ENVIRONMENTAL POLICY INNOVATION CENTER

SAND COUNTY FOUNDATION

EXECUTIVE BRIEF

SOLUTIONS FOR CITIES:

How Municipalities and Water Utilities Can Pay for Water Quality Improvements on Farms

For decades, America's cities, towns, public water utilities, and private companies have been working to clean up water pollution so that water is safe to drink, lakes are safe to swim in, and our ecosystems are healthy. In many parts of the country, we still have a long way to go. According to the U.S. Environmental Protection Agency (EPA), 46% of U.S. rivers and streams and 21% of lakes and reservoirs are currently impaired.

Municipalities are not only faced with the challenge of paying for efforts to improve water quality, but also have to update and replace aging infrastructure, prepare for natural disasters like flooding, and respond to new and emerging drinking water contaminants. The EPA estimates that these costs amount to a 20-year investment of $472.6 billion for drinking water systems and $271.0 billion for wastewater systems.

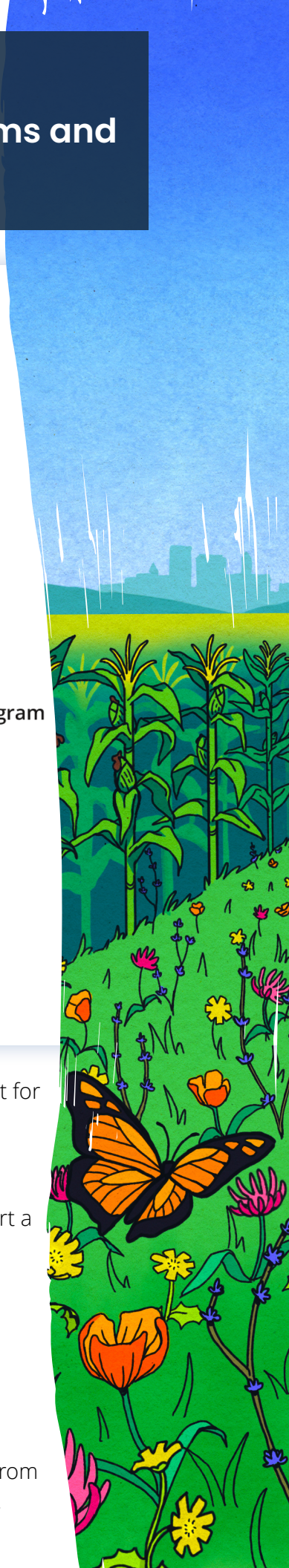
While new technologies and treatment facilities within a city's border will continue to be the principle strategy to address pollution, new opportunities and momentum have appeared that expand the use of natural and watershed-scale activities to meet water quality goals. Planting trees reduces pollution. A 'green' rooftop on an urban skyscraper soaks up stormwater. A farm with carefully planted buffers on the downhill side of a corn field filters runoff.

Under a new approach cities or water utilities can finance voluntary and collaborative efforts by farmers, dairies, and ranchers to prevent nutrient pollution. In exchange, the city funding the work can use the credit under their permits for those water quality improvements. Dozens of programs are or soon will be making use of these approaches to achieve water quality goals.

Over the last year, the Environmental Policy Innovation Center and Sand County Foundation worked to document 20 ways that cities, towns, and water utilities could fund or finance water quality improvements on farms. Our report: "Strengthening Urban-Rural Connections: How cities and water utilities can pay for water quality improvements on farms" provides a summary and brief case studies of each of those approaches.

Twenty ways cities, towns, and water utilities can pay for water quality improvements on farms and get regulatory credit for doing so.

Funding Sources		**General Fund Appropriations**
		New Taxes
		Stormwater Utility Fees
		Special Purpose District
		Source water or Watershed Protection Fee
		Permit Review, Development Inspection, and Special Fees
		Innovative Revenue Generating Approaches
	Financing Sources	Municipal Bonds
		Drinking Water State Revolving Fund
		Clean Water State Revolving Fund
		Water Infrastructure Finance and Innovation Act
		USDA Rural Development Water and Waste Disposal Loan & Grant Program
		Private Finance
	Procurement Methods	Public Private Partnerships
		Pay-For-Success Contracts/Bonds
		Direct Procurement
		Joint Benefits Authority
		Pooled Water Fund
		Water Quality Trading
		Revolving Water Fund



These 20 strategies offer options that could allow almost every city and town to support for water quality work on farms to meet its water quality goals and compliance obligations. Our report describes three types of approach to pay for this work:

- **FUNDING** refers to the provision of "one-way" financial resources to support a need, program, or project. This term is used when 1) a utility fills the need for funds by generating its own internal revenues and reserves. The use of rate revenues, cash reserves, and fees is referred to as "pay as you go" or "Pay Go" funding. 2) The recipient obtains a grant or similar form of funds that do not require repayment and do not carry an interest expense.

- **FINANCING** refers to the "two-way" acquisition of money for a program or project. The term financing is used when the monetary resource need is filled from borrowed money where principal and interest are owed to the source of funds.

This includes loans, municipal bonds, and other sources of monetary resources that require repayment of principal and interest. Typically, these resources will tie to a capital asset (like a farm BMP) and will not be available for supporting ongoing operational expenses.

- **PROCUREMENT** covers the processes involved in the sourcing of, negotiation for, and selection of goods and services. Cities are extremely familiar with routine purchasing of supplies and of the use of Requests for Proposals and competitive bidding for services, but there are a growing number of procurement options like Pay for Success contracting and P3s that offer new ways to fund water quality work side by side with the procurement of it.

FULL REPORT:

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"Strengthening Urban-Rural Connections: How cities and water utilities pay for water quality improvements on farms," Environmental Policy Innovation Center, Washington DC & Sand County Foundation, Madison, Wisconsin.