

OUR WATER, OUR WAY

MAJOR WET WEATHER ISSUES FACING PEORIA



“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

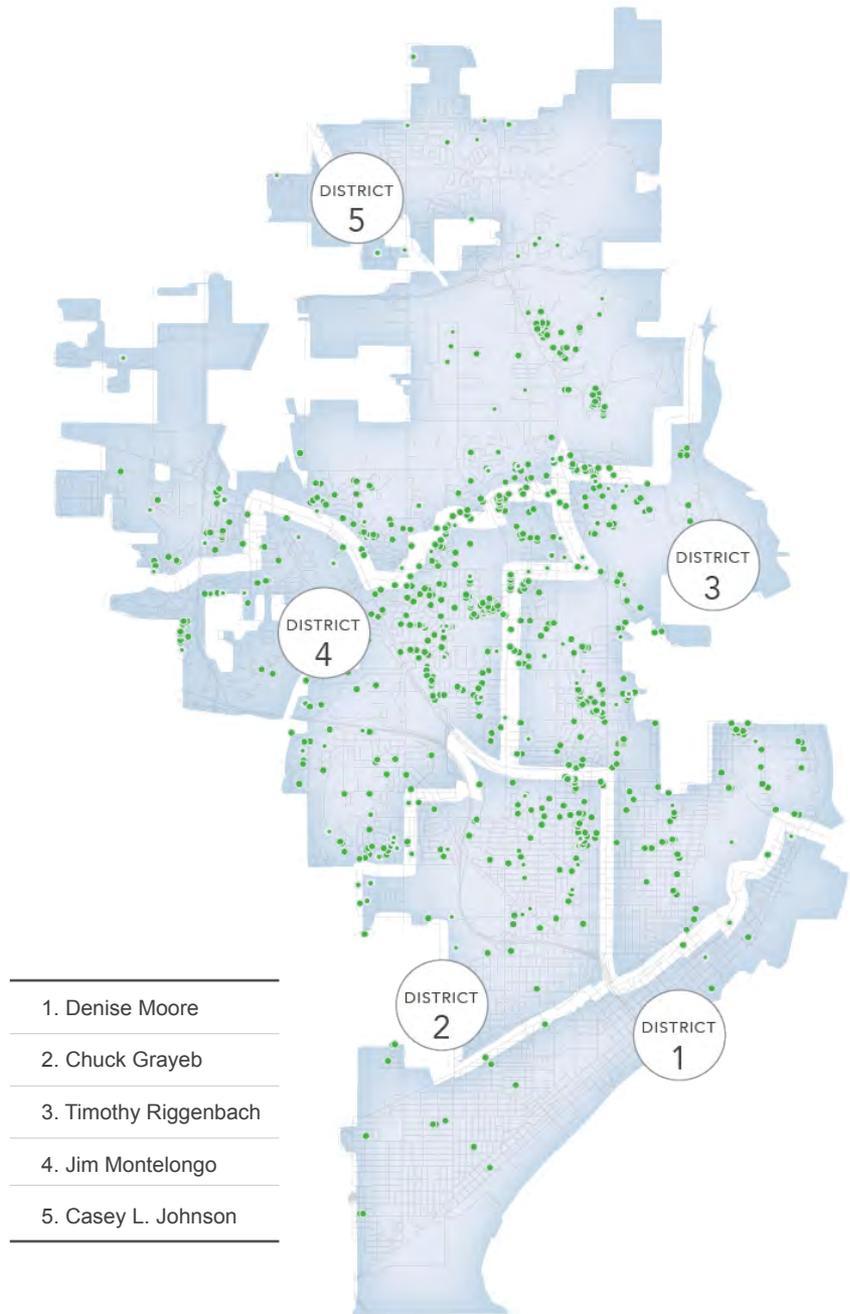
What is stormwater infrastructure? Do I use it?

- Ditches
- Creeks
- Pipes and culverts
- Ponds and lakes
- Curb and gutter
- Inlets and manholes
- Wetlands
- Oceans
- Rain gardens
- Bioswales
- Many more



CITYWIDE STORMWATER PROBLEMS

EVERY PART OF PEORIA SUFFERS FROM WET WEATHER PROBLEMS.



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- 1. Denise Moore
 - 2. Chuck Grayeb
 - 3. Timothy Riggerbach
 - 4. Jim Montelongo
 - 5. Casey L. Johnson
-

ALLEN & ALTA RD. CULVERT: \$1.2 MILLION



THIS SINKHOLE CAUSED BY
FLOODING WAS 20 FEET DEEP

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.**

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

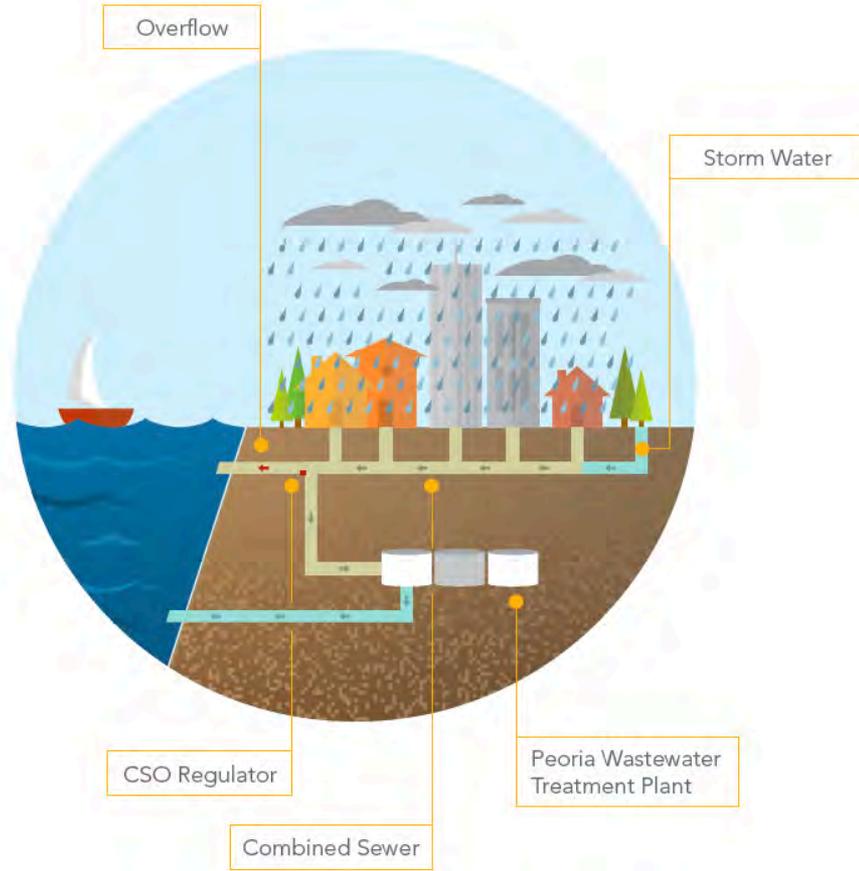
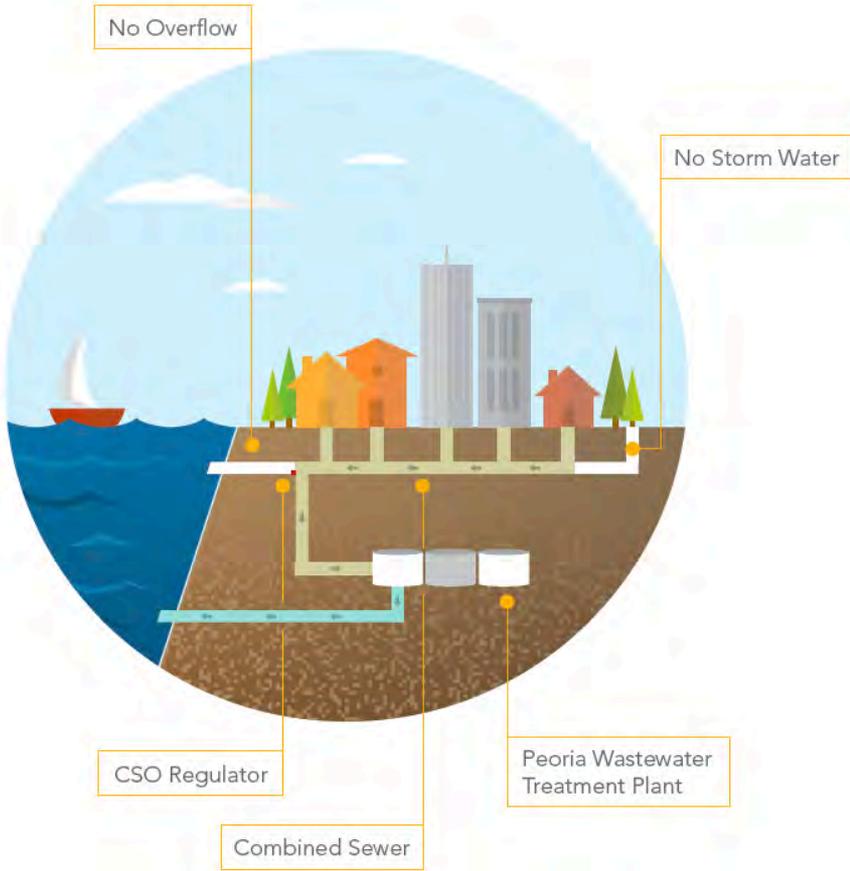


LACK OF MAINTENANCE CLEANING REDUCES CAPACITY

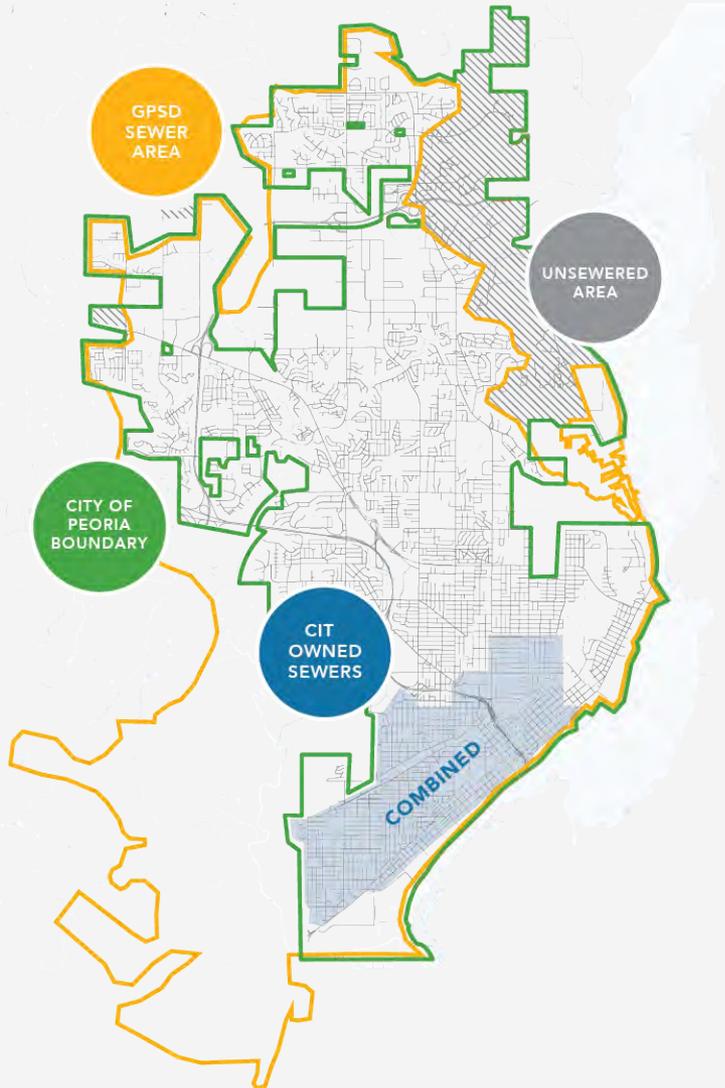


COMBINED SEWER OVERFLOWS

COMBINED SEWER OVERFLOWS



COMBINED SEWER AREA



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





renew EVANSVILLE

What is a CSO?

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



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

In addition to keeping stormwater out of our sewers, green infrastructure provides opportunity for additional **COMMUNITY BENEFITS** including...



Connections between
People and Places



Ecological **Health**
and **Productivity**



Safe and Accessible
Transportation Infrastructure



Local Jobs and
Workforce Training



Crime Mitigation



Neighborhood-scale
Economic Development



Public **Health and Wellness**



FINDING SOLUTIONS

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



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

Funding a 'green' CSO fix

Our current estimate for **installing green infrastructure** to control CSOs is approximately ...

\$200-250 million

This **capital spend** will take place over ...

a number of years TBD

There will be **ongoing maintenance (O&M)** costs once green is installed. Likely between ...

1%-3% of capital cost

Funding a responsible stormwater program

Total stormwater program approximately...

\$8.24 million per year

Annual capital costs...

\$5,340,000

Annual operating costs...

\$2,900,000

Stormwater utility



A STORMWATER UTILITY IS A PUBLIC UTILITY ORGANIZED AS A SEPARATE ENTERPRISE IN THE SAME FASHION AS THE 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:

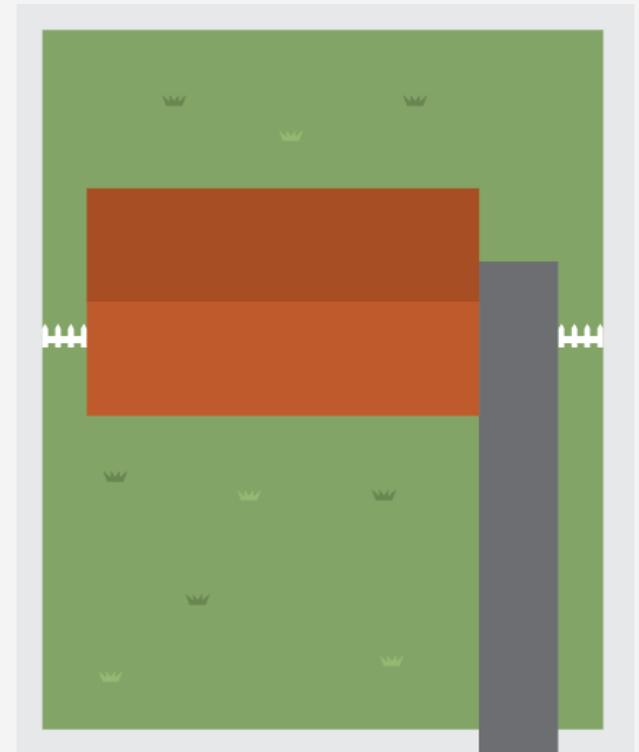
- It serves as a dedicated revenue stream
- All properties participate—if you use the system, you pay
- It provides incentives for responsible actions

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



$$\begin{aligned}
 & \text{Brown square} + \text{Grey square} = 2,600 \text{ SF Impervious} \\
 & \qquad \qquad \qquad = \mathbf{2.6 \text{ Billing Units}}
 \end{aligned}$$

Will the **stormwater utility** fund the **CSO fix**?

Yes...and no.

- The total CSO fix will cost \$200-250 million. That would be a BIG monthly bill.
- Part of the CSO solution will be funded through the stormwater utility, the rest will may come from a raise in sewer bills, property tax, other taxes, etc.
- Ultimately City Council will decide

What will the stormwater utility pay for?

- System planning and asset management
- Infrastructure maintenance & replacement
- Runoff and pollution reduction
- Stream/channel improvements
- Public Works equipment
- Private property drainage program
- Total capital & maintenance expense
- Partial CSO funding
- Green Infrastructure construction and maintenance

DRAFT Average Residential Rate

- Stormwater Program = \$8.24 million per year
- Partial CSO cost = \$5 million per year
- Total Funding = \$13.24 million per year

DRAFT

-
- **DRAFT monthly residential bill range based on:**
 - 2,600 SF impervious area parcel
 - **Average residential monthly stormwater bill: \$13.00–\$18.20**

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.

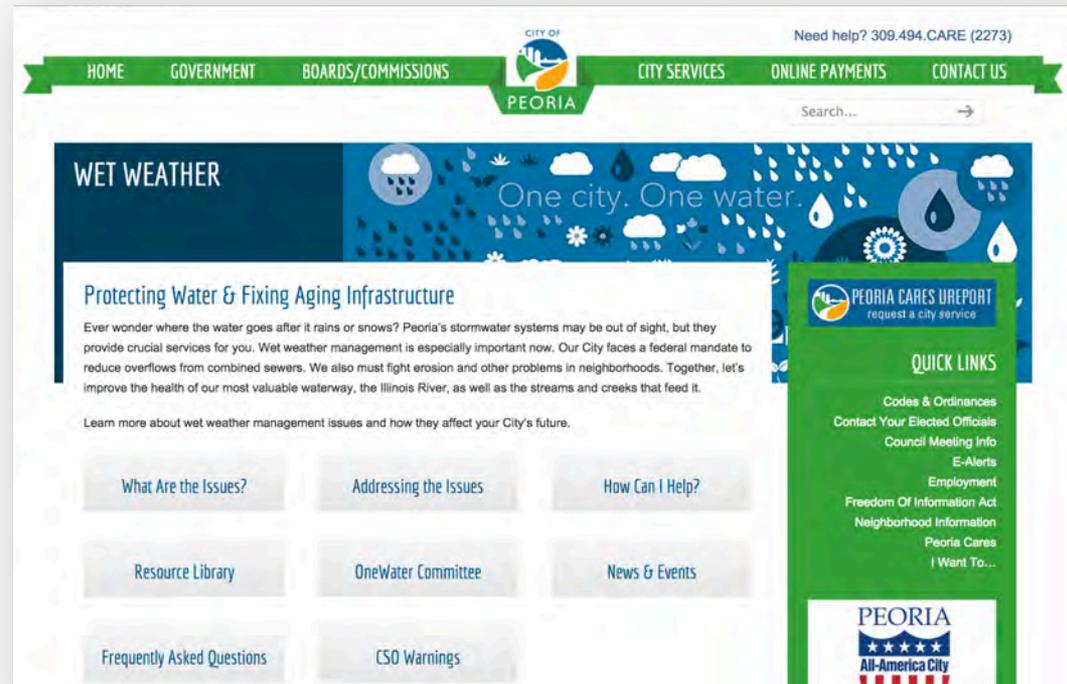
INCENTIVES

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



Visit OneWaterPeoria.com for more info.



Thank you for your time.