



INVESTING IN IOWA'S WATERSHEDS

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INVESTING IN IOWA'S WATER
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Topics

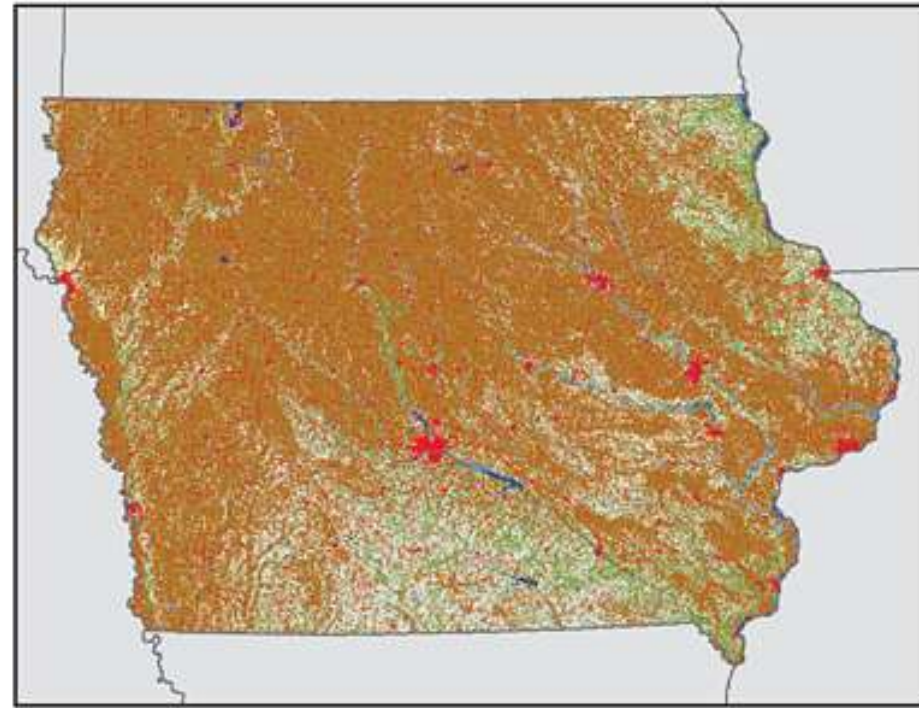
- Iowa's nonpoint source pollution problems
- SRF program background
- Water Resource Restoration Sponsored Projects
- Prairie Pothole Joint Venture



Iowa's Landscape Transformed



(A)



(B)

Forest/woodland
Brush/scrub
Grassland
Barren

Cropland
Pasture/hay
Wetland
Water

Urban/settled

“Nowhere have landscape and habitat changes been more dramatic than in Iowa.”

