



Watershed Resilience: Community Assessment Worksheet

Introduction:

Rivers are the cornerstone of communities. Healthy rivers support agriculture, industry, recreation, public health and strengthen local economies. Land use and development activities, combined with outdated or deteriorating water infrastructure and unpredictable weather patterns, create new challenges for clean water and our communities. Investing in rivers and natural infrastructure provides multiple benefits that improve water quality, create jobs, and enhance resiliency.

Purpose:

Finding sufficient resources to plan, design, and implement natural infrastructure and restoration projects can be a challenge, especially for many small and mid-size cities. Funding sources and financing strategies are available, but it can be difficult for municipal staff to navigate these options. However, with collaboration, municipalities can improve efficiency in watershed management and leverage existing resources to develop strategies that fund water-quality improvements, fostering watershed collaboration, and connect people with the river.

This exercise is aimed to facilitate discussion across jurisdictional boundaries, academic disciplines, municipal silos, and industry sectors to explore a holistic approach in watershed management for health rivers and communities.

Outcome:

Through collaboration, we can begin to develop actionable pathways to improving water quality and river health. Watershed-scale planning can strengthen coordination between municipalities and community partners. to improve efficiency in stormwater management and reduce burdens on public services. Through collaboration we can learn from diverse perspectives and disciplines, explore multi-faceted approaches, and deploy innovative funding strategies that foster equitable water stewardship, and advance climate resiliency goals through sustainable funding and financing strategies.

Follow the worksheet, answering the questions to the best of your knowledge. Multiple viewpoints are encouraged.

River Name: _____

Section 1: River Assessment: Existing Trends. *Check all answers that apply.*

1. What type of development or land activity is within the watershed?
 - Highly urbanized
 - Suburban residential
 - Commercial development
 - Rural residential
 - Agricultural
 - Natural/protected lands
 - Tribal lands

2. Who is accessing the river and how is the river being used currently?
 - Anglers
 - Paddlers
 - Bird Watchers
 - Hikers/Bikers
 - Industry
 - Farmers
 - Other _____

3. Is public access to the river equitable in all riverfront communities?
 - Yes, existing riverfront park spaces/trails
 - Yes, public land with potential access in the future
 - No, private property along riverfront
 - No, floodwalls, culverts, other infrastructure limit access
 - No, water quality challenges limit access
 - Other _____

4. Who is currently responsible for local watershed planning, water-infrastructure improvements, watershed stewardship, water quality requirements?
 - Individual municipal departments (Stormwater, Parks, etc.)
 - Collective/regional governing body
 - Other

5. Are municipalities collaborating with watershed and non-profit partners in watershed improvements?
 - Yes
 - No
 - Unknown

6. What does resiliency mean (to you) for the watershed?
 - Economic vitality
 - Critical infrastructure is safeguarded
 - People are healthy
 - Natural resources are protected or restored
 - Ability to respond and recover from climate-related disasters
 - Proactive investments in climate-mitigation strategies
 - Adaptable and flexible planning

Section 2: River Health: Existing Challenges and Opportunities. *Check all answers that apply.*

7. The water-related priority challenges for community's *upstream* watershed are:

- Lakeshore Flooding
- River/Creek Flooding
- Property Damage
- Critical Infrastructure at Risk
- Stormwater Runoff / Infrastructure Capacity
- High Water Levels
- Soil Erosion near beaches or riverbanks
- Water Quality Impairments
- Habitat Improvement
- Dune undulations
- Native or Prairie plantings
- Fiscal constraints for water infrastructure improvements
- Legal challenges to implementing natural infrastructure
- Other (please specify): _____

8. The water-related priority challenges for community's *downstream* watershed are:

- Lakeshore Flooding
- River/Creek Flooding
- Property Damage
- Critical Infrastructure at Risk
- Stormwater Runoff / Infrastructure Capacity
- High Water Levels
- Soil Erosion near beaches or riverbanks
- Water Quality Impairments
- Habitat Improvement
- Dune undulations
- Native or Prairie plantings
- Fiscal constraints for water infrastructure improvements
- Legal challenges to implementing natural infrastructure
- Other (please specify): _____

9. Are there overlapping water-related challenges between communities upstream and downstream?

- Yes, _____
- No _____
- Other (please specify): _____

10. In this watershed, communities are implementing the following climate-resilient strategies:

- Protecting or restoring natural resources
- Confronting weather or climate-related challenges
- Creating or updating planning documents
- Building community awareness
- Improving quality of life
- Meeting regulatory requirements
- Accessing funding specifically for natural infrastructure projects
- No climate-resilient strategies have been adopted

