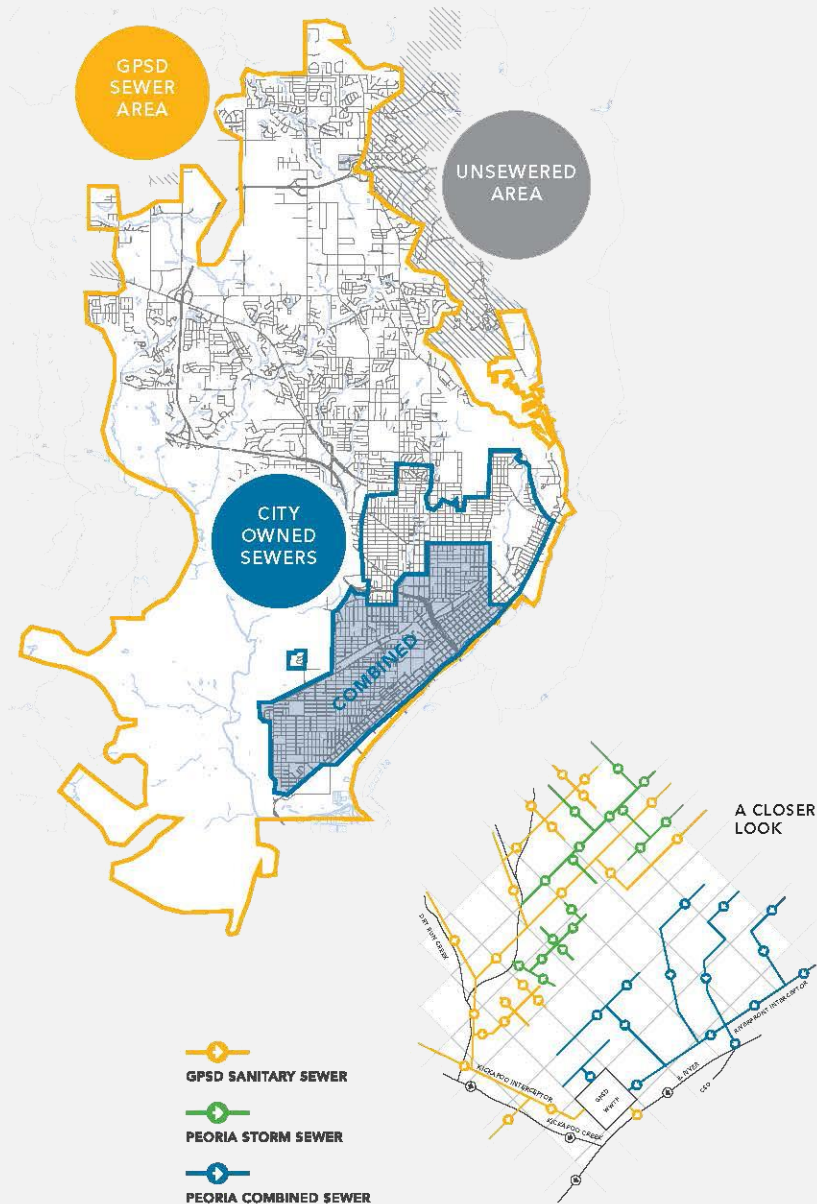


# COMBINED SEWER OVERFLOWS



# COMBINED SEWER AREA

## MEET YOUR INFRASTRUCTURE



## PEORIA SEWER OVERFLOW LOCATIONS:

The dots on the map show where sewers may overflow during wet weather.

Due to sewer improvements completed in the 1990s, some of these overflow pipes are inactive. During a typical rainfall, overflows occur at an average of five locations.

— City of Peoria CSO Public Outreach Education Handout, 2009





**We are not alone.** 700+ communities have combined sewers. Settlements range from millions to billions.  
**But Peoria is among the last** in the U.S. *(the last large city in Illinois)* that still must develop control plans.



**Peoria averages between 20-30 CSO events per year**



**CSOs can occur with as little as .15 inches of rain**



**CSOs cause elevated bacteria levels in Illinois River  
exceeding the level considered safe for contact**



**CSOs can occur throughout the year**



# Why is this a problem now?

- Peoria faces an unfunded mandate from the EPA
- We must bring # of CSO events down as close to zero as possible
- We are at risk of being taken to court and could face major punitive costs if not resolved
- Negotiations are ongoing





## FINDING SOLUTIONS



Group of community leaders focused on comprehensive wet weather management for our City who:

- Make recommendations, shape (not set) City policy
  - Locations of green infrastructure re: combined sewer overflow
  - Public Works program priorities for stormwater
  - Potential funding streams, such as a stormwater utility
  - Credits for property owners
- Research issues, share ideas, serve as educated advocates

# 100% **green** infrastructure

Other cities are using green infrastructure as part of their CSO plans.

