

2014 Green Infrastructure Webcast Series

Innovative Financing for Green Infrastructure

Tuesday, November 4th, 2014
1:00 – 2:30pm EST

Speakers:

- **Jennifer Cotting**, Research Associate, Green Infrastructure, Environmental Finance Center, University of Maryland
- **Deron Muehring**, Civil Engineer, City of Dubuque, IA
- **Lori Beary**, SRF Coordinator, Iowa Finance Authority

Sponsored by U.S. EPA Office of Wastewater Management

Logistics

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 - Call **GoToWebinar** support:[1-800-263-6317], and give conference ID# 942-389-537

Webcast Agenda

- **Introduction**
- **An Overview of Green Infrastructure Financing,**
Jennifer Cotting
- **The Bee Branch Watershed Flood Mitigation Project,**
Deron Muehring
- **Water Resource Restoration Sponsored Projects,**
Lori Beary
- **Q&A session**
- **Wrap up**



Now to our speakers!

Green Infrastructure Financing: Innovative Ideas and Emerging Trends

November 4, 2014

University of Maryland Environmental Finance Center

www.efc.umd.edu

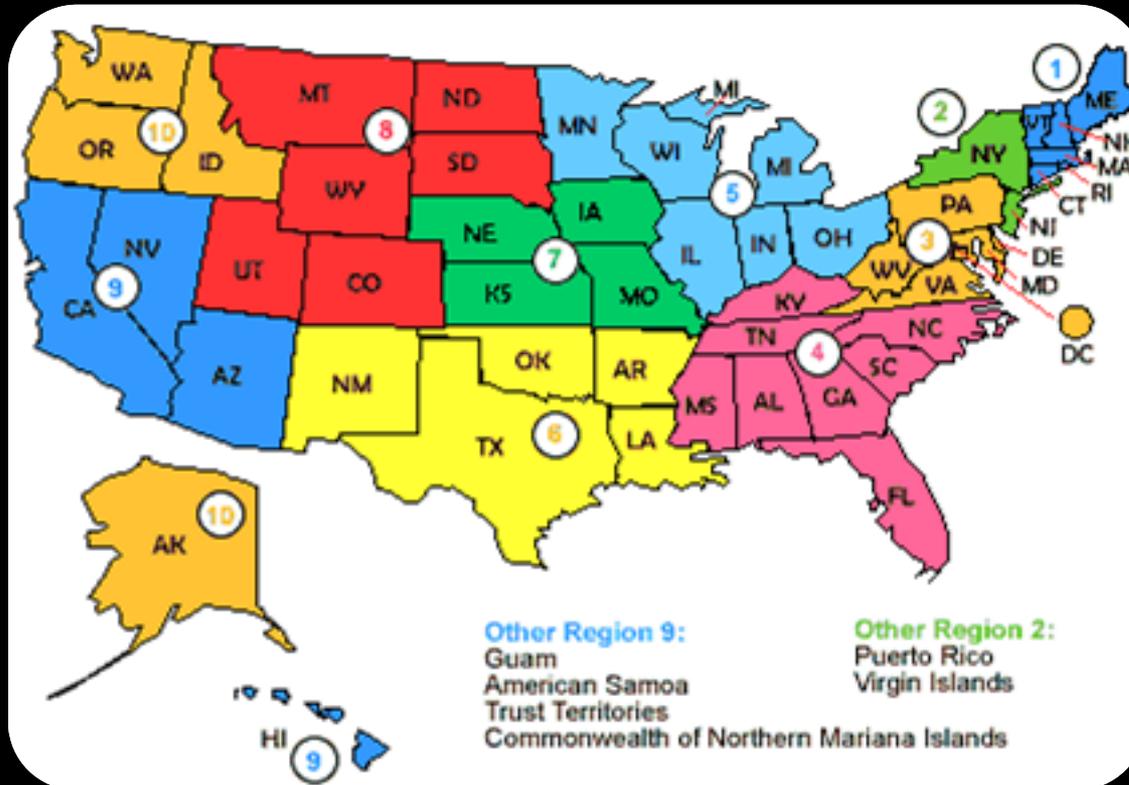




The Environmental Finance Center

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The EFC: Who are we?



Applying a financing lens
across sectors . . .

- **Technical Assistance**
- Stormwater
- **Green Infrastructure**
- Agriculture
- **Air Quality**
- Climate & Energy
- **Sustainability**
- Program & Policy Analysis



Green Infrastructure: EFC's Point of View

A resource management approach with the capacity to:

- Reduce implementation costs
- Deliver benefits that serve multiple community priorities
- Engage the private sector
- Spur behavior change through the marketplace
- Provide return on investment to local economies



Telling the financing story through the use of graphics

LENEXA, KS

Location: Johnson County
Area: 34.45 square miles
Founded: 1869
Population: 48,190



MULTIPLE FINANCING MECHANISMS

- local development charge
- state and federal grants
- protective ordinances
- comprehensive planning
- stormwater utility
- outreach and education



SYSTEM UPGRADES



Voter approved 1/8 cent sales tax



Generated \$15+ million between 2000-2010

SYSTEM MAINTENANCE

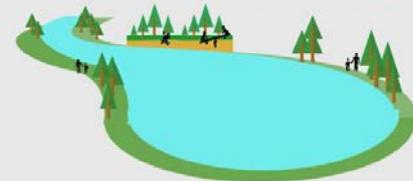


\$66 annual fee for residential properties



Non-residential based on amount of runoff

RAIN TO RECREATION



Core project was creation of a 35-acre lake and 240 acre park that serves multiple community priorities



Additional focus on engaging private property owners through voluntary programs like:

- Kansas Healthy Yards certification program
- free technical assistance for rain barrel installation



DEVELOPED BY THE ENVIRONMENTAL FINANCE CENTER
ALL REFERENCES AVAILABLE ON OUR WEBSITE
WWW.EFCUMD.UMD.EDU
October 2014



Green Infrastructure Finance: Components

Successful green infrastructure financing tends to rely on:

- A consensus driven plan
- Strong leadership and leading by example
- Leveraging multiple financing mechanisms
- Collaboration with a network of partners
- Careful communications, messaging , and outreach
- Making the business case for green infrastructure
- Incentivizing participation from the private sector





Community Examples

Developing a Plan

PITTSBURGH, PA

Location: Three Rivers Watershed
Area: 58 square miles
Founded: 1717
Population: 306,211

LONG RANGE PLANNING

As little as 1/10 of an inch of rain can overwhelm the system and cause a sewage overflow!

Like many US cities, Pittsburgh has a combined sewer system subject to regulations designed to reduce overflows and improve local water quality

GREENING THE PITTSBURGH WET WEATHER PLAN

An integrated watershed approach that . . .

- ✓ is the result of a consensus-building process where nonprofits and public and private sector representatives devoted more than **1000** hours to discussion and plan development
- ✓ promotes green infrastructure and adaptive management to deliver greater benefits to the City
- ✓ recommends PWSA take on a leadership role, engage partners to expand capacity, and create a utility to provide a dedicated revenue stream

SPOKANE, WA

Location: Spokane River Watershed
Area: 60 square miles
Founded: 1871
Population: 209,525

INTEGRATED CLEAN WATER PLAN

City plan is addressing stormwater and wastewater simultaneously to improve Spokane River water quality

Plan looks to incorporate green practices into all City infrastructure projects to reduce costs

Around 1 billion gallons of untreated stormwater enters the Spokane River from storm drains each year

Also in Pittsburgh:

- Guidance on reuse of vacant lands
- Pilot projects that help communities visualize solutions

Also in Spokane:

- Urban tree initiative
- Stormwater utility
- SRF funding

Leadership and Setting the Example



CHICAGO, IL

Location: Cook County
Area: 234 square miles
Founded: 1833
Population: 2,718,782

MAJOR PUBLIC INVESTMENT

Mayor's initiative to upgrade and improve water and sewer infrastructure

Will incorporate green infrastructure into existing capital projects using guidance from the City's Green Stormwater Infrastructure Strategy

\$50 MILLION
OVER 5 YEARS

The infographic features a stylized cityscape with green trees, a white truck, and a construction crane against a dark grey background. The text is in white and green, with large blue numbers for the investment amount and duration.



TUCSON, AZ

Location: Gila River Watershed
Area: 350.2 square miles
Founded: 1718
Population: 343,829

GREY AND GREEN

The City is integrating green infrastructure into:

- Curb cuts and basins in right of ways
- Chicanes, medians and traffic circles
- Street width reductions
- Parking Lots

By considering where green infrastructure can fit into existing capital projects Tucson has made GI the norm for their roadways and other projects

The infographic features a stylized cityscape with green trees, a white truck, and a construction crane against a dark grey background. The text is in white and green, with large blue numbers for the investment amount and duration.

Also in Chicago:

- Coordination with school system and DOT
- CNT partnership engages residents and businesses

Also in Tucson:

- Action plan for water sustainability
- LID & GI guidance manuals
- Estimating value of benefits

Leveraging Multiple Financing Mechanisms

LOS ANGELES, CA

Location: Los Angeles County
 Area: 530 square miles
 Founded: 1781
 Population: 3,884,307



LEVERAGING FUNDS

Implementation projects stretched local dollars further by leveraging multiple funding sources and local priorities

South LA Wetlands Park

9 acre passive and active recreation site that includes a constructed wetland that collects trash and can treat up to

680,000

gallons of urban runoff a day



That's enough to fill an Olympic-size swimming pool

Prop 0 funds were supplemented with

- ⌘ settlement agreement dollars
- ⌘ transit authority funds
- ⌘ an EPA brownfields grant
- ⌘ other bond funding

Cesar Chavez Groundwater Improvement

This repurposed landfill site is now home to a

41

acre recreational complex that includes

10,800 acre feet of annual groundwater recharge which reduces spending on imported water

Other funds included ...

- ⌘ Urban planning grants
- ⌘ Waste Management Board funds
- ⌘ Capital Improvement spending

GREENVILLE, SC

Location: Greenville County
 Area: 28.14 square miles
 Founded: 1683
 Population: 61,397



LEADERSHIP

The mayor saw daylighting the falls as an economic development opportunity

PARTNERSHIP

He engaged the Garden Club whose outreach created Community demand for Removing the Bridge



GARDEN CLUB FUNDRAISING & HOSPITALITY TAX

Covered the cost of \$13.4 million award winning pedestrian bridge and park

FALLS PARK ENDOWMENT

manges donations from corporations, businesses, foundations, and the general public to provide amenities, services, and maintenance not covered by the parks department



Partnership and Collaboration

Also in Omaha:

- Watershed fee
- Grants
- World O!
Water
- Ordinances

OMAHA, NE

Location: Papillion Creek Watershed
Area: 130.6 square miles
Founded: 1854
Population: 434,353

REGIONAL APPROACH

The Papillion Creek Watershed connects:

portions of **3** counties, **1/3** of the state's population

11 local governments and,

The Papillion Creek Watershed Partnership ... created a watershed management plan to establish regionally common goals and guide a collaborative approach to managing water quality and quantity

Better Water Quality

Reduced Runoff

Also in Puyallup:

- Planning for future growth
- Incentivizing residential BMPs

PUYALLUP, WA

Location: Puget Sound Watershed
Area: 12.2 square miles
Founded: 1890
Population: 38,147

ENGAGING PARTNERS

Public and private sector stakeholders are collaborating around local water quality

City of Puyallup
Pierce County
Washington State University
Puyallup Nation

This expands capacity and enables partners to do more than they could ever do alone

LEVERAGING FUNDING SOURCES

Puget Sound grant to Puyallup Tribe will address sediment in hatcheries

\$1 million Ecology grant to WSU and the City for campus retrofits

EPA support as a partnership community

Communications and Outreach

NORFOLK, VA

Location: Elizabeth River
Chesapeake Bay

Area: 96 square miles

Founded: 1682

Population: 136,836

MAKING NORFOLK MORE RESILIENT

Downtown Norfolk experiences routine flooding... even in the absence of weather events

Normal tides in Norfolk have risen 1 1/2 feet over the past century!

Also in Norfolk:

- Stormwater utility, regional planning, and urban tree canopy

Also in Warrington:

- Other grants, partnerships, leveraging local priorities

WARRINGTON, PA

Location: Bucks County, PA

Area: 13.8 square miles

Founded: 1734

Population: 17,580

OPEN SPACE REFERENDUM

Residents voted to borrow **\$3 million**

To be repaid through a small property tax increase

LEVERAGING FOR GREATER IMPACT

Grants \$350,000 from Bucks County and pursuing grants and other funding programs stretches local dollars further

Partnerships Partnering with the land trust community can expand capacity and reduce the burden to the Township

Other Local Priorities Considering open space planning in the context of other community priorities such as stormwater requirements and economic development goals can create efficiencies and reduce implementation costs

- ✓ Stormwater
- ✓ Green Infrastructure
- ✓ Quality of life

PHILADELPHIA, PA

Location: Delaware Watershed
Area: 141.6 square miles
Founded: 1682
Population: 1,533,165

THE PLAN IS PROJECTED TO...



Add 250 green jobs per year

Remove up to 1.5 billion tons a year of carbon emissions

Raise Philly's total property value 2-5%



Making the Business Case

LANCASTER, PA

County: Lower Susquehanna Watershed
Area: 7.34 square miles
Founded: 1742
Population: 80,000

COMPARING COSTS

The City must divert **750** million gallons from the Combined Sewer System

Gray Alone



\$300 million

Green Approach



\$140 million

NEW ORLEANS, LA

Location: Mississippi River Delta
Area: 350.2 square miles
Founded: 1718
Population: 343,829

WHAT ARE THE POTENTIAL BENEFITS?

Improved & new waterways are estimated to increase property values by

\$183 Million



The plan will save more than

\$10.8 billion

in avoidable flooding costs over fifty years

The plan could generate a total economic benefit of up to

\$22.3 billion



The plan could support up to

101,790 jobs

PORTLAND, OR

Location: Multnomah County
Area: 145.1 square miles
Founded: 1845
Population: 609,456

RESULTS ... 950 Green Street Facilities

42 Acres of Ecoroofs



930,000 kilowatt hours saved annually



\$11,000,000

Saved in stormwater processing

Engaging the Private Sector

BINGHAMTON, NY

Location: Broome County, NY
Area: 11.14 square miles
Founded: 1867
Population: 46,551

SHARING THE COST

50/50

... of green stormwater projects
with residents and businesses

STORMWATER MANAGEMENT FUND

NFWF sponsored program where the City splits the cost of GI projects with developers and landowners up to \$25,000 for going above and beyond the required level stormwater management



GREEN STORMWATER AND LANDSCAPING MATCHING FUND



Local foundation sponsored program where the City provides matching funds for residents, nonprofits, and small businesses who want to install small-scale GI practices such as rain gardens, rain barrels, shade trees, and pervious paving

AURORA, IL

Location: Fox River
Area: 39.38 square miles
Founded: 1837
Population: 199,963

INCENTIVIZING INVESTMENT

River Edge Redevelopment Zone



Zoning overlay along Fox River provides state & local tax credits for locating businesses or development, creating jobs, or remediating environmental hazards in the area

RiverEdge Park

\$15 million
in grants leveraged

for 30-acre, \$18.5 million park at the core of the 10-year revitalization plan offering public space and natural areas for entertainment and recreation



What's Next ?



Creative Use of the SRF

SPOKANE, WA

Location: Spokane River Watershed

Area: 60 square miles

Founded: 1871

Population: 209,525

AWARD WINNING SURGE SRF PROJECT

\$599,000 from the Department of Ecology's Water Pollution Control Revolving Fund

for the SURGE project which created



HALF = 20-year low interest loan
HALF = forgiven loan

37 rain gardens

5

drainage structures

1,200 sq yards of pervious sidewalk



Emerging Bond Markets

Also in the District:

- Stormwater utility
- Credit trading program
- Technical support for residential BMPs

The infographic features a dark green header with the text 'WASHINGTON, DC' in large white letters. To the right, it lists: 'Location: Potomac River', 'Area: 68.3 square miles', 'Founded: 1790', and 'Population: 646,499'. Below this is a stylized illustration of a cityscape with trees, a truck, and buildings. The main title '\$350 MILLION CENTURY BOND' is in large green letters. Below it, '1st' is written in large blue letters with a downward arrow pointing to 'DC Water 'green bond''. To the right, '100' is written in large blue letters with an arrow pointing to '100-year municipal bond for water or wastewater'. Further right, '100' is written in large blue letters with an arrow pointing to '100 year term equitably shares costs with future benefiteres and locks in lower funding costs for long-term'. A green dollar bill icon is positioned at the bottom center.

WASHINGTON, DC

Location: Potomac River
Area: 68.3 square miles
Founded: 1790
Population: 646,499

\$350 MILLION CENTURY BOND

1st → 100-year municipal bond for water or wastewater

↓ DC Water 'green bond'

100 → 100 year term equitably shares costs with future benefiteres and locks in lower funding costs for long-term

Regionalization

LONG CREEK, ME

Location: Long Creek Watershed

Area: 3.45 square miles

SHARED PLAN. SHARED PERMIT



The Long Creek Restoration Plan was the result of the two-year collaborative effort of four municipalities, area business, nonprofits, and state agencies

Upon EPA approval of the plan, the four municipalities created a watershed management district



By 2009, Maine required all property owners in the watershed with 1 impervious acre or more be permitted

The state offered a voluntary group permit option for property owners in the watershed

FUNDING & FINANCING

District members represent 91% of the impervious cover in the watershed

Participating landowners commit to paying **\$3000** per impervious acre for the next **10** years

Participants are saving up to half of what they'd spend on an individual permit

credits are offered for landowners who install BMPs or take on maintenance or 'good housekeeping' tasks

Funding programs have been leveraged too ...

\$2 million in ARRA funding for **2** demonstration projects

that provided proof of concept for pervious paving and streamside plantings



EPA 319 & MEDEP Other grant support includes ...



which made plan development and stakeholder engagement possible

Summary Findings

Successful green infrastructure financing tends to rely on:

- Local ownership of the solution
- Collaboration and partnerships
- Leveraging multiple financing mechanisms
- Engaging the private sector in the solution

Emerging trends include:

- Getting creative with the State Revolving Loan Fund
- Green Bonds
- Regionalization

Contact Information



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*Partnering to transform
a watershed plan into a
watershed reality:
the Bee Branch Watershed
Flood Mitigation Project*

Deron Muehring, Civil Engineer
City of Dubuque (IA)



November 4, 2014

Dubuque, Iowa



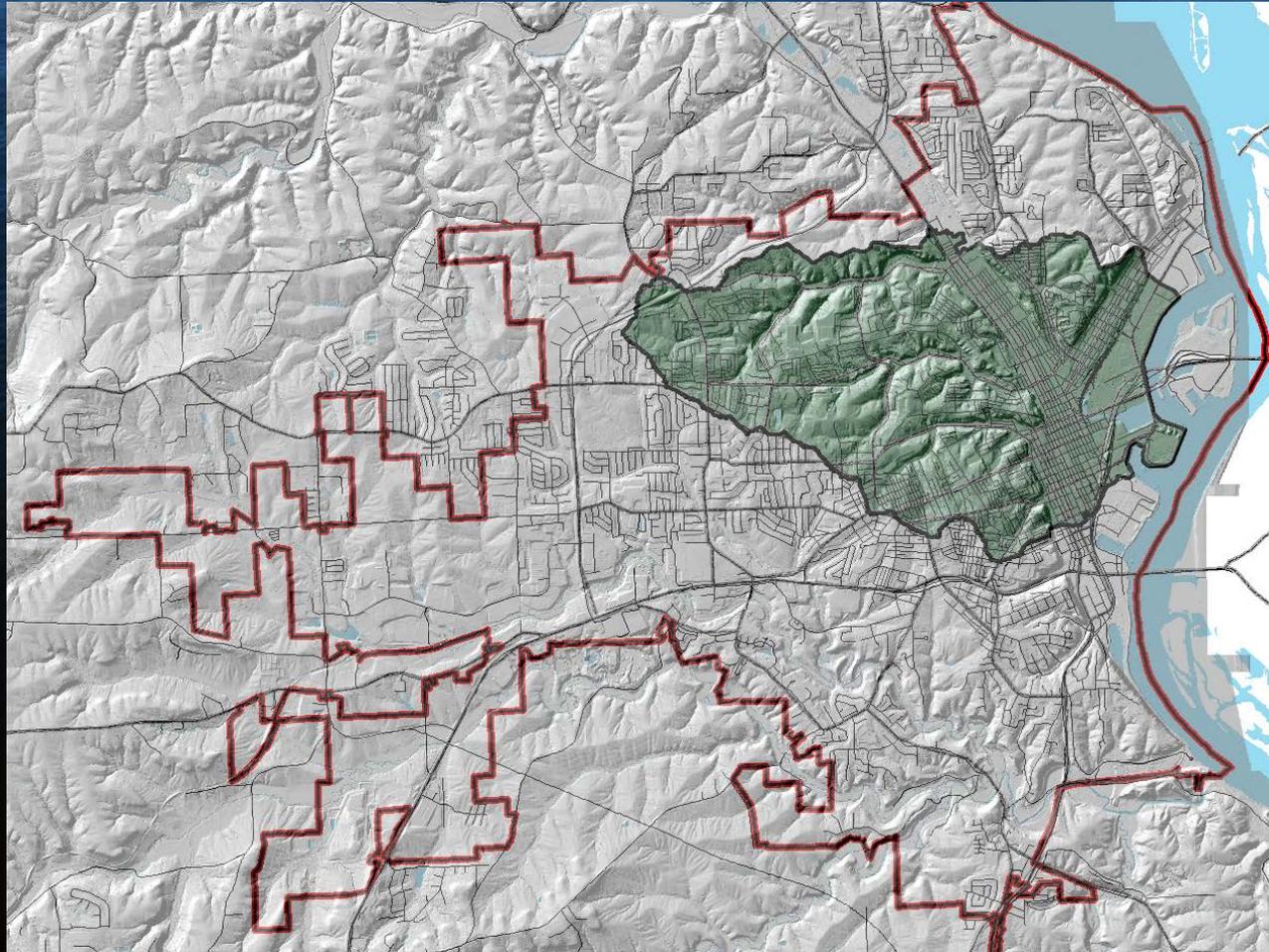
Dubuque, Iowa

Watershed Address...



Mississippi Watershed

Watershed Address...



Bee Branch Watershed

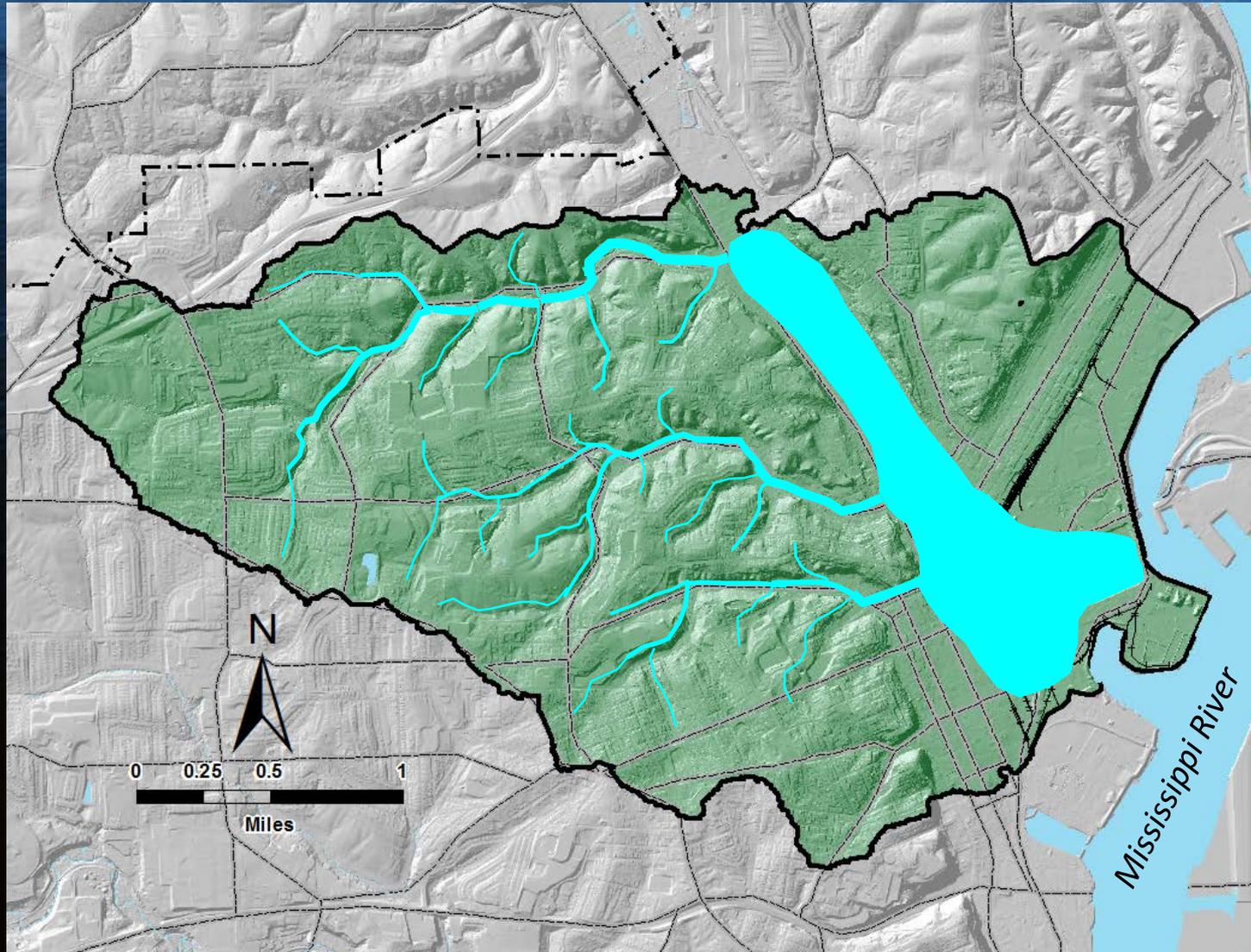
Watershed Hydrology...