11. Which communities are farther along in adopting climate resilient strategies? If so, what is the motivating factor for this community?
12. Communities in this watershed are also seeking to address these additional priorities in the near future:
- Economic development goals
 - Improve Recreational Amenities
 - Downtown revitalization
 - Promote/Foster Tourism
 - Affordable Housing
 - Addressing Environmental Injustice
 - Creating jobs
13. Community participation is promoted and encouraged in public projects or municipal planning?
- Yes
 - No
 - Unknown
14. Municipal leaders are collaborating with local/regional community partners in watershed management?
- Yes
 - No
 - Unknown
15. Who are the additional partners/organizations to engage in fostering water quality improvement?
16. What data gaps are needed to better understand existing water-related challenges?
17. Are existing environmental injustices and/or socio-economic and environmental burdens considered in project identification? (Use the printed maps or other Climate Vulnerability Screening Tools)

Section 3: Planning and Funding for Healthy Rivers: *Check all that apply:*

18. *Communities in the watershed are:*
- Adopting comprehensive plans that include floodplain and stormwater management **or** plans that support watershed management/health
 - Codes and zoning ordinances include development standards for water quality protection and flexibility for natural infrastructure solutions
 - Municipal leaders are knowledgeable on the benefits of Natural Infrastructure as climate-resiliency tool
 - Capital budgets incorporate funding for river protection, natural stormwater infrastructure and/or climate resiliency projects
 - Municipalities have (or currently are) leverage existing funding for water projects
 - The private sector (businesses, industries) contributes to climate-resilient initiatives? (match funding, technical support, etc.)
19. Communities provide or engage in the following water-improvement activities:
- Rebates/grants for natural infrastructure projects
 - Watershed education for the public
 - Landscaping education for professionals

- Stormwater reduction goals
- Trash Elimination programs
- Community/river-clean ups
- Composting programs
- Water pollutant reduction goals
- Tree canopy goals
- Increasing green space and natural amenities

20. In the watershed, communities have adopted codes and zoning ordinances for development projects to improve water quality:

- Limited development in ecological sensitive areas
- Standards for stream buffers and setbacks from river and streams
- Vegetation protection standards that minimize disturbance within the riparian corridor
- Soil erosion mitigation standards for new and (re)development to reduce sedimentation
- Stormwater managements that promote natural infrastructure practices
- Water quality protections
- Phosphorus reduction requirements (TMDL's)
- Development incentives for water efficient development
- Agriculture conservation initiative
- Rainwater harvesting allowed
- Indoor water reuse permitted

21. Based on the existing community priorities, and water-related challenges, what are the actionable opportunities to improve river health?

- Reducing stormwater pollution
- Increasing public green space
- Advancing natural infrastructure on private properties
- Riverbank protections
- Ecological/habitat protections
- Urban tree canopy
- Improving recreation amenities
- Other _____

22. Where does the funding currently come from for stormwater/watershed management?

- Capital budgets
- Grants/Loans
- Private investments
- Stormwater utility fees
- Recitation / User fees (boat launches, park fees)
- Other _____

23. The Infrastructure Investment and Jobs Act (IIJA) provides significant funding to invest in water infrastructure through the Clean Water State Revolving Fund (CWSRF) program, yet, many communities are not prepared to apply for this funding. Do the municipalities (or utilities) have the following in preparation for funding applications:

- Contacted Ohio's SRF program administrator to arrange a pre-planning meeting
- Determine Ranking for placement on the Priority List and/or Principal Forgiveness
- Engineer plans with environmental/public health assessments
- Identified a dedicated source of repayment for any financing you receive

24. Do municipalities have the following documents to apply and determine eligibility for federal and state funding programs?
- Fiscal Sustainability Plan
 - GAAP Certification
 - Useful Life
 - Federal/State Procurement Certification
 - Limited Site Certification (if acquiring new property)
 - Stormwater Management / Watershed Plan
 - Climate resiliency / Hazard Mitigation Plans
25. Incentive programs can entice private property owners to implement natural infrastructure solutions and contribute to addressing stormwater challenges in the watershed. Which approaches currently exist? Which approaches could be developed? Select all that apply.
- a) Incentives programs can be developed from leveraging existing sources.
- Tax incremental Financing Districts (TIFs)
 - Business Improvement Districts (BIDs)
 - Revolving Loan Program
 - Economic Development Loans
 - Opportunity Zones
 - Affordable Housing (Community Development Block Grant Programs)
 - Brownfield Redevelopment Authority
 - Façade Improvement Grants
- b) Are communities implementing any of the following indirect incentives to advance water quality improvements:
- Density bonuses
 - Reduced permit fees for projects that include natural infrastructure
 - Expedited plan review process natural infrastructure projects
 - Awards & recognition

Summary: Putting it all together

Based on the answers above, use the *State and Federal Funding Sources for Natural Infrastructure Solutions* handout, identify potential funding programs or strategies to improve water quality:

Questions for discussion:

- ❖ Identify opportunities to improve water quality and/or increase river-related access?
- ❖ Do the opportunities align with existing community plans/priority goals?
- ❖ What are the challenges to implementing/advancing improvements to water quality?
- ❖ Which potential funding sources were identified to address water-quality challenges?
- ❖ Is there potential to develop a dedicated revenue source for the river?
- ❖ What additional resources or partners can you bring in to support this strategy?
- ❖ Which funding strategies could be leveraged to sustain local funding for water quality?

Notes/Additional Discussion Points: