Discovery Partners Institute
National Wildlife Federation
prairierivers network

QUAD CITIES ECOLOGICAL CORRIDOR NETWORK

Connecting Nature Across the Quad Cities

Date:
February 2026

Prepared by: National Wildlife Federation
Mapping Partner: Discovery Partners Institute, University of Illinois Urbana Champaign
Local Partner: Prairie Rivers Network

About This Report: This report outlines the ecological corridor network in the Quad Cities region, focusing on habitat connectivity, conservation opportunities, and strategic planning for a resilient natural landscape.

For the full interactive story map, visit:
https://storymaps.arcgis.com/stories/dc9ad198b55646128b897644f567e91b

Acknowledgments: The National Wildlife Federation would like to thank the Walton Family Foundation for their financial support that made this work possible. We also thank Bi-state Conservation Action Network, particularly their Ecological Corridor subcommittee, that pioneered initial mapping. We also appreciate the continued support of Prairie Rivers Network and other local organizations that help us ground this work.

Cover image: Nahant Marsh in Davenport, Iowa is a living example of how wetlands can enhance biodiversity, filter water, and provide resilience against flooding in the Quad Cities.

NATIONAL
WILDLIFE
FEDERATION

TABLE OF CONTENTS

Executive Summary ii
Introduction.... 1
Key Findings from the Network Mapping....5
Strategic Opportunities to Implement the Network 6
  Lower Rock River Watershed (East Moline, Credit Island, Milan Bottoms) 7
  Lower Wapsipinicon River Watershed (North of the Quad Cities)....10
  Duck Creek Watershed....14
  Mississippi River Mainstem & Associated Floodplain Tributaries 17
Cross-Cutting Strategies.... 20
  Integrate Network into Local and Regional Planning Frameworks.... 20
  Restore and Optimize Ravines as Natural Infrastructure....22
  Leverage Existing Initiatives and Partnerships....22
  Secure Funding and Resources 22
  Engage, Inform, and Empower Communities....23
  Launch Pilot Projects/Demonstration Sites 23
  Monitor, Adapt, and Celebrate Progress....24
Next Steps & Considerations 24
Appendix A. Methodology for Ecological Corridor Development in the Quad Cities....26
Appendix B. Network Workshop Summary 29
Appendix C. Secondary Geographies for Conservation Action....31
  Green River Watershed....31
  Edwards River Watershed 33
  Maquoketa River Watershed....34

EXECUTIVE SUMMARY

The *Quad Cities Ecological Corridor Network* report, developed by the National Wildlife Federation in partnership with the Discovery Partners Institute at the University of Illinois, provides a comprehensive assessment of habitat connectivity and conservation opportunities across the Quad Cities region. Covering Scott and Muscatine Counties in Iowa and Rock Island, Henry, and Mercer Counties in Illinois, this report offers conservation practitioners a roadmap to prioritize actions where they can have the greatest impact on biodiversity, climate resilience, and community well-being.

This “network” refers to a system of connected, high-potential landscapes, both existing conserved areas and adjacent, unconserved natural or semi-natural lands, that, if protected or restored, would enhance regional biodiversity and climate resilience by providing flood mitigation benefits. Our analysis focused on identifying unconserved lands, defined here as natural or semi-natural areas that are not currently under formal protection (e.g., public parks and preserves). These areas often face the greatest risk of development and represent critical opportunities for proactive conservation.

Key Findings: The Network covers 5.59 million acres, connecting diverse habitats across the region, only 1,248,966 acres (22.35%) are currently conserved, leaving over 4.3 million acres (77.65%) within the Network available for formal conservation.

Strategic Opportunities: The report details critical findings for key areas, focusing on areas of greatest conservation need:

1. Lower Rock River Corridor: At 120,563 acres, 86,657 acres (71.9%) of the Lower Rock River watershed are not conserved. This corridor is a critical ecological gap along the Mississippi, vital for migratory birds and floodwater storage. High-priority sub-watersheds include Shadow Lake, Town of Reynolds–Mill Creek, Coal Creek, Mud Creek–Mill Creek, and Zuma Creek, some 100% unconserved.

2. Lower Wapsipinicon River Watershed: This 153,588-acre corridor has 94,015 acres (61.2%) not conserved. It's one of the last largely intact natural corridors, providing significant floodwater storage, but is vulnerable to agricultural expansion. Many sub-watersheds, such as South Fork Walnut Creek, Mill Creek, and Walnut Creek, are 100% unconserved.

3. Duck Creek Corridor: This 27,971-acre urban corridor has 19,610 acres (70.1%) not conserved, particularly Lower Duck Creek (over 90% unprotected). It's crucial for localized flood management and stormwater retention in Davenport and Bettendorf.

4. Mississippi River Mainstem & Associated Floodplain Tributaries: This 64,952-acre geography has 43,807 acres (67.9%) not conserved. These numerous smaller tributaries and floodplains are vital for water quality, migratory pathways, and overall river health. High-

priority sub-watersheds include Mill Creek, Meredosia Ditch, Spencer Creek, and Copperas Creek.

Cross-Cutting Strategies: Advancing the Ecological Corridor Network will require coordinated, system-wide action. Key strategies include integrating the Network into local and regional planning frameworks, restoring ravines and riparian areas as natural infrastructure, leveraging partnerships and shared governance structures, securing diverse funding sources, engaging communities and landowners, and launching visible pilot projects that demonstrate on-the-ground success.

To validate and refine these findings, the project team convened a regional mapping and ground-truthing workshop in September 2025 with local governments, federal agencies, conservation organizations, and community partners from across Iowa and Illinois. Participants reviewed and confirmed priority corridor geographies, identified on-the-ground considerations related to restoration feasibility, land ownership, and community priorities, and helped surface shared regional themes such as wetland and floodplain restoration, connectivity along creeks and ravines, and integration with recreation and public access. Building on this partner input, the report outlines next steps to advance the Ecological Corridor Network from planning to implementation, including strengthening regional coordination, advancing early place-based projects in priority geographies, embedding corridor goals into local and regional plans, and sustaining momentum through coordinated outreach and joint funding efforts.

The ecological corridor is not a map of everything that must be conserved in a "perfect world," but rather a practical guide for where investments in protection, restoration, or natural infrastructure could deliver the most benefit, particularly in mitigating flood risk while supporting biodiversity and community well-being.

INTRODUCTION

The Mississippi River and forested bluffs in the Quad Cities region form a foundational natural landscape for both people and wildlife. The Quad Cities region of Iowa and Illinois is rich in natural assets, from the Mississippi River and its tributaries to floodplain wetlands, prairies, and upland forests. However, these landscapes have been fragmented by past development and land use, which has isolated natural areas and limited the full benefits nature can provide to surrounding communities. Lack of natural spaces that can provide climate resilience benefits, like reducing flood risk and attenuating extreme heat, also poses an economic risk to communities; for instance, Illinois' 2023 State Hazard Mitigation Plan cited 147 flood events throughout 2017 and estimated damages at $12.7 million, with Rock Island County being one of the most affected.[1]

This analysis responds to an urgent regional need: to reverse habitat loss, reconnect fragmented landscapes, and prepare for a future shaped by climate extremes. As highlighted in the Quad Cities Climate Assessment, this river community, shaped by the Mississippi and Rock Rivers and fed by key tributaries like Duck Creek and the Wapsipinicon, faces increasing threats from more intense rainfall, frequent flooding, and extreme heat, among other stressors.[2] Natural infrastructure like wetlands, prairies, and wooded corridors can absorb stormwater, buffer floods, filter runoff, cool neighborhoods, and create critical habitat for pollinators, birds, and threatened species. Yet many of these systems are isolated, unprotected, or disappearing. By identifying where natural spaces can be reconnected across jurisdictional and land ownership boundaries, this corridor analysis offers a path forward.

Mapping an Ecological Corridor Network (henceforth, the Network) identifies a system of connected natural spaces that brings together forests, wetlands, parks, and open spaces across the region. By identifying critical linkages between existing and possible parks, preserves, and other green spaces, this map serves as a blueprint for coordinated conservation action. The overall goal of this report is to help conservation practitioners in the Quad Cities region direct efforts and funding towards areas of greatest need and strategic impact for flood mitigation and biodiversity conservation.

---

[1] Illinois Emergency Management Agency and Office of Homeland Security. (2023). Illinois state hazard mitigation plan. https://iemaohs.illinois.gov/content/dam/soi/en/web/iemaohs/recovery/documents/plan-illmitigationplan.pdf

[2] Pathak, A., Bagherzadeh, M., Struss, N., Wadhwa, A., & Sharma, A. (2024). Navigating climate challenges in the Quad Cities: A comprehensive assessment and paths to resilience. Washington, DC: National Wildlife Federation.

Creating a system of contiguous natural areas offers wide-ranging benefits for people and wildlife:

- **Flood mitigation:** e.g. Nahant Marsh can filter up to 2 billion gallons during rain events.
- **Runoff reduction:** urban trees already absorb ~69 million gallons annually in the Quad Cities region.
- **Carbon sequestration:** forests in the region capture ~100,000 tons of carbon/year.
- **Outdoor Access:** The Quad Cities already has over 200 miles of land- and water-based trails[3] and a connected network would further enhance these benefits.
- **Enhanced Public Health:** Simply spending time in nature can reduce anxiety, improve mood, and boost cognitive function.[4]
- **Economic Benefits:** Outdoor recreation such as boating, fishing, hunting, sightseeing, wildlife observation, and trail use in Illinois create a $3.2 billion annual economic impact and support 33,000 jobs statewide[5] directly benefiting local businesses and communities within the Quad Cities as well.

This document summarizes the results of a mapping initiative to assess the Quad Cities for its potential to create an ecological corridor and provides a foundation for coordinated conservation, planning, and investment. Our analysis considered HUC12 watersheds in all of Scott and Rock Island counties and parts of Henry, Mercer, and Muscatine counties.

---

[3] River Action. (n.d.). Quad Cities trails. https://riveraction.org/node/57
[4] University of Illinois Extension. (n.d.). Wellness in nature. https://extension.illinois.edu/health/wellness-nature
[5]Illinois Department of Natural Resources. (n.d.). Did you know? https://dnr.illinois.gov/about/didyouknow.html#h13

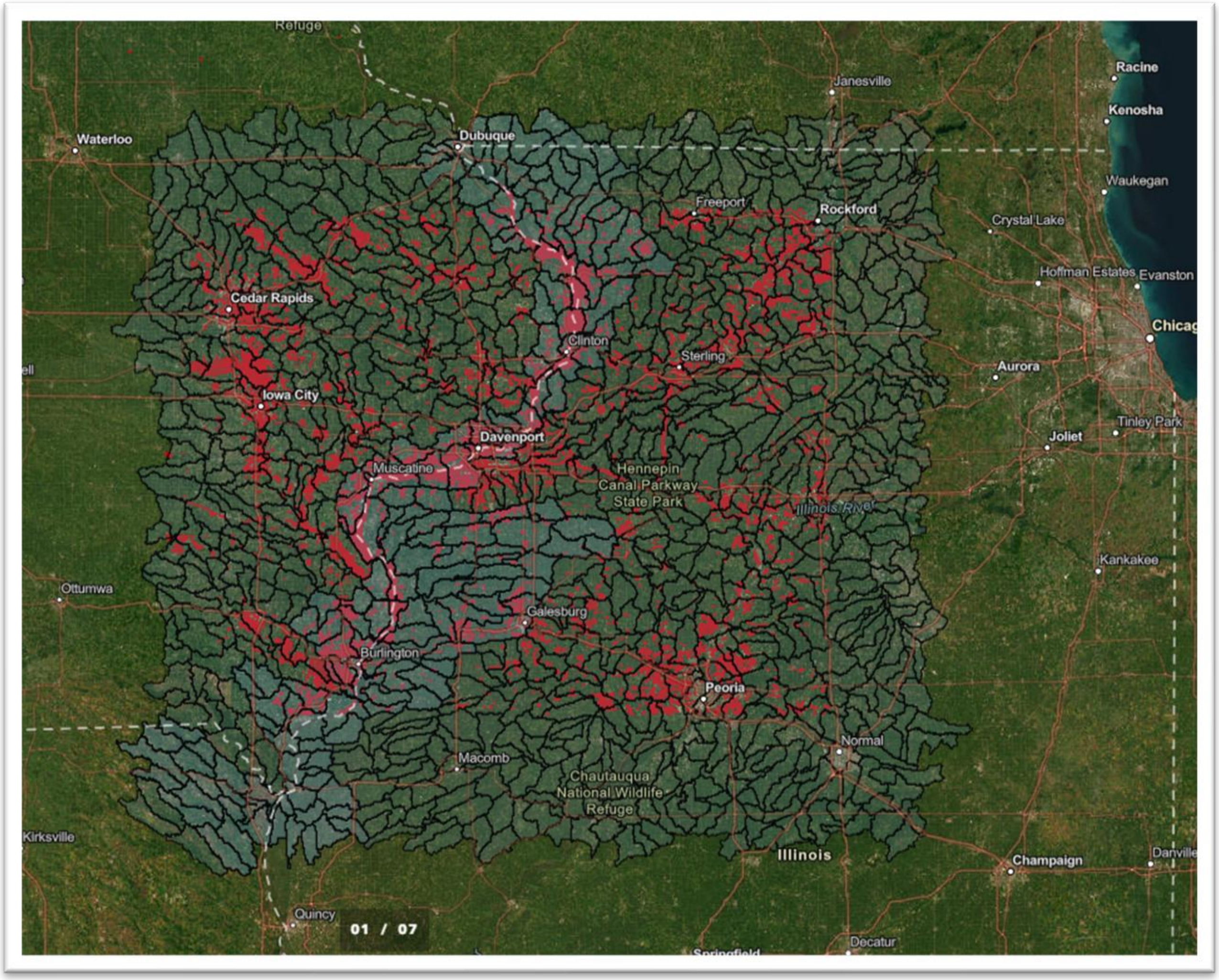


Figure 1. *Geographic Scope of the Analysis. Ecological corridors are traditionally defined as designed spaces that facilitate the movement of plants and wildlife between urban habitats, enhancing connectivity and biodiversity. In this study, we prioritize corridors that also deliver* ***flood mitigation and climate resilience benefits*** *such as buffering stormwater and reducing erosion. The highlighted areas (in red) show where natural landscapes help connect habitats, support wildlife movement, and improve regional resilience to extreme events across the Quad Cities.*

To identify areas for coordinated conservation, we performed an extensive mapping analysis across approximately 11,176,796 acres of land within the defined HUC12 watersheds (see Figure 1). Of this total area, approximately 5,588,398 acres (50%) fall within the identified Ecological Network, collectively forming the corridor system. Of this total corridor area, approximately 1,248,966 acres (22.35%) are currently protected as state parks, conservation areas, or nature preserves. The remaining 4,339,432 acres (77.65%) represent significant opportunities for new conservation efforts to create critical linkages and enhance the Network. While a detailed breakdown of public versus private ownership for these unprotected areas is beyond the scope of this initial mapping, a substantial portion, particularly in rural watersheds, is privately held, emphasizing the importance of landowner engagement in future steps.

METHODOLOGY AT A GLANCE

The Ecological Corridor Network was developed through a multi-step geospatial analysis integrating land cover, habitat suitability, and climate-flood risk data. Using remote sensing indices (e.g., Normalized Difference Vegetation Index [NDVI], Normalized Difference Water Index [NDWI]), land use classifications, and species habitat models, the team identified core natural areas and modeled connectivity across the Quad Cities region. Habitat suitability mapping incorporated vegetation health, water proximity, terrain, and urban barriers, while least-cost path and graph-based analyses delineated optimal corridors. Flood data from NWF's Climate Assessment was incorporated as a critical constraint in habitat suitability modeling. Locations within recurrent flood zones or floodway easements were down-weighted in the habitat suitability index (HIS), particularly for species sensitive to inundation or dependent on stable dry ground (e.g., burrowing mammals, ground-nesting birds). Flood-adapted ecosystems such as wetlands, riparian woodlands, and oxbow lakes were assigned as higher suitability for select species (e.g., amphibians, waterfowl). A binary flood mask was applied to exclude high-risk zones from core habitat designation. Additionally, terrain-driven flood proxies such as local depression areas and low-lying slope/aspect combinations were flagged using the Digital Elevation Model (DEM) and cross-referenced with flood exposure maps. The flood-prone areas identified in the report were integrated into the resistance surface with context-dependent weighting. For flood-sensitive species, high-flood-risk zones are given elevated resistance scores to discourage corridor placement through hazardous terrain. For flood-tolerant or aquatic species, these zones serve as preferred pathways, especially where they align with riparian greenways or wetland complexes. The flood-buffering capacity of vegetated corridors is explicitly modeled and built into the corridor modeling tool (least-cost path analysis). Riparian buffers along the Mississippi River, Rock River, and Duck Creek are treated as ecosystems with both ecological and hydrological functions, offering both ecological and flood protection value and given higher priority. Their prioritization in least-cost path and circuit models is enhanced through a composite scoring system that integrates ecological resistance, flood mitigation potential, and climate resilience. See Appendix A for detailed methodology.

To ensure that the Network reflects on-the-ground realities and local priorities, the mapping analysis was paired with a regional partner workshop held in September 2025 at the Nahant Marsh Education Center. Local governments, state and federal agencies, conservation organizations, and community partners reviewed corridor outputs, ground-truthed priority geographies, and identified opportunities and constraints related to land ownership, restoration feasibility, flood risk reduction, and community use. Insights from this workshop directly informed the strategic opportunities outlined later in the report, helping translate the Network from a spatial analysis into an actionable, place-based framework. A summary of the workshop discussion and outcomes is included in Appendix B.

KEY FINDINGS FROM THE NETWORK MAPPING

Our analysis revealed valuable insights about ecological corridor opportunities in the Quad Cities region. Key findings include:

- **Extensive Network Footprint:** The mapped Network encompasses approximately 5,588,398 acres of land across the bi-state Quad Cities region. This represents the critical natural links – along river corridors, streams, and woodlands – needed to connect hundreds of individual habitat patches into one continuous network. The Mississippi River corridor forms the backbone, with major tributaries (such as the Rock River, Wapsipinicon River, Green River, and Cedar River) and associated upland forests creating lateral branches of connectivity. Virtually every part of the region contains some Network lands, underscoring that connectivity is a region-wide opportunity.
- **Significant Conservation Opportunity:** Of the 5,588,398 acres analyzed, 22.35% (about 1,248,966 acres) are currently protected as parks, conservation areas, or nature preserves. However, the remaining 77.65% (approximately 4,339,432 acres) are unprotected. This substantial gap highlights a tremendous conservation opportunity and urgent need to secure additional lands within the Network to achieve its full potential; cultivating a connected network across political boundaries can help mitigate climate-driven hazards like floods and extreme heat by working across the landscape and more broadly accrue benefits.
- **Core Areas and Linkages:** The Network links significant natural areas. For example, on the Illinois side it connects Loud Thunder Forest Preserve, Illiniwek Forest Preserve, and the Milan Bottoms wetlands along the Mississippi River while also encompassing high-priority sub-watersheds such as Mud Creek–Mill Creek, Zuma Creek, and Coal Creek—each with over 90% unconserved acreage and representing significant opportunities for land conservation. On the Iowa side, it links areas such as Scott County Park, Duck Creek Parkway, and Nahant Marsh with the Mississippi River integrating smaller yet strategic sub-watersheds such as South Fork Walnut Creek, Pioneer Creek, and McDonald Creek, each with over 90% unconserved acreage. By design, the map crosses jurisdictional borders, the corridors weave through portions

of Muscatine and Scott Counties in Iowa and Rock Island, Henry, and Mercer Counties in Illinois, creating an interconnected system rather than isolated pockets.

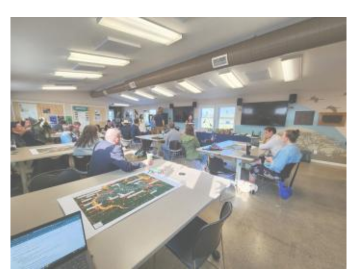
- **Diverse Habitat and Topography:** The Network spans a mix of habitat types such as floodplain forests, wetlands, wooded bluffs, ravines, prairies, and grasslands, reflecting the region's natural diversity. River corridors are especially important for migratory birds and wildlife, while upland areas and remnant prairies help connect larger natural spaces. By linking these ecosystems, the Network boosts ecological resilience across the landscape, which in turn ensures consistent ecosystem services for communities, like minimizing air pollution and purifying water.

STRATEGIC OPPORTUNITIES TO IMPLEMENT THE NETWORK

The Quad Cities region has a strong foundation for collaboration and some "early win" opportunities. This section outlines priority geographies and actionable strategies to translate the Network map into on-the-ground conservation. Priority geographies and conservation opportunity areas are identified through the Network mapping analysis and informed by ongoing stakeholder conversations across the region; the implementation strategies reflect insights and refinement from the September 2025 regional partner workshop. In addition to the primary priority geographies highlighted below, several secondary geographies with significant conservation potential were identified through the mapping analysis and

NETWORK WORKSHOP

The workshop brought together more than 25 participants representing local governments, federal agencies, conservation organizations, and community partners from across the Quad Cities region in Iowa and Illinois. Participants reviewed and validated preliminary ecological corridor mapping outputs, refined priority geographies, and identified on-the-ground considerations related to restoration feasibility, land ownership, flood risk reduction, community priorities, and partnership readiness. The workshop also surfaced shared regional priorities and near-term opportunities for implementation, including wetland and floodplain restoration, connectivity along creeks and ravines, conversion of underutilized green space to native habitat, and integration of corridor goals with local planning processes. *A detailed summary of workshop outcomes is provided in Appendix B.*



stakeholder conversations and are described in Appendix C.

To guide action, sub-watersheds have been classified based on their level of existing conservation. These categories help prioritize where new efforts can make the greatest impact:

- **High Priority for New Conservation (Areas with >75% Non-Conserved Land):** These sub-watersheds represent the largest remaining unprotected areas within the corridor, offering significant opportunities for conservation efforts. In this report, 'non-conserved' refers to land that is not currently under any formal conservation status, as defined by Protected Areas Database (PAD-US) and local land protection databases. This category includes both undeveloped natural or semi-natural areas (e.g., forests, wetlands, grasslands) and working lands (e.g., agriculture) that may still provide ecological value or restoration potential. It excludes developed urban areas and impermeable surfaces that are no longer viable for habitat connectivity and flood mitigation. While land ownership patterns and existing habitat quality vary within this category, it was used as a preliminary filter to identify areas where conservation action is still possible, recognizing that finer-scale prioritization will require additional layers such as habitat quality, land use, and feasibility of protection.
- **Moderate Opportunity for New Conservation (Areas with 25-75% Non-Conserved Land):** These areas have some existing conservation but still offer considerable acreage for additional protection.
- **Well-Conserved Areas (<25% Non-Conserved Land):** These sub-watersheds have a high proportion of formally protected land. Continued stewardship and connectivity to nearby landscapes is key.

Lower Rock River Watershed (East Moline, Credit Island, Milan Bottoms)

Corridor Snapshot

Total Corridor Area: 120,563 acres
Already Conserved: 33,906 acres (28.1%)
Non-Conserved: 86,657 acres (71.9%)

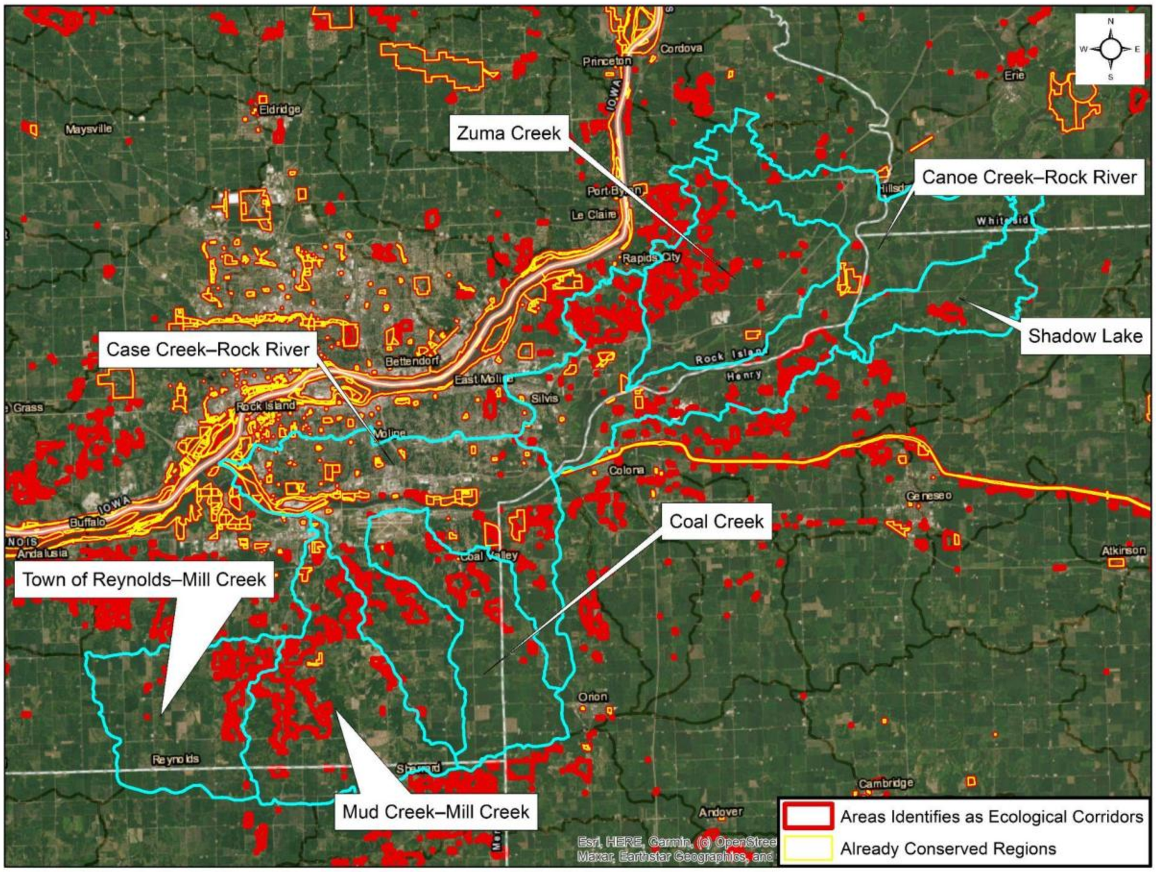
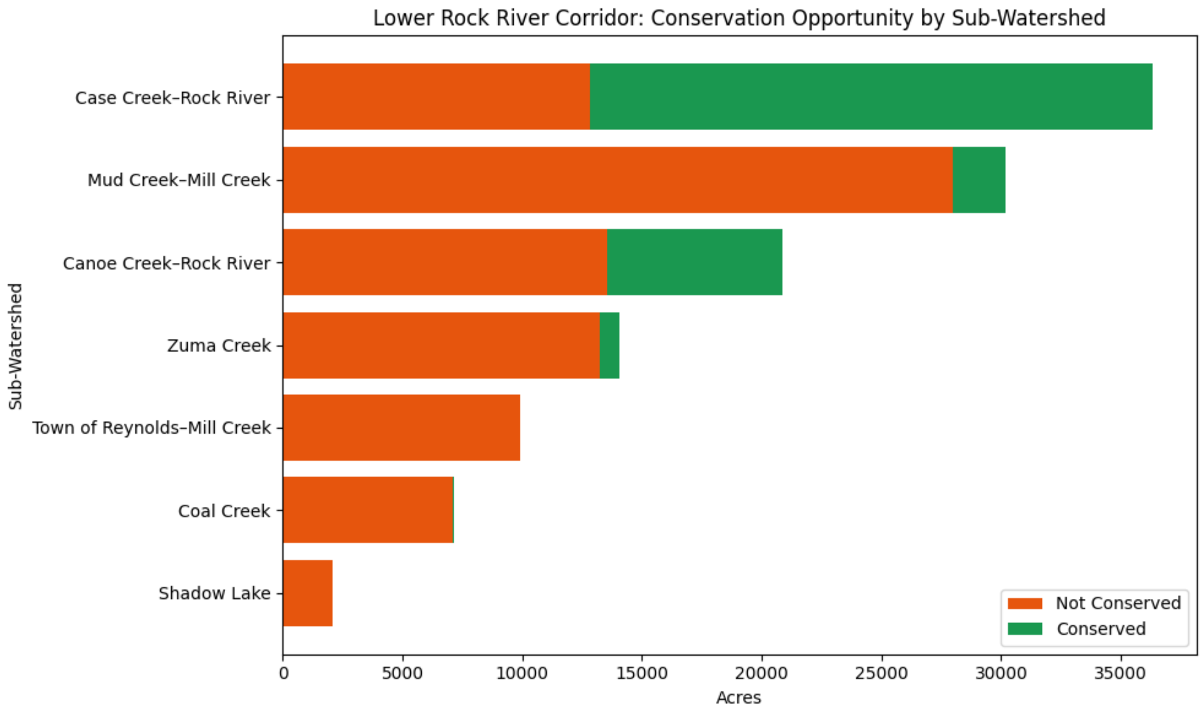


Figure 2. *Lower Rock River Corridor.*

Conservation Opportunity Areas

Sub-Watershed Name	Priority Level	Total Acreage	Not Conserved Acreage	% Not Conserved
Shadow Lake	High Priority	2,055.33	2,055.33	100.00%
Town of Reynolds–Mill Creek	High Priority	9,901.29	9,901.29	100.00%
Coal Creek	High Priority	7,136.93	7,103.92	99.50%
Mud Creek–Mill Creek	High Priority	30,173.17	27,990.78	92.80%
Zuma Creek	High Priority	14,070.79	13,254.23	94.20%
Canoe Creek–Rock River	Moderate Opportunity	20,873.36	13,524.04	64.80%
Case Creek–Rock River	Moderate Opportunity	36,352.82	12,827.72	35.30%



The Lower Rock River Corridor, encompassing the Milan Bottoms and Credit Island floodplains, stretches across more than 120,000 acres. With only 28% of the corridor currently conserved, large tracts, especially in Shadow Lake, Zuma Creek, Mud Creek, and Reynolds-Mill Creek, remain vulnerable to development, hydrological modification, and nutrient loading from agricultural sources. Pockets of land are federally owned or under conservation easements, but large stretches remain fragmented.

This corridor fills a critical ecological gap along the Mississippi River between the Upper Mississippi Wildlife Refuge to the north and the Port Louisa NWR to the south. It serves as a key flyway zone for migratory birds and is important for backwater fisheries and floodwater storage. Stakeholders emphasized the urgency of filling this gap to complete a nearly continuous riverine greenbelt.

The Lower Rock River Corridor offers a critical example of urban–rural ecological connectivity, spanning three counties: Rock Island, Mercer, and Henry. In Rock Island County, urban and suburban areas like Milan, Credit Island, and Eastern Moline sit at the downstream end of the corridor. Moving southwest, the corridor transitions into agricultural and semi-rural landscapes in Mercer County, including the Town of Reynolds–Mill Creek and Mud Creek–Mill Creek subwatersheds, which are largely farmed and underprotected. To the southeast, the corridor overlaps with northwestern Henry County, particularly through the Case Creek–Rock River and Coal Creek subwatersheds.

Potential Strategies

Conservation could prioritize land acquisition or easements to fill in gaps in the corridor and create a more continuous protected area.

- Advance the Milan Bottoms–Lower Big Island complex as a near-term priority, including opportunities to expand protection and pursue inclusion in the Illinois Land & Water Reserves.
- Evaluate the I-80/85 corridor in East Moline as a potential early-action site for restoration, flood mitigation, and connectivity.
- Use creeks and riparian areas as primary corridor spines, prioritizing tributaries (e.g., Mud Creek–Mill Creek, Zuma Creek, Coal Creek) to strengthen connectivity between the Rock River and the Mississippi.
- Pursue targeted landowner engagement where expansion is feasible, recognizing that some areas (e.g., Rock Island Forest Preserve lands) currently lack willing landowners or funding for expansion.
- Advance visible urban connections through tree corridors and greenway linkages around East Moline and Moline to connect parks, trails, and riverfront areas.

Lower Wapsipinicon River Watershed (North of the Quad Cities)

Corridor Snapshot

- **Total Corridor Area:** 153,588.66 acres
- **Already Conserved:** 59,573.53 acres (38.8%)
- **Non-Conserved:** 94,015.13 acres (61.2%)

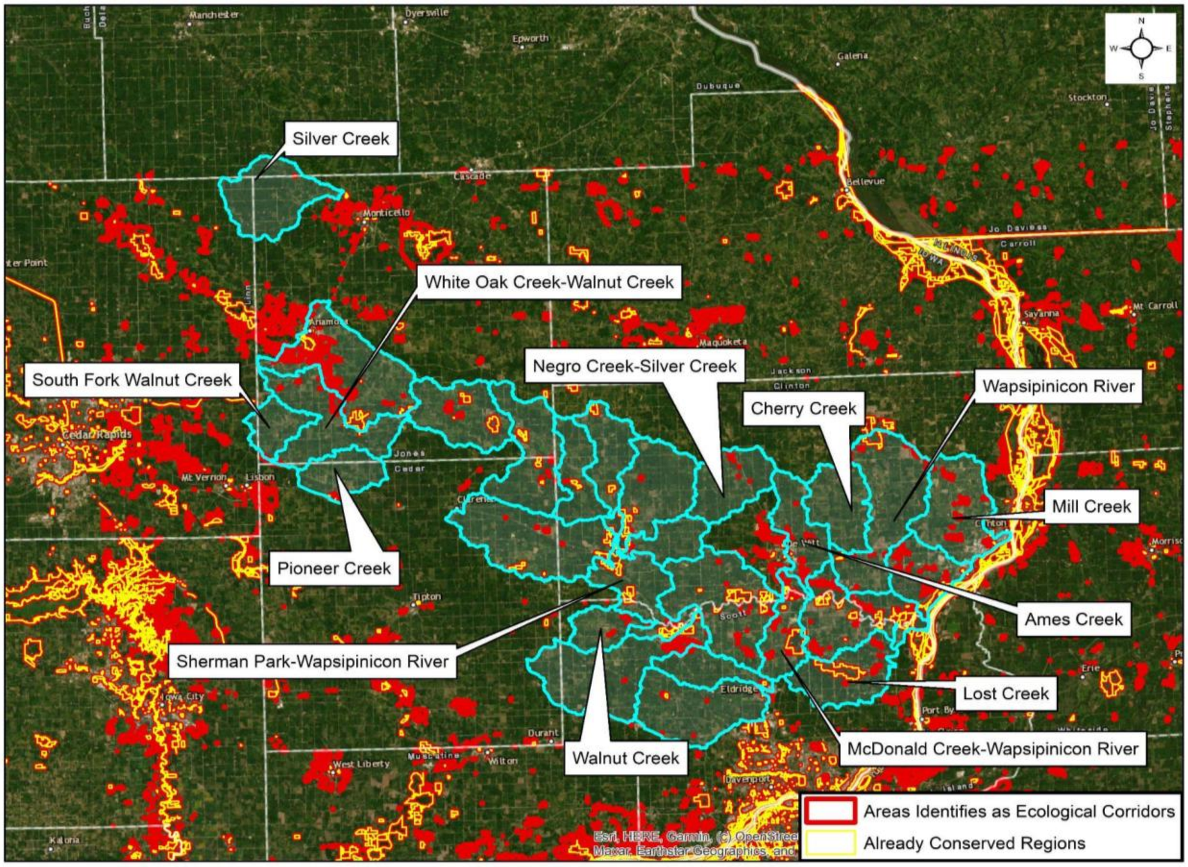


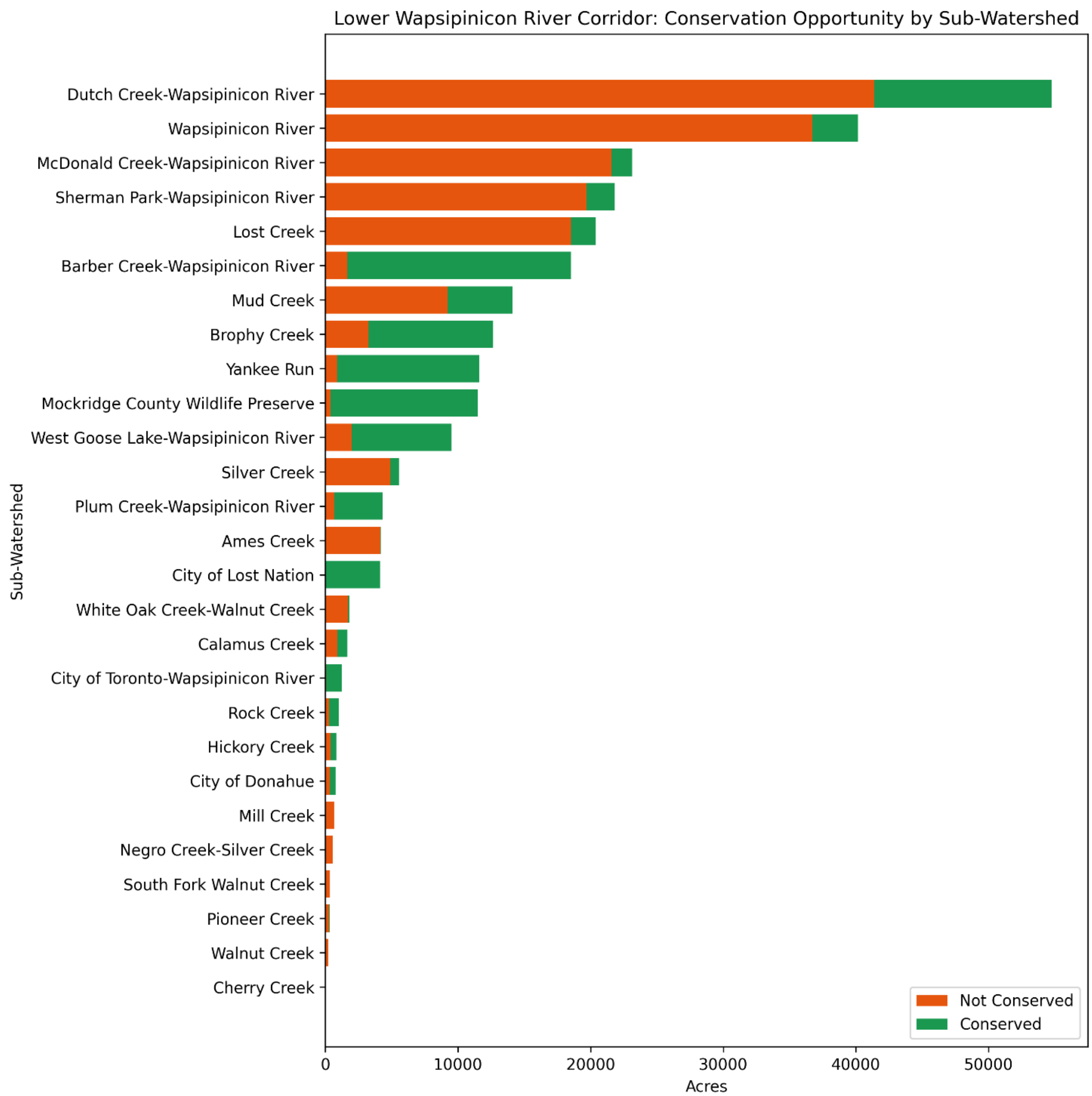
Figure 3. *Lower Wapsipinicon River Watershed.*

Conservation Opportunity Areas

Sub-Watershed Name	Priority Level	Total Acreage	Not Conserved Acreage	% Not Conserved
South Fork Walnut Creek	High Priority	356.58	356.58	100.00%
Pioneer Creek	High Priority	322.26	275.93	85.60%
White Oak Creek-Walnut Creek	High Priority	1,797.47	1,738.19	96.70%
Mill Creek	High Priority	675.36	675.36	100.00%
Walnut Creek	High Priority	213.63	213.63	100.00%
Sherman Park-Wapsipinicon River	High Priority	21,828.97	19,688.90	90.20%
Cherry Creek	High Priority	57.23	57.23	100.00%

Negro Creek-Silver Creek	High Priority	585.69	585.69	100.00%
Silver Creek	High Priority	5,558.78	4,910.61	88.30%
Ames Creek	High Priority	4,177.16	4,150.00	99.30%
McDonald Creek-Wapsipinicon River	High Priority	23,128.15	21,561.03	93.20%
Lost Creek	High Priority	20,392.23	18,515.77	90.80%
Wapsipinicon River	High Priority	40,157.86	36,724.68	91.50%
Hickory Creek	Moderate Opportunity	842.62	407.43	48.30%
Mud Creek	Moderate Opportunity	14,113.03	9,212.62	65.30%
City of Donahue	Moderate Opportunity	778.81	345.73	44.40%
Calamus Creek	Moderate Opportunity	1,668.05	904.65	54.20%
Brophy Creek	Moderate Opportunity	12,660.37	3,253.17	25.70%
Dutch Creek-Wapsipinicon River	Moderate Opportunity	54,749.62	41,385.59	75.60%
Rock Creek	Moderate Opportunity	1,033.71	266.93	25.80%
West Goose Lake-Wapsipinicon River	Well-Conserved	9,534.49	1,996.78	20.90%
Plum Creek-Wapsipinicon River	Well-Conserved	4,336.20	671.16	15.50%
City of Lost Nation	Well-Conserved	4,137.68	0	0.00%
City of Toronto-Wapsipinicon River	Well-Conserved	1,239.48	79.9	6.40%
Mockridge County Wildlife Preserve	Well-Conserved	11,499.37	395.02	3.40%
Yankee Run	Well-Conserved	11,611.46	879.64	7.60%

Barber Creek-Wapsipinicon River	Well-Conserved	18,511.77	1,668.40	9.00%



The Wapsipinicon River Corridor spans over 271,800 acres of connected green space across 11 HUC12 subwatersheds in eastern Iowa. Nearly one-third (31%) of this corridor is already conserved. Still, over 186,000 acres remain vulnerable, particularly to agricultural expansion, habitat fragmentation, and drainage modifications in its rural headwaters.

The Wapsipinicon is one of the last largely intact natural corridors in the region. Its combination of upland prairies, backwater sloughs, and forested riparian zones provides significant floodwater storage upstream of the Quad Cities. Its rural character makes it especially vulnerable to agricultural expansion and drainage modifications.

Potential Strategies

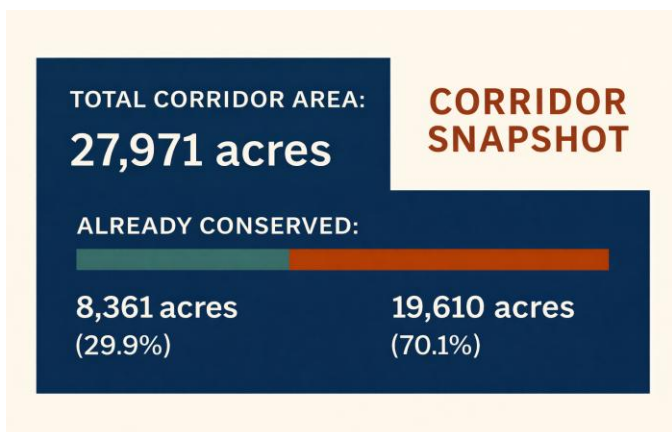
Conservation efforts here might focus on maintaining its intactness, preventing fragmentation, and working with landowners to protect riparian buffers.

- Maintain intactness and prevent fragmentation, especially in low- and moderately conserved HUCs like McDonald Creek and Crows Creek.
- Identify and target landowners with significant riparian property along the Wapsipinicon River and its key tributaries (Crows Creek, Dutch Creek, etc.).
- Leverage existing monitoring and data by using permanent stream gauges and available USACE datasets to better quantify the Wapsipinicon's contribution to downstream flooding and inform project prioritization.
- Build on existing agricultural conservation programs, including NRCS initiatives, RCPP efforts (e.g., oxbow restoration in Scott County), and partnerships with agricultural organizations to expand voluntary conservation across the watershed.
- Explore coordinated governance and capacity-building opportunities, such as watershed management authorities, joint staffing models with NRCS, or stronger roles for county conservation boards to support land acquisition and implementation.

Duck Creek Watershed

Corridor Snapshot

- **Total Corridor Area:** 27,971 acres
- **Already Conserved:** 8,361 acres (29.9%)
- **Non-Conserved:** 19,610 acres (70.1%)



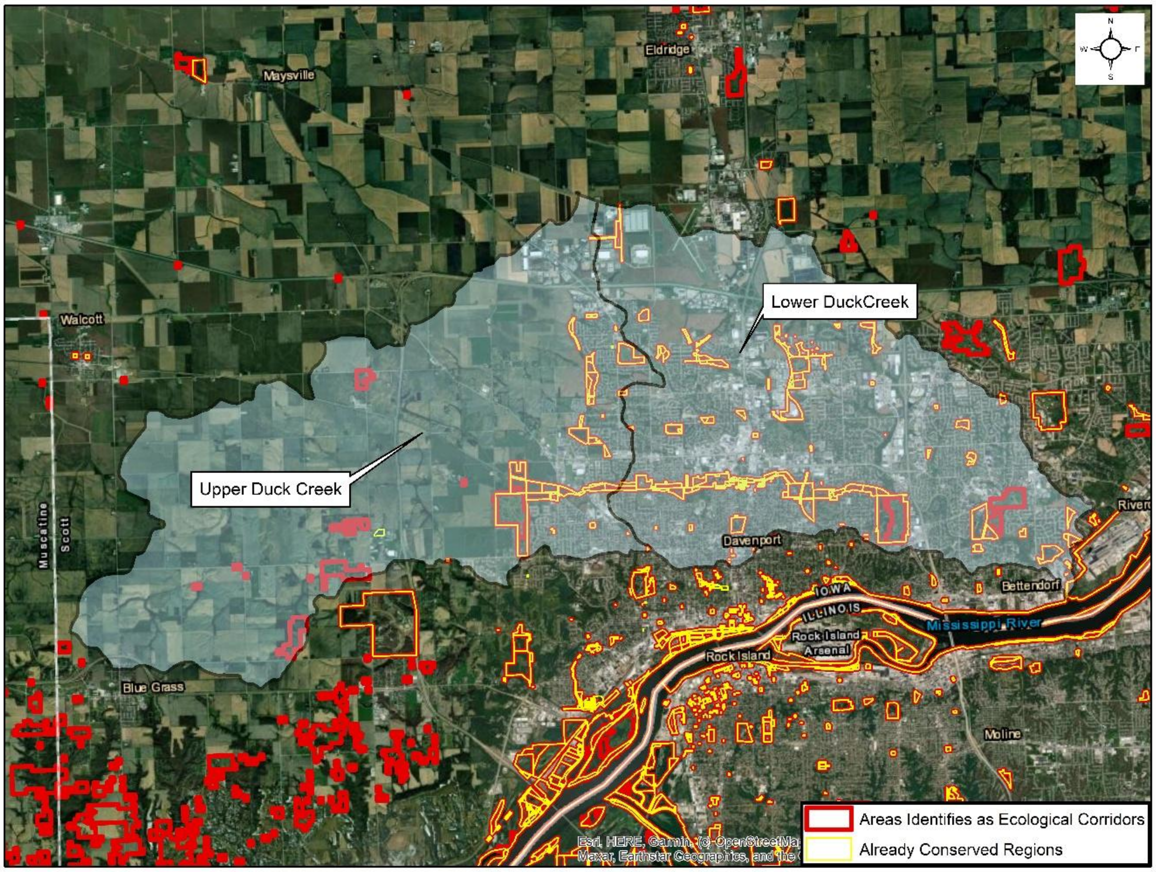
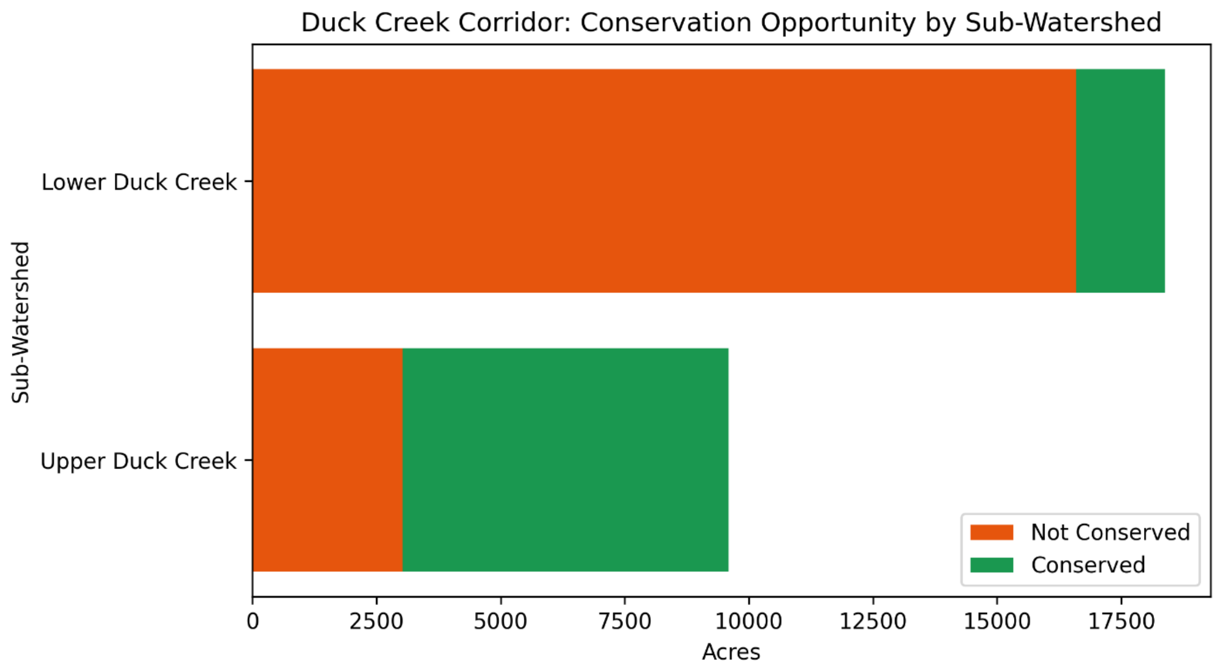


Figure 4. *Duck Creek Corridor.*

Conservation Opportunity Areas

Sub-Watershed Name	Priority Level	Total Acreage	Not Conserved Acreage	% Not Conserved
Lower Duck Creek	High Priority	18,381	16,584.21	90.22%
Upper Duck Creek	Moderate Opportunity	9,590	3,025.45	31.50%



Spanning nearly 29,000 acres across two HUC12 subwatersheds, the Duck Creek Corridor serves as a critical link between city parks, neighborhoods, and natural features like Nahant Marsh and the Mississippi River floodplain. A sizable portion of land is city- or non-profit-owned (e.g., Nahant Marsh), but other parcels within the corridor are not yet managed for ecological function or formal conservation. Although Upper Duck Creek is relatively well-conserved (68.5%), Lower Duck Creek remains over 90% unprotected.

Duck Creek is a highly visible, highly accessible urban stream corridor where urban stream restoration and green infrastructure (e.g., rain gardens, permeable pavements, vegetated swales, etc.) can be showcased simultaneously. The creek also plays a significant role in reducing floods and retaining stormwater.

Potential Strategies

Restoration and enhancement efforts in this area could focus on improving connectivity within the urban matrix, stormwater management, and creating demonstration sites for ecological restoration in urban settings.

- Strengthen greenway and trail connectivity by aligning corridor planning with existing and planned bike and pedestrian networks, including the Duck Creek bike path, Goose Creek Trail, and connections to West Lake and Credit Island.
- Use Duck Creek and its tributaries as the primary urban corridor spine, prioritizing floodplain, ravine, and riparian restoration to address recurring flash flooding and improve stormwater management.

- Leverage city- and county-owned lands by converting underutilized, mowed parcels and green space into native prairie, wetland, or riparian habitat to improve connectivity at low acquisition cost.
- Advance ravine and creek restoration projects on both sides of the river, including Pleasant Creek, Spencer Creek, Crow Creek, and areas north of the Duck Creek buyout project, to protect emerging corridors as development pressure increases.
- Integrate corridor goals into local planning and zoning efforts, including Bettendorf's planned greenway zoning and ongoing floodplain mapping and hazard mitigation initiatives.
- Refine corridor boundaries based on feasibility, removing non-conservation areas such as wastewater treatment infrastructure, industrial sites, airports, and detention facilities while retaining adjacent natural areas where restoration or buffering is possible.
- Expand rural engagement upstream by coordinating with Scott County Soil & Water Conservation Districts and existing RCPP efforts to promote edge-of-field practices and voluntary conservation on agricultural lands.

Mississippi River Mainstem & Associated Floodplain Tributaries

Corridor Snapshot

- **Total Corridor Area:** 64,952.40 acres
- **Already Conserved:** 20,845.24 acres (32.1%)
- **Non-Conserved:** 43,807.16 acres (67.9%)

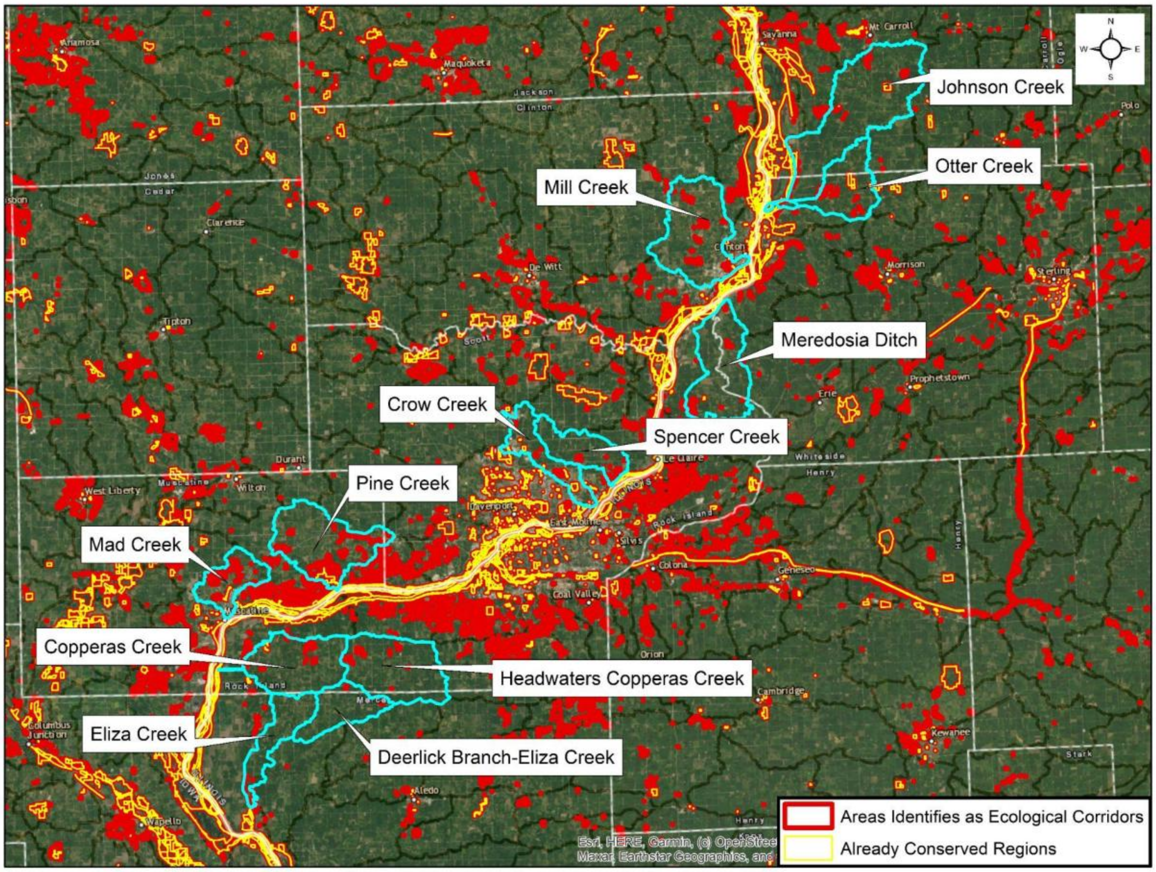
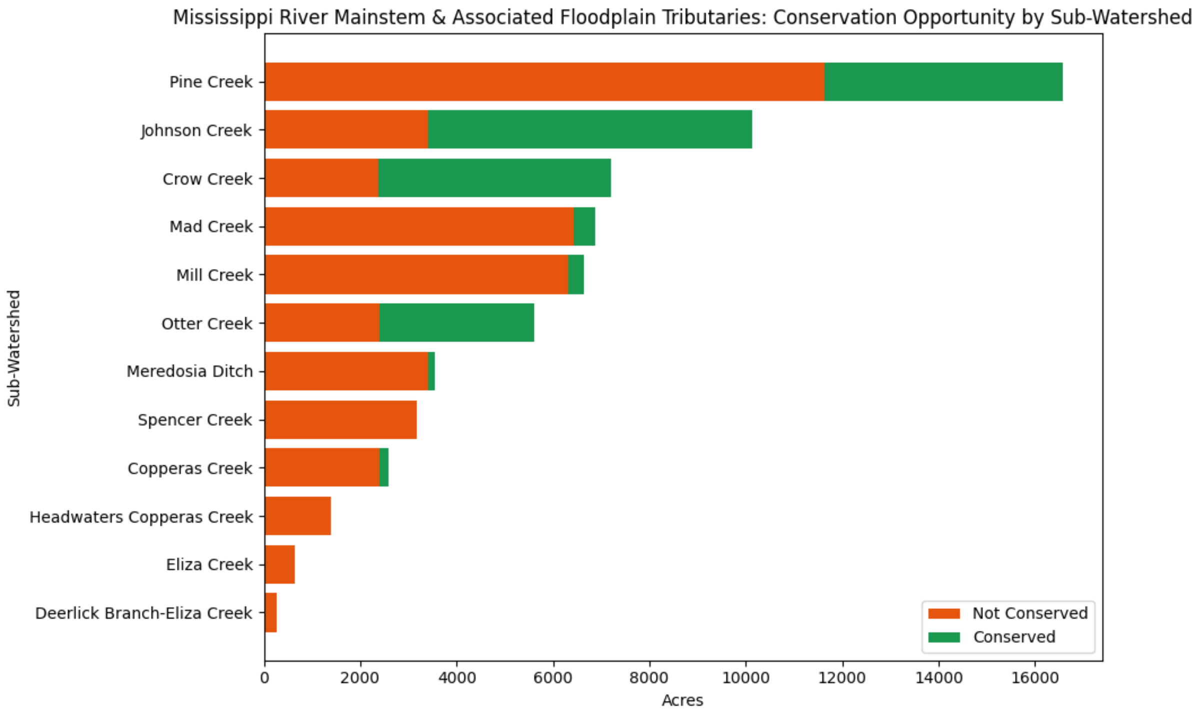


Figure 5. *Mississippi River Mainstem.*

Conservation Opportunity Areas

Sub-Watershed Name	Priority Level	Total Acreage	Not Conserved Acreage	% Not Conserved
Mill Creek	High Priority	6,635.55	6,317.95	95.20%
Meredosia Ditch	High Priority	3,547.45	3,401.28	95.90%
Spencer Creek	High Priority	3,174.49	3,174.20	99.90%
Headwaters Copperas Creek	High Priority	1,396.18	1,396.18	100.00%
Mad Creek	High Priority	6,880.81	6,427.14	93.40%
Deerlick Branch-Eliza Creek	High Priority	268.69	268.69	100.00%
Eliza Creek	High Priority	642.41	642.41	100.00%
Copperas Creek	High Priority	2,590.90	2,386.95	92.10%

Otter Creek	Moderate Opportunity	5,607.64	2,397.24	42.80%
Johnson Creek	Moderate Opportunity	10,138.69	3,397.39	33.50%
Crow Creek	Moderate Opportunity	7,201.41	2,368.78	32.90%
Pine Creek	Moderate Opportunity	16,568.18	11,628.95	70.20%



This geography encompasses the numerous smaller tributaries and expansive floodplains directly connected to the Mississippi River, particularly in the upstream and central portions of the Quad Cities area not fully captured by the Lower Rock River Corridor. These areas are vital for water quality, migratory pathways, direct human access, and maintaining the overall health of the river system.

This corridor serves as a vital hydrological and ecological link to the Mississippi River, supporting diverse aquatic and terrestrial species and influencing downstream water quality. The substantial non-conserved acreage highlights major opportunities for expanding formal protection and integrating conservation efforts into the broader regional strategy.

Potential Strategies

Conservation efforts in this area can prioritize direct river-adjacent protection and tributary health.

- Prioritize tributary-driven restoration near population centers, focusing on flood-prone areas with high social vulnerability such as the Lower Rock River corridor near Colona and tributaries in Scott and Rock Island Counties.
- Target sediment and nutrient reduction in key tributaries, including Spencer Creek and Crow Creek, through streambank stabilization, riparian buffers, and floodplain restoration.
- Build on existing county-led efforts, supporting ongoing RCPP projects in Scott County (e.g., wetland and oxbow restoration) and current watershed planning and landowner outreach in Rock Island County.
- Strengthen rural landowner outreach upstream of the Quad Cities, recognizing lower awareness of flooding and water quality impacts in ex-urban and rural areas and the need to expand partner networks beyond city boundaries.
- Identify and engage additional upstream partners to better understand priority geographies, land management concerns, and feasible conservation practices that contribute to mainstem resilience.
- Use tributary restoration as an entry point for mainstem benefits, emphasizing how upstream actions can reduce downstream flooding, improve water quality, and complement Mississippi River–focused investments.
- Implement natural infrastructure that capture nutrients and sediment to reduce runoff into tributaries and ultimately the Mississippi.

CROSS-CUTTING STRATEGIES

To bring the Network vision to life, conservation leaders must align around system-wide actions beyond one watershed or county boundary. The following strategies can be applied across the region to build momentum, integrate the Network goals into local governance, and ensure long-term success.

Integrate Network into Local and Regional Planning Frameworks

A strategic opportunity lies in incorporating the Network into regional and local land-use plans. County and city governments can formally recognize the mapped Network areas in their comprehensive plans, master plans, hazard mitigation, or zoning ordinances. By doing so, the Network becomes a planning layer that must be considered in development decisions, for example, a city could establish a conservation overlay zone or stream buffer ordinance to protect lands within the Network from incompatible development. The corridor map can inform and integrate corridor priorities into the following key planning processes:

- **Hazard Mitigation Plans (HMPs)**
  Examples: Rock Island County HMP (2021), Scott County HMP (2023)

    - Ecological corridors can reduce localized flood risk, protect floodplains, and buffer critical infrastructure — all of which are priorities in HMPs. Integration into these plans can help justify and unlock FEMA mitigation funding for corridor-aligned projects.
- **Comprehensive Land Use Plans**
  Examples: City of Moline, East Moline, Davenport, Rock Island County
    - These plans guide long-term growth and development decisions. Recognizing the ecological corridor network in comprehensive plans ensures land conservation and resilience strategies are considered in zoning, capital investments, and development approvals.
- **Watershed or Greenways Plans**
  Examples: Rock River Ravines Watershed Plan (2008), Rock Island County Greenways Plan (2018), Duck Creek Watershed Plan (2011)
    - These frameworks already promote conservation and connectivity. Aligning corridor efforts with these plans builds continuity with past work and positions new projects to receive support from parks, trails, and water quality programs.
- **Zoning, Subdivision, and Stormwater Ordinances**
    - Cities can use the Network to update local ordinances that encourage conservation design, such as clustering housing away from sensitive habitat, incorporating stream buffer requirements, and requiring natural infrastructure in new developments within or adjacent to the corridor. A helpful resource can be the *Sustainable Development Code* that offers model zoning and stormwater management strategies that support nature-based resilience and ecological connectivity.
- **Bi-State Regional Coordination**
    - The Bi-State Regional Commission can help institutionalize the Network as a regional planning layer, guiding smart growth by steering development away from critical corridor areas and toward less sensitive sites. They can also support data integration into 2021 Bi-State Comprehensive Economic Development Strategy (CEDS) that highlights the region's riverfront forests, wetlands, and wildlife habitat as core regional assets under threat from development. It calls out the Mississippi, Rock, and Wapsipinicon River corridors as ecological priorities and names flood mitigation and greenspace as shared goals. It also underscores that "the largest impact from flood occurs where development has occurred, which is mostly along the Mississippi and Rock Rivers," further cementing the need for large-scale flood mitigation solutions.

Formal recognition of the ecological corridor network as a planning layer, whether in comprehensive plans, green infrastructure overlays, or hazard mitigation strategies, can unlock local, state, and federal funding streams, help secure regulatory weight, and elevate the corridor as an official framework for coordinated conservation and climate resilience investment across the region.

Restore and Optimize Ravines as Natural Infrastructure

Ravines are a defining feature of the Quad Cities landscape and represent both ecological and stormwater assets. Ravines can serve as natural conduits for wildlife movement, stormwater absorption, erosion control, and groundwater recharge. However, many ravines have been altered, neglected, or degraded over time. To restore their function, municipalities and partners can invest in ravine stabilization and re-vegetation using native plants, re-establish hydrologic flows, and integrate ravines into broader stormwater and green infrastructure plans, especially in places like East Moline, where local leadership has already prioritized this strategy.

Leverage Existing Initiatives and Partnerships

The Quad Cities area already has collaborative initiatives such as River Action and the Bi-State Conservation Action Network (BiCAN) with its Ecological Corridor Subcommittee that can continue to lead the charge in convening partners and coordinating implementation. This effort could also be advanced through the creation of a dedicated Ecological Corridor Implementation Committee or Coalition. This new group could include members from BiCAN, River Action, the Clean Rivers Advisory Committee (C-RAC), local governments, land trusts, county conservation boards, and regional planning bodies that can collectively develop a detailed action plan with timelines. This should include setting measurable targets, for example, aiming to permanently protect certain acres of the Network by 2030 as an initial milestone, broken down by county or corridor segment to assign responsibility and track progress.

Secure Funding and Resources

Sufficient and sustained funding is the linchpin for turning the Network into on-the-ground projects. A blend of grants (state open space grants, federal programs like the North American Wetlands Conservation Act (NAWCA) for wetlands, private foundations) and financing schemes for the multiple co-benefits of the natural spaces (water quality, recreation, wildlife habitats) can be leveraged. It also means encouraging local governments to allocate budget for land acquisition or match grants. Corporate partners and local businesses can be engaged as potential sponsors, given the quality of life and recreation benefits of a greener region. Consider establishing a regional conservation fund or coalition fundraising campaign to pool resources. National Wildlife Federation's Nature-based Solutions Funding Database catalogues federal funding opportunities.

Engage, Inform, and Empower Communities

Community support is critical for building and fostering a connected network of conserved land and water in the Quad Cities. Community members should not only understand the benefits of the Network but be involved in shaping its future. This means consulting, involving, and collaborating with residents and stakeholders throughout planning and implementation. Opportunities exist to engage residents through volunteer projects (tree plantings, river clean-ups along the corridor, community science wildlife monitoring, etc.), as well as through outreach that highlights the Network benefits for people. Ecotourism and outdoor recreation can be promoted hand-in-hand with conservation such as paddling trails on connected river stretches, birding tours that follow migratory pathways, or scenic byways that showcase restored natural vistas. By demonstrating how the Network can provide recreation and economic benefits (in addition to ecological ones), local leaders and funders will be more inclined to back the effort. Education programs in schools and community centers about the region's wildlife and the concept of connectivity can cultivate a sense of stewardship in the next generation. Ultimately, an informed and excited public will help create the political will and resources needed to implement the Network.

> **Landowner engagement across the region** is particularly important in rural watersheds, where most corridor acreage is privately held. Trusted messengers such as soil and water conservation districts, local producers, and conservation partners can help build bridges with landowners and increase awareness of voluntary conservation tools. The National Wildlife Federation's Conservation Champions program is one such model, designed to equip influential farmers and ranchers to lead peer-to-peer outreach within their communities. Outreach should be tailored to landowner interests, whether it's improving yield, protecting family land, or reducing flood risk.

Launch Pilot Projects/Demonstration Sites

To build visible momentum and community support, the Network initiative can begin with a small set of high-impact pilot projects that demonstrate what conservation looks like on the ground. Potential demonstration sites could include the acquisition of a strategic parcel in the Milan Bottoms–Credit Island corridor or a stream restoration effort along Duck Creek in Davenport that combines native plantings with interpretive signage and stormwater benefits. In rural areas, working with landowners in the Green River tributaries or Wapsipinicon basin to implement riparian buffers or prairie restoration could serve as a visible model of voluntary conservation.

Monitor, Adapt, and Celebrate Progress

As implementation proceeds, establish a system to monitor outcomes, like tracking acres protected, miles of stream buffer restored, etc. This data should be reviewed regularly by the EC Subcommittee (or another designated coalition) to assess what's working and where strategies might need adjustment. This approach, known as adaptive management, is a structured, iterative process of robust decision-making in the face of uncertainty, where lessons learned are used to inform and improve future actions. Importantly, celebrating milestones through media coverage, community events, and recognition of key contributors will reward the hard work of partners and keep everyone motivated for the next phase.

NEXT STEPS & CONSIDERATIONS

This analysis uses the percentage of non-conserved (or unconserved) land as a first-order filter to identify watersheds with potential for ecological corridor expansion. In this context, unconserved refers to land not currently under formal protection status, such as state parks or federal lands, but may still include natural or semi-natural landscapes, as well as working lands like agricultural fields. Developed areas (e.g., impervious urban land) were excluded from this calculation.

While this metric offers a useful lens to identify areas with potential for future conservation investment, we recognize it is only a starting point. Not all unconserved lands have equal ecological value or restoration feasibility. Habitat quality, land ownership patterns, cultural and community priorities, and readiness for partnership are all important next-layer considerations. The following next steps reflect shared themes and implementation considerations raised by partners across geographies and support coordinated, region-wide advancement of the Ecological Corridor Network:

- **Strengthen regional coordination and shared leadership.** Partners consistently emphasized the need for clearer coordination across jurisdictions and sectors. Establishing regular forums for shared learning, project alignment, and communication can help reduce duplication, align expectations, and support collective action.
- **Advance early, visible projects to build momentum.** Participants highlighted the importance of near-term, on-the-ground actions—such as wetland restoration, ravine stabilization, native vegetation conversions, or trail-adjacent green infrastructure—to demonstrate progress, build public support, and sustain partner engagement.
- **Align corridor goals with existing plans, policies, and funding pathways.** Integrating corridor priorities into comprehensive plans, hazard mitigation plans, watershed plans, and capital improvement programs was identified as a key strategy for institutionalizing nature-based solutions and unlocking funding opportunities.

- **Expand landowner and community engagement.** Successful implementation will depend on voluntary participation across both urban and rural landscapes. Tailored outreach approaches—recognizing differences between landowners, operators, and community users—are critical for building trust and identifying feasible conservation opportunities.
- **Continue to refine priorities using data and local knowledge.** Participants underscored the value of pairing spatial analysis with on-the-ground insight. Ongoing use of monitoring data, local expertise, and partner feedback can help refine project selection, improve feasibility, and adapt strategies over time.
- **Maintain Momentum Through Outreach and Joint Funding.** Sustained progress will depend on continued outreach and visible implementation outcomes that build public understanding and support. Developing shared messaging and visuals that communicate corridor benefits such as flood resilience, habitat connectivity, recreation, and quality of life can help strengthen long-term buy-in. Participants also emphasized the value of coordinating around funding opportunities and pursuing joint proposals where appropriate, particularly for programs that support nature-based solutions, regional collaboration, and community resilience.

Together, these next steps reflect an iterative, partner-driven approach to advancing the Quad Cities Ecological Corridor Network that builds upon data-informed analysis, incorporates local knowledge and priorities, and emphasizes actionable pathways toward implementation. Continued collaboration will be essential to refining priorities, advancing projects on the ground, and realizing a connected and resilient ecological corridor network across the region.

APPENDIX A. METHODOLOGY FOR ECOLOGICAL CORRIDOR DEVELOPMENT IN THE QUAD CITIES

Study area: Nestled at the convergence of the Mississippi and Rock Rivers, the Quad Cities form a vibrant community that spans southeastern Iowa's Davenport and Bettendorf to northwestern Illinois' Rock Island, Moline, and East Moline. Home to nearly 400,000 residents, the region thrives as a hub of manufacturing, commerce, and transportation. Equally vital is the region's rich natural heritage - characterized by riverfronts, floodplains, wetlands, ravines, and urban green spaces that support biodiversity, provide critical ecosystem services, and offer residents daily access to nature.

Data Collection and Preprocessing: The first step involved gathering and preprocessing multi-source geospatial datasets to support corridor identification. Vegetation and hydrological remote sensing based (RS) indices such as NDVI, NDWI, and EVI were derived from Sentinel-2 and Landsat 8–9 platforms using Google Earth Engine. These indices provide spatially explicit information on vegetation vigor, surface water availability, and canopy structure, and are composited into seasonal and annual layers for the period 2018–2024 after applying cloud masking protocols. Land use and land cover (LULC) information was extracted from the ESA WorldCover (10 m) and the National Land Cover Database 2019 (30 m) datasets, while NOAA C-CAP data complements coastal and urban land classifications. These datasets were reclassified into ecologically relevant categories such as forest, urban, wetland, and agricultural areas. Additional vegetation structure layers, including canopy height and density, were extracted from Landsat-based canopy products and LiDAR-derived models where available. Protected area boundaries were sourced from the USGS Protected Areas Database (PAD-US), and ecological classifications were aligned using EPA Level III Ecoregions to contextualize the Quad Cities within broader biogeographic zones.

Biodiversity and species habitat data were retrieved from the USGS GAP program and USFWS ECOS portal, which provide modeled habitat distributions and critical conservation areas for federally listed species. Climate datasets, including modeled historical and future temperature and precipitation patterns, were integrated from PRISM, Daymet, or TerraClimate sources at 800m–1km resolution. Elevation, slope, and aspect layers were derived from the 30 m SRTM DEM, and road networks and anthropogenic barriers are extracted from OpenStreetMap (OSM). Local spatial plans, floodplain maps, and green infrastructure layouts were gathered from county and municipal authorities to inform context-sensitive corridor design. In addition to remote sensing indices, LULC, and species habitat data, flood risk information (developed during a previous assessment) was integrated early into the data pipeline. Specifically, flood-prone zones, historical inundation extents, and critical flood infrastructure were extracted from the assessment report which synthesized in-house developed flood models (Pathak et al., 2024, Wadhwa et. al., 2025), local rainfall observations, and crowdsourced flood information. These flood layers were rasterized and co-registered to the habitat and resistance surfaces at a common resolution (e.g., 10–30 m). Attributes such as flood frequency, water depth, and exposure to social vulnerability were preserved for downstream analysis.

The data flow of RS indices, satellite data, habitat suitability and in-house flood data is shown in Figure 6. Proximity to riparian buffers and natural floodways was recorded to allow identification of potential dual-function corridors that enable wildlife movement and provide natural flood mitigation for vulnerable communities.

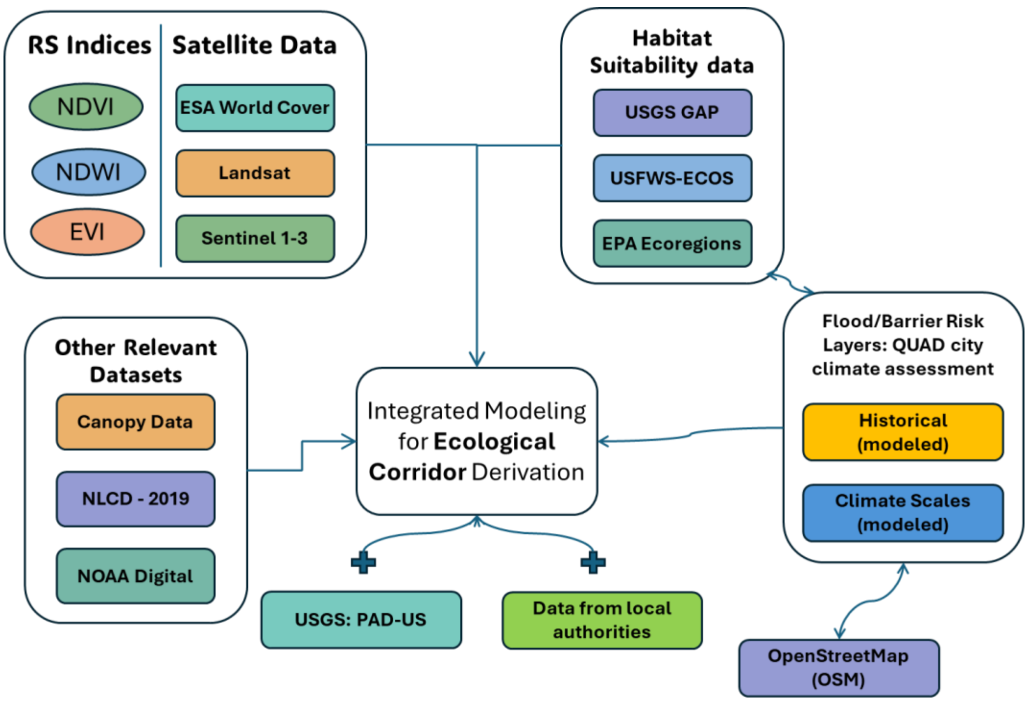


Figure 6. *End to End Data Flow Pipeline for Identification of Ecological Corridors.*

Habitat Suitability Modeling: To identify potential ecological corridors, a habitat suitability modeling approach was implemented. Focal species were selected based on ecological importance, sensitivity to fragmentation, and relevance to the Quad Cities region typically including medium- to large-bodied mammals, avian indicators, and pollinators. A habitat suitability index (HSI) was constructed using a multi-criteria approach, integrating NDVI (as a proxy for vegetation health), land cover class (e.g., forests and wetlands ranked highest), distance from urban and road infrastructure, proximity to surface water (NDWI), and topographic variables (elevation and slope) relevant to species preferences. The weights for each factor were determined through literature-based scoring and using Analytical Hierarchy

Process (AHP). The resulting HSI map represents a spatially continuous raster surface where higher values denote higher habitat suitability for target species.

Corridor Modeling and Connectivity Analysis: Once suitable habitat patches were identified, connectivity modeling was performed to delineate optimal ecological corridors. Least-cost path (LCP) analysis was conducted using the inverse of the habitat suitability index (HSI) map as the cost surface, such that areas with low suitability (e.g., dense urban or industrial zones) incurred higher movement costs. Source and destination habitat patches were defined based on size thresholds and ecological significance, and the optimal corridors between them were derived using standard cost-distance algorithms in GIS platforms or via packages like gdistance in R. To better capture functional connectivity, a resistance surface was developed by assigning resistance weights to each land cover class, anthropogenic barrier, and fragmented zone. These resistance surfaces were refined with additional weights for climate stress exposure and terrain ruggedness. To assess the robustness and redundancy of the corridor network, graph-theory-based connectivity metrics were computed. Using Conefor and Graphab, metrics including betweenness centrality, landscape cohesion, and patch importance were calculated.

Flood data from the NWF's Climate Assessment were incorporated as a critical constraint in habitat suitability modeling. Locations within recurrent flood zones or floodway easements were down-weighted in the HSI, particularly for species sensitive to inundation or dependent on stable dry ground (e.g., burrowing mammals, ground-nesting birds). Flood-adapted ecosystems such as wetlands, riparian woodlands, and oxbow lakes were assigned as higher suitability for select species (e.g., amphibians, waterfowl). A binary flood mask was applied to exclude high-risk zones from core habitat designation. Additionally, terrain-driven flood proxies such as local depression areas and low-lying slope/aspect combinations were flagged using the DEM and cross-referenced with flood exposure maps. The flood-prone areas identified in the report were integrated into the resistance surface with context-dependent weighting. For flood-sensitive species, high-flood-risk zones were given elevated resistance scores to discourage corridor placement through hazardous terrain. For flood-tolerant or aquatic species, these zones serve as preferred pathways, especially where they align with riparian greenways or wetland complexes. The flood-buffering capacity of vegetated corridors is explicitly modeled and built into the corridor modeling tool (least-cost path analysis). Riparian buffers along the Mississippi River, Rock River, and Duck Creek are treated as ecosystems with both ecological and hydrological functions, offering both ecological and flood protection value and given higher priority. Their prioritization in least-cost path and circuit models is enhanced through a composite scoring system that integrates ecological resistance, flood mitigation potential, and climate resilience.

APPENDIX B. NETWORK WORKSHOP SUMMARY

September 11, 2025 | Nahant Marsh Education Center, Davenport, IA

What We Did

Regional partners gathered to discuss the *Quad Cities Ecological Corridor Network*—a science-based effort to connect habitats, reduce flooding, and build community resilience across the Mississippi River region of Iowa and Illinois. The workshop brought together city and county leaders, conservation groups, state and federal agencies, and researchers to:

- Ground-truth corridor mapping results.
- Identify priority areas for restoration and protection.
- Build a shared vision for next steps and collaboration.

Shared Priorities

Participants emphasized that advancing the corridor network will require **coordination, partnerships, and visible results on the ground.**

Top priorities included:

- **Wetland & Floodplain Restoration** – Projects like the Milan Bottoms, Duck Creek, and Wapsipinicon River corridors offer major opportunities for flood storage, habitat, and recreation.
- **Urban Green Infrastructure & Native Landscaping** – Expanding prairie conversions, greenways, and ravine restoration across city-owned lands.
- **Community Engagement & Access** – Increasing awareness and ensuring all residents have green space within a short walk of home.
- **Policy & Planning Integration** – Embedding nature-based solutions in local comprehensive plans, zoning, and hazard mitigation updates.

Key Themes from the Discussion

- **Coordination & Leadership:** Partners called for coordination to share expertise, align projects, and strengthen collaboration.
- **Funding & Quick Wins:** Wetland restoration, native plant conversions, and trail connections were highlighted as visible, early successes to maintain momentum.
- **Shared Learning:** A post-workshop survey will help create a Partner Roster listing each organization's expertise and project focus to facilitate collaboration.

Next Steps

- Complete the partner survey.

- Develop thematic project ideas around natural assets such as wetlands, green infrastructure, ravine restoration across priority corridors.
- Integrate corridor goals into local planning and policies through coordination with Bi-state Regional Planning Commission.

Why It Matters

The Quad Cities Ecological Corridor Network represents a shared regional vision: a connected landscape where nature, communities, and resilience thrive together. By linking floodplains, parks, and natural areas across boundaries, the corridor initiative will help reduce flood risks, improve water quality, enhance wildlife habitat, and expand access to nature for everyone in the Quad Cities region.

APPENDIX C. SECONDARY GEOGRAPHIES FOR CONSERVATION ACTION

These geographies are also relevant to the Quad Cities ecological network but may have a slightly broader regional focus, or current conditions suggest they are not as immediate a priority for new protection as the primary geographies, though they offer significant opportunities for specific conservation strategies.

Green River Watershed

The Green River is a major tributary of the Rock River in Illinois, draining a vast area to the southeast of the immediate Quad Cities metro. Its extensive watershed, characterized by agricultural landscapes, offers significant opportunities for rural conservation, improving water quality, and maintaining connectivity to the larger Rock River system.

Corridor Snapshot

- **Total Corridor Area:** 124,806.66 acres
- **Already Conserved:** 49,494.88 acres (39.7%)
- **Non-Conserved:** 75,398.94 acres (60.3%)

Conservation Opportunity Areas

High Priority for New Conservation (Areas with >75% Non-Conserved Land)

- Town of Viola: 1,638.09 acres total; 1,638.09 acres not conserved (100.0% not conserved)
- Town of Lee Center: 1,389.15 acres total; 1,389.15 acres not conserved (100.0% not conserved)
- Leake Lake-Green River: 5,215.27 acres total; 5,215.27 acres not conserved (100.0% not conserved)
- Woodhaven Lake-Green River: 6,481.10 acres total; 6,481.10 acres not conserved (100.0% not conserved)
- Town of Maytown-Green River: 660.79 acres total; 660.79 acres not conserved (100.0% not conserved)
- Town of Walton-Main Ditch: 240.33 acres total; 240.33 acres not conserved (100.0% not conserved)
- Walnut Creek: 187.43 acres total; 187.43 acres not conserved (100.0% not conserved)
- Town of New Bedford-Green River: 260.09 acres total; 260.09 acres not conserved (100.0% not conserved)

- Devils Slough Ditch-Hennepin Canal: 1,741.33 acres total; 1,741.33 acres not conserved (100.0% not conserved)
- Hickory Creek-Hennepin Canal: 1,924.21 acres total; 1,924.21 acres not conserved (100.0% not conserved)
- Fairfield Ditch Number 1-Green River: 2,793.65 acres total; 2,793.65 acres not conserved (100.0% not conserved)
- Wildcat Ditch: 26.76 acres total; 26.76 acres not conserved (100.0% not conserved)
- Main Union Special Ditch: 279.17 acres total; 279.17 acres not conserved (100.0% not conserved)
- Big Slough Ditch: 1,004.90 acres total; 1,004.90 acres not conserved (100.0% not conserved)
- Mineral Creek: 4,339.50 acres total; 4,252.19 acres not conserved (98.0% not conserved)
- Mosquito Creek: 4,697.27 acres total; 4,510.46 acres not conserved (96.0% not conserved)
- Spring Creek: 1,202.99 acres total; 1,081.48 acres not conserved (89.9% not conserved)
- Winnebago Ditch: 650.96 acres total; 564.82 acres not conserved (86.8% not conserved)
- Red Oak Ditch-Green River: 836.12 acres total; 752.55 acres not conserved (90.0% not conserved)
- Walker Creek-Mud Creek: 13,213.23 acres total; 11,747.57 acres not conserved (88.9% not conserved)
- Hunt Slough: 6,868.15 acres total; 5,639.01 acres not conserved (82.1% not conserved)
- Green River: 19,207.86 acres total; 15,244.78 acres not conserved (79.4% not conserved)

Moderate Opportunity for New Conservation (Areas with 25-75% Non-Conserved Land)

- Hennepin Canal: 7,253.94 acres total; 3,414.41 acres not conserved (47.1% not conserved)
- Hennepin Canal-Green River: 14,506.18 acres total; 6,834.86 acres not conserved (47.1% not conserved)
- Geneseo Creek: 4,166.94 acres total; 2,163.12 acres not conserved (51.9% not conserved)

Well-Conserved Areas (<25% Non-Conserved Land)

- King Creek: 14,002.78 acres total; 39.93 acres not conserved (0.3% not conserved)
- Mud Creek: 3,934.05 acres total; 609.87 acres not conserved (15.5% not conserved)
- Spath Spur-Green River: 5,089.68 acres total; 877.21 acres not conserved (17.2% not conserved)
- Town of Cambridge-Spring Creek: 1,174.31 acres total; 217.93 acres not conserved (18.6% not conserved)

Edwards River Watershed

The Edwards River is a significant tributary to the Mississippi River, primarily flowing through Mercer County, Illinois. Its ecological health and vast non-conserved acreage are critical for the broader regional system, particularly the agricultural landscapes it drains and its downstream influence on the Mississippi.

Corridor Snapshot

- **Total Corridor Area:** 40,046.33 acres
- **Already Conserved:** 8,712.39 acres (21.8%)
- **Non-Conserved:** 31,333.94 acres (78.2%)

Conservation Opportunity Areas

High Priority for New Conservation (Areas with >75% Non-Conserved Land)

- Frye Lake-Camp Creek: 21,656.17 acres total; 21,506.15 acres not conserved (99.3% not conserved)
- North Camp Creek-Camp Creek: 1,665.68 acres total; 1,665.68 acres not conserved (100.0% not conserved)
- Little Camp Creek-Camp Creek: 995.04 acres total; 995.04 acres not conserved (100.0% not conserved)
- Mud Creek-Edwards River: 8,744.64 acres total; 7,306.26 acres not conserved (83.6% not conserved)
- Skunk Creek-Edwards River: 5,123.51 acres total; 5,123.51 acres not conserved (100.0% not conserved)
- Town of Millersburg-Edwards River: 1,068.31 acres total; 968.84 acres not conserved (90.7% not conserved)
- Headwaters Pope Creek: 1,569.60 acres total; 1,559.60 acres not conserved (99.4% not conserved)
- North Pope Creek: 1,696.13 acres total; 1,696.13 acres not conserved (100.0% not conserved)
- Bridger Cemetery-Pope Creek: 881.12 acres total; 881.12 acres not conserved (100.0% not conserved)
- Mad River-Pope Creek: 2,052.86 acres total; 1,760.14 acres not conserved (85.7% not conserved)
- Hawkeye-Dolbee Diversion Channel: 5,470.44 acres total; 4,566.29 acres not conserved (83.5% not conserved)
- Talbot Creek-Cedar Creek: 4,988.29 acres total; 4,213.20 acres not conserved (84.5% not conserved)
- Cedar Creek: 3,711.14 acres total; 3,711.14 acres not conserved (100.0% not conserved)

Moderate Opportunity for New Conservation (Areas with 25-75% Non-Conserved Land)

- Edwards River: 448.06 acres total; 251.34 acres not conserved (56.1% not conserved)
- Dugout Run-Pope Creek: 2,725.16 acres total; 1,429.72 acres not conserved (52.5% not conserved)
- Headwaters Cedar Creek: 14,907.25 acres total; 10,265.89 acres not conserved (68.9% not conserved)

Well-Conserved Areas (<25% Non-Conserved Land)

- Dugout Creek-South Edwards River: 163.80 acres total; 32.68 acres not conserved (19.9% not conserved)
- Town of Andover-Camp Creek: 760.39 acres total; 107.82 acres not conserved (14.2% not conserved)
- Hillery Creek-Edwards River: 1,586.15 acres total; 156.93 acres not conserved (9.9% not conserved)
- Iowa Slough: 11,238.78 acres total; 1,754.25 acres not conserved (15.6% not conserved)

Maquoketa River Watershed

Though slightly outside the Quad Cities urban focus, the Maquoketa River influences downstream flooding and water quality and is rich in biodiversity. Stakeholders highlighted it as ecologically important but currently under-addressed, making it an ideal site for rural corridor pilot programs.

Corridor Snapshot

- **Total Corridor Area:** 221,551.38 acres
- **Already Conserved:** 71,000.56 acres (32.0%)
- **Non-Conserved:** 150,705.51 acres (68.0%)

Conservation Opportunity Areas

High Priority for New Conservation (Areas with >75% Non-Conserved Land)

- Little Bear Creek-Bear Creek: 1,751.02 acres total; 1,751.02 acres not conserved (100.0% not conserved)
- Silver Creek: 52.96 acres total; 52.96 acres not conserved (100.0% not conserved)
- Deer Creek: 7,440.30 acres total; 7,440.30 acres not conserved (100.0% not conserved)
- West Kitty Creek: 6,100.29 acres total; 6,100.29 acres not conserved (100.0% not conserved)
- Farm Creek: 296.91 acres total; 296.91 acres not conserved (100.0% not conserved)

- City of Cascade-North Fork Maquoketa River: 1,198.46 acres total; 1,198.46 acres not conserved (100.0% not conserved)
- Otter Creek: 783.45 acres total; 783.45 acres not conserved (100.0% not conserved)
- Lytle Creek: 1,838.17 acres total; 1,838.17 acres not conserved (100.0% not conserved)
- Buck Creek-North Fork Maquoketa River: 202.72 acres total; 202.72 acres not conserved (100.0% not conserved)
- Sugar Creek: 252.70 acres total; 252.70 acres not conserved (100.0% not conserved)
- Brush Creek: 1,740.93 acres total; 1,740.93 acres not conserved (100.0% not conserved)
- Hainer Creek-Maquoketa River: 7,044.91 acres total; 6,773.86 acres not conserved (96.2% not conserved)
- Cline Creek-Maquoketa River: 8,866.58 acres total; 8,351.01 acres not conserved (94.2% not conserved)
- Cedar Creek-North Fork Maquoketa River: 14,630.44 acres total; 13,830.74 acres not conserved (94.5% not conserved)
- Kitty Creek: 955.04 acres total; 894.94 acres not conserved (93.7% not conserved)
- Union Creek-Prairie Creek: 4,834.38 acres total; 4,468.87 acres not conserved (92.4% not conserved)
- Pumpkin Creek-Maquoketa River: 15,140.45 acres total; 12,921.96 acres not conserved (85.3% not conserved)
- Rock Creek-Maquoketa River: 65.42 acres total; 54.11 acres not conserved (82.7% not conserved)
- Copper Creek: 4,851.67 acres total; 3,941.48 acres not conserved (81.2% not conserved)
- Farmers Creek: 2,215.62 acres total; 1,785.06 acres not conserved (80.6% not conserved)

Moderate Opportunity for New Conservation (Areas with 25-75% Non-Conserved Land)

- Jurdan Creek-Maquoketa River: 75,746.62 acres total; 55,713.97 acres not conserved (73.5% not conserved)
- Beers Creek: 1,635.67 acres total; 934.22 acres not conserved (57.1% not conserved)
- Mineral Creek: 7,428.71 acres total; 4,331.23 acres not conserved (58.3% not conserved)
- Washington Mills-Lytle Creek: 2,266.01 acres total; 1,203.72 acres not conserved (53.1% not conserved)
- Pine Creek-Maquoketa River: 16,567.34 acres total; 6,291.46 acres not conserved (38.0% not conserved)
- Rat Run-Bear Creek: 7,038.66 acres total; 2,365.31 acres not conserved (33.6% not conserved)

Well-Conserved Areas (<25% Non-Conserved Land)

- Whitewater Creek: 5,354.34 acres total; 1,059.56 acres not conserved (19.8% not conserved)

- Maquoketa River: 8,413.83 acres total; 765.65 acres not conserved (9.1% not conserved)
- Cline Branch-North Fork Maquoketa River: 6,197.15 acres total; 409.07 acres not conserved (6.6% not conserved)
- Deep Creek: 8,297.41 acres total; 468.05 acres not conserved (5.6% not conserved)

NWF NATIONAL WILDLIFE FEDERATION ™