Masterpiece on the Mississippi



Watershed Hydrology...



Summary of Presidential Disaster Declarations in 1999 - 2011

Presidential Disaster Declaration: May 21, 1999

Disaster #	1277
Reason for Declaration	Flooding, severe storms, tornadoes

Presidential Disaster Declaration: June 19, 2002

Disaster #	1420
Reason for Declaration	Flooding and storms

Presidential Disaster Declaration: June 2, 2004

Disaster #	1518
Reason for Declaration	Flooding, severe storms, tornadoes

Presidential Disaster Declaration: May 27, 2008

Disaster #	1763
Reason for Declaration	Flooding, severe storms, tornadoes

Presidential Disaster Declaration: August 14, 2010

Disaster #	1930
Reason for Declaration	Flooding, severe storms, tornadoes

Presidential Disaster Declaration: August 30, 2011

Disaster #	4018
Reason for Declaration	Flooding, severe storms, tornadoes
Cause of Damage	10.2 inches of rain in 12 hours

Summary of Presidential Disaster Declarations in 1999 - 2011

Since 1999, Dubuque has witnessed:

- ❖ One 10-year storm,
- ❖ One 25-year storm,
- ❖ Two 50-year storms, and
- ❖ Three 100-year storms.

Based on historic rainfall data outlined in 1992 *Rainfall Atlas of the Midwest* (Huff and Angel)

Witnessed Flooding...



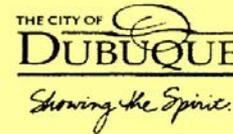
Estimated damages due to the six disasters
from 1999 to 2011 totals **\$69.8 million**



Drainage Basin Master Plan

2001

City of Dubuque, Iowa
Drainage Basin Master Plan



Fall 2001

HDR

HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, NE 68114

City of Dubuque, Iowa

2013 Drainage Basin Master Plan Amendment



HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, NE 68114

Drainage Basin Master Plan

2013

How you address the
issue is just as important
as why...

Bee Branch Watershed Flood Mitigation Project

Bee Branch Watershed Flood Mitigation Project Phases

Phase	Description	Est. Completion	Est. Cost
1	Carter Road Detention Basin	Completed 2004	\$1,076,315
2	West 32 nd Street Detention Basin	Completed 2009	\$4,158,589
3	Historic Millwork District	Completed 2012	\$7,977,311
4	Lower Bee Branch Creek Restoration	2014	\$21,274,685
5	Flood Mitigation Gate Replacement	2015	\$2,099,000
6	Impervious Surface Reduction	2034	\$57,420,000
7	Upper Bee Branch Creek Restoration	2016	\$64,823,636
8	22 nd Street Storm Sewer Improvements	2020	\$3,380,000
9	Flood Mitigation Maintenance Facility	2020	\$4,360,000
10	North End Storm Sewer Improvements	2019	\$1,160,000
11	Water Plant Flood Protection	2020	\$3,800,000
12	17 th Street Storm Sewer Improvements	2020	\$7,520,000
Subtotal			\$179,049,536



Bee Branch Watershed Flood Mitigation Project

The combined phases will:

- ❖ Reduce the **volume** of stormwater,
- ❖ Slow the **rate and timing** of stormwater flow through the upper watershed,
- ❖ Increase safe stormwater **conveyance** through the flood-prone area.



Bee Branch Watershed Flood Mitigation Project

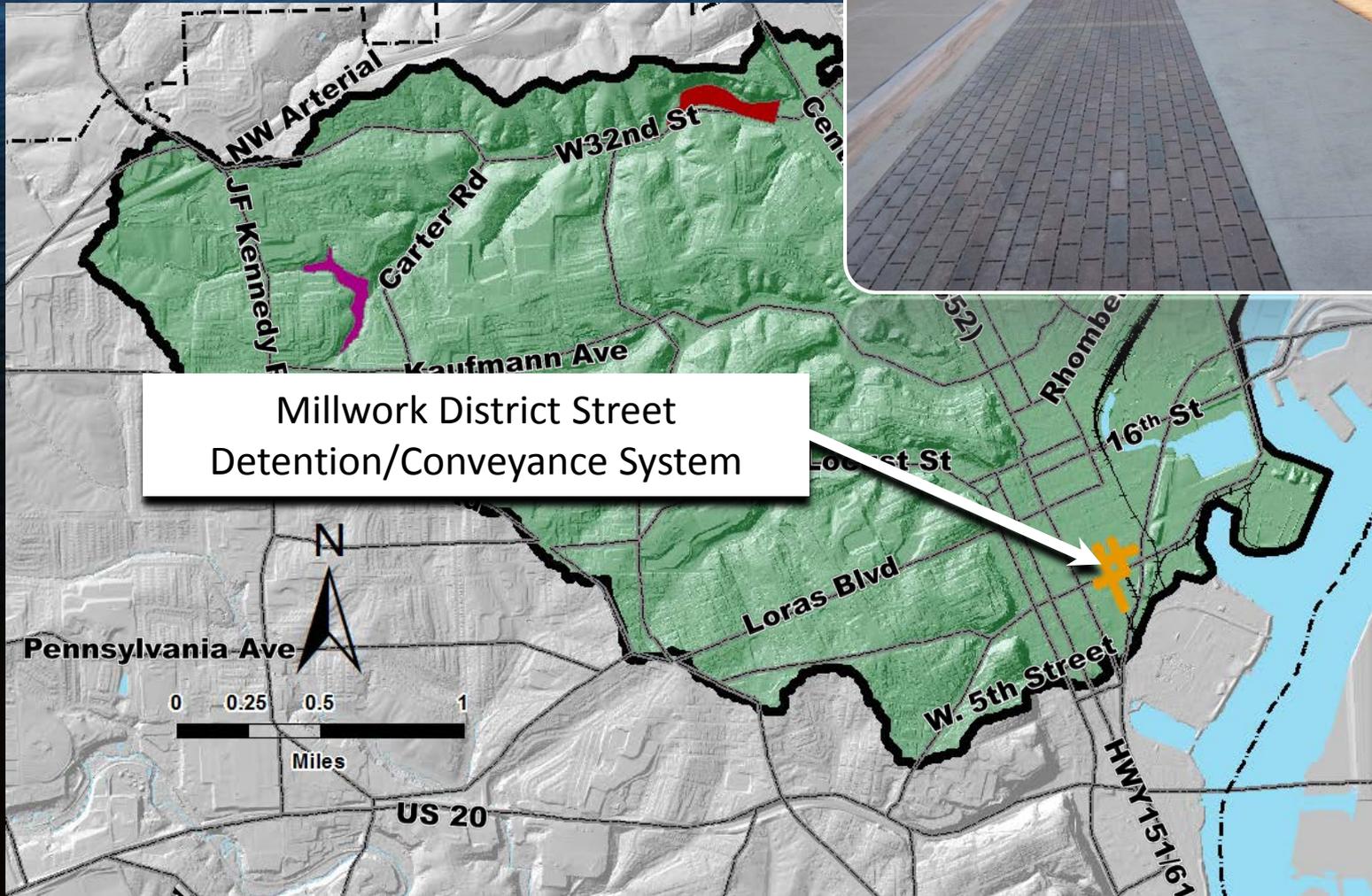
The combined phases will:

- ❖ Reduce the **volume** of stormwater,
- ❖ Slow the rate and timing of stormwater flow through the upper watershed,
- ❖ Increase storage capacity in the flood-prone area.

Volume

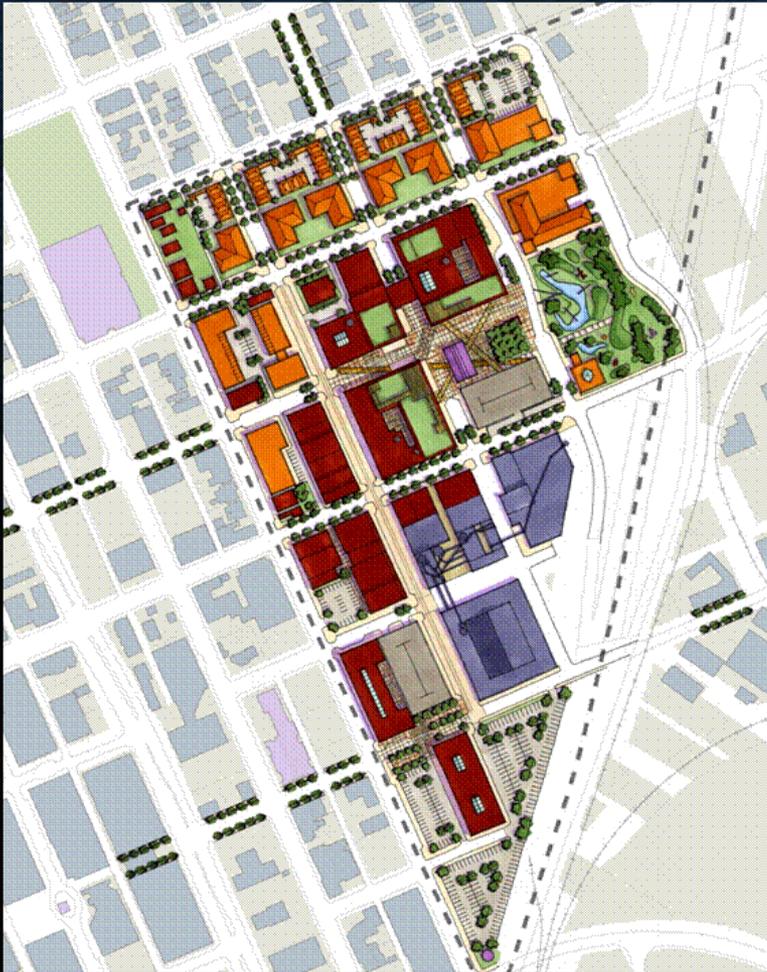


Historic Millwork District Pervious Pavement System



Historic Millwork District

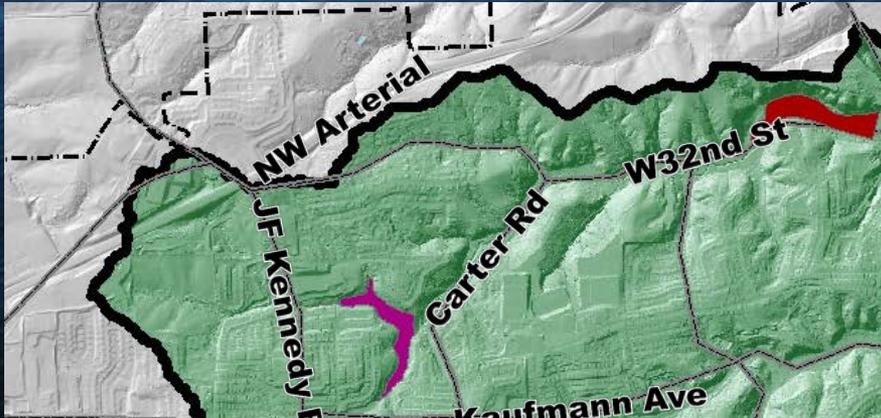
Total Development Outcomes



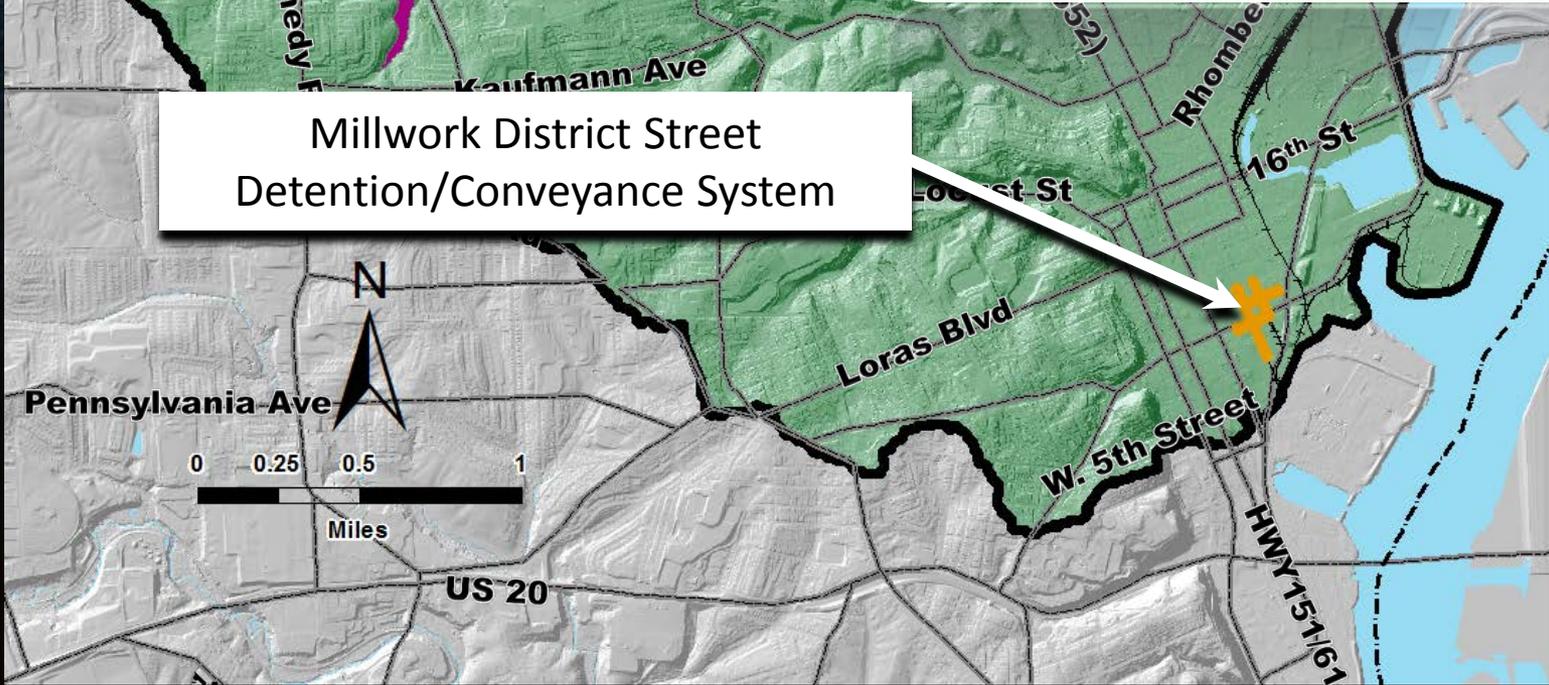
- 732 Housing Units
- 351,000 SF commercial/retail space
- **29 blocks of new streets**
- **12 blocks of improved streets**
- 3 acres of green space

