



Central South Branch Kishwaukee River Action Plan

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Agenda

- **Programmatic Recommendations**
- **Site-Specific Recommendations**
- **Critical/Priority Areas**



Action Plan Components

Programmatic Measures: general remedial, preventive, and policy watershed-wide Management Measures that can be applied across the watershed by various stakeholders.

Site Specific Measures: actual locations where Management Measure projects can be implemented to improve surface and groundwater quality, and green infrastructure.

Programmatic Measures

Policy & Education Recommendations

- **Ordinance and Policy Recommendation**
- **Rainwater Harvesting & Re-use**
- **Native Landscaping**
- **Street Sweeping**
- **Septic System Maintenance**
- **Green Infrastructure Planning**
- **Conservation Design & Low Impact Development**
- **Water Quality Trading & Adaptive Management**

Ordinance & Policy Recommendations

■ Plan Adoption & Implementation

- Watershed partners adopt plan and incorporate into comp. plans and ordinances

■ Ordinance updates based on completed ordinance reviews

■ Green Infrastructure Network

- GIN incorporated into comp. plans and development reviews
- Developers protect and restore degraded natural areas
- Donate to public entity for long term management with dedicated funding

Ordinance & Policy Recommendations

■ Groundwater

- Infiltration requirements and impervious surface reduction within developments

■ Road Salt

- Consider alternatives to existing programs & emerging research from IL Tollway

■ Native Landscaping/Natural Area Restoration

- Allow native landscaping within local ordinances
- Require developers to meet natural area performance standards

Programmatic Agricultural Recommendations

- **Practice Principles of Soil Health**
- **Encourage Regenerative Agriculture**
- **Leverage NRCS Programs**
 - Environmental Quality Incentive Program (EQIP)
 - Agricultural Conservation Easement Program (ACEP)
 - Wetlands Reserve Easements (WRE)
 - Agricultural Land Easements (ALE)
 - FSA's Conservation Reserve Program (CRP)



Native Landscaping

- Using native plants around homes & businesses



Pavement Alternatives (ie. Permeable Pavers)

- Allow water to percolate
- Provide for infiltration
- Can be used for parking lots, parking aprons, private roads, fire lanes, residential driveways, and bike paths



Street Sweeping

- Removes pollutants from roadways before they can enter streams
- Bi-weekly street sweeping can provide sufficient results



Septic System Maintenance

- Septic system failure can lead to high levels of nutrients and bacteria
- Owners should be compliant with state and local ordinances for installation, operation, & maintenance
- Septic owners should follow USEPA's guidance called "A Homeowner's Guide to Septic Systems"



Rainwater Harvesting & Re-use

- Downspout disconnection
- Reduction in stormwater runoff
- Utilizes rain barrels or cisterns
- Often used for irrigation



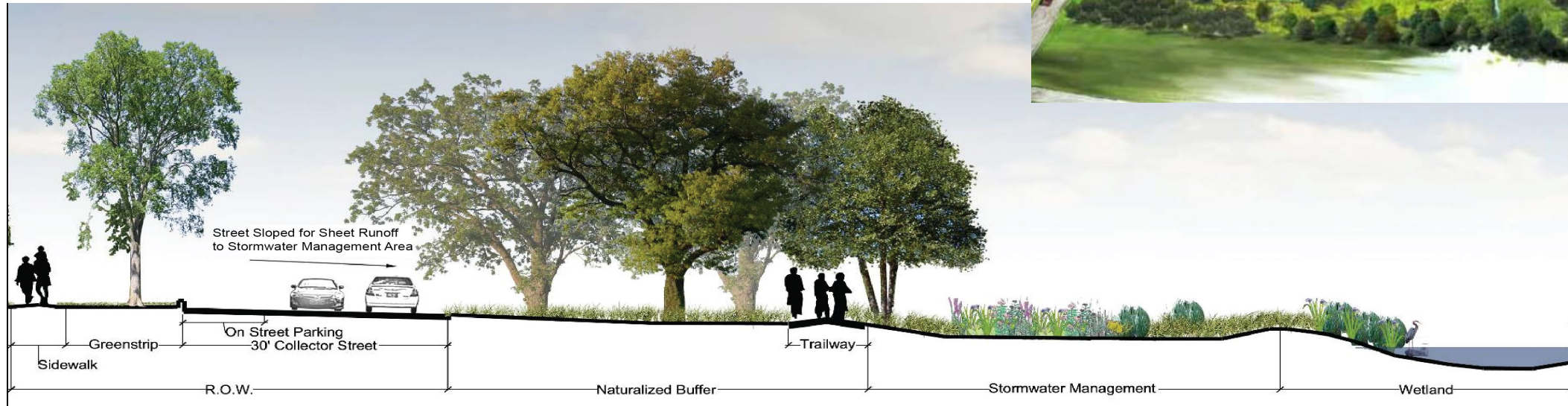
Green Infrastructure Planning



- Key to achieving watershed health
- Protect unprotected green infrastructure parcels through acquisition, regulation, and/or incentives
- Incorporate conservation or low impact design standards on green infrastructure parcels where development is planned
- Limit future subdivision of green infrastructure parcels
- Implement long term management of green infrastructure

Conservation Design & Low Impact Development

- AKA cluster or opens space design
- Preserves natural areas and features
- Maintains density by allowing smaller lots clustered around natural resources



Water Quality Trading & Adaptive Management



- Follows example set by WI
- Way for municipal and industrial NPDES permit holders to show compliance with water quality-based effluent limitations
- Provides point sources with flexibility to acquire pollutant reduction from other sources in the watershed

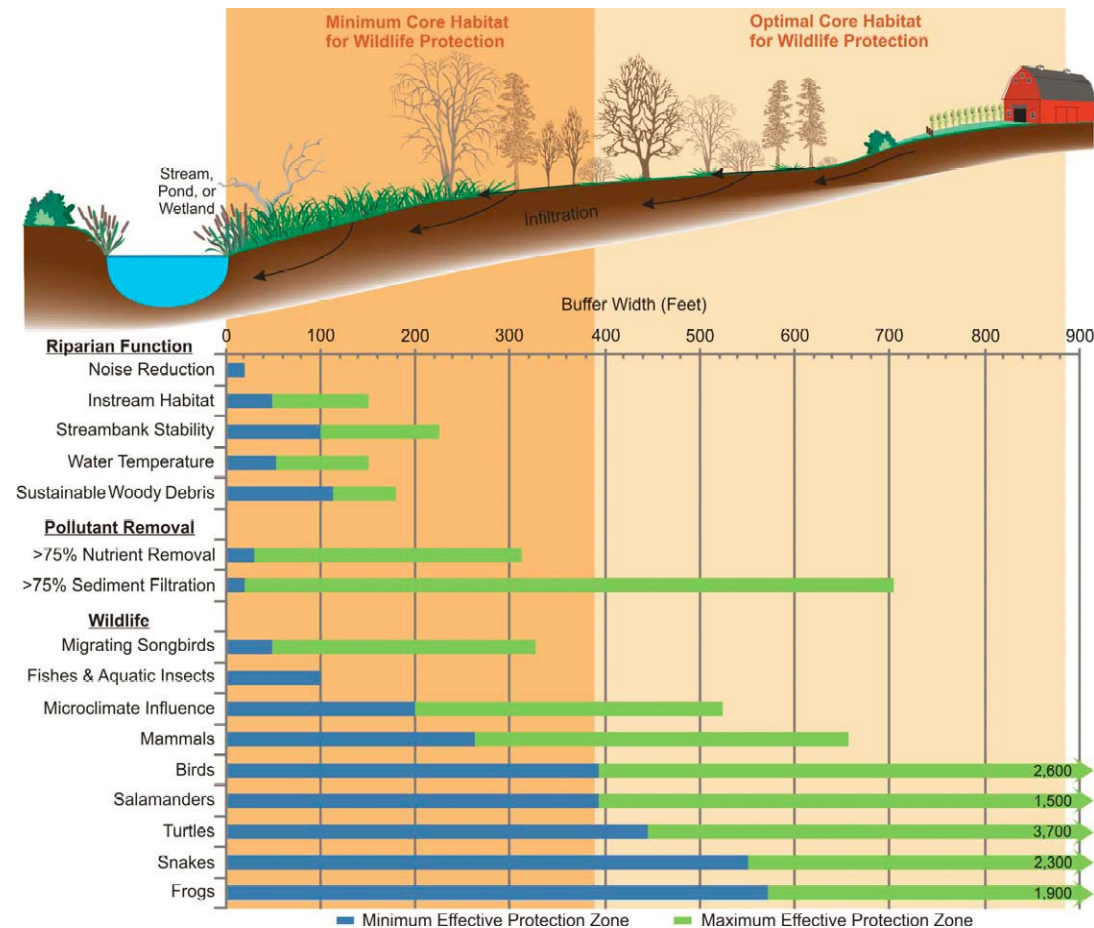
Site-Specific Measures

Site-Specific Management Measures

- **Stream & Riparian Area Restoration**
- **Wetland Restoration**
- **Detention Basin Retrofits**
- **Agricultural Management Practices**
- **Other Management Measures**

Waterbody Buffers

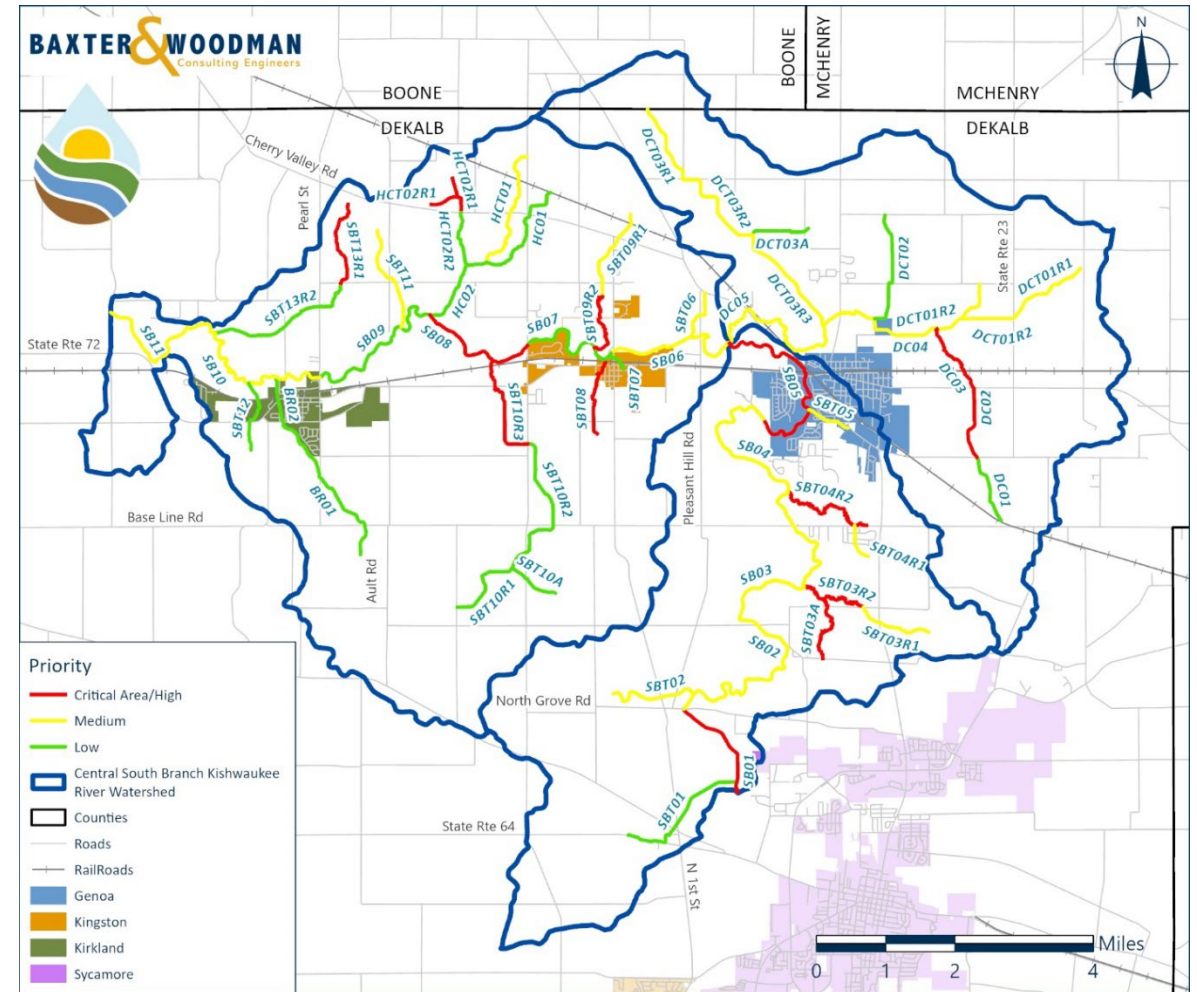
Land adjacent to any water body including ponds, lakes, streams, and wetlands. SEWRPC recommends 75% minimum of stream length naturally vegetated with 75-foot-wide buffer. Goal for this watershed plan is 50 feet along both banks.



Riparian function, pollutant removal, & wildlife benefits for buffer widths (Source: SEWRPC) 2010).

Streambank & Riparian Area Restoration Sites

- 103,428 lf categorized as Critical/Priority Areas
- Install native stream buffers where missing
- Restore degraded riparian areas to higher quality
- Spot stabilize banks using bioengineering, regrading where necessary

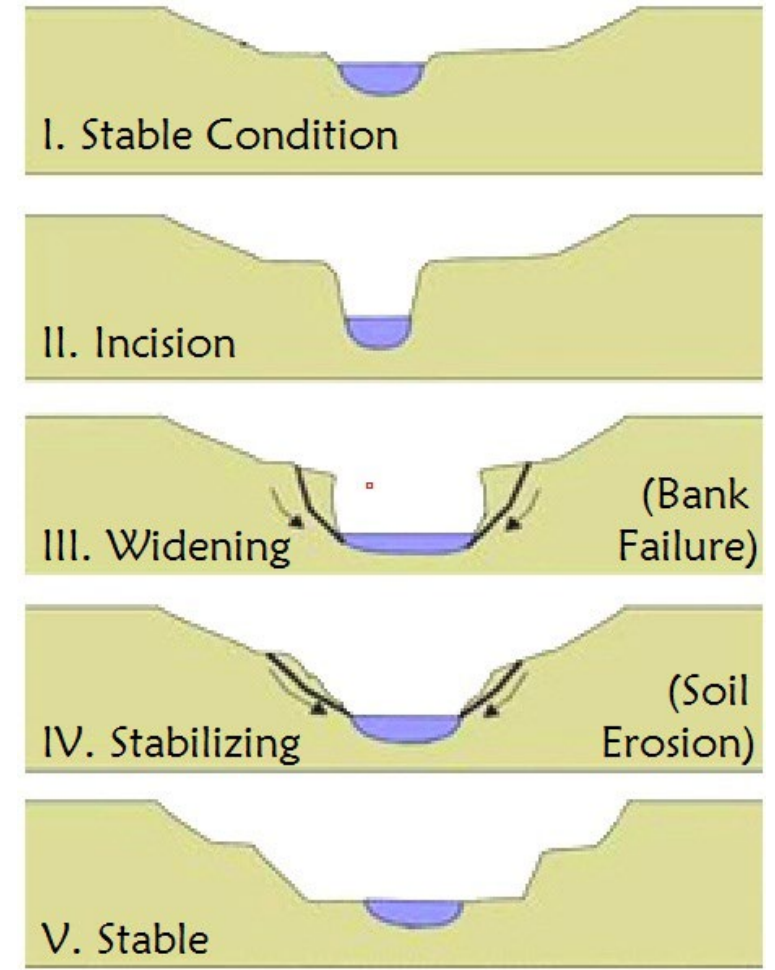


Example Stream & Riparian Area Restoration



Recovering Stream Channels

Stable two stage channels (Stage 5) that form in most agricultural ditches should be encouraged and protected by landowners during maintenance activities.



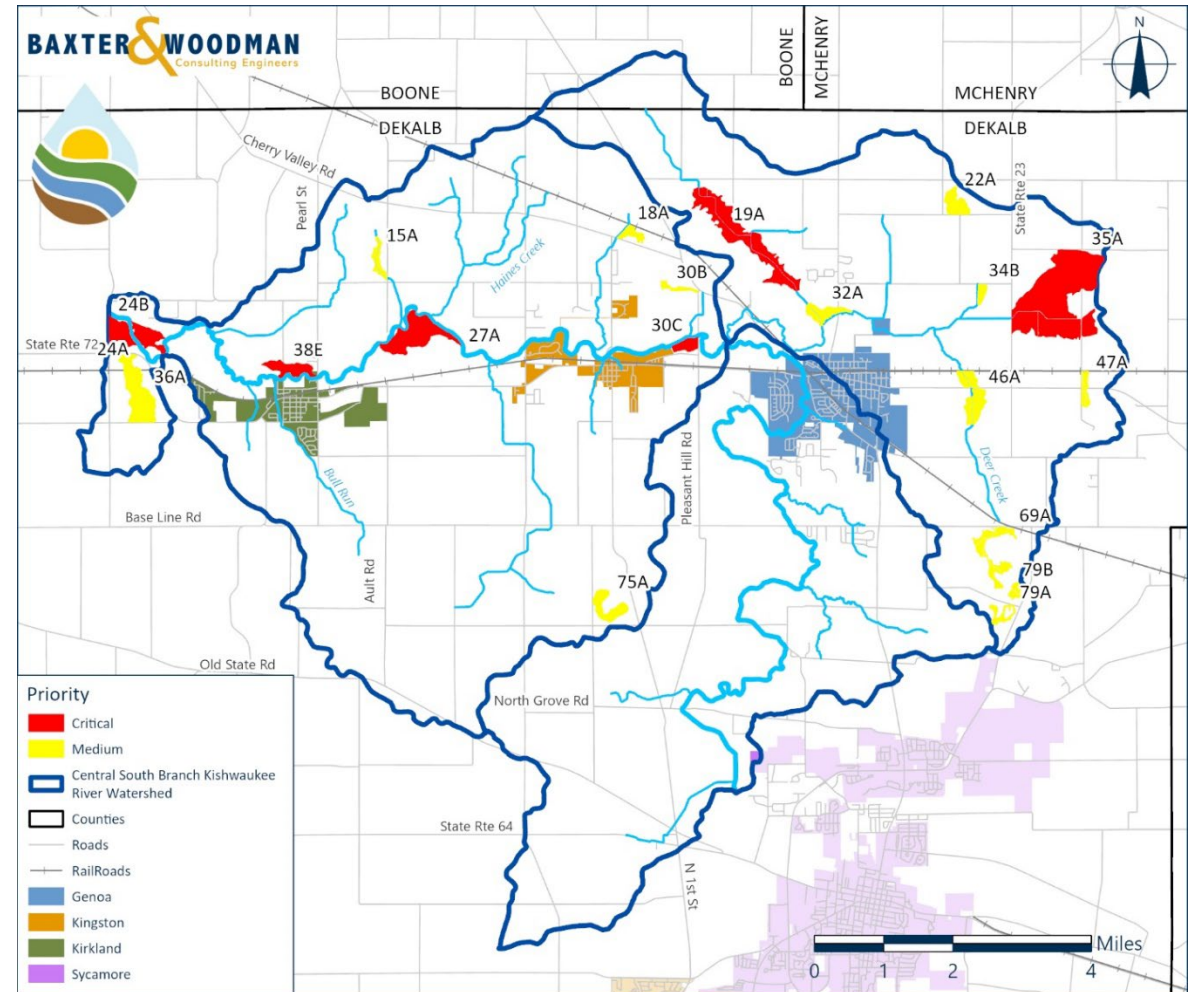
Wetland Restoration



- **Return hydrology and vegetation to soils that once supported wetlands**
- **Incorporate into conservation design or as part of wetland mitigation bank**

Wetland Restoration Sites

- 1,410 acres (7 sites) are Critical/Priority Areas
- 13 are Medium Priority
- All confirmed to be potentially feasible based on field investigations.

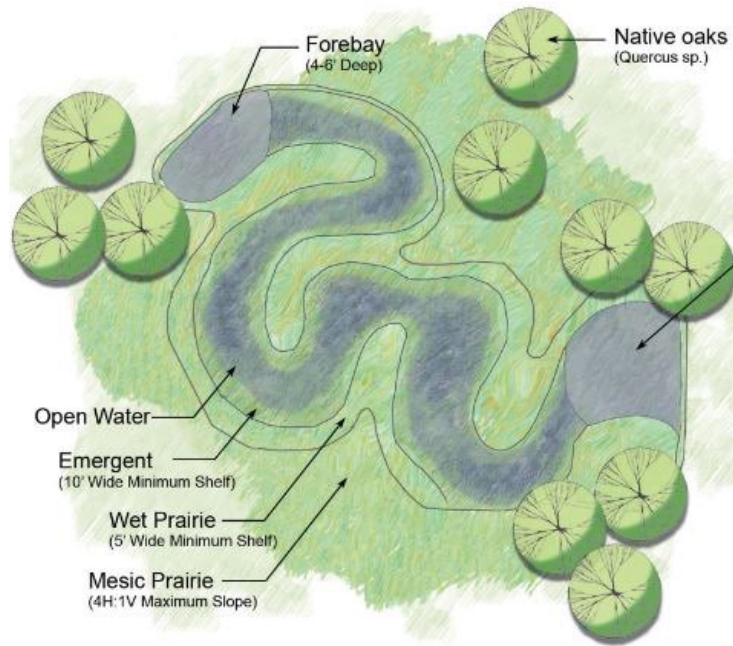


Example Wetland Restoration Sites



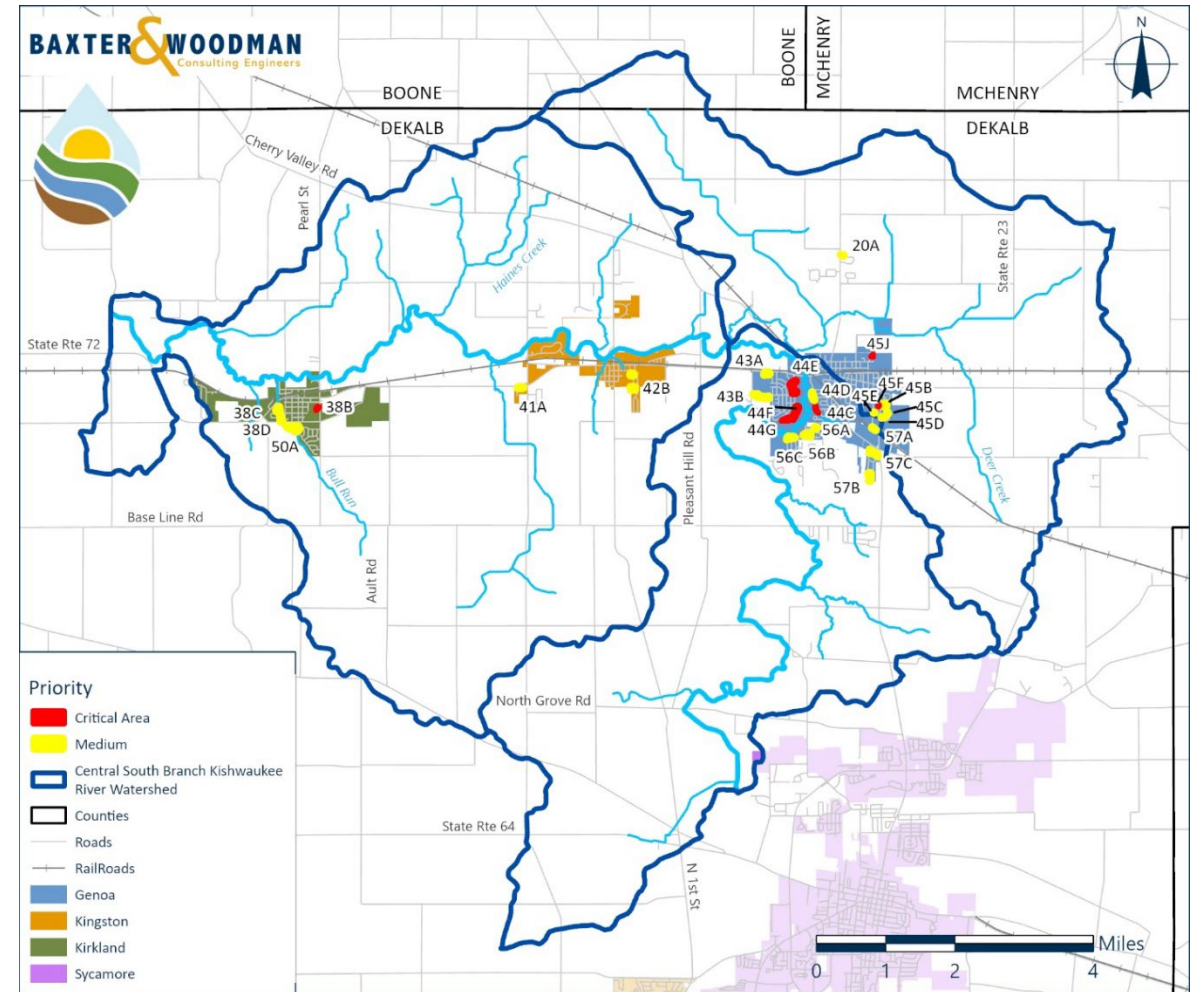
Detention Basin Retrofits

- Location
- Design
- Short- & Long-Term Native Vegetation Establishment



Detention Basin Retrofit Sites

- 7 detention basins are categorized as High Priority/Critical Areas.
- 19 are categorized as Medium Priority.
- General recommendations include naturalizing slopes and buffers.



Example Detention Basin Retrofits



Agricultural Management Practices

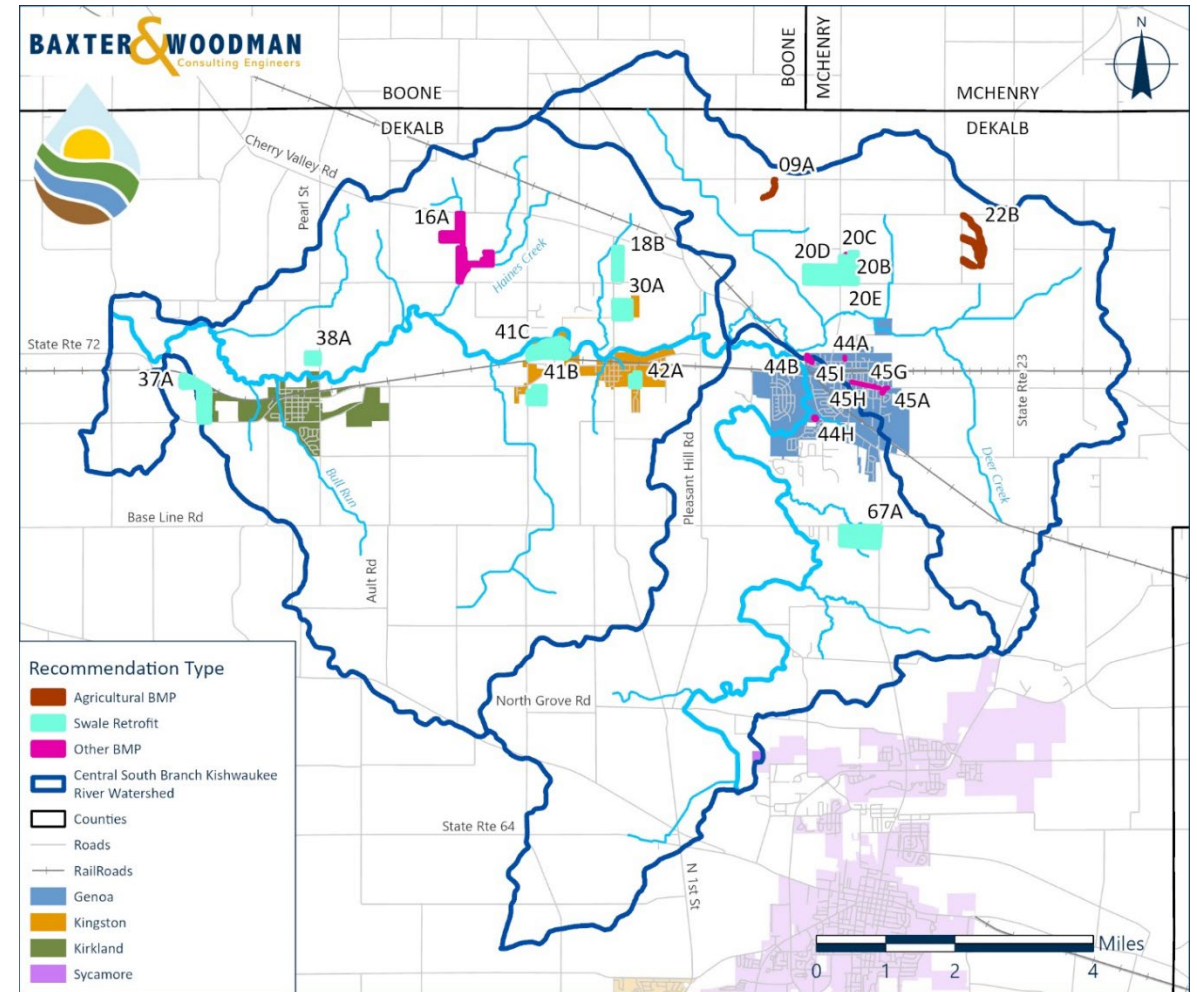


- Grass waterways installed (2 sites)
- Implement mulch till, reduced till, or no till on an additional 16% of agricultural lands currently practicing conventional tillage
- This alone could reduce pollutant loading by 12,625 lbs/year of nitrogen, 5,923 lbs/yr of phosphorus, and 3,184 tons/year of sediment.

Other Management Measure Sites

Potential projects include:

- 13 Swale retrofits
- 4 Natural area restorations
- 2 Green alley retrofits
- 1 Rain garden retrofit



Other Management Measure Sites



18B Swale Retrofit



20B Natural Area Restoration

Other Management Measure Sites



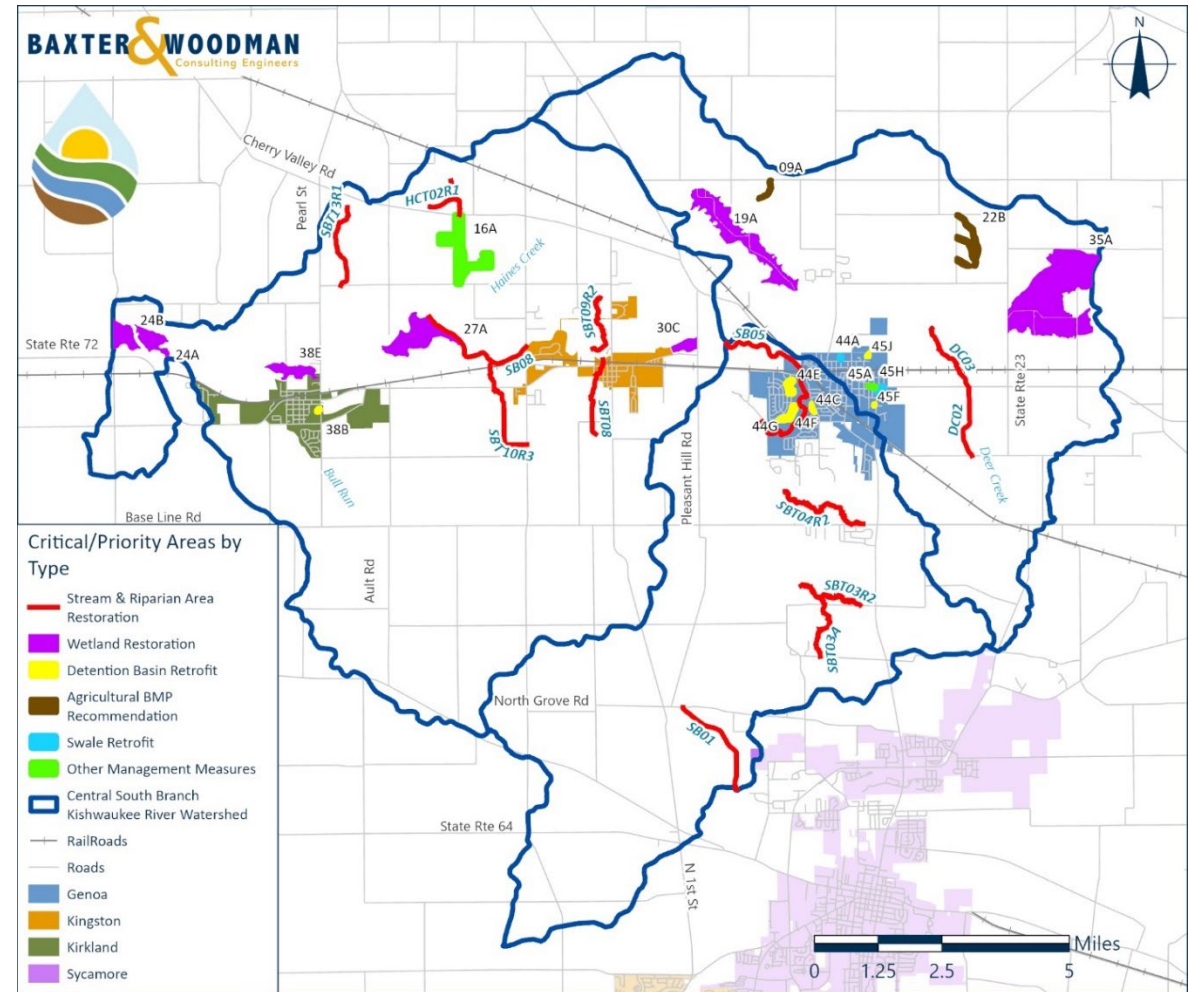
45H Green Alley Retrofit



44H Natural Area Restoration

Critical/Priority Areas

- Projects recommended for IEPA 319 Grant Funding.
- Generally, those projects that would create the most water quality improvement.
- Also includes implementing mulch till, reduced till, or no till on an additional 16% of agricultural lands currently practicing conventional tillage



Watershed Planning Schedule

Upcoming Meeting:

■ **October – Implementation and Outreach Plan**

Draft Watershed-Based Plan due to IEPA January 10, 2025

Questions?

