

Riverfront Parks Create Resilient Cities

Resilient Boston Harbor

- The plan lays out strategies along Boston's 47-mile shoreline that will increase access and open space along the waterfront while better protecting the city during a major flooding event.
- Redesigned waterfront parks create flood protection and improve access and recreation, while providing buffers for our shoreline from waves and storm surge.
- The strategies include elevated landscapes, restored marshes, enhanced waterfront parks, flood resilient buildings, and revitalized and increased connections and access to the waterfront.
- For instance, Moakley Park, one of the jewels in Boston's Emerald Necklace network of green spaces, will be transformed into "a world-class, climate-resilient waterfront park for all."

Hunter's Point South Waterfront Park, New York City

- The park's marshland serves as a natural form of storm absorption against the wills of the East River's rugged current; the designers further bolstered this shoreline with the help of a supporting walkway, which doubles as a scenic outlook.
- Concrete benches divert storm floodwater, the cafe's roof catches rain for reuse, and the grassy soccer field is conveniently lined with drains.
- Now, the park exists jointly as an innovative piece of infrastructure and also a shared space for the larger community looking for a place to relax, participate in outdoor sports, or simply look out on the riparian vista.
- "It shows that we can design an extraordinary park that touches the lives of people and provides a place to celebrate and connect while at the same time doing our resiliency work."

Buffalo Bayou Park, Houston

- From the beginning, park elements were designed with water in mind—both floods and droughts...The park's structures are designed to withstand not only inundation, but also impacts from whatever debris and detritus might wash through.
- Everything built into the park, even the trashcans, has foundations anchored far below the surface to prevent them from washing away. Rounded corners, and surfaces tapered

into the flow of future floodwaters, protect everything from bridge columns to walkways from erosion. Retaining walls slope downward to allow silt to slough off.

- Most of the park's larger structures have ground floors intended to flood: water came up to the doors of the restaurant, which sits above a boat rental facility that was designed so that water could flow through.
- The park's tremendous popularity has surpassed all expectations, instantly creating a regional amenity out of what had been little more than a drainage ditch.
- VIDEO: Buffalo Bayou Park Developing Urban Resilience: developingresilience.uli.org/case/buffalo-bayou-park/

Resources

CITY PARKS: A Smart Investment for American's Health, Economy & Environment - CASE STUDIES, City Parks Alliance

"As cities become more densely populated, and concern about the impact of climate change increases, planners, elected officials, and community advocates are taking a fresh look at parks and their potential to help address critical urban infrastructure and public health issues. City parks provide access to recreational opportunities, spur local economies, combat crime, and protect cities from environmental impacts. Parks are now recognized as powerful tools to address a number of challenges that cities face today."

cityparksalliance.org/wp-content/uploads/2020/01/CPA_Cases-Revised-12-19-prnt.pdf

Parks Are a Critical Solution to Climate Change, American Society of Landscape Architects

"Parks boost community resilience because they offer a place to develop deeper neighborhood connections. They improve community health by reducing stress, restoring cognition, and providing a place to exercise. Parks mitigate the urban heat island effect, improve air quality, and absorb carbon from the atmosphere. They support local biodiversity and can act as buffer zones for flooding or mudslides. Parks are both important social and environmental infrastructure."

dirt.asla.org/2018/10/11/parks-are-a-critical-solution-to-climate-change/

Resilient Parks and Open Spaces, Urban Land Institute

"Parks present an important opportunity to enhance community resilience, as well as improve the local quality of life, access to recreation, and public health. This collection showcases real estate projects that leverage parks and open space to help address the effects of climate change, from protecting against water-related events to mitigating heat island effects." **developingresilience.uli.org/themes/resilient-parks-and-open-spaces/**

Climate Resilient Parks, National Recreation and Parks Association

"Parks are key community stakeholders when it comes to addressing the effects of climate change. From protecting water resources via green infrastructure practices to reducing urban

heat island effect through citywide forest restoration - parks play a critical role in building climate resilient communities."

www.nrpa.org/our-work/Three-Pillars/conservation/climate-resilient-parks/

City Parks Aren't Luxuries, They Are Critical Infrastructure

"City parks can be designed to act like sponges, holding water during rain events and slowly filtering stormwater after the event has passed. Cities are using that natural capacity as green infrastructure to complement the traditional alternative of building and maintaining large underground networks of pipes and tunnels. And parks do this all while improving air quality, reducing the heat-island effect and creating close-to-home opportunities for outdoor recreation and experiences with nature."

thehill.com/changing-america/opinion/476518-city-parks-are-critical-infrastructure

VIDEO – How Parks Build Resilient Cities

cityparksalliance.org/resource/parks-as-infrastructure/