Historic Millwork District

Pervious Pavement System – **Complete Streets**

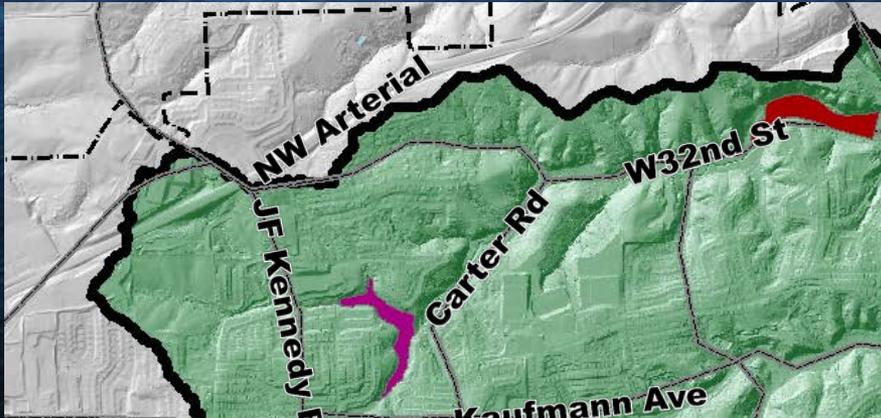


Millwork District Street
Detention/Conveyance System

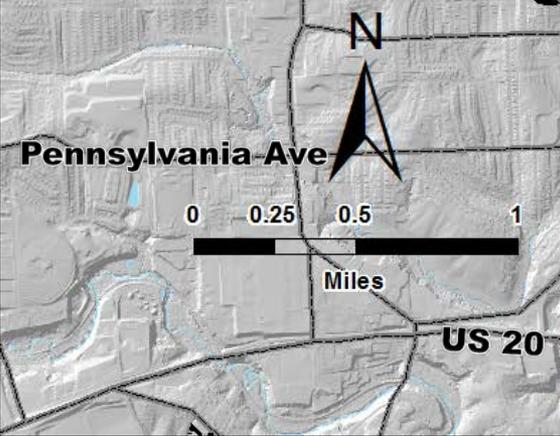


Historic Millwork District

Pervious Pavement System – **Complete Streets**



Millwork District Street Detention/Conveyance System



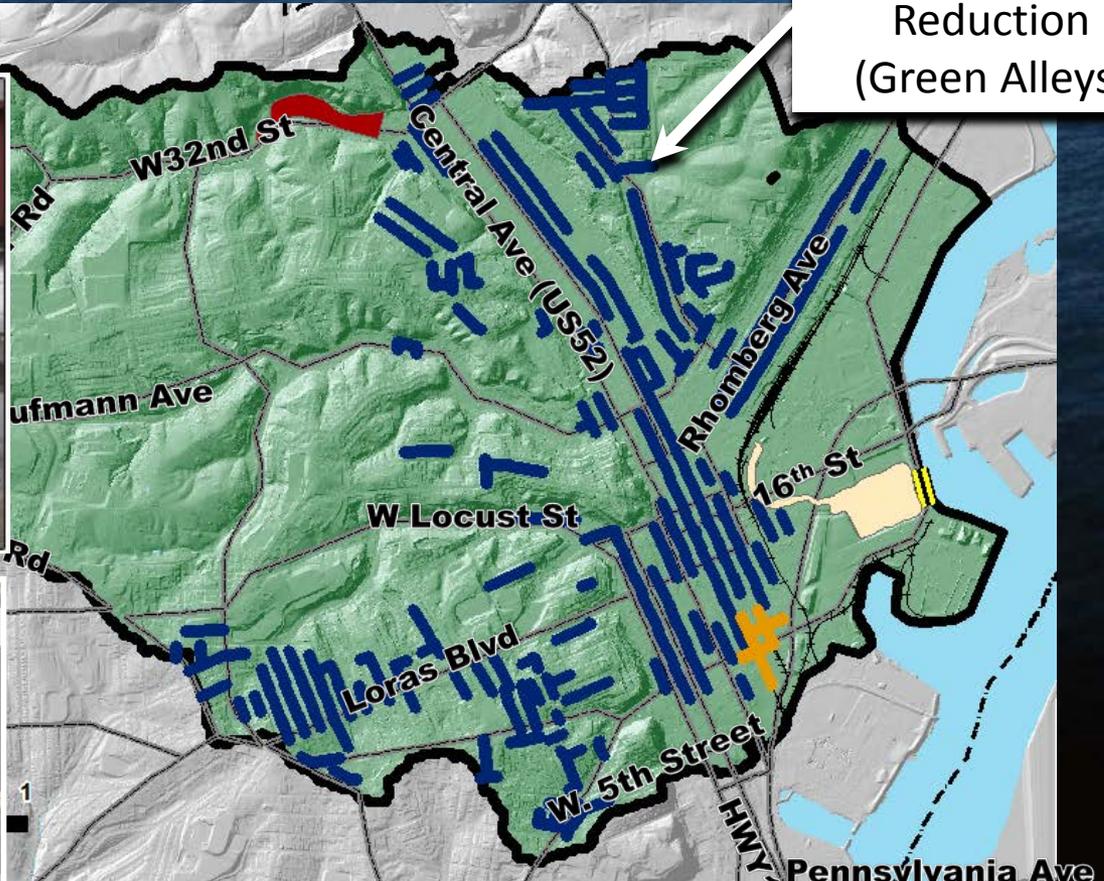
TIGER



Green Alleys

Pervious Pavement Systems

Pervious Surface
Reduction
(Green Alleys)



Sometimes How you address the issue is MORE important than why...

Green Alleys

Pervious Pavement Systems

Pervious Surface
Reduction
(Green Alleys)



Who does this
interest?



Bee Branch Watershed Flood Mitigation Project

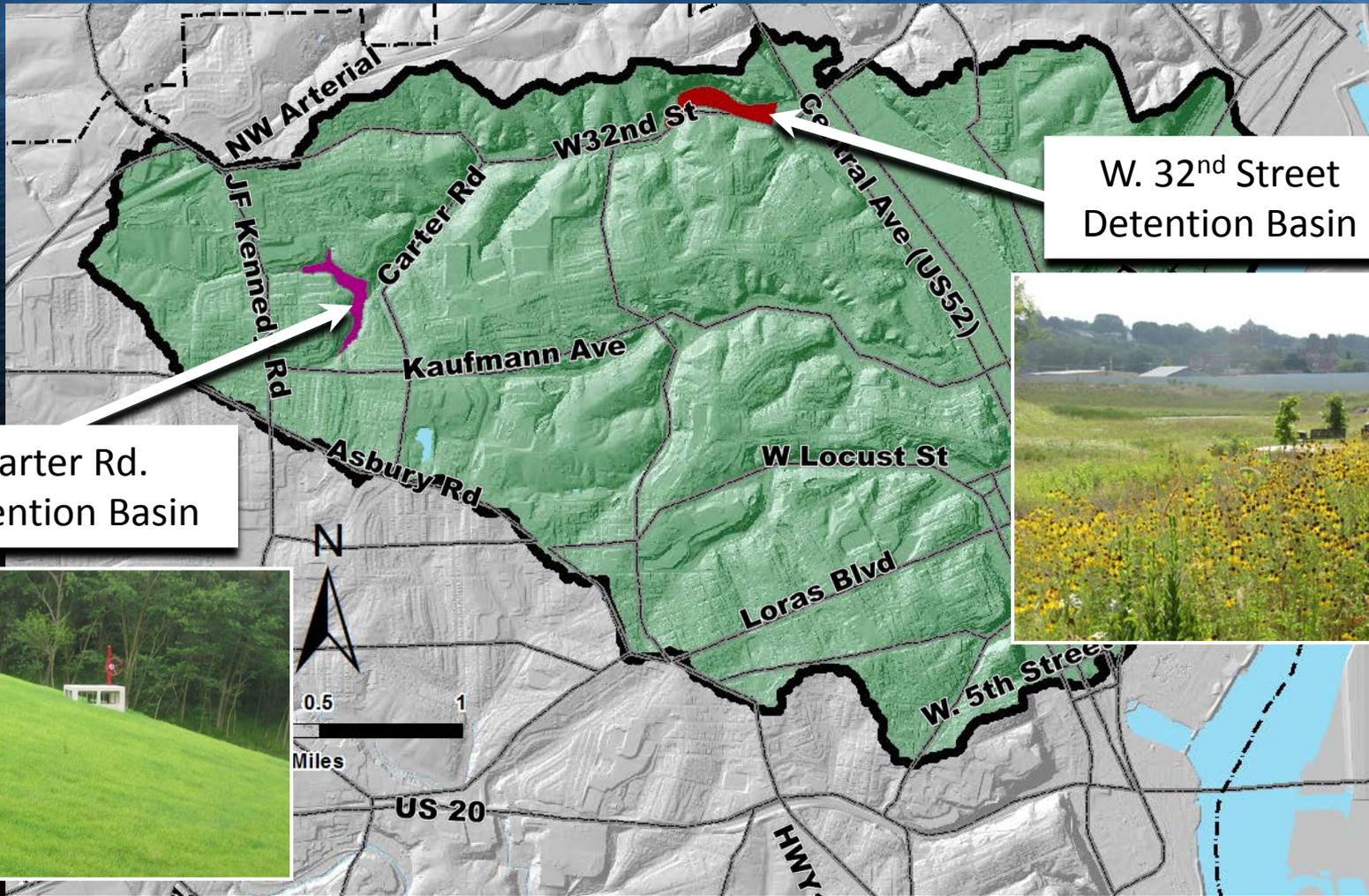
The combined phases will:

- ❖ Reduce the volume of stormwater,
- ❖ Slow the **rate and timing** of stormwater flow through the upper watershed,
- ❖ Increase safe stormwater conveyance through the



Rate & Timing

Upstream Detention



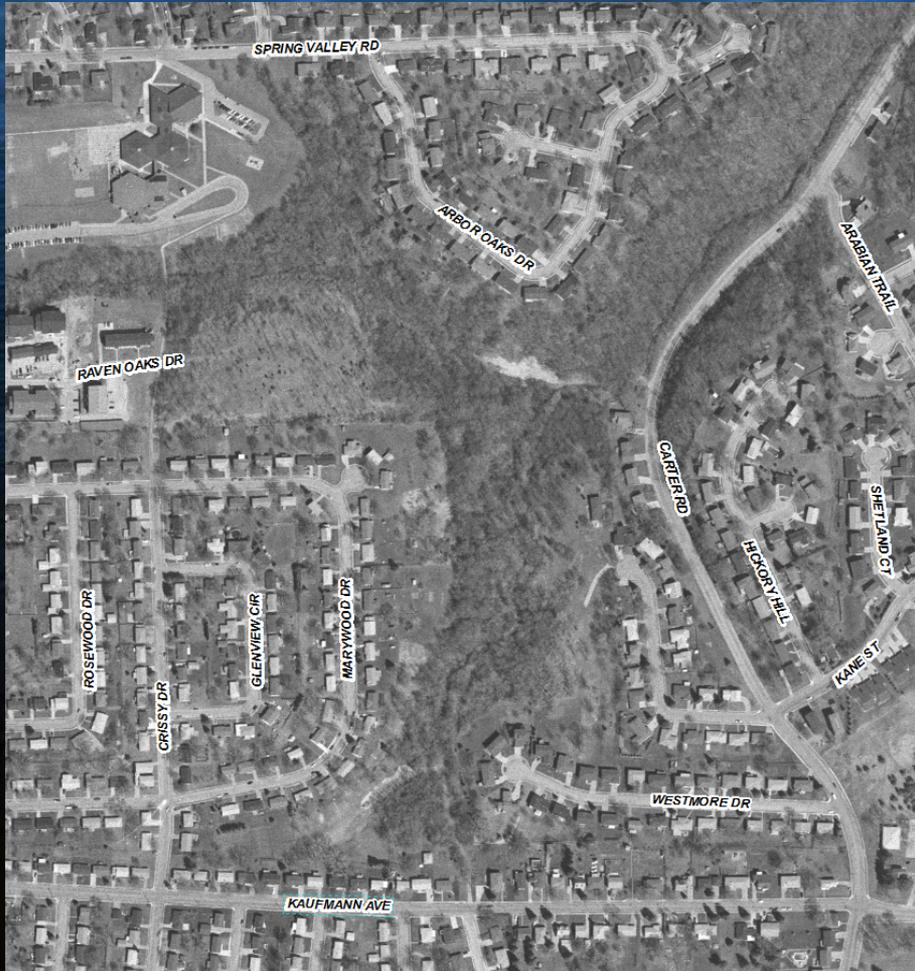
W. 32nd Street
Detention Basin

Carter Rd.
Detention Basin

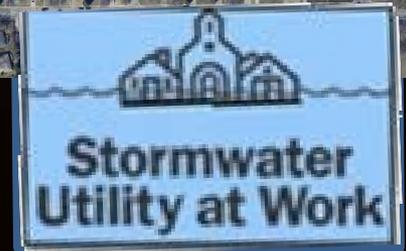
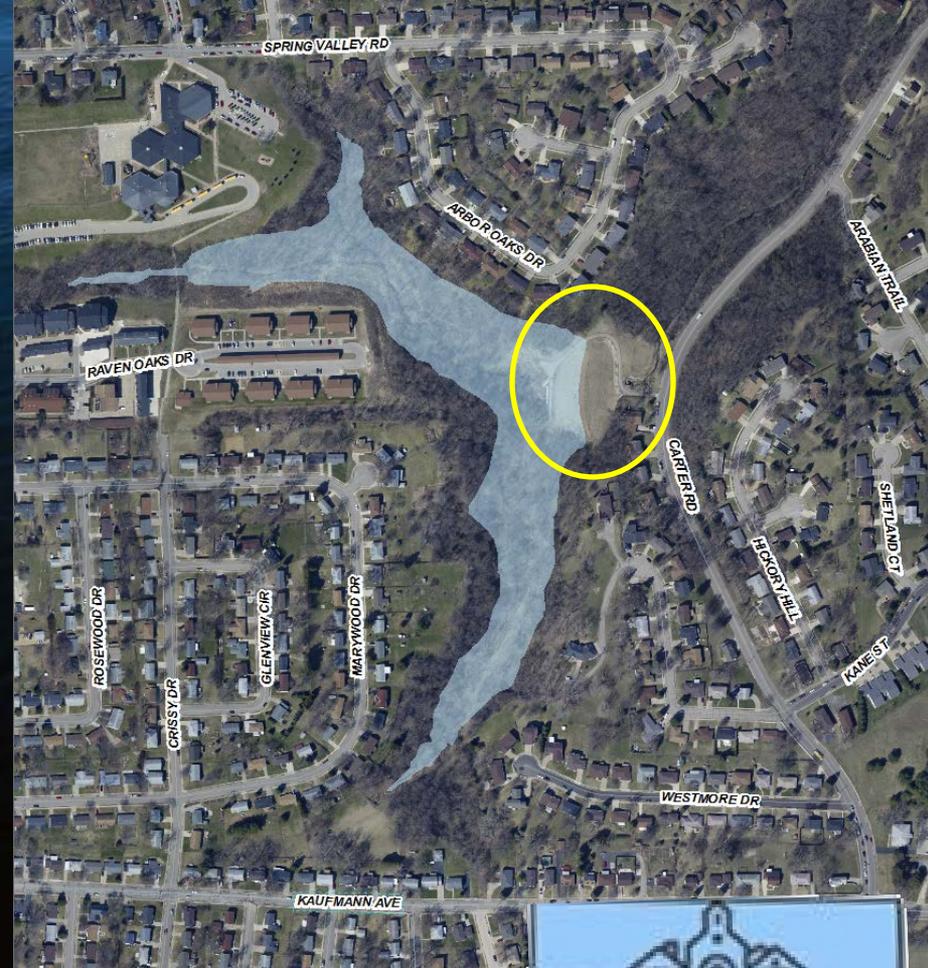


Carter Road Detention Basin

Before



After



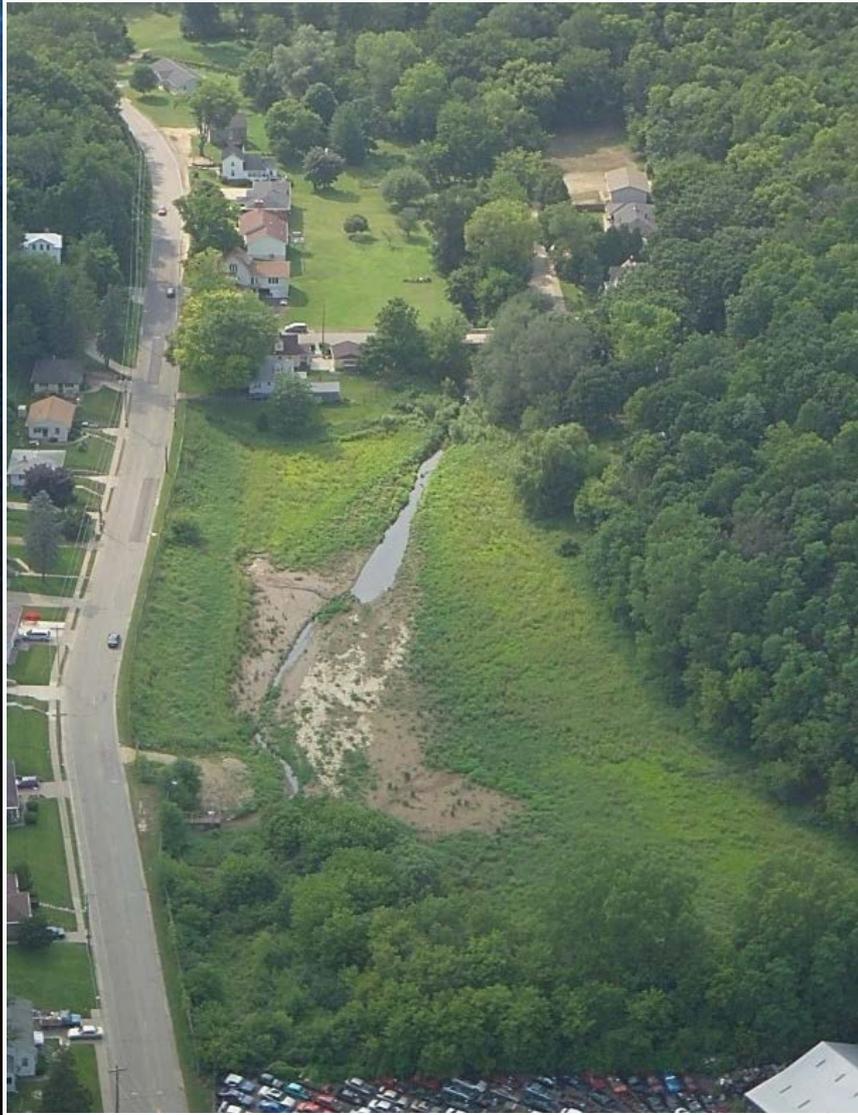
Carter Road Detention Basin

Preservation of 12
Acres of wooded,
riparian landscape

Who does this
interest?



W. 32nd Street Detention Basin



Before



After

W. 32nd Street Detention Basin

- ❖ Preservation/enhancement of 6.2 acres of riparian landscape
- ❖ Creation of an additional 10.5 acres of riparian landscape



Bee Branch Watershed Flood Mitigation Project

The combined phases will:

- ❖ Reduce the volume of stormwater,

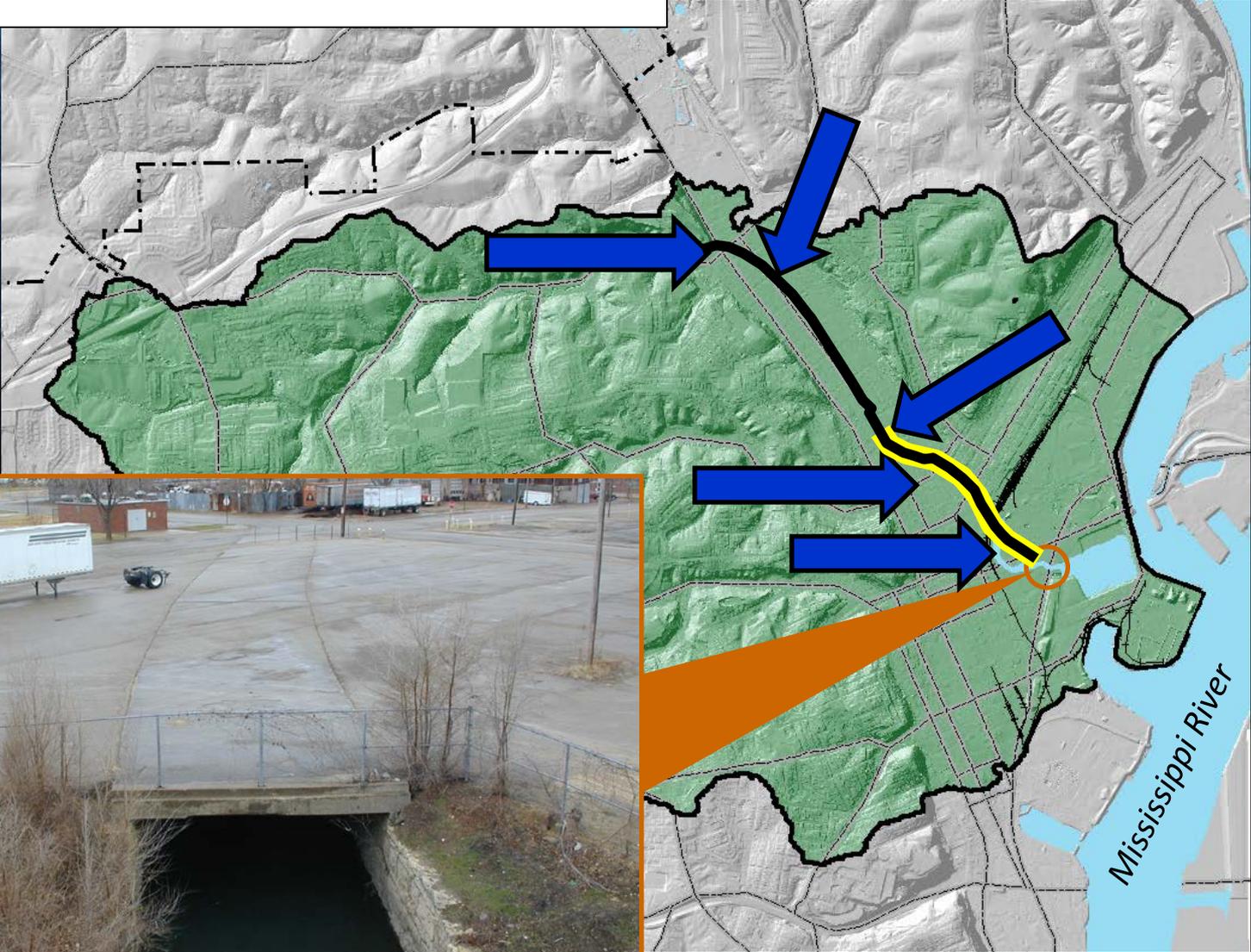
- ❖ Slow the rate and timing of stormwater flow through the upper reach of the watershed.

Conveyance

- ❖ Increase safe stormwater conveyance through the flood-prone area.



Bee Branch Sewer (1910)

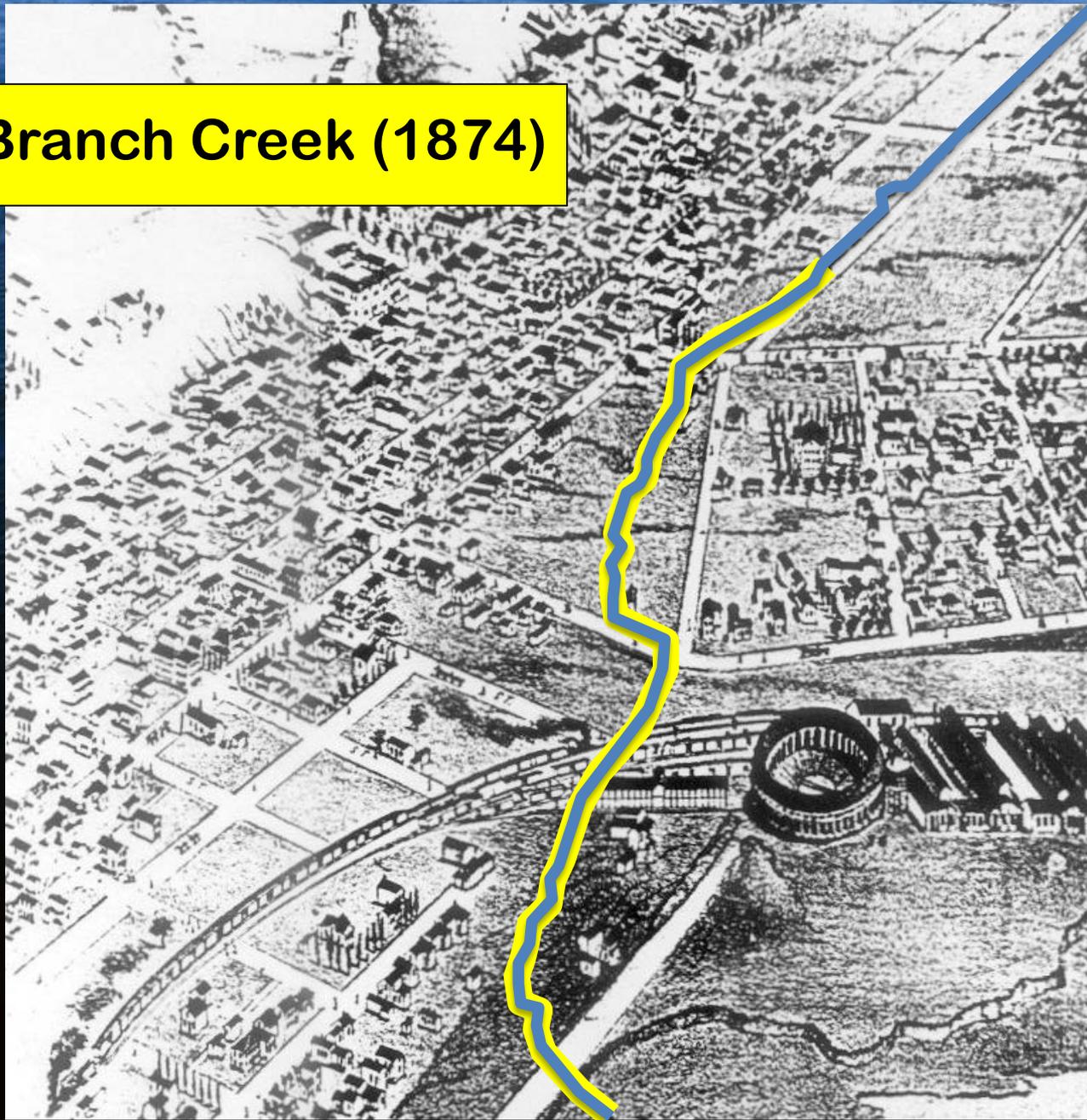


Who does this interest?

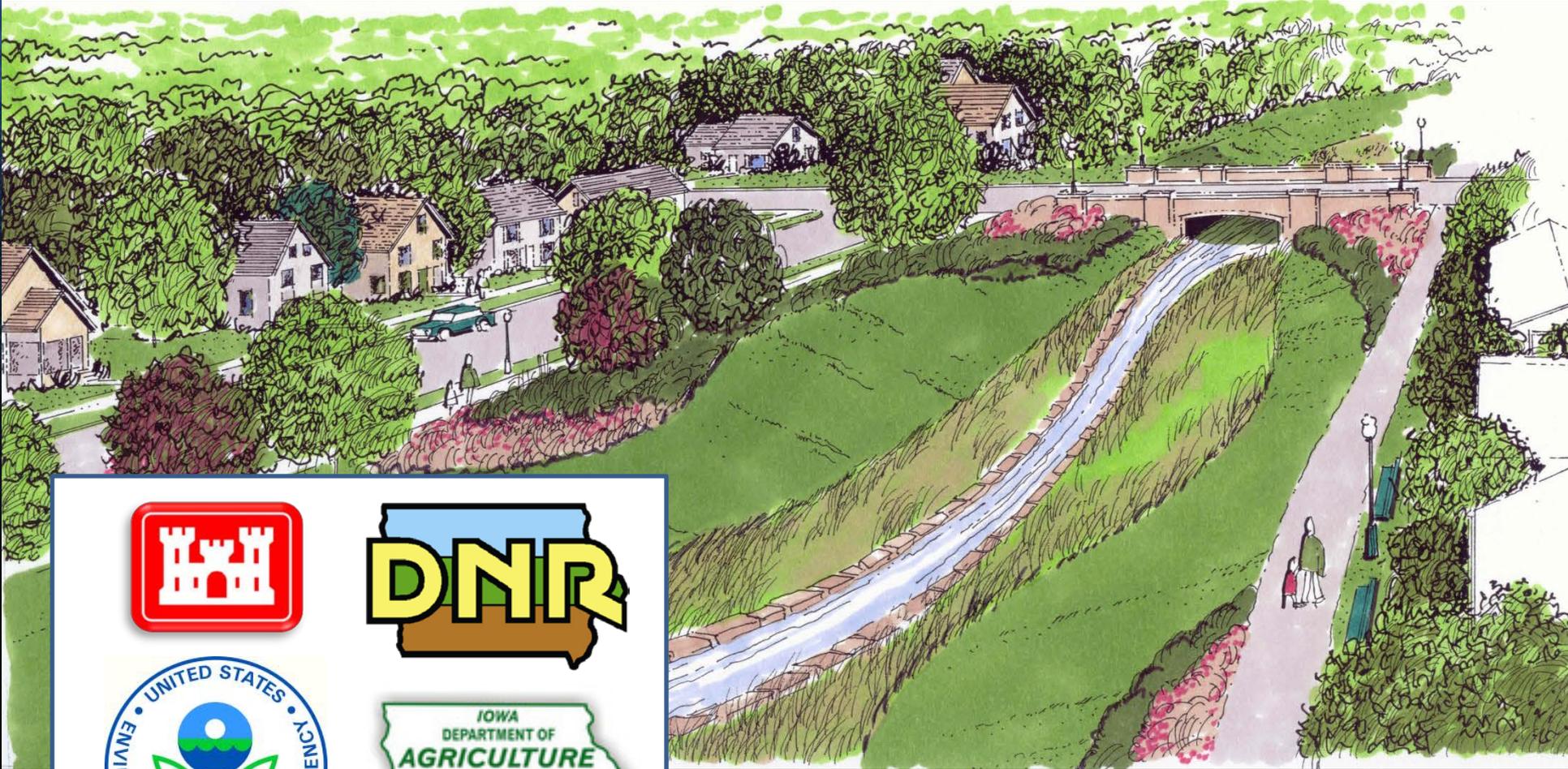


American
Concrete Pipe
Association

Bee Branch Creek (1874)

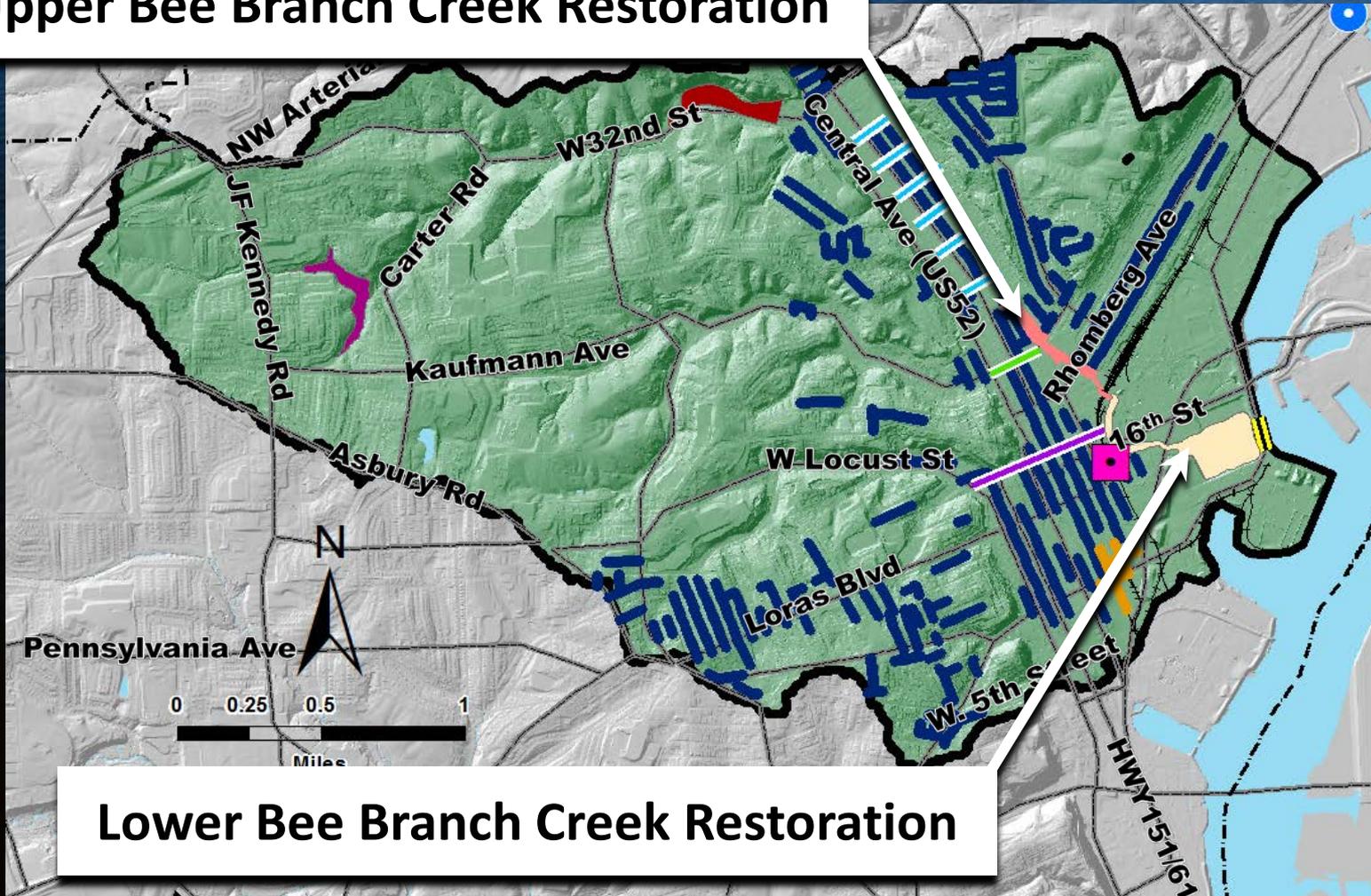


Who does this interest?



Bee Branch Creek Restoration

Upper Bee Branch Creek Restoration



Lower Bee Branch Creek Restoration

Lower Bee Branch Creek Restoration



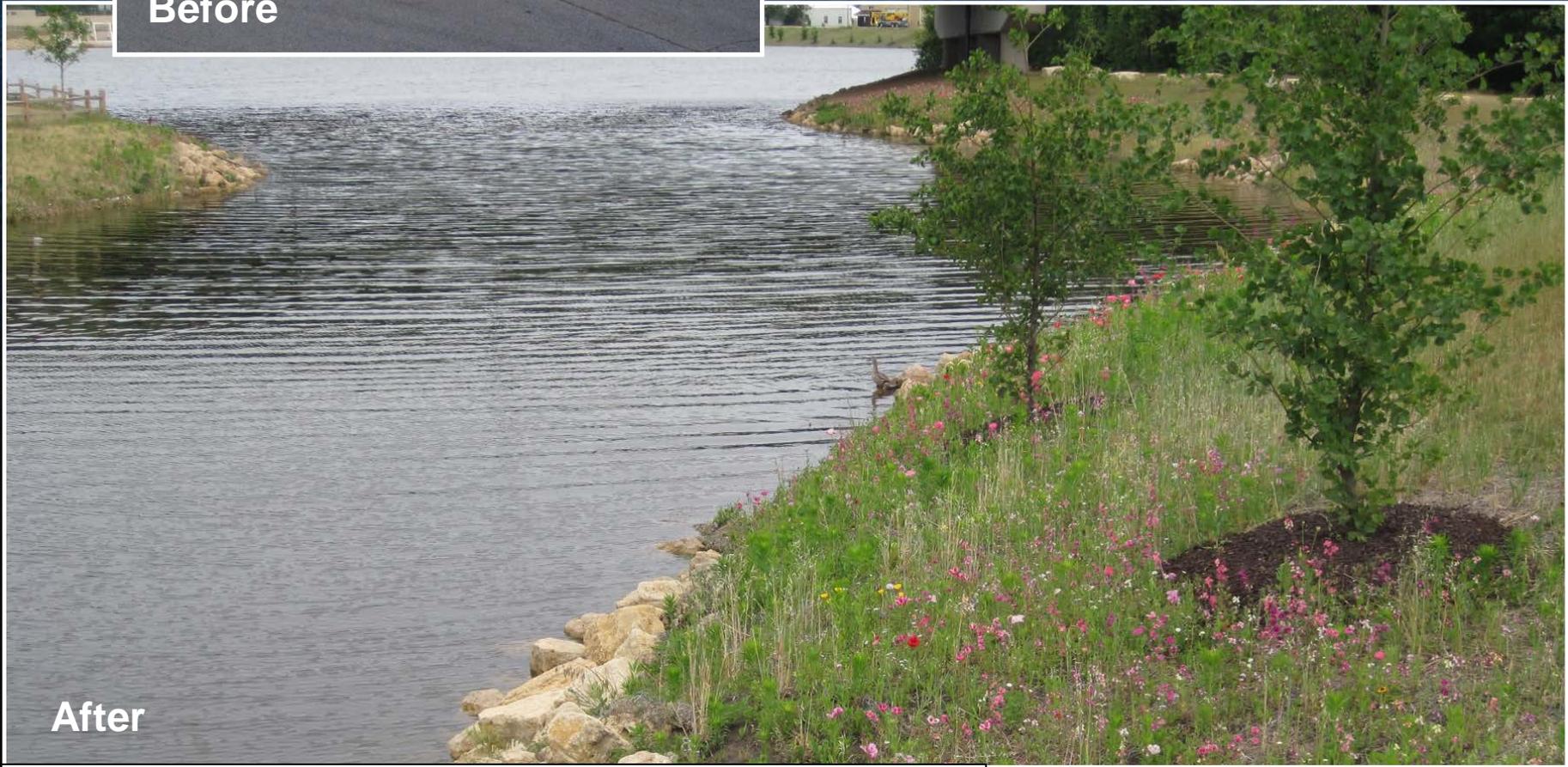
Looking east from Sycamore Street

Lower Bee Branch Creek Restoration

Who does this
interest?



Before



After

Looking east from Sycamore Street

Biodiversity and Habitat Creation

June 2014 fish count:

15 fish species from
7 families!

Who does this
interest?



Biodiversity and Habitat Creation



Who does this
interest?



Biodiversity and Habitat Creation



45 bird species

Who does this
interest?

Biodiversity and Habitat Creation



Who does this
interest?



Lower Bee Branch Creek Restoration

Replace...



Looking northwest from 15th Street

Lower Bee Branch Creek Restoration

Did you know that the corners of square pegs can be rounded?



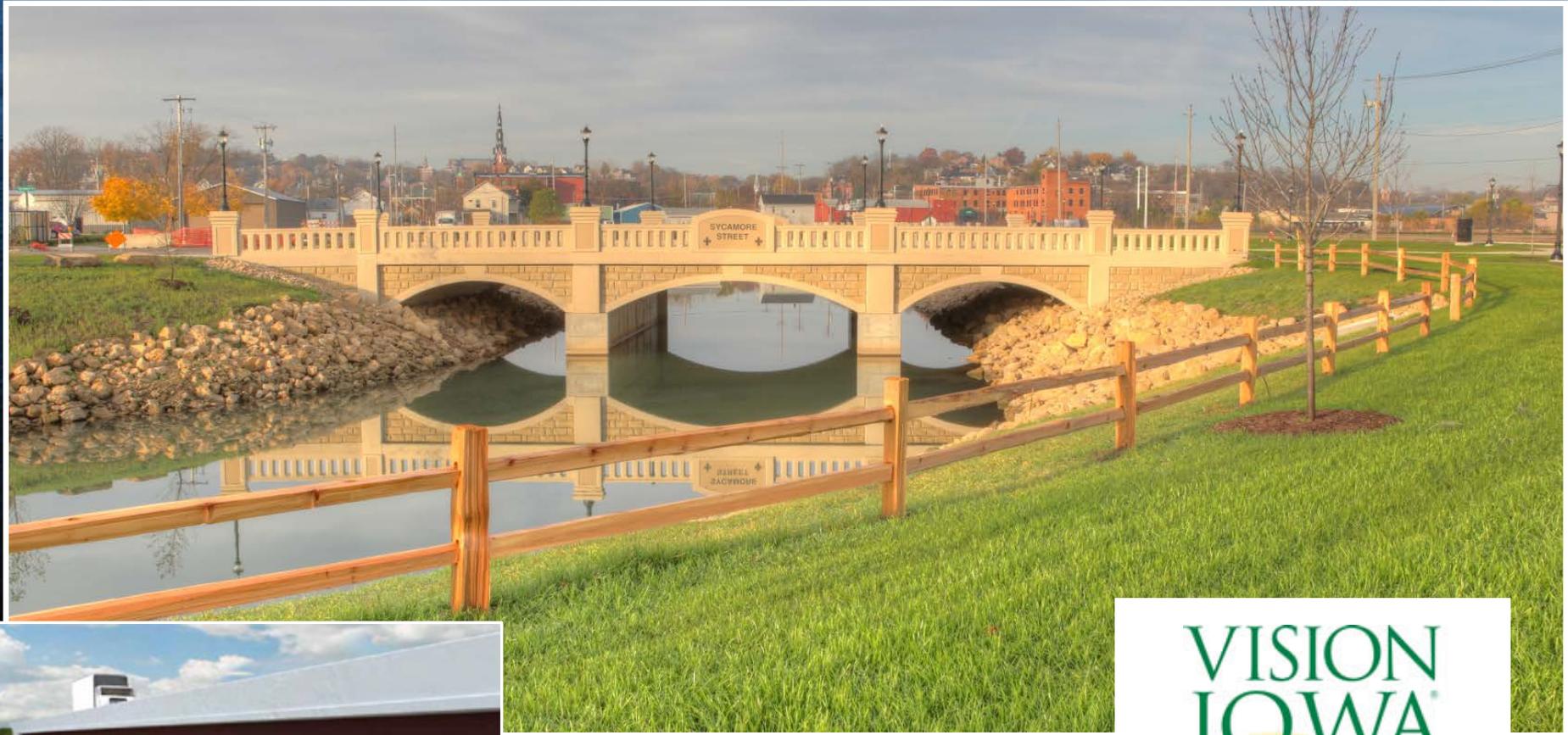
After



Before

Looking northwest from 15th Street

Lower Bee Branch Creek Restoration



ENHANCED BRIDGES

Recreation & Transportation Alternatives



U.S. Department of Transportation
**Federal Highway
Administration**

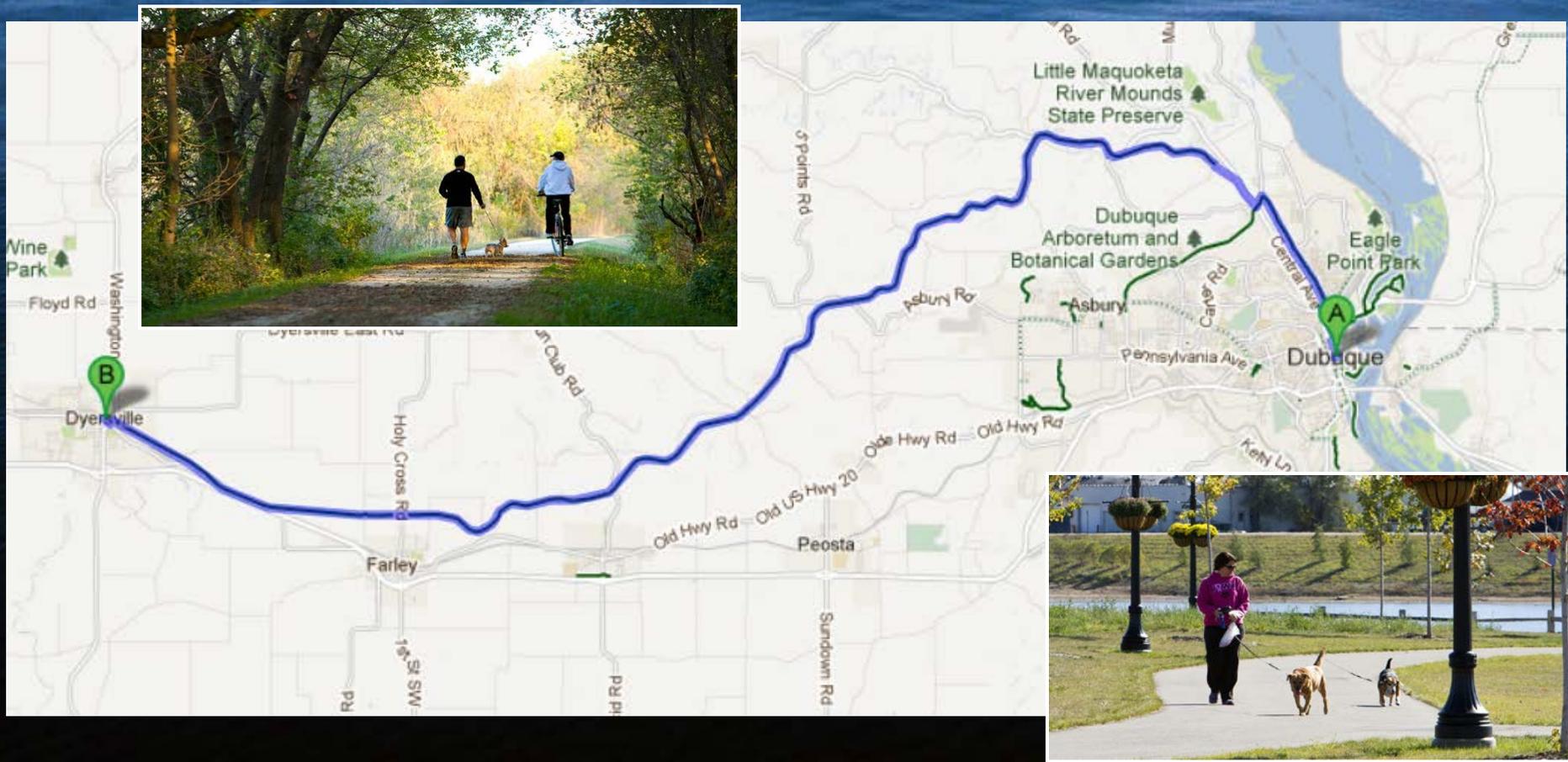


**Iowa Department
of Transportation**



Who does this interest?

Recreation, Tourism, & Transportation Alternatives



Who does this interest?

Recreation, Tourism, & Transportation Alternatives



U.S. Department of Transportation
**Federal Highway
Administration**



**Iowa Department
of Transportation**

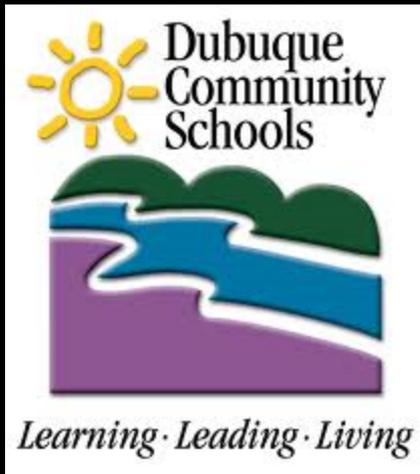


**VISION
IOWA**

Who does this interest?

Connecting with Nature

Audubon School



**Outdoor Classroom /
Amphitheater**

Project Funding

U.S. EPA Clean Water SRF	\$39,604,257
U.S. EPA Clean Water SRF Sponsorship Program	\$9,416,795
U.S. EDA Disaster Relief Grant	\$1,227,138
U.S. DOT TIGER Grant	\$5,600,000
State I-Jobs II Grant	\$3,965,500
State RECAT Grant	\$2,250,000
U.S. DOT National Scenic Byways Grant	\$1,000,000
State Recreational Trail Grant	\$100,000
Dubuque Metropolitan Area Transportation Study	\$640,000
General Obligation Bonds	\$48,227,604
Private Donations	\$165,244
Sale of Assets and Land	\$336,358
Stormwater Utility Fees	\$14,394,096
State Flood Mitigation Sales Tax Increment	\$98,494,178
Table adjustment for SRF loan repayment	\$(24,491,634)
Total Project Funding	\$200,929,536

Project Partners



Project Partners

Always room for more...

*Partnering to transform a
watershed plan into a
watershed reality:
the Bee Branch Watershed
Flood Mitigation Project*



Deron Muehring, Civil Engineer
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dmuehrin@cityofdubuque.org

www.cityofdubuque.org/beebranch



facebook.com/beebranchdbq



twitter.com/beebranchdbq

Water Resource Restoration Sponsored Projects



INVESTING IN IOWA'S WATER
www.iowasrf.com

SRF Background

- In Iowa, the SRF Program is jointly administered by Iowa Department of Natural Resources (DNR) and Iowa Finance Authority (IFA)
- Primary source of funding for municipal water and wastewater infrastructure projects





1989 - 2002

**LOW-INTEREST
LOANS FOR**

**Water and
wastewater
infrastructure
only**



2003 - Present



Nonpoint Source



- Loans
- Linked Deposits
- Loan Participations
- Green Projects /
Loan Forgiveness
- Sponsored Projects



SRF for Nonpoint

Loans to farmers, livestock producers, cities, watershed organizations, rural homeowners, landfills and others to protect or restore water quality



\$178 million since 2003



INVESTING IN IOWA'S WATER
www.iowasrf.com

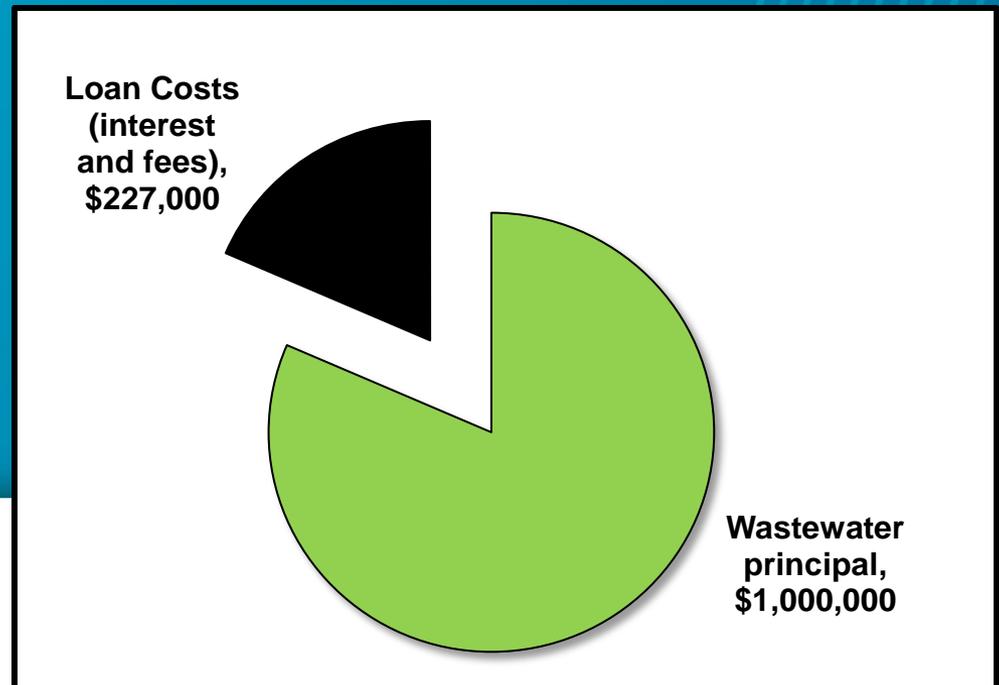
WRR Sponsored Projects

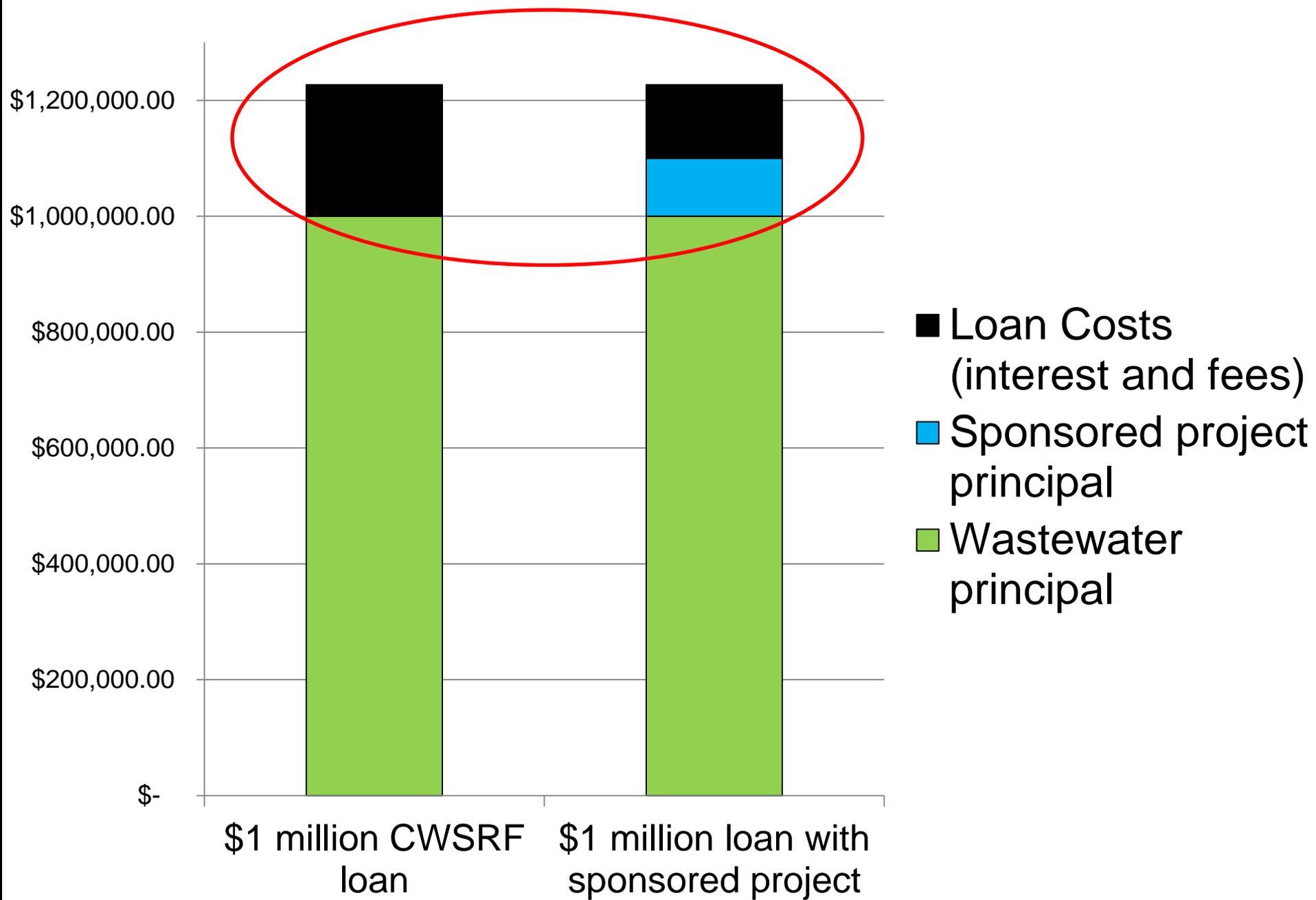
- Created by Ohio EPA
- Iowa first explored doing sponsored projects back in 2005
- Changes had to be made to the Iowa Code
 - sewer revenues could only be used for the utility
- Two types of projects:
 - Non-point project within city
 - City partners with a third party for project in watershed



Typical CWSRF Loan

- City borrows **\$1,000,000** for sewer project
- City makes annual principal and interest payments on loan for 20 years
- With interest and fees, the city repays **\$1,227,000** over the life of loan





Sponsored Project Funds

- Current interest rate is 1.75%
- Up to 1% of interest can be used for non-point source project (interest rate will not go below .75%)
- Approximately \$100,000 per \$1,000,000 borrowed

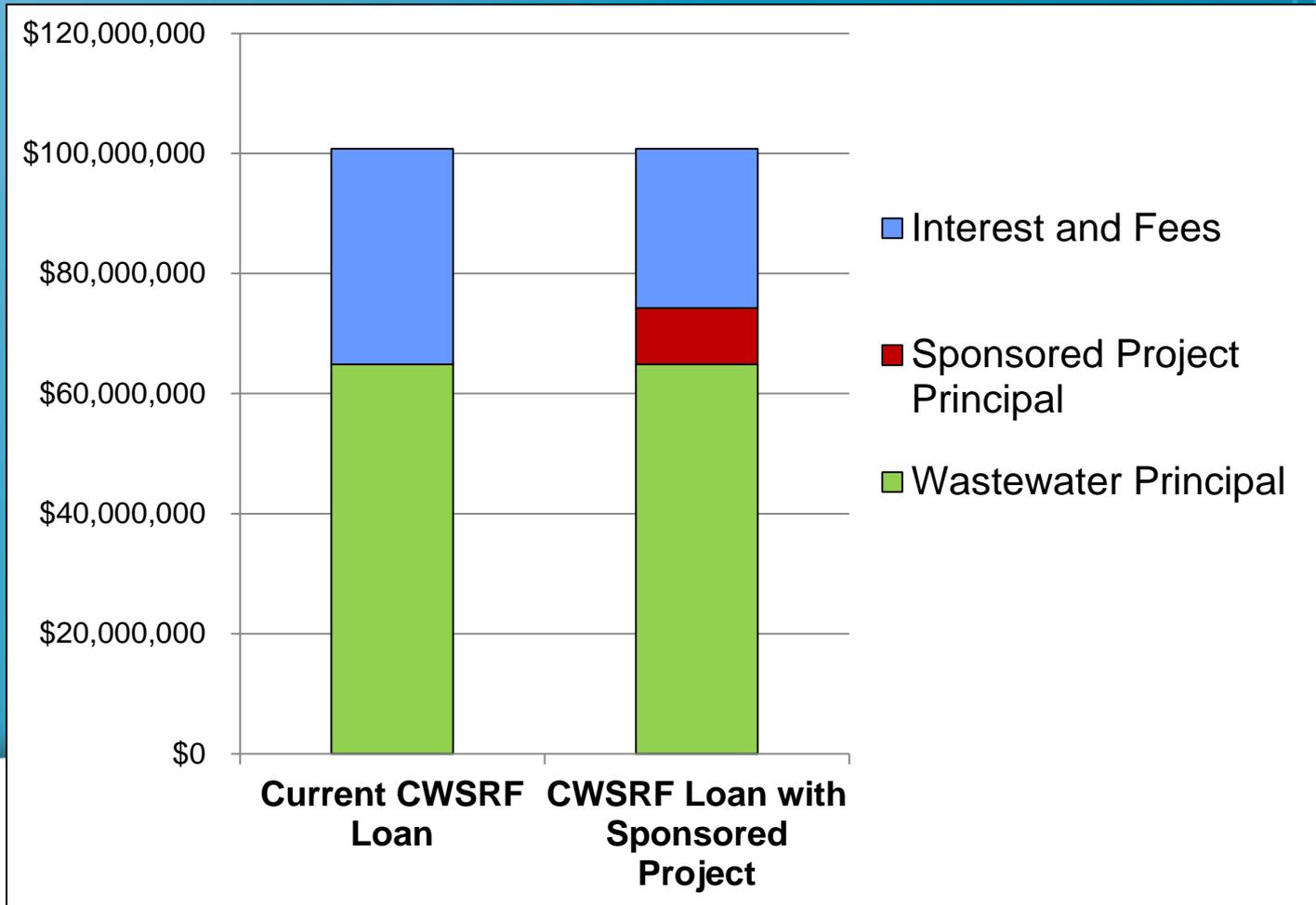


CWSRF Loan with Sponsored Project

- City applies for both traditional wastewater project and non-point sponsored project
- City borrows **\$1,000,000** to pay for sewer system upgrades PLUS amount equivalent to up to 1% of interest (about **\$100,000**) for a total of **\$1,100,000**
- There is only one loan
- City makes annual principal and interest payment for 20 years. The interest rate is reduced on the loan so the amount repaid by the city is **\$1,227,000**



Dubuque Pilot Project



FY 2014 Projects

23 projects for \$13M in NPS projects

Projects included:

Permeable paving

Grassed waterways

Constructed wetlands

Restoration of riparian buffer and flood plain

Stream bank stabilization

Conservation buffers

Rain gardens/bioswales



FY 2015 Applications

- Applications are now taken twice a year
 - March and September
- \$10 million allocated for FY15 projects



Application Requirements

The project must improve water quality in the watershed in which the publicly owned wastewater utility is located.

- Applicants must have a watershed plan
- Applicants must include a water quality organization in project development, planning and design
 - Soil and Water Conservation Districts
 - local watershed organizations
 - County Conservation Boards



Pre Application Consultation

This consultation is conducted by conference call and covers:

- Applicant eligibility based on status of CWSRF infrastructure loan
- Water resource proposed for protection or restoration
- Status of watershed assessment
- Project partners, including required participation of a conservation organization
- Eligibility of potential practices
- Approximate project schedule and budget



Watershed Plan

- Identification of impacted water body and its watershed
- Assessment of water quality issues
- Project goals and objectives
- Evaluation of alternatives
- Description of practices to be implemented
- Expected water quality outcomes
- Proposed project schedule and milestones
- Proposed evaluation measures and procedures



For More Information

www.iowaSRF.com

www.iowasrf.com/about_srf/sponsored-projects-home-page/

The screenshot shows a web browser window displaying the 'Sponsored Projects Home Page' on the Iowa State Revolving Fund website. The browser's address bar shows the URL http://www.iowasrf.com/about_srf/sponsored-proj. The page features a navigation menu with 'Topic', 'Program', and 'Audience' tabs. The main content area is titled 'Sponsored Projects Home Page' and includes a 'SHARE' button with social media icons. Below the title, there is a section for 'Water Resource Restoration Sponsored Projects' with a list of links: 'FY 2016 Application Packet -- next deadline March 2, 2015', 'FY 2015 Program Summary', 'FY 2013-2014 Program Summary', and 'Sponsored Project Handout'. A sidebar on the left contains the SRF logo and a menu with 'About SRF', 'News', 'SRF Resources', and 'FY 2016 Sponsored Projects'. The footer of the page includes the text 'The State Revolving Fund: Investing in Iowa's Water' and a search bar. The Windows taskbar at the bottom shows the system clock as 2:43 PM on 10/29/2014.



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