--U.S. Geological Service



Source: NRCS



Clean Water SRF Background



1989 - 2002

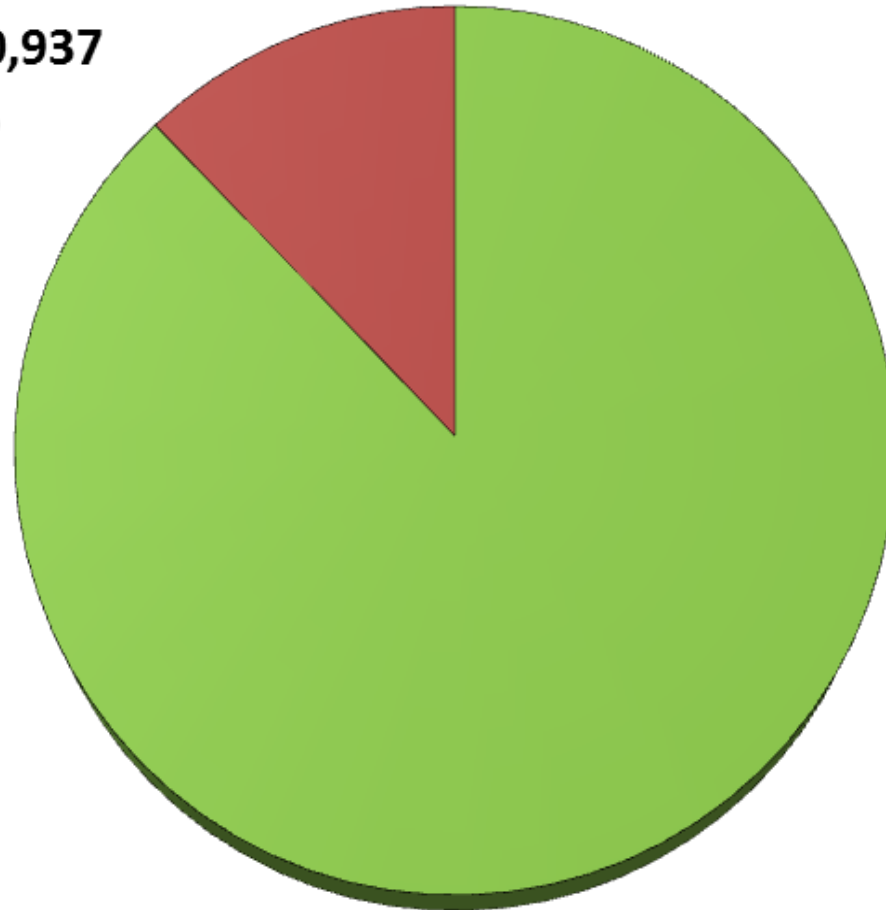
**LOW-INTEREST LOANS
FOR
wastewater infrastructure
only**

