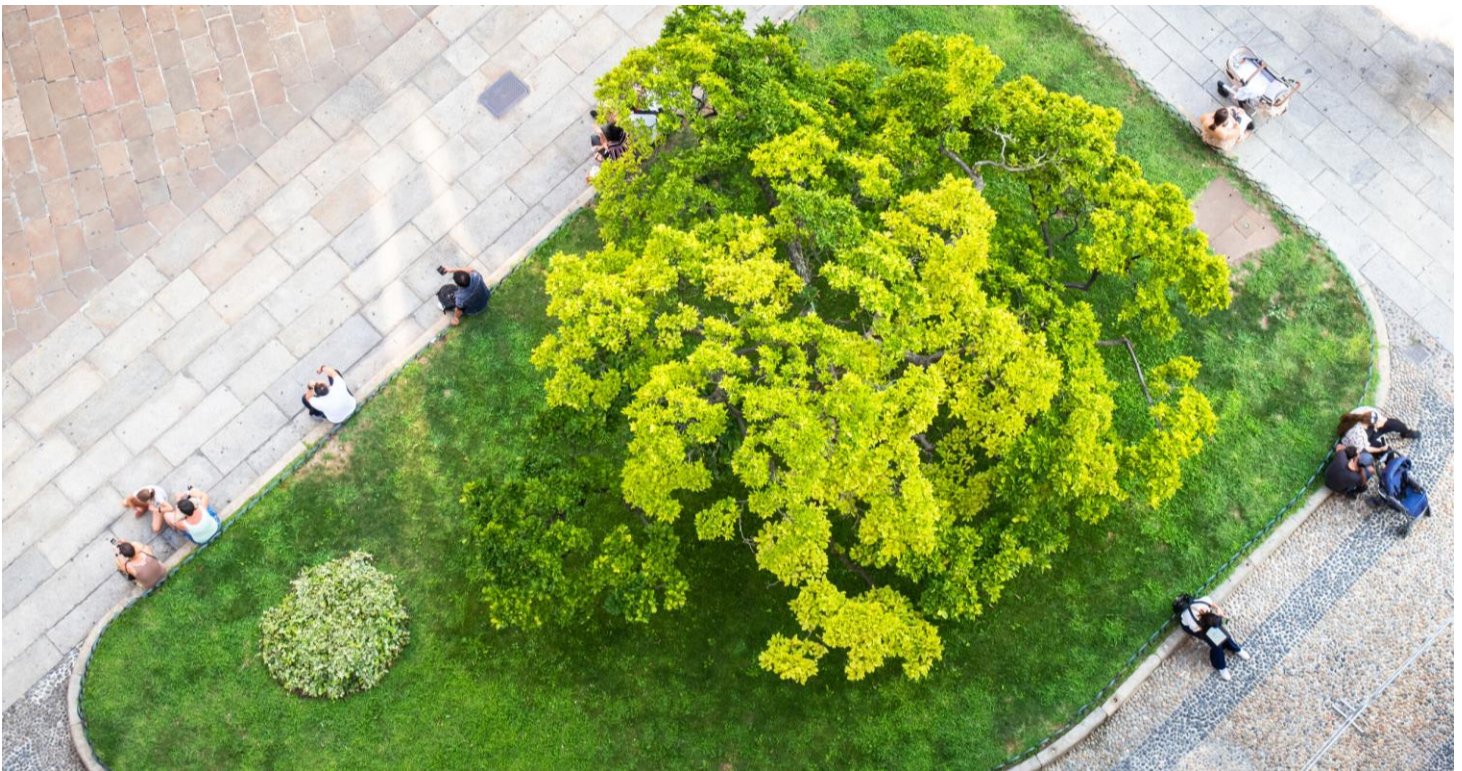


By investing in green infrastructure, cities can adapt to rising temperatures and flooding while also offering residents a more livable, active, playful, safe, healthy, and ecologically-diverse community landscape.

Green infrastructure serves as a cost-effective living alternative to engineering-driven gray infrastructure projects, and tends to be used as a nature-based solution for stormwater, flooding, and heat island-related issues in urban areas. Vegetation paired with bioswales and permeable pavement slow water down and enable water to percolate into the soil, rather than overwhelm combined storm and sewer infrastructure. Practically, green infrastructure projects entail planting, maintaining, and protecting soils, plants, trees, and wetlands across all ecosystem types and city geographies.



