



What Can Your Land and Water Conservation Department Do for Your Lake?

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Jefferson County

Land & Water Conservation Department

Intent of State Statute: Conserve Soil and Water Resources

- Establishes erosion control goals
- Provides for cost sharing, technical assistance, educational programs, etc.
- Encourages coordinated planning and program implementation
- Authority to enact ordinances
- Creation of Land and Water Conservation Committees and Departments



**Each County
has a Land and
Water
Conservation
Department and
Committee**

Each LWCD is Unique

- Different number of employees
- Different staff expertise
- Different focus depending on resources, land uses



Land and Water Resource Management Plans

- Goals, Work Plan, Implementation Plan, Priority Areas, Enforcement Strategy
- Requirement in every county
- Updated every 5 years (may change)
- Local Advisory Committee
- Public Hearing

County Budget Process

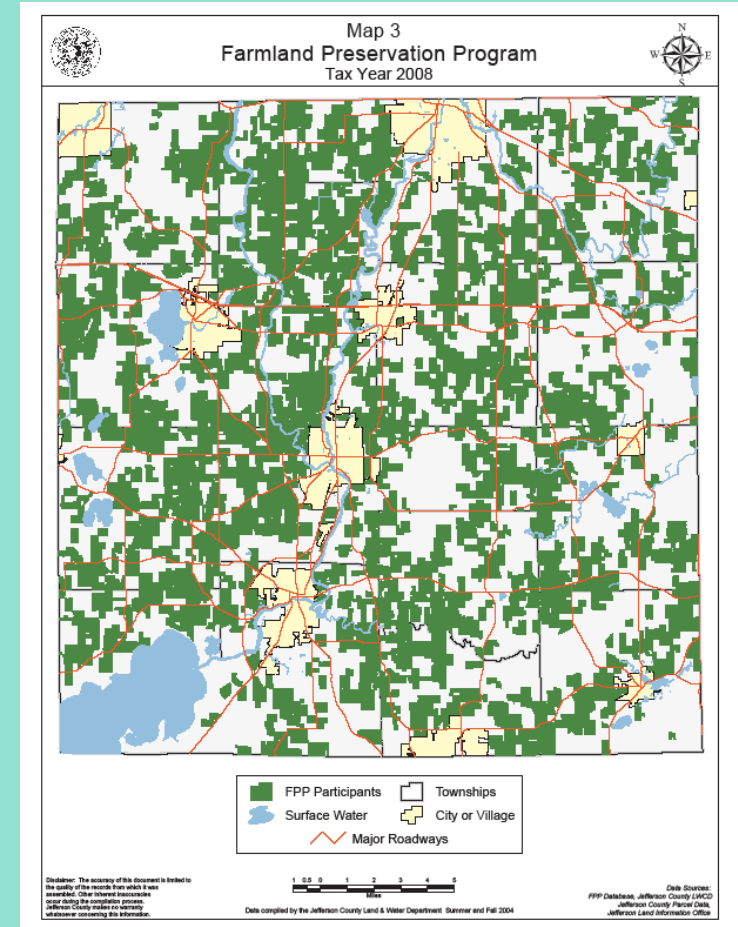
- Departments submit budgets to County Board Finance Committee
- Finance Committee holds series of meetings in September – public comment
- County Board holds public hearing in October
- County Board votes on budget in November

Agriculture



Conservation Planning

- Farmland Preservation Program – tax credits to farm land according to plan



~60% of Jefferson County farmland

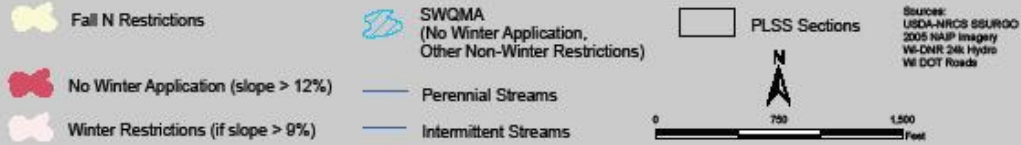
Manure!



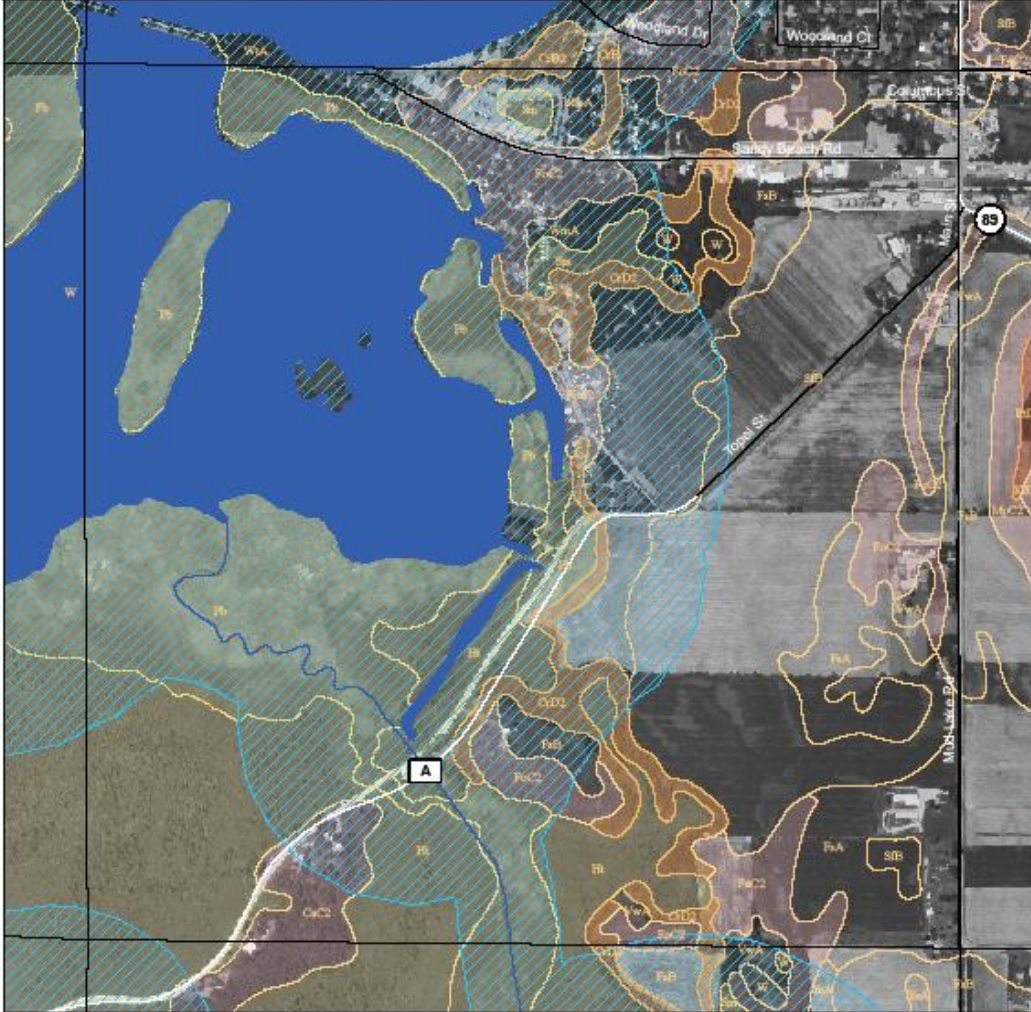
Nutrient Management Plans

- Requirement for every farm
- Working Lands Initiative
- Manure (and fertilizer) spreading plan:
where, when, how much
- Plan is based on crop needs and nutrients
in soil
- Surface and ground water protections
- Restriction maps

Wisconsin 590 Nutrient Management Application Restrictions



This map has been developed utilizing the nutrient application restrictions from the September 2005 Wisconsin NRCS 590 Nutrient Management Practice Standard. This map is an initial inventory of nutrient spreading risks which must be field verified to identify other risk areas such as concentrated flow channels, wetlands, and conduits to groundwater. See the "Considerations" section of the 590 practice standard for additional planning suggestions.
<http://efotg.nrcs.usda.gov/references/public/WI/590.pdf> Aug 25, 2008



Restrictions:

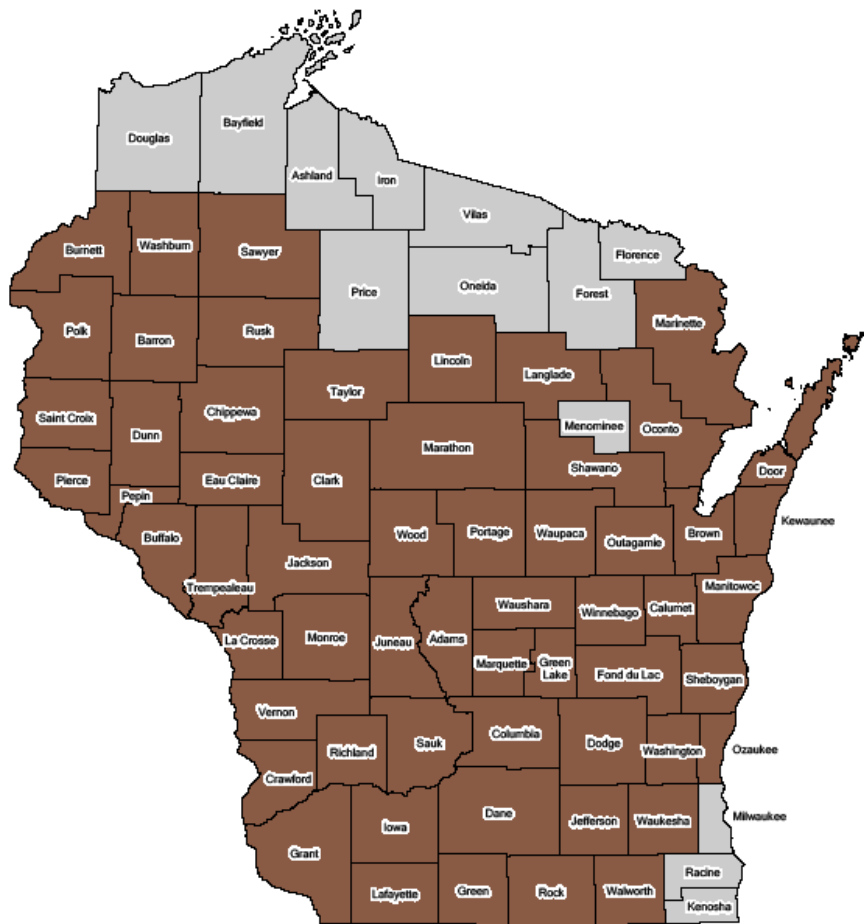
- Proximity to water
- Slope of land
- Vulnerable soil types
- Wells
- Direct conduits to water
- Winter

Manure Storage Ordinance

- Build, Alter, Close Storage – need a permit
- Review Plans
- Inspection Authority
- Stop Work Authority
- NMP requirement