2003 - Present

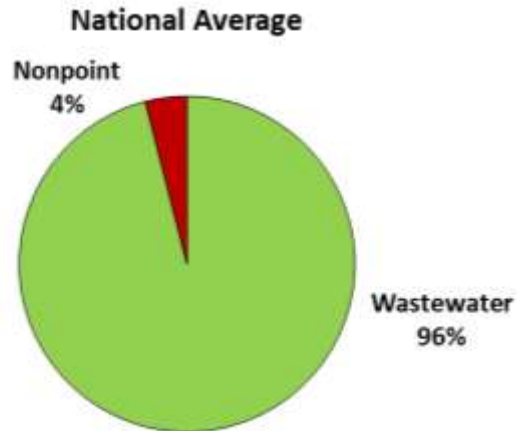


Cumulative Funding of Wastewater vs. Nonpoint

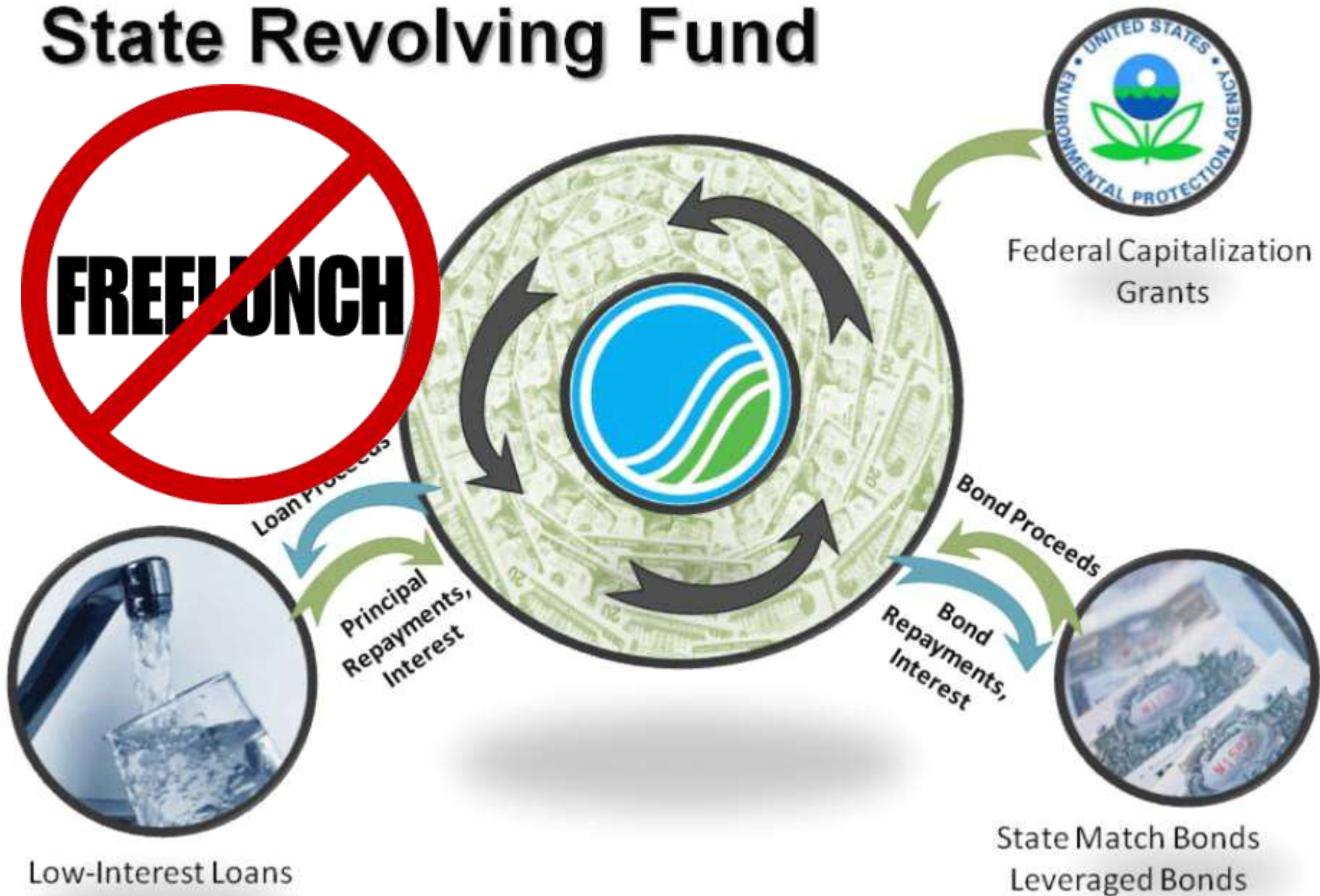
Nonpoint
\$242,260,937
12%



Wastewater
\$1,729,751,013
88%



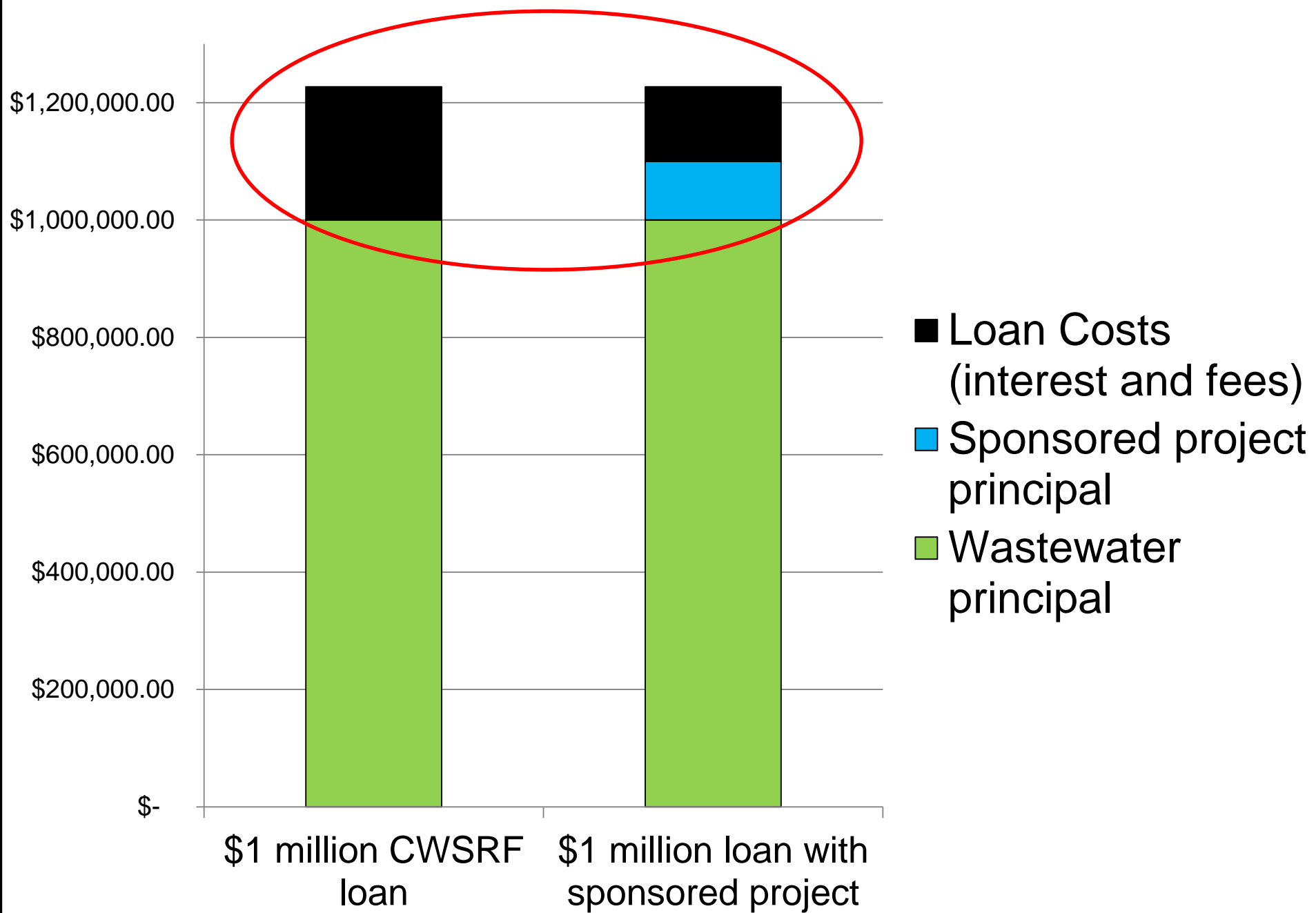
State Revolving Fund



Water Resource Restoration Sponsored Projects

- A financing tool to address nonpoint source problems
- Iowa legislature allowed the use of sewer revenues to finance locally directed, watershed-based projects
- Implemented through the Clean Water SRF



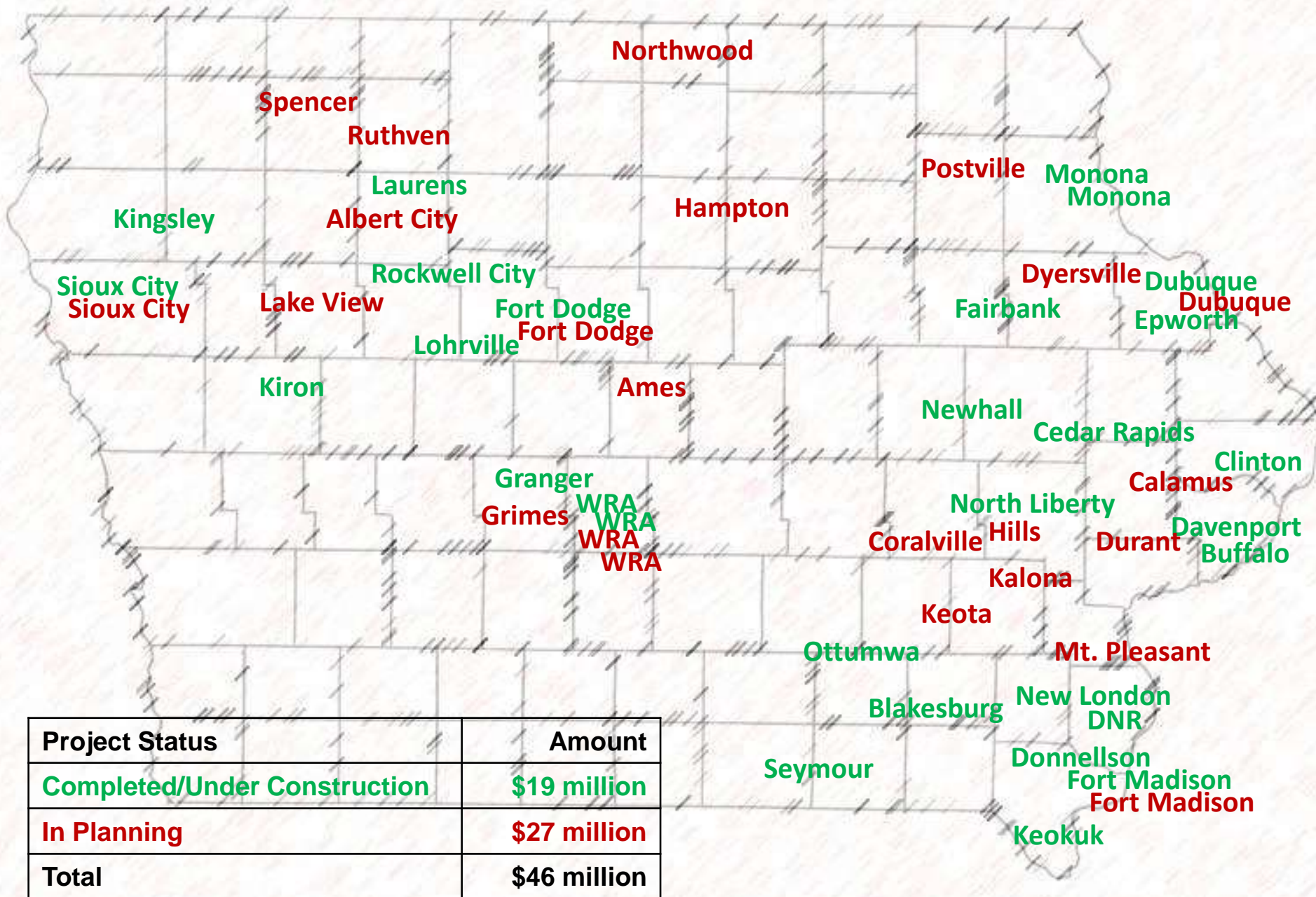


Sponsored Projects

- Started with pilot project in 2013 with City of Dubuque on Mississippi River
- Opened up to other communities in 2014
- Set aside \$10 million to \$15 million per year
- Interest rate hit to the Clean Water SRF – how much interest can we afford to lose?
- Take applications twice per year



Project Status as of November 2016 – Water Resource Restoration Sponsored Projects



Project Status	Amount
Completed/Under Construction	\$19 million
In Planning	\$27 million
Total	\$46 million

City of Monona (NE IA, pop. 1500)



- **Runoff from gravel parking lot at municipal pool polluting creek in Turkey River Watershed**
- **Permeable paving infiltrates storm water and reduces runoff**
- **Wastewater loan \$2.75 million**
- **Sponsored project amount \$245,000**

City of Sioux City (NW IA pop. 82,000)



- Restored native prairie and oak savanna in city park
- Stabilized eroding streambanks on creek leading to Missouri River
- Multiple wastewater loans
- Sponsored project amount \$1,440,000

City of Fort Dodge (Central IA, pop. 24,000)



- Multiple loans, multiple sponsored projects
- Stream corridor restoration in city park with storm water management
- Support for Badger Lake watershed project
- Dam removal on Des Moines River is next project
- Loan amounts \$49 million
- Sponsored project budget approx. \$3.9 million



