



New Report

Working with the Market: Economic Instruments to Support Investment in Green Stormwater Infrastructure

Storm and Stream Solutions and Willamette Partnership published a report, in partnership with WEF’s Stormwater Institute, on cost-effective and innovative ways to drive investment & implementation of green infrastructure for stormwater management.

Background Urban stormwater runoff is one of the most significant environmental issues facing communities today. Flooding, water supply, water quality, habitat degradation, and other impacts associated with stormwater runoff are increasing due to ongoing urbanization, a more episodic climatic regime, and rising global temperatures. Communities are in need of cost-effective and innovative ways to address stormwater impacts and meet regulations. A new report, released April 2017, summarizes how stormwater managers can work with market forces, applying “economic instruments” to address these critical issues.

What’s Inside Economic instruments recognize and deliberately work within the economic system to create action or drive investment that meets environmental goals. They include the use of incentives, subsidies, trading, and mitigation (Fig. 1).

Economic instruments are a useful tool for stormwater managers because they can:

- Increase the coverage of green infrastructure on both public lands, private lands, new development, and urban retrofits;
- Provide flexibility and reduce cost for regulated entities trying to meet stormwater requirements;
- Provide a vehicle for both public and private investments; and
- Enhance the efficiency of delivering benefits associated with stormwater infrastructure.

Incentive-based approaches motivate the installation of stormwater controls by offering cost avoidance, financial gain, or program/project support. Stormwater

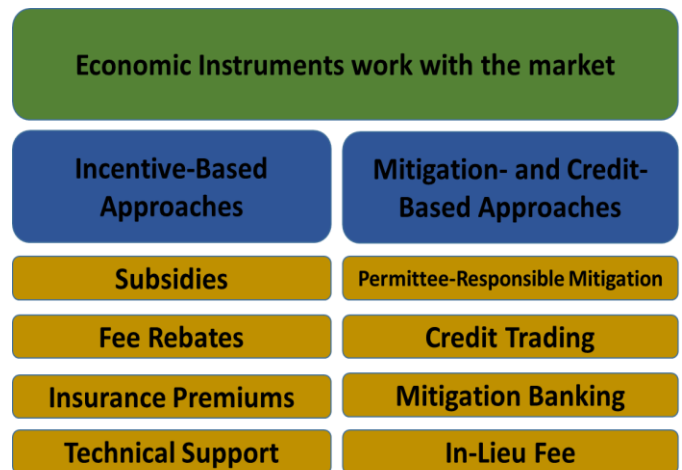


Figure 1. A taxonomy of economic instruments

programs often use rebates, subsidies, or project/logistical support as an incentive for private parties to install green infrastructure.

In **mitigation- or credit-based approaches**, stormwater benefits are quantified as a currency or “credit” and traded between parties to mitigate or offset regulatory requirements. This creates an incentive for pollution controls to be implemented where they are most cost-effective. These programs provide flexibility for regulated parties and create an incentive to develop new, more cost effective methods to reduce pollution and/or control stormwater volume.

While these economic instruments have the potential to attain greater performance and efficiency in green infrastructure investment, policy and programmatic barriers limit their widespread use. These barriers include:

- **Technical Capacity:** The development of a trading or mitigation framework requires specialized skills that many communities do not have. Off-the-shelf tools and resources, such as “road map” guides, templates, or workshops could help small and mid-sized communities engage.
- **Market Size:** Trading areas and units of currency constrict potential market size. Where appropriate, permitting with consistent pollutants and units can open market opportunities.
- **Quantification:** Quantifying pollutant reductions to use as a units of trade is challenging. Standard assessment methods and performance-based investment vehicles can help.

Origins of the Report

In 2016, the National Network on Water Quality Trading gathered over 50 experts in stormwater management and water quality trading to explore these nascent and evolving approaches. This report summarizes the content and take aways from that process. Workshop participants focused on a) the motivations that drive investment in stormwater infrastructure; b) a set of program options that work with market forces for more effective and efficient investment in stormwater infrastructure; c) the issues that limit these approaches; and d) ways to get beyond these hurdles.

If proven effective, we expect economic instruments to become more common elements in stormwater programs across the country.

Next Steps

Storm and Stream Solutions LLC, Willamette Partnership, and WEF’s Stormwater Institute will host a number of events to describe and discuss the report contents including a webinar and presentations at the 2017 StormCon and WEFTEC conferences.

For More Information



Seth Brown
Principal/Founder
Storm and Stream Solutions, LLC
seth.brown@stormandstream.co



Carrie Sanneman
Clean Water Program Manager
Willamette Partnership
sanneman@willamettepartnership.org

National Network on Water Quality Trading

The National Network was formed in 2012 to establish a national dialogue on how water quality trading can best contribute to clean water goals. That includes providing options and recommendations to improve consistency, innovation, and integrity in water quality trading.

Network participants come from diverse backgrounds, representing utility, agriculture, environmental, regulatory, and practitioner communities. The Network hosts collaborative dialogues to discuss and advance the state of knowledge on trading and trading-related topics.

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