Counties with Manure Storage Ordinances



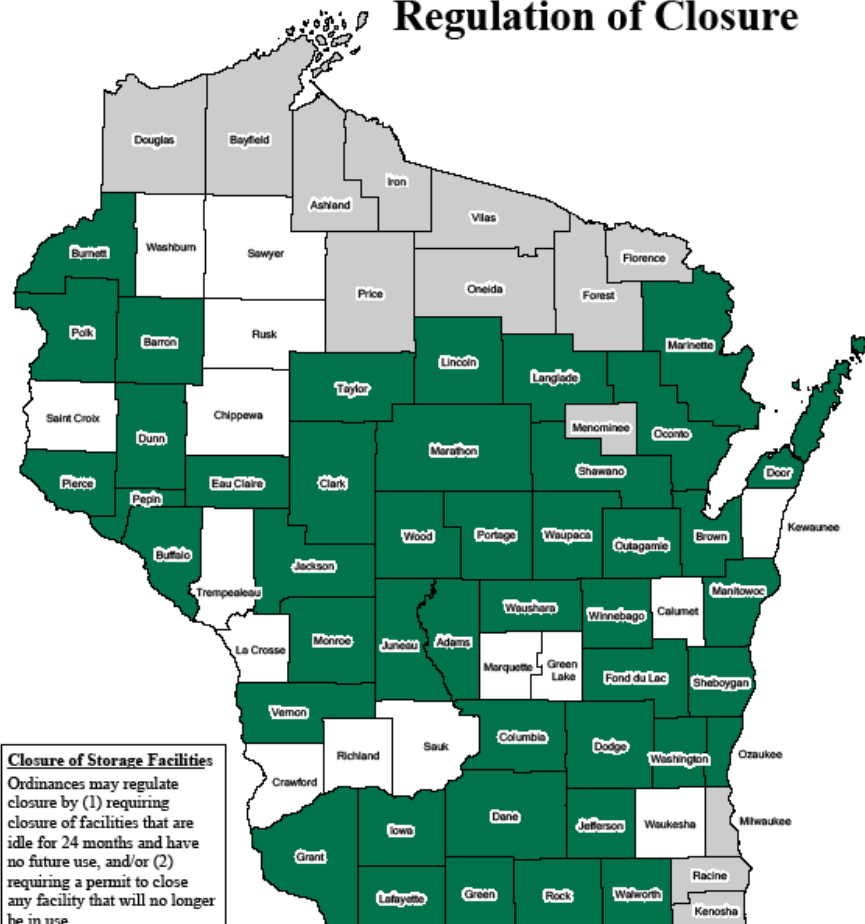
Ordinance Status

- Ordinance Enacted
- No Ordinance



Map Updated: 11/20/2007

Manure Storage Ordinances: Regulation of Closure



Closure of Storage Facilities

Ordinances may regulate closure by (1) requiring closure of facilities that are idle for 24 months and have no future use, and/or (2) requiring a permit to close any facility that will no longer be in use.



Regulation of Closure

- Closure Regulated
- Closure Not Regulated
- No Manure Storage Ordinance

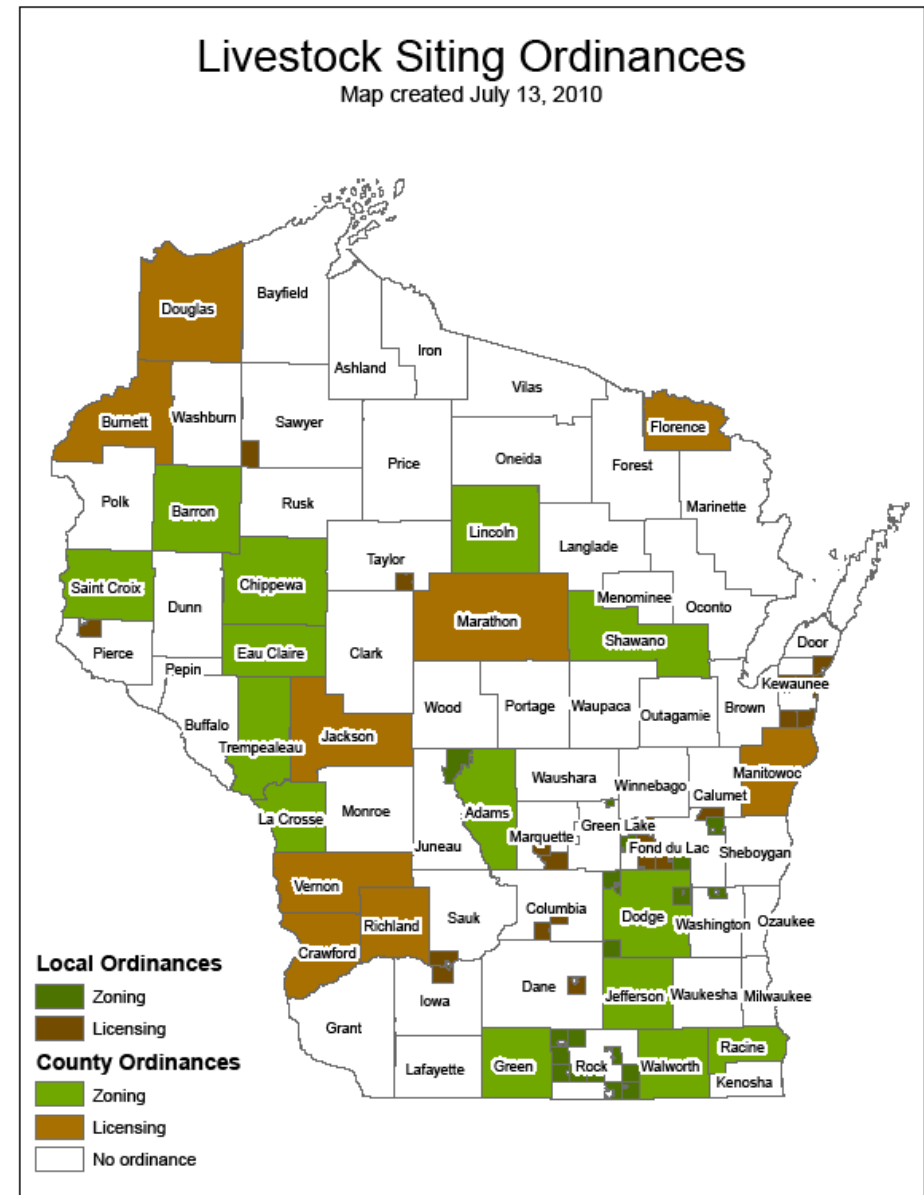


Map Updated: 11/20/2007



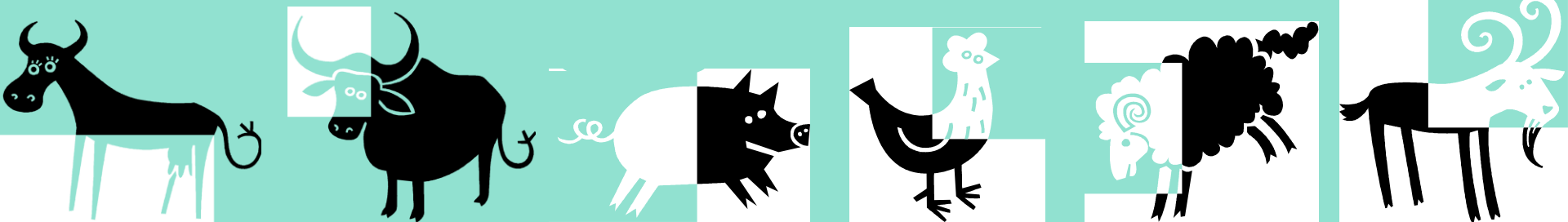
Livestock Siting Law

- 150 animal unit threshold, Jefferson Co. (500 elsewhere)
- Dairy, beef, swine, poultry, sheep, goats
- Odor Management
- Waste & Nutrient Management
- Waste Storage Facilities
- Runoff Management



Jefferson County's Experience

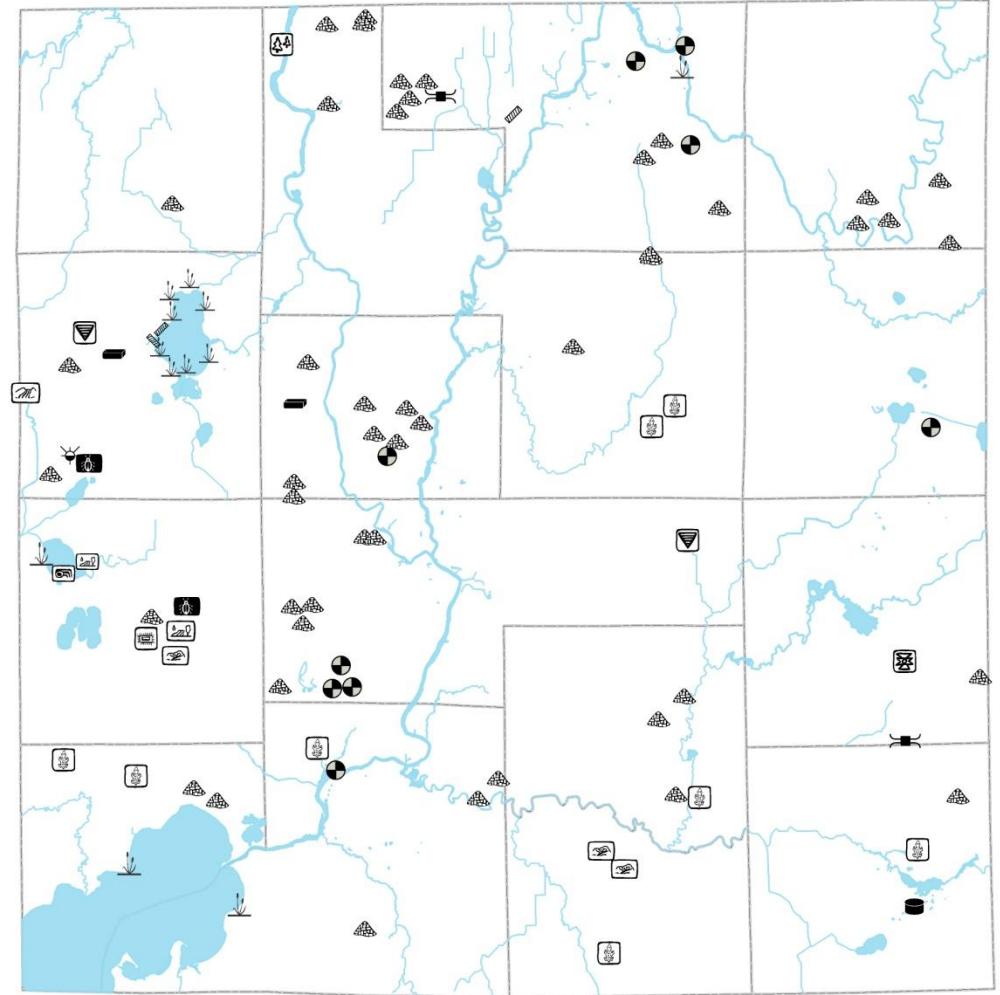
- 9 permits approved since 2006
- Application causes more long-term planning and environmental considerations
- Public input is part of process; but cannot stop permit issuance unless application information is false



Cost-Sharing Programs



Map 1 Cost Shared Projects 2006-2010





Compiled by Jefferson County
Land & Water Conservation
Department, June 2010

Data Sources:
Jefferson LWCD Costshare Database

Cost-Sharing Programs

- State = \$20,400 in 2009, \$20,000 in 2010
- State Nutrient Management = \$30,000 in 2009, \$12,874 in 2010
- Jefferson County = \$23,400 in 2009, \$8,675 in 2010
- Many Federal programs – NRCS, FSA
- LWCDs, State, Federal governments provide technical assistance
- Lake Group Involvement

Shoreland Restorations



Cost-Sharing with Lake &
River Residents



- 70% cost-sharing up to a cap (\$4,000 in 2010)
- Provide landscaper lists, and native plant lists
- Perform inspections before, during, after
- Some restorations are required through Zoning



Cost-sharing lake and river shoreline erosion control



Manure Management Prohibitions

- No overflow of manure storage facilities
- No direct runoff from a feedlot or stored manure into the waters of the state



Manure Management Prohibition

- No unconfined manure pile in a water quality management area – within 1,000 ft. from a lake; within 300 ft. from river or stream; or a site susceptible to groundwater contamination





Manure Management Prohibition

- No unlimited access of livestock to waters of the state such that maintenance of adequate sod or vegetative cover is prevented



Manure Complaints

- Investigate every complaint: information from citizen, visit site, look at nutrient management plans, ask for spreading logs
- Approximately 85-90% of manure complaints are found to NOT be violations or problems
- Inform farmers – better communications with neighbors
- Educate citizens

Manure Spreading Violations

- Manure runoff to surface water – DNR Conservation Warden
- Citations from DNR
- Citations from Zoning if farm has a permit
- Can require nutrient management plan ONLY with offer of cost-sharing or within Working Lands Initiative
- Can add spreading restrictions to plan

Construction Site Erosion

- An acre under construction with no erosion control delivers, on average, as much sediment to local waterways as 75 acres of cropland.

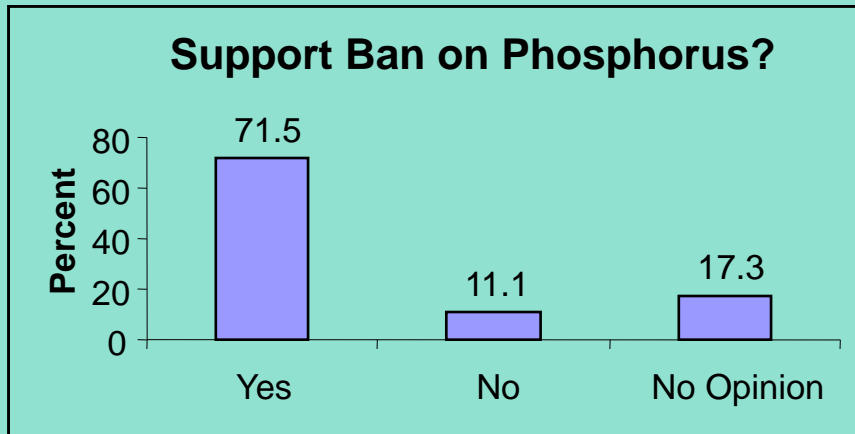
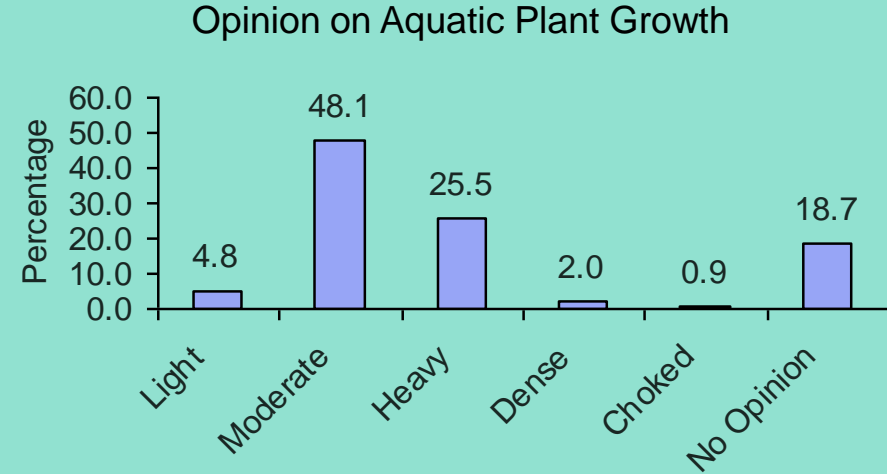
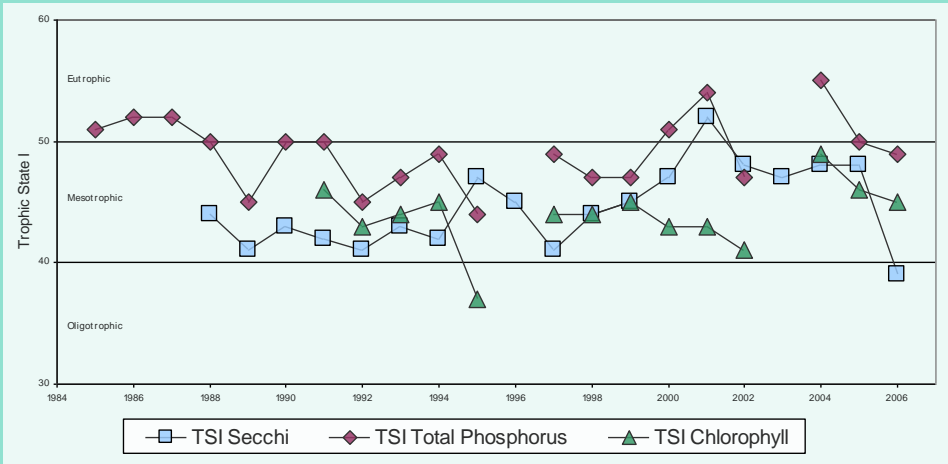


A photograph of a pond filled with green lily pads and several small yellow flowers. The water is dark blue, and the lily pads are densely packed, covering most of the surface. The text is overlaid on the image.

Lakes

- **Grants: Sponsor, Fiscal Agent, Matching Time**
- **Meeting Facilitation**
- **Collect, Summarize, and Explain Data and Information**
- **Communicate with the Public**
- **Communicate with Decision Makers**
- **Mapping Capabilities**
- **Develop Management Plans**

Lake Management Plans

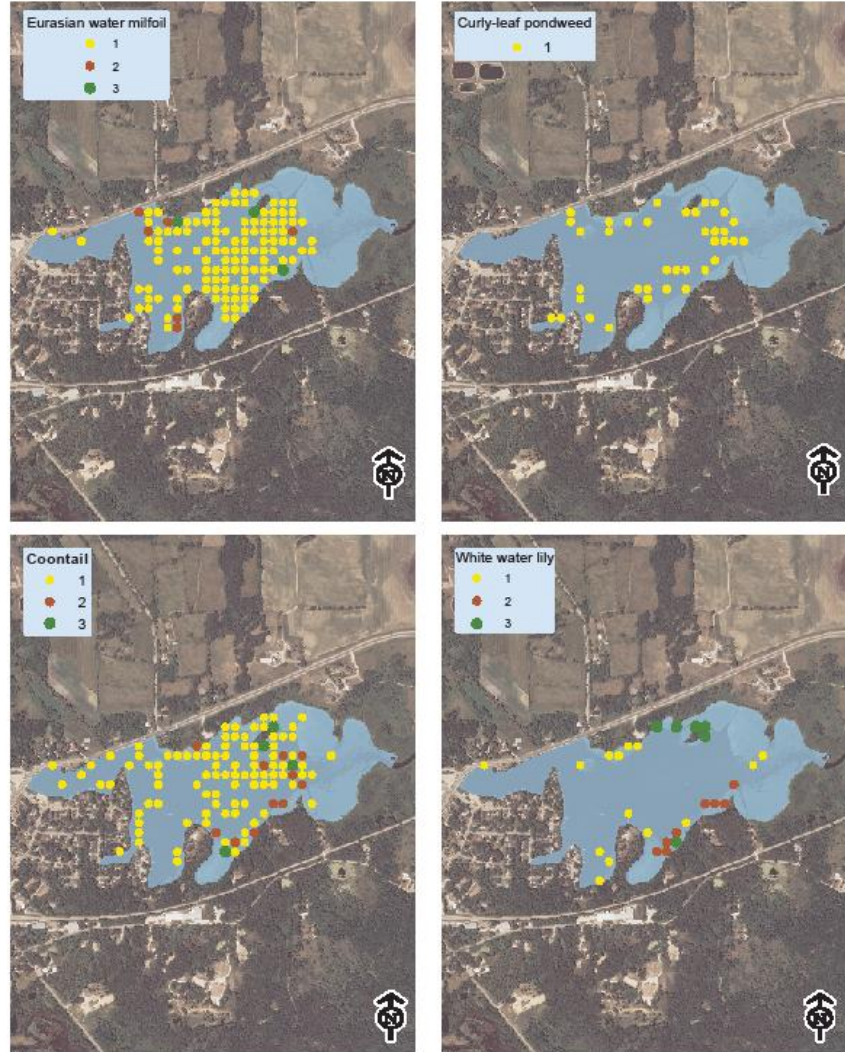


Aquatic Plant Surveys & Plans



Aquatic Plant Densities

Rake Sampling Plant Density
1 = Few Plants on Rake
2 = Rake head 1/2 - full
3 = Rake overflowing



Lake Classification



Shoreland Zoning Rules

- Building Setbacks
- Stairways
- Boathouses
- Shoreland Cutting
- Shoreland Restoration

lake monitoring, prevention and control of invasives, nonpoint source pollution, education, organizations

NR 115 – Shoreland Rules

- New State Minimum Standards
- Adoption by February 2, 2012
- Public Process
- Zoning
- LWCD



Research, Special Projects

Effects of Pier Shading on Near-Shore Aquatic Habitat

Researchers:

