

Unveiling the Quad Cities Flood Map

A Tool for Climate Change and Community Resilience

National Wildlife Federation and Prairie Rivers Network

In partnership with Discovery Partners Institute, University of Illinois System



About Me



- BS in Dietetics from Western Illinois University
- Registered Dietitian
- River Health & Resiliency Organizer for



Our Mission

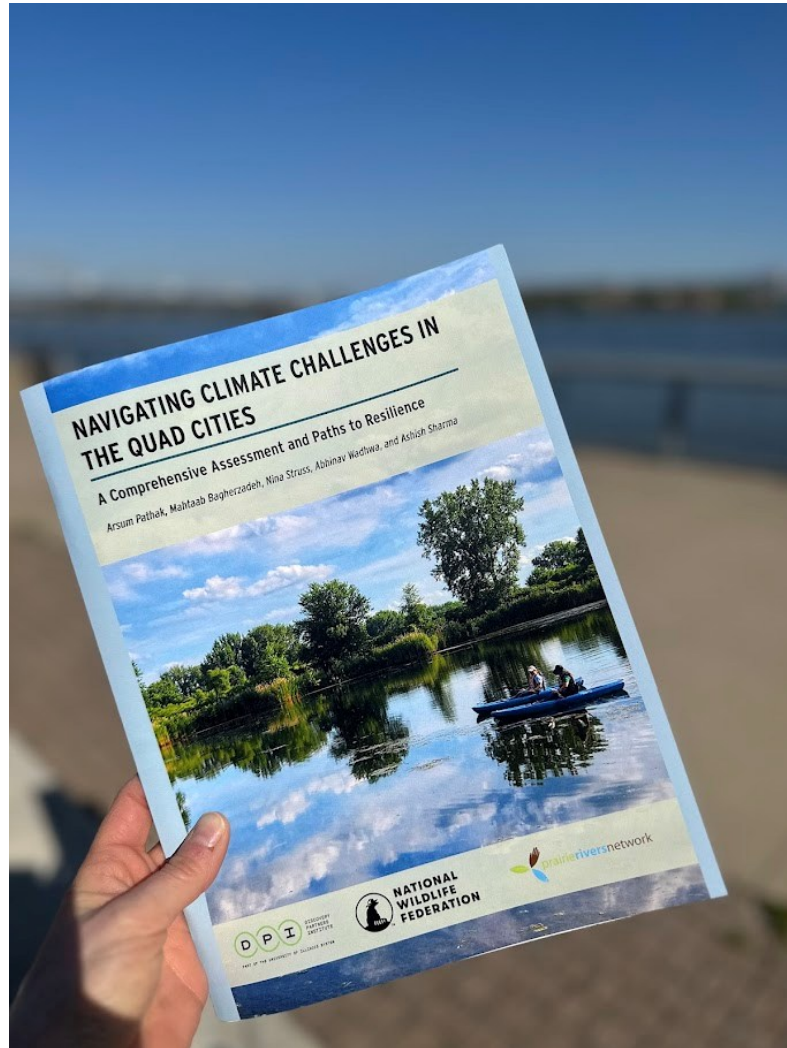


Protect Water. Heal Land. Inspire Change.

Using the creative power of science, law, and collective action, we protect and restore our rivers, return healthy soils and diverse wildlife to our lands, and transform how we care for the earth and for each other.



Quad Cities Climate Assessment

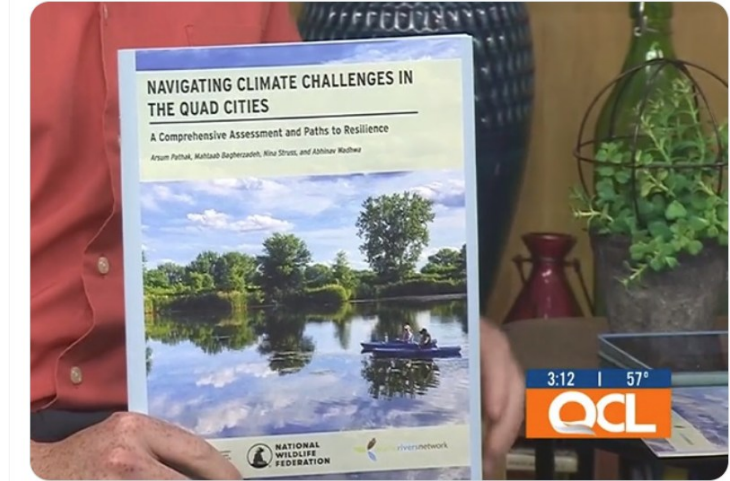


COMMUNITY DRIVEN CLIMATE ASSESSMENT

The assessment intends to better understand local impacts in the Quad Cities by utilizing climate models to simulate and project future climate impacts under different hypothetical scenarios.



