

Types	NbS measures	NbS benefits
Water management	<p>1) Build resilient blue-green infrastructure, including rain gardens, wetlands, bioswales, and retention ponds.</p> <p>2) Balance cut and fill and generate falls to harvest, filter, retain, and purify stormwater runoff and enable public education of sponge city application.</p>	<p>As a provincial sponge city demonstration area, it has improved the regional stormwater resilience. Taking the demonstration area as an example, the water treatment capacity and water storage capacity have been increased, of which the water storage capacity (runoff) has reached 3600 m<sup>3</sup>, and the pollutants have been reduced by 80% of total suspended solids, 50% of total phosphorus, and 30% of total nitrogen, and the water quality has reached Class III.</p>
Carbon reduction	<p>1) Implement comprehensive forest restoration techniques to conduct sustainable management of existing forest, succession forest, and new tree groves.</p> <p>2) Recycle concrete, gravel, weathering steel, and other materials on site to enhance riverbank appearance and erosion control.</p>	<p>More than 20,000 new trees were planted, with a combined carbon sequestration of about 300 TgC per hectare per year.</p> <p>An estimated 10,500 m<sup>3</sup> or 833 30-tonne truckloads avoided a 30-mile round journey to the nearest landfill, saving some 25,000 miles or an estimated 11,542 kg carbon footprint of waste transportation to nearest offsite landfill.</p>
Create self-sustaining planting	<p>Combine ecological adaptability to build a variety of self-sustaining vegetation types, such as native ecological forest, riverbank wetland and wet forest, and wildflower grassland and meadows.</p>	<p>The naturalistic planting creates a distinctive regional landscape image; the self-sustaining community with low maintenance and low energy consumption utilizes ecological benefits and reduces the management and maintenance cost of the park.</p>
Habitat creation	<p>1) Create continuous wildlife corridors; increases habitat connectivity between land and water.</p> <p>2) Enhance plant diversity with predominantly native plants to restore food chains between fauna and flora.</p> <p>3) Native forest and understory planting to the river floodplain, constructed wetland habitats supporting insects, amphibians, fish, and wildfowl.</p> <p>4) Woody debris, seeds, log piles, retained for habitat value.</p>	<p>Increase biodiversity—surveys show increased sightings of 19 species of wild birds from 16 families and 8 families of fish, 6 species of amphibians from 3 families (including 4 species of key protected animals in Jiangsu Province), and 15 species of reptiles (including 8 species of key protected species in Jiangsu Province) and 22 species of mammals from 10 families (including 7 species of key protected animals in Jiangsu Province).</p>
City connectivity and community engagement	<p>1) Connecting to the scenic belt is enhanced by the network of green corridors, parks, and canals that form part of the 70% green coverage on the island.</p> <p>2) Integrate 21 km cycling and jogging loop around the island to host the annual 'Nanjing Tour' bicycle race and marathons.</p> <p>3) Create biophilic open space that is open and inclusive for social equity, human well-being, and to support popular science education.</p>	<p>1) Draw positive concern on ecological protection from the news media (CCTV-4 broadcasted a 13-minute introduction on the island in 2019).</p> <p>2) Multi-disciplinary cooperation led to a series of post occupancy professional and educational lectures on lessons learned. Topics on ecological design, sponge cities, and habitat creation by ULI, AIA (Shanghai), WAF, ASLA, etc.</p> <p>3) The impact of advocacy for environmental protection contributed towards a 10-year commercial fishing ban in 332 conservation areas along the Yangtze River which China imposed on January 1, 2021.</p>