**PEORIA CAN DO EVEN MORE.**



**RAIN GARDENS**



**BUMPOUTS**



**GREEN ALLEYS**



## Co-Benefits of **green** infrastructure

We **need** to abate Combined Sewer Overflows. **PEORIA WANTS TO POSITIVELY IMPACT OUR COMMUNITY ON OTHER LEVELS.**

- Connections Between People and Places
- Safe and Accessible Transportation Infrastructure
- Crime Mitigation
- Public Health and Wellness
- Ecological Health and Productivity
- Local Jobs and Workforce Training
- Neighborhood-Scale Economic Development

## City of Peoria Budget Challenge



### ▼ Long-Term City ...

Street Funding

Combined Sewer Overflo...

**Stormwater Management**

### ► Spending

### ► Revenue

Don't see your  
policy choice?

**Tell Us**

## Stormwater Management

(choose one)

[Previous](#) | [Next](#)



### Maintain Current Drainage and Stormwater Funding

Currently, the City spends \$1.2 M on drainage and stormwater management funding.

PROS & CONS

**18%** chose this



### Adopt a Stormwater Utility Fee

The City is just beginning its study on the total cost for stormwater management efforts. Several communities in Illinois, including Eureka and Morton, have adopted this fee, and the rates range from \$3.71 to \$9.72 per month per household. Raising this fee would offset \$1.2 million of current expenses paid for by other revenues.

PROS & CONS

**69%** chose this



### Seek A Revenue Source Other Than Utility Fees

Continue to invest more in stormwater and drainage projects throughout the City, but find an alternative revenue source than a stormwater utility fee. (Additional revenues would have to be identified in the revenue section of this Budget Challenge.)

PROS & CONS

**13%** chose this

**Take Action**



**Next**

# Stormwater utility



**A STORMWATER UTILITY IS A PUBLIC UTILITY ORGANIZED AS A SEPARATE ENTERPRISE IN THE SAME FASHION AS THE CITY'S WATER UTILITY, SEWER UTILITY, OR PARKING UTILITY.**

**A stormwater utility is an equitable and responsible way to fund wet weather management.**

**Reasons for supporting a stormwater utility:**

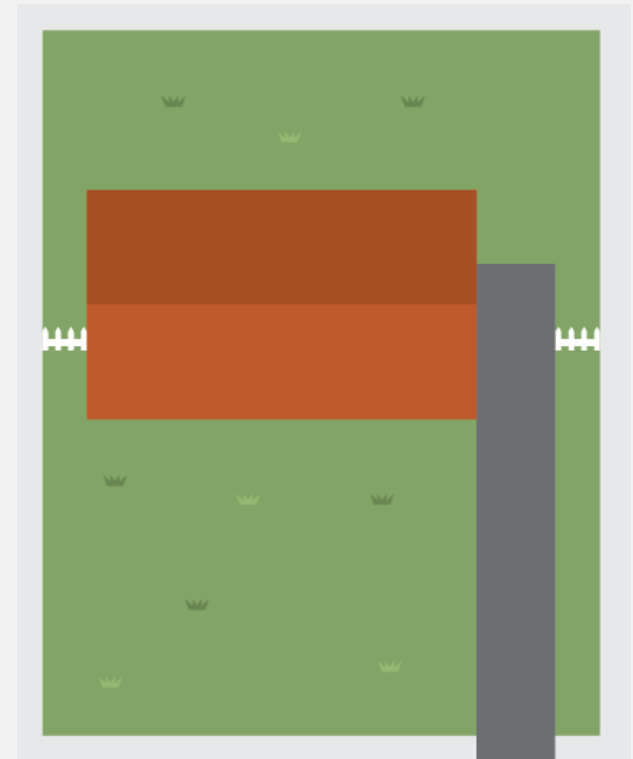
- It serves as a dedicated revenue stream
- All properties participate—if you use the system, you pay
- It provides incentives for responsible actions