Great research has been done on a local level, looking at potential impacts climate change could have on the QC in the future. I sat down with Nina Struss of @PrairieRivers to talk about the report; what we can do to mitigate negative impacts @kwqcnews kwqc.com/2024/04/17/new...



9:24 AM · Apr 18, 2024 · 220 Views

NAVIGATING CLIMATE CHALLENGES IN THE QUAD CITIES

Planning for a safer future

- What's happening:** As climate change intensifies, extreme weather – including flooding, droughts, and high temperatures – will affect the quality of life in the Quad Cities.
- Zooming in:** We developed an assessment to better understand what could happen in the Quad Cities area under different climate change scenarios.
- Big picture:** The goal is to provide Quad Cities residents with a better understanding of what climate change might bring and to outline some options for creating a healthier and more resilient future.
- What's next:** A number of Quad Cities stakeholders helped shape this assessment, better aligning the nature-based solutions considered with community concerns and knowledge. **We want to work together with communities to develop a safer future for the Quad Cities.**

Working with nature

Did you know? Nahant Marsh catches and filters up to two billion gallons of water during severe rain events.

Ensuring that upstream wetlands like Nahant Marsh remain healthy in the future is one way to reduce climate-fueled flooding.

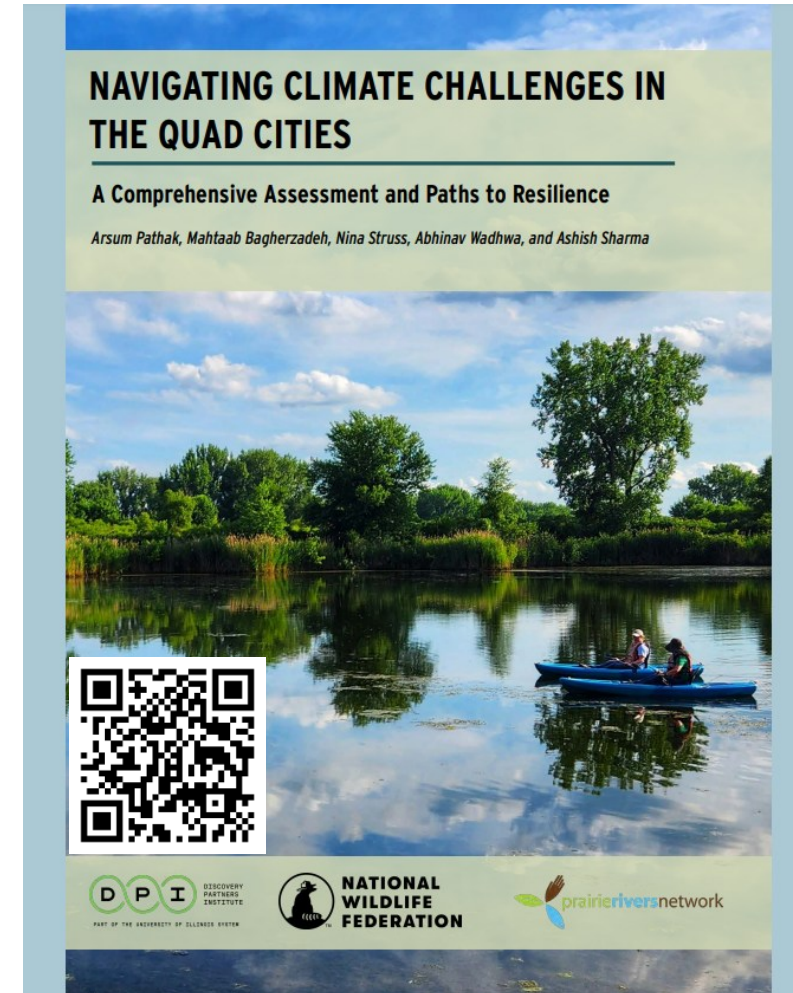
Let's work together. Scan here to submit your ideas and needs.

Quad Cities Climate Assessment

PURPOSE:

- **EQUIP** local leaders, decision-makers, and community members in the Quad Cities with locally relevant information about the impacts of climate change;
- **EMPOWER** community members to identify and pursue greater investments in the long-term resilience of their community, including through nature-based projects where appropriate;
- **SERVE** as a foundation for stakeholders to make informed choices and leverage funding opportunities for the present and future of the region.

PRODUCT – Community-Driven Climate Assessment for the Quad Cities region with input from the relevant stakeholders.



Community Outreach

- **Stakeholder Interviews:**
 - Conservation staff from city municipalities
 - Technical experts from local agencies
 - Various non-profit organizations
- **Public Input Sessions**
 - 3 Sessions held in various Quad Cities locations
 - Obtained feedback on the assessment's preliminary findings
 - Offered space for questions, concerns and recommendations for the assessment



Community Identified Climate Risks

extreme heat
drought
flash flooding
wildfire smoke
extreme weather
derecho
river flooding
air quality
tornadoes

Quad Cities Interactive Flood Map



Interactive Flood Map

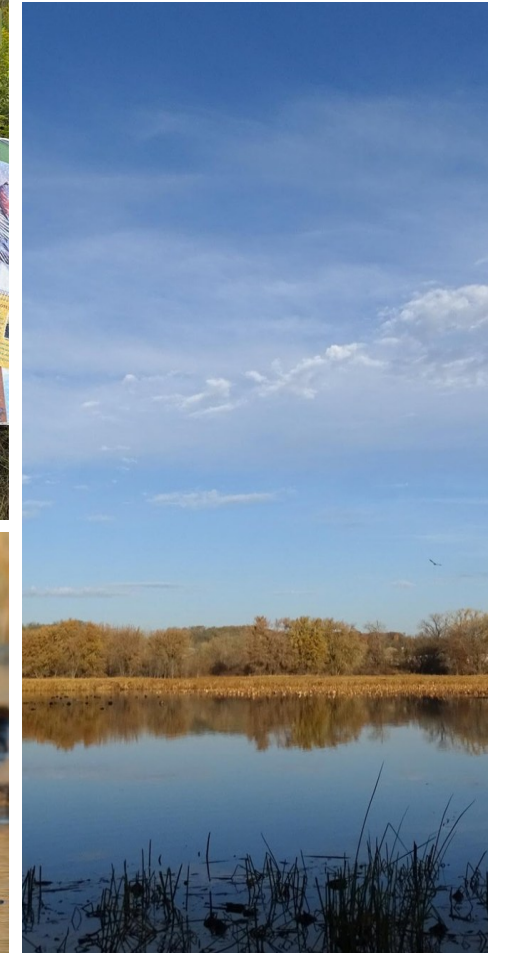
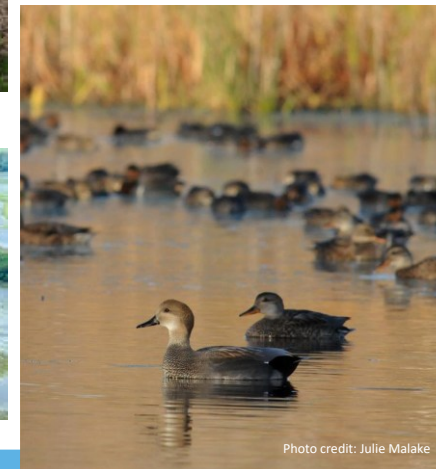


Articles:

- [Nature-based solutions: an effective approach for flood mitigation and resilience in the Quad Cities in future climate](#)
- [Effectiveness of nature-based solutions to reduce flooding in Quad Cities Metro Area \(QCMA\) using SWMM-HEC based flood model](#)

Resilience

Nature-Based solutions can help the Quad Cities prepare



GREEN BLUEPRINT

How Nature Provides Solutions
for Our Communities

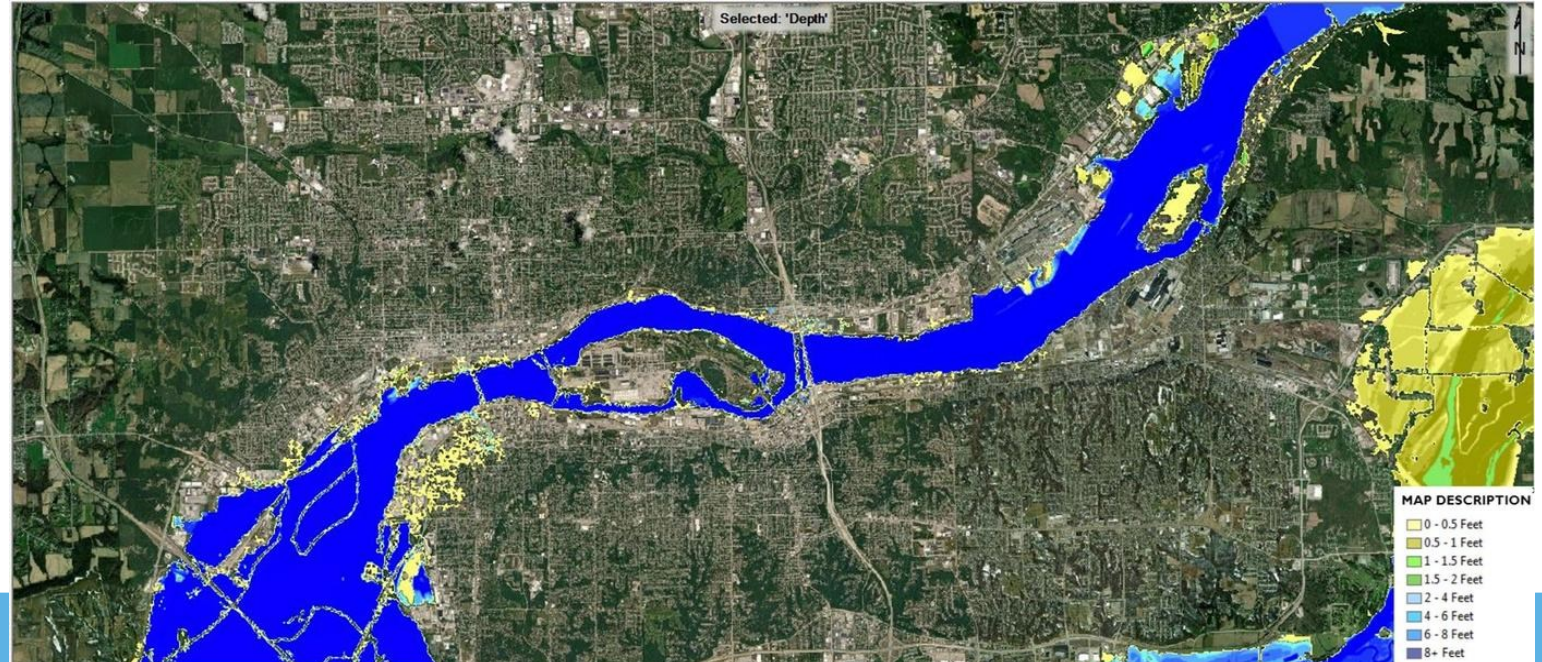
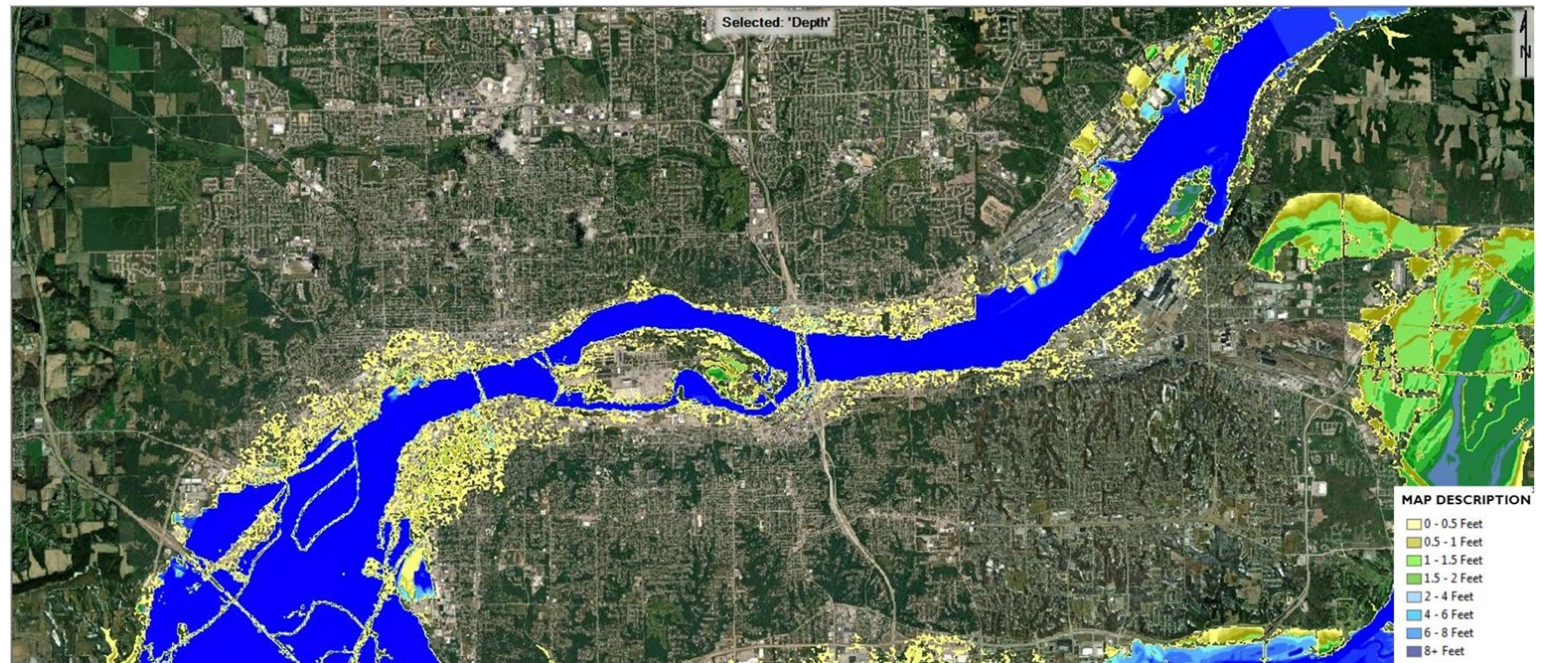


Nature-Based Solutions

- Actions to protect, sustainably manage and restore natural and modified ecosystems that address societal challenges effectively, while providing environmental and economic benefits
- Ability to adapt to a changing climate
- Alternative to hard infrastructure, or can be used in combination – “green-gray hybrid solutions”
- Provide wide-ranging co-benefits: cleaner air and drinking water, wildlife habitat, carbon sequestration, recreational use/outdoor tourism, cultural assets



Effectiveness of Nature-Based Solutions



Quad Cities Interactive Flood Map



[Interactive Flood Map](#)



Community Identified Nature Based Solutions

- Increase green space
- Ravine restoration
- Providing equitable access to the river
- Natural infrastructure to curb “heat islands”



Advancing Nature Based Solutions

- Utilize findings to apply to grant funding or advocate for resilience and nature-based solution initiatives in communities.
- Communicate with policy and decision-makers about the urgency of implementing nature-based solutions as part of a comprehensive solution.
- Understanding how city infrastructure and future business developments will further exacerbate climate risks and how these impacts will affect surrounding communities.



Advancing Nature Based Solutions

- Advocate for the creation of jobs specific to nature-based solutions (i.e. ensuring qualified contractors are available to assist homeowners and businesses with nature-based solutions)
- Serving as an educational resource that emphasizes the opportunity for nature-based solutions within various communities, businesses, and media outlets.
- Supporting a broader analysis that looks upstream to rural and agricultural impacts and opportunities.



Questions?



Thank you!

Questions? Comments? Feedback?

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