City of Northwood

(practically in Minnesota, pop. 2,000)

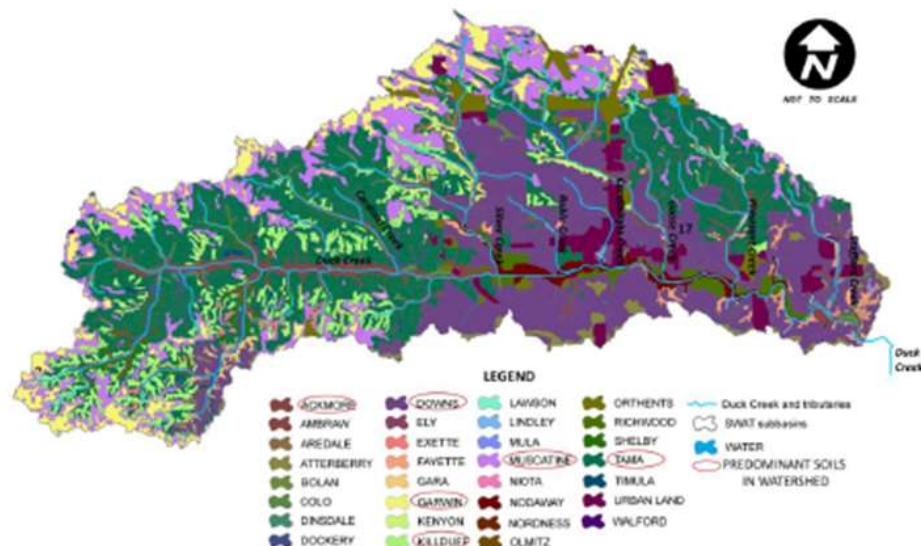
- Supporting installation of nutrient removal wetlands on agricultural landscape
- Hoping to generate water quality credits for future use
- Wastewater treatment upgrade \$8.9 million
- Sponsored amount \$890,000
- Other funding from Iowa Department of Agriculture and Land Stewardship and local drainage district



Program Outcomes

- Demonstrate nonpoint source water quality practices such as green infrastructure
- Encourage watershed-based planning and partnerships
- Build technical expertise in Iowa's design and construction community

Figure 5.2 Duck Creek Watershed Map. soils



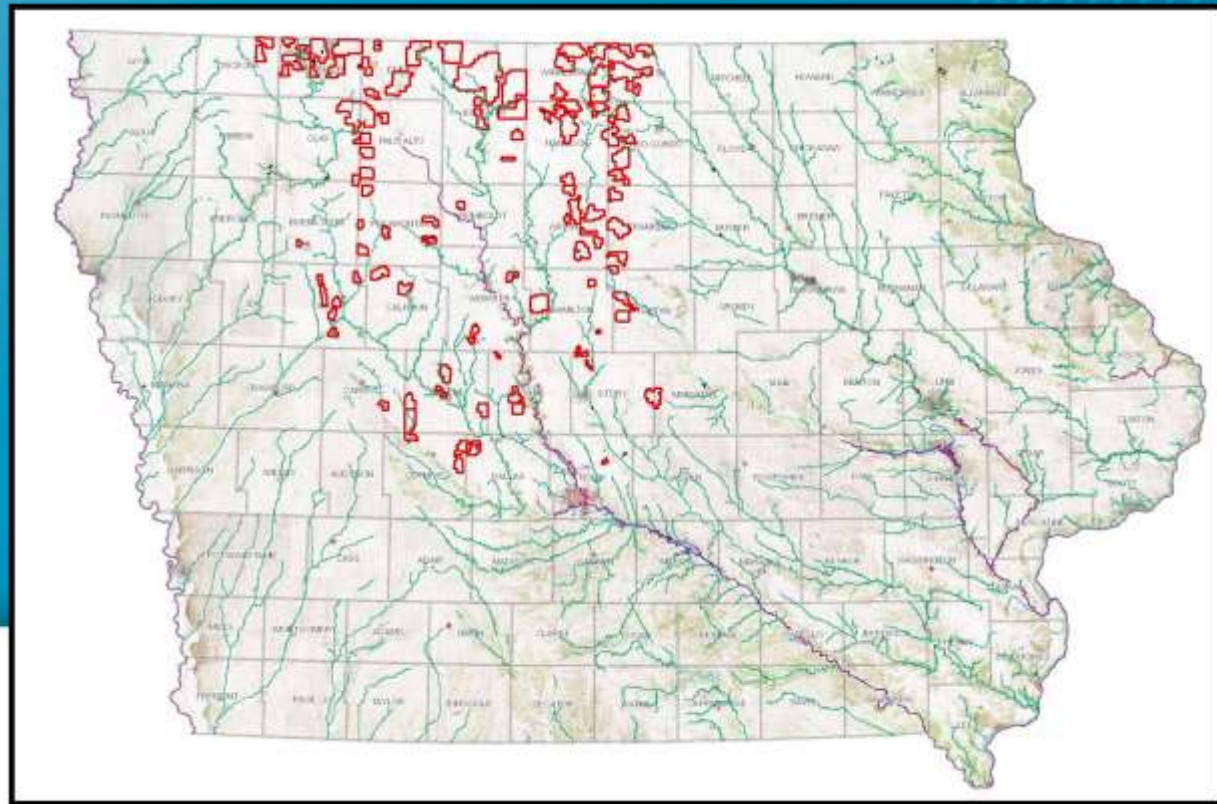
Wetland Restoration in the Prairie Pothole Region

- Originally 100,000 acres of prairie potholes across the Great Plains
- Natural shallow lakes and large marshes
- Provided ecosystem services – wildlife habitat, water quality
- In Iowa, 90% of potholes have been drained for agricultural production



Prairie Pothole Joint Venture

- In Iowa, DNR and Fish and Wildlife Service have identified 100 priority areas for wetland restoration
- Must be located in historic high density wetland landscape with high potential for restoration of ecological functions



SRF Provides a Financing Tool

- Land acquisition of priority parcels is unpredictable
- Local, state, and federal partners may not have funding when land comes on the market
- Iowa Natural Heritage Foundation purchases land using SRF loan through participating lender, often at 0%
- INHF holds land for 3-5 years while public agency assembles funding

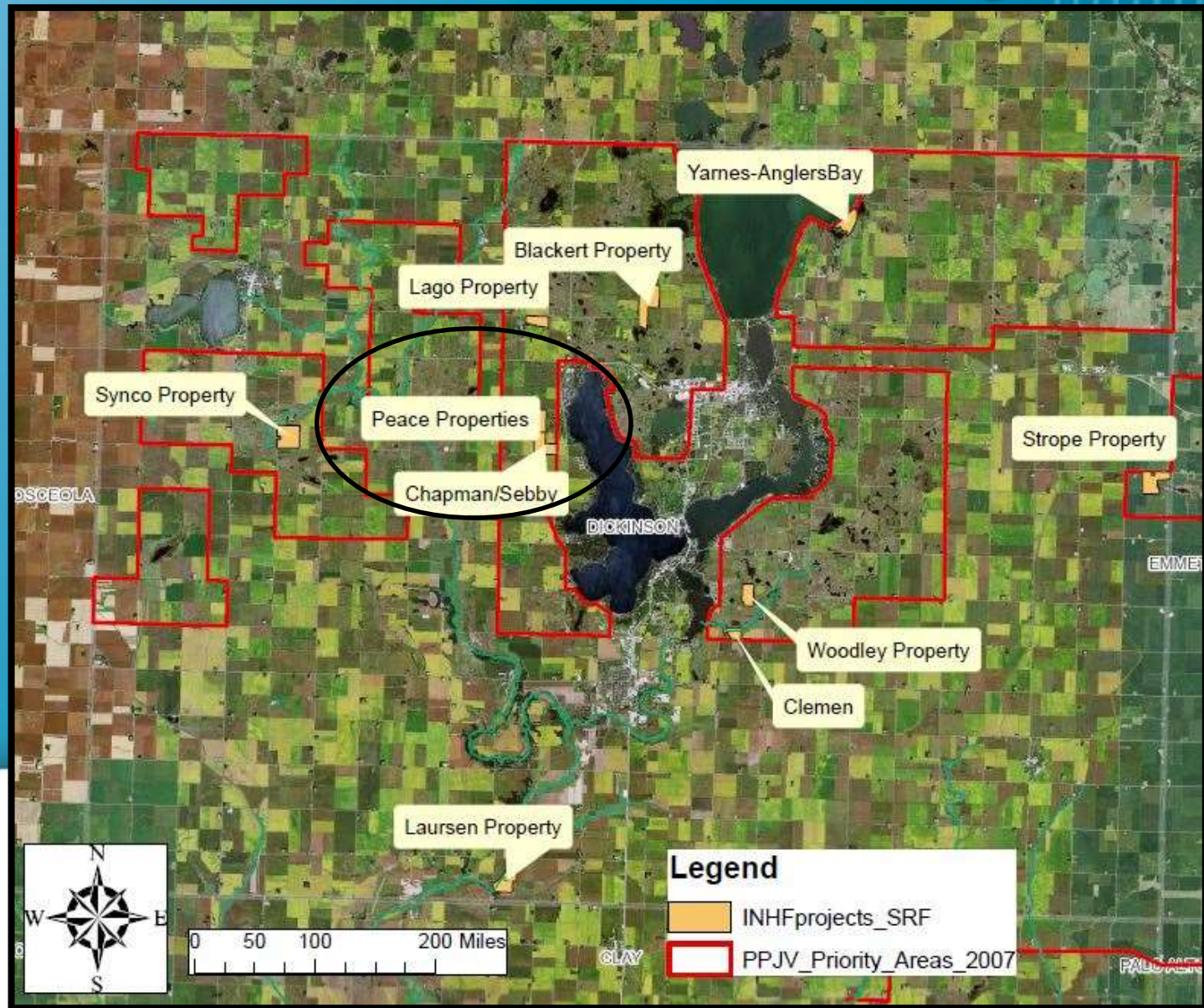


Rolling Line of Credit for PPJV

- CWSRF sets aside funds annually for upcoming loans at 0% interest
- In 2008, a \$10 million rolling line of credit good for 10 years was approved for PPJV loans
- As loans are repaid, more dollars available for additional loans
- Provides certainty and flexibility



PPJV – Dickinson County



West Okoboji Lake

- One of Iowa's Great Lakes – natural glacial lakes
 - High Quality Resource Water
 - Drinking water source
- “The primary threats to the region's water quality are from agricultural nutrients, soil erosion, human and livestock waste, storm water contaminants, urban development and loss of natural wetlands.”



West Okoboji Lake

Before acquisition and restoration



After acquisition and restoration

West Okoboji Lake



Two parcels of land were purchased in 2010 for a total of \$1,860,000. Loans have already been repaid and the land transferred to DNR ownership for permanent protection. Total cost for land, easements, and restoration = \$3,000,000.

West Okoboji Lake

- **Funding Sources for loan repayment and restoration:**
 - U.S. Fish and Wildlife Service - federal
 - Waterfowl Production Areas (WPA)
 - North American Wetlands Conservation Act (NAWCA)
 - EPA 319 Program - federal
 - Iowa Lake Restoration Program – state
 - Dickinson County SWCD – state
 - Iowa State Duck Stamp - state
 - Dickinson County Water Quality Commission – local
 - Iowa Natural Heritage Foundation – private nonprofit (donations)
 - LaVonne Foot Estate - private



TRAVEL GUIDE

IOWA

traveliowa.com

Questions?

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