# Case Study Models for a Regenerative Economy: Built Environment Impacts in the Southeast

Historic Fourth Ward Park, Atlanta, Georgia (2012-Present)

Prepared by Bailey Shea, Program Coordinator for Policy

### Overview<sup>1,2</sup>

Funding Sources: Atlanta Beltline, Inc.; City of Atlanta Department of Watershed Management; Historic Fourth Ward Park Conservancy; Trust for Public Land; Woodruff Foundation

Project cost: \$18 million (Budgeted at \$23 million)

Building size: 17.5 acres, including 2-acre reservoir

Features: Clear Creek Basin (100-year flood capacity reservoir); Historic Fourth Ward Skatepark; playground and splash pad; Atlanta Beltline connectivity; Fully ADA compliant

Historic Fourth Ward Park, specifically its crowning jewel, Clear Creek Basin, has dramatically reduced flooding in the area, which was once a brownfield filled with abandoned warehouses and parking lots.



Clear Creek Basin at the Historic Fourth Ward Park in Atlanta

### **Built Environment Impact**

- The City of Atlanta Department of Watershed Management initially proposed a grey infrastructure solution to the runoff and flooding problems that would cost \$40 million, but this park—as recommended by a coalition of community members—was budgeted at \$23 million and came in under budget at approximately \$18 million.
- The community-envisioned park, with its innovative green infrastructure centered design, saved the City over \$20 million and added nature and a neighborhood amenity to the community by forgoing a traditional "hardscaping" or "grey infrastructure" solution of a new pipe system. Green infrastructure uses natural landscaping elements to allow nature to do much of the work to reduce flooding, filter out pollutants and reduce capacity needs of municipal stormwater infrastructure. When stormwater flows are treated, absorbed and/or completely managed by green infrastructure, this may be referred to as a form of passive stormwater management, and the safe, low-impact return of water to urban ecosystems is an example of regenerative design in action.
- Smart stormwater management at the city level can reduce city and even regional infrastructure needs, reducing energy and materials expended as well as taxpayer dollars spent. When communities reduce their impact on this kind of infrastructure, they stabilize the "horizontal built environment" —the infrastructure aspects of the built environment which connect residents and businesses and allow for the necessary flow of people and resources.
- Increased greenspace and trees reduce the urban heat island effect that the city naturally experiences due to hardscaping and dark materials. Green spaces and trees provide shade and create a cooling effect on the surrounding built environment, mitigate the effect of pollutants trapped by the hotter air surrounding the city, and increase air quality through the ecosystem services of plants.



<sup>1</sup>http://www.h4wpc.org/

<sup>&</sup>lt;sup>2</sup>Anand, Spandana; Butler, Catherine; Hanson, Alex; Roopini, Revathi. "Historic Fourth Ward Park: A Planning Process Analysis." October 27, 2015.

# Case Study Models for a Regenerative Economy: Built Environment Impacts in the Southeast

Historic Fourth Ward Park, Atlanta, Georgia (2012-Present)

Prepared by Bailey Shea, Program Coordinator for Policy

#### Connection to the Natural Environment

- Clear Creek Basin is a 2.5-acre detention pond that is central to the design of the park and has capacity for a 100-year flood event. The Clear Creek water table that feeds into the basin once fueled the Ponce De Leon Springs, a popular destination for healing and relaxation for Atlantans in the 1860s. The basin has been successful in alleviating flooding problems by diverting water from traditional stormwater infrastructure, which was already overwhelmed due to surrounding development, including parking lots and other impervious surfaces.
- Green infrastructure surrounding the basin and the basin itself benefits the surrounding watershed by reducing stormwater surges and sewage spills. Today the park connects people who are otherwise surrounded by urban development to nature and provides habitat to pollinators and urban animals including turtles, fish and waterfowl that call Clear Creek Basin home.

#### Connection to the Social Environment

- Local community activists including architects, hydrologists and real estate professionals came together and built a coalition of supportive organizations over a number of years through local planning meetings where they envisioned an alternative solution to the chronic flooding issues they experienced in their neighborhood. Years of meetings led to conversations with City leaders, at which point the project was championed at the neighborhood level. These efforts exemplify the power and importance of community-based civic action. Broad community and stakeholder engagement often lead to projects which are inclusively designed for long-term community benefit.
- Resolving flooding in the area was also central to the sale of City Hall East to create Ponce City Market, a mixed-use development which today attracts Atlantans and tourists alike for restaurants, a food hall, retail boutiques, a rooftop bar with seasonal attractions and walkable outdoor spaces. Prior to the installation of the park and its basin, the building experienced major flooding challenges that would have rendered it impossible to sell, much less develop.
- Connections into the Trust for Public Land, the Atlanta Beltline, the Department of Watershed Management and more critical partners led to the purchase and construction of the park over two phases and several years. Today, the park remains a neighborhood amenity and a testament to the power of community ideation, design and advocacy.
- Historic Fourth Ward Park restores habitat and natural space in an urban environment where it did not exist before. Providing community members with the chance to interact with nature and visually connect to it from the surrounding built environment supports biophilic theory—the guiding principle common in regenerative design that focuses on people's inherent connection to nature.
- In addition to providing increased views of and direct connection to nature, the park creates outdoor social space and serves as a neighborhood attraction—opportunities for community gatherings, concerts and other performances and more create space for vibrant and dynamic local economic opportunity that was not previously there.

