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## Climate Change Adaptation Resource Center (ARC-X)

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# Smart Growth Along the Riverfront Helps Manage Stormwater in Iowa City, Iowa

Iowa City, Iowa was among the hardest hit communities from the 2008 Iowa River floods with extensive flooding along the riverfront. In 2009, EPA and FEMA worked with the state organization, Rebuild Iowa, to identify policy options to accommodate growth in the Riverfront Crossings District and add green infrastructure and open space to reduce flooding. Subsequent EPA assistance on brownfields redevelopment and green infrastructure helped the city develop a master plan to rebuild the riverfront while

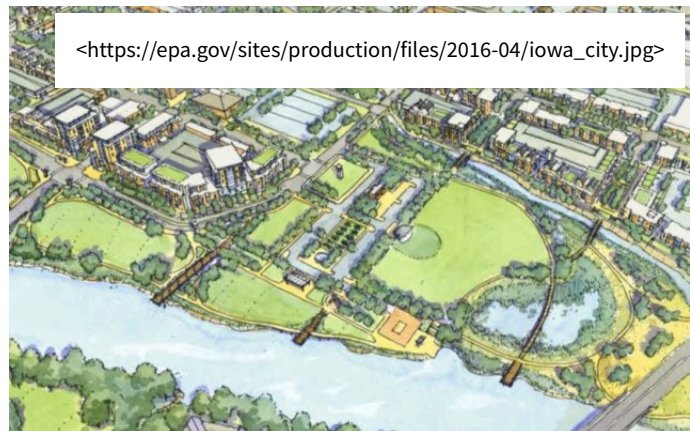


Illustration of the riverfront restoration.

protecting the environment, promoting equitable development, and helping address the challenges of climate change. The Riverfront Crossings Master Plan aims to create a resilient riverfront community park through using flood mitigation measures and stormwater best management practices to protect against future flooding.

The plan would relocate vulnerable properties and infrastructure away from the floodplain and guide future development away from the most vulnerable areas. The Riverfront Crossings Master Plan promotes green infrastructure, vegetated buffer zones and public spaces along rivers and streams to reduce flooding, runoff, and erosion. While this plan did not explicitly incorporate climate projections, it can help Iowa City better manage projected increases in extreme rainfall, stormwater runoff and flooding

along the riverfront. The Riverfront Crossings Master Plan will help Iowa City transition a high risk flood prone area with critical community infrastructure into a public riverfront park that provides recreational amenities, and helps the community adapt to current and future high river flows.

How Did They Do It?	Applicable EPA Tools
<p><b>Promoted Smart Growth Rebuilding Efforts</b></p> <ul style="list-style-type: none"> <li>• The city and state agency Rebuild Iowa, with EPA support, developed comprehensive smart growth and green infrastructure development plans that reduce the risk to current and future flooding and avoided placing development within a high risk area.</li> <li>• Since 2009, EPA has been involved through several technical assistance programs including technical assistance from the EPA's Smart Growth Program, Green Infrastructure Technical Assistance Program, and the inter-agency Partnership for Sustainable Communities.</li> </ul>	<p>Iowa City, IA, Downtown &amp; Riverfront Crossings Master Plan provides examples to help identify similar strategies to help your community adapt.</p> <p>Downtown and Riverfront Crossings Master Plan <a href="#">↗</a></p>
<p><b>Restored Floodplain and Developed Green Infrastructure to Reduce Flooding Impact</b></p> <ul style="list-style-type: none"> <li>• Designed floodplain restoration consistent with 2009 USEPA Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects.</li> <li>• Used green infrastructure and stormwater best management practices to reduce impact of future flooding by creating a riverfront public park.</li> <li>• Adapted to higher river elevations through moving critical infrastructure out of the floodplain and redesigning the riverfront to provide stormwater management and a recreational amenity for the community.</li> </ul>	<p>EPA's Enhancing Sustainable Communities With Green Infrastructure Report helps local governments integrate green infrastructure strategies into community plans.</p> <p>EPA's Enhancing Sustainable Communities With Green Infrastructure Report &lt;<a href="https://epa.gov/smartgrowth/enhancing-sustainable-communities-green-infrastructure">https://epa.gov/smartgrowth/enhancing-sustainable-communities-green-infrastructure</a>&gt;</p>

## Similar Cases and More Information

To see how another community has adapted to manage stormwater with a mix of grey and green infrastructure, view the DC Consent Decree example. Remember, critical infrastructure such as drinking water and wastewater utilities may be threatened from extreme precipitation events and flooding, to see how Iowa City, IA adapted to ensure their wastewater service was prepared for future flood risk, view Iowa City, IA North Treatment Plant.

- DC Consent Decree <<https://epa.gov/arc-x/dc-utilizes-green-infrastructure-manage-stormwater>>
- Iowa City, IA North Treatment Plant <<https://epa.gov/arc-x/iowa-city-iowa-closes-vulnerable-wastewater-facility>>

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## References

- Downtown and Riverfront Crossings Master Plan [📄](#)
- North Wastewater Treatment Plant Restoration (PDF) [📄](#) <<https://www8.iowa-city.org/weblink/0/doc/1498674/electronic.aspx>>(44 pp, 2 MB)
- Iowa City (PDF) [📄](#) <<https://www8.iowa-city.org/weblink/0/doc/1482458/electronic.aspx>>(70 pp, 34 MB)

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