## The rate will be based on impervious area

- Impervious area makes it hard for stormwater to be absorbed by the ground
- Each fee will correlate to runoff and thus the impact on stormwater costs
- Billing units are set per 1,000 SF of impervious area

### We recommend this method because:

- The fee is directly related to runoff contribution
- Easy to understand
- We have detailed data on impervious area
- Has been legally upheld in IL
- Credit program encourages property owners to minimize runoff



$$\text{Brown Rectangle} + \text{Grey Rectangle} = 2,600 \text{ SF Impervious} \\ = \mathbf{2.6 \text{ Billing Units}}$$



## Rate method applied

- **Stormwater Program = \$12.1 million**
- **DRAFT monthly bill range based on:**
  - 2,600 SF impervious area parcel



- 
- **Average residential monthly stormwater bill: \$9–\$13**
    - **If bill includes CSO Operations & Maintenance (O&M): \$14–\$18**
    - **If bill includes CSO O&M and Capital: \$24–\$30**

Disclaimer: There are many factors affecting the fee assessment.  
The figures shown are for discussion purposes and are not a finalized rate.  
City Council will make the final policy decisions.

## **We are currently exploring:**

### **CREDITS**

A credit is an ongoing reduction to the stormwater bill. Sometimes credits are for a limited time and have to be renewed; other times they are ongoing.

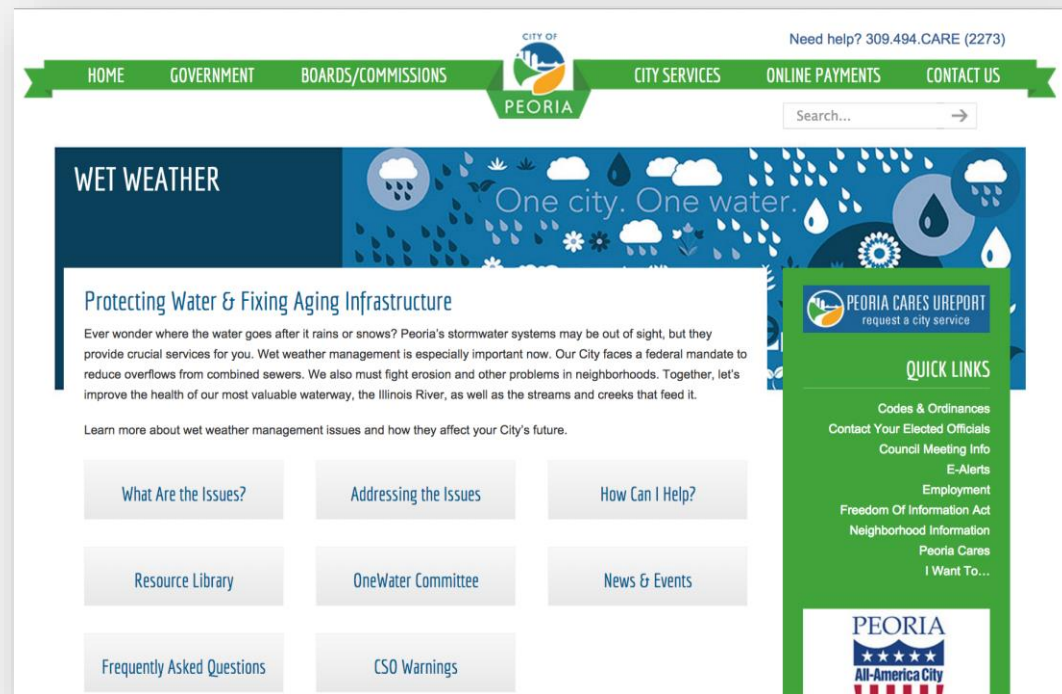
### **INCENTIVES**

An incentive is a onetime credit on the stormwater bill for best management practices such as rain barrels.

1. Wet weather issues can negatively impact safety, beauty and sustainability of Peoria.
2. We HAVE to address combined sewer overflows ...  
not just because the EPA is forcing us to, but also because we need to protect the health of the Illinois River.
3. Everyone has a role to play in wet weather management.

## Do your part:

- Keep contaminants out of drains, sewers and streams
- Minimize impervious surfaces on your property
- Capture rainwater
- Reduce water usage
- Attend OneWater Committee Meetings



*Visit [OneWaterPeoria.com](http://OneWaterPeoria.com) for more info.*





**Thank you for your time.**