



ENVIRONMENTAL IMPACT BONDS

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SOCIAL IMPACT BONDS

A Social Impact Bond (SIB) is not a bond in the traditional sense. It is generally a partnership between government, a private investor, and a nonprofit service provider to fund a social program.

A government agency contracts with a private-sector organization to obtain social services. The organization acts as an intermediary between private investors, who provide capital to pay for the services, and nonprofit service providers, who actually deliver the services.

Government pays the organization based on the program achieving predetermined performance outcomes.

SIBs are currently being used or developed to finance programs in such areas as foster care, homelessness, and recidivism. The first SIB program began in 2010 in the United Kingdom.

OLR Report [2012-R-0472](#) provides more information on SIBs.

ISSUES

What are Environmental Impact Bonds? Can they be used to finance stormwater projects?

SUMMARY

Environmental Impact Bonds (EIBs) are similar to Social Impact Bonds (SIBs), except that they address environmental issues (see side box).

Like SIBs, EIBs generally involve a contracting entity (often a government agency) paying an agreed-upon amount to investors if a project meets certain performance goals. They often monetize future costs savings, meaning an investor's return is based on the amount of savings generated by a particular project. SIBs and EIBs are types of "pay-for-performance" or "pay-for-success" contracts.

According to a 2013 report by David Nicola, published by Duke University's Center for the Advancement of Social Entrepreneurship (CASE) at The Fuqua School of Business ([Environmental Impact Bonds](#)), EIBs could be used to finance stormwater reduction projects such as making "green infrastructure" improvements that remove impervious surfaces or capture stormwater. But we are unaware of any stormwater projects currently financed through EIBs.

Much of this report's information on EIBs is taken from the CASE report.

STORMWATER EIB

Stormwater is runoff from rain and snow that flows over land and impervious surfaces (i.e., parking lots, roadways) without being absorbed. It may contain pollutants such as oil, grease, fertilizers or pesticides, bacteria from pet waste or failed sewer systems, soil, and soap. The federal Clean Water Act requires municipalities to treat stormwater collected in municipal sewer systems ([33 USC § 1342](#)).

During wet periods when more stormwater enters sewer systems, overflow from municipal treatment plants can release untreated sewage and stormwater into nearby water bodies. To reduce the likelihood of the stormwater polluting these water bodies, municipalities may seek to expand water treatment infrastructure or reduce the amount of stormwater entering the system.

According to the CASE report, EIBs may be used to finance green infrastructure projects to address stormwater pollution. These projects, by reducing the number or size of impervious surfaces or capturing stormwater, decrease the (1) need to upgrade water treatment facilities to accommodate stormwater runoff and (2) amount of the stormwater overflow entering nearby water bodies. The article contends that EIBs are suitable for addressing stormwater runoff because the (1) environmental damage is measurable and (2) remediation costs are high. These reasons make stormwater projects good candidates for cost-effective and innovative financial solutions such as EIBs.

The CASE report explains that a stormwater EIB for a green infrastructure project would generally involve a government agency contracting with investors to supply upfront capital (for a set amount and term). The capital would be provided to a nonprofit and construction and engineering firms to pay for the improvements. The investors (and nonprofit, if applicable) would be repaid if certain performance targets are met. The targets could be based on the number of (1) impervious surfaces removed and (2) gallons of stormwater runoff avoided.

HYPERLINK

David J. Nicola, *Environmental Impact Bonds*, The Fuqua School of Business Center for the Advancement of Social Entrepreneurship, Duke University, 2013 (http://sites.duke.edu/casei3/files/2013/03/CASEi3_EIB_Report_FINAL-links.pdf, last visited November 6, 2014).

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