Green infrastructure, despite its countless co-benefits for community wellbeing, continues to receive less funding than gray infrastructure projects. This is partially because the value of—and performance on—co-benefits can be difficult to quantify.

- **About \$500 billion has been built or spent on gray infrastructure, compared to around \$20 billion for natural or ‘green’ infrastructure in 2015.¹**
- **Green infrastructure co-benefits** include improved water quality, decreased flooding, increased water supply, reduced particulate pollution and smog, carbon capture and greenhouse gas reductions, improved respiratory health, increased climate resiliency, improved habitat for urban wildlife, increased habitat connectivity, new green jobs, ease of recreational activity, and increased property values.

¹ https://www.forest-trends.org/wp-content/uploads/2017/11/Gammie_State-of-Green-Infra-Investment.pdf

Case Study

Atlanta Green Infrastructure Environmental Impact Bond (EIB)



PROJECT LEAD: Atlanta Department of Watershed Management

FUNDING TYPE: Publicly-offered environmental impact bond

FINANCE LEAD: Quantified Ventures

AMOUNT: USD \$14 million

SCOPE: Six green infrastructure projects

Atlanta’s Department of Watershed Management issued a \$14 million environmental impact bond to finance six green infrastructure projects alongside Proctor Creek. The projects focus on water equity and include remediating a polluted waterway in a lower-income Atlanta neighborhood, reducing flooding in residential areas, creating new community greenspace, and providing employment and agency to local residents to install and maintain the infrastructure.²

Environmental Impact Bonds (EIBs) are unique from standard general obligation bonds in that they provide various levels of return depending on how funded projects perform environmentally, a form of pay-for-success, or outcome-oriented financing. Atlanta’s ten-year EIB has a two-tiered performance structure, with an estimated base rate of 3.55%.³ If after six years the project surpasses its high performance threshold—6.52 million gallons of new stormwater capture capacity, representing \$1.8 Million in potential cost savings for the city—then investors will be repaid at a higher level.⁴ If and when the project exceeds that threshold, the estimated effective interest rate increases to 4.67%, and Atlanta will pay investors an additional \$1 million USD, resulting in an additional \$800,000 in net-savings for the city.⁵

EIBs’ pay-for-success structure helps municipalities finance and share the risk of newer innovative projects with investors, and encourages investors to finance innovative projects, mainly through the possibility of “high performance scenario” yields (which are set above market rates). When a project’s holistic cost-savings and environmental and social benefits are difficult to firmly estimate, EIBs are an instrument that enable cities to hedge their interest rates with a project’s actual performance on key metrics.

The project was initially spurred through a grant from The Rockefeller Foundation, which Atlanta secured to hire Quantified Ventures, the firm that designed the bond.⁶ Quantified Ventures is an impact investing firm pioneering innovative pay-for-success bond structures in cities and regions across the United States. Additional support was provided by Neighborly, a mission-oriented broker-dealer who sold the bond through its online platform (now defunct), and KeyBanc Capital Markets and Cisneros Shank who assisted with underwriting.⁷

Because the bond was sold in \$100,000 minimum increments, the investors purchasing it were primarily traditional large investment firms who were seeking to diversify their risk and generate impact.⁸ The bond was highly rated by Moody’s (Aa3) and S&P (A+).⁹

Please note: EIBs can be issued as municipal bonds, as well as in the form of performance-based contracts or loans. Municipalities can select the mechanism that best suits their unique needs.

² <https://nextcity.org/daily/entry/atlanta-issues-public-environmental-impact-bond-for-green-infrastructure>

³ <https://www.conservationfinancenetwork.org/2019/06/24/atlanta-environmental-impact-bond-breaks-into-public-market>

⁴ <https://www.quantifiedventures.com/atlanta-eib>

⁵ <https://www.conservationfinancenetwork.org/2019/06/24/atlanta-environmental-impact-bond-breaks-into-public-market>

⁶ <https://nextcity.org/daily/entry/atlanta-issues-public-environmental-impact-bond-for-green-infrastructure>

⁷ <https://waterfm.com/atlanta-dwm-completes-first-publicly-issued-environmental-impact-bond/>

⁸ <https://www.conservationfinancenetwork.org/2019/06/24/atlanta-environmental-impact-bond-breaks-into-public-market>

⁹ <https://www.quantifiedventures.com/atlanta-eib>

Taking Action

Guide to Issuing Environmental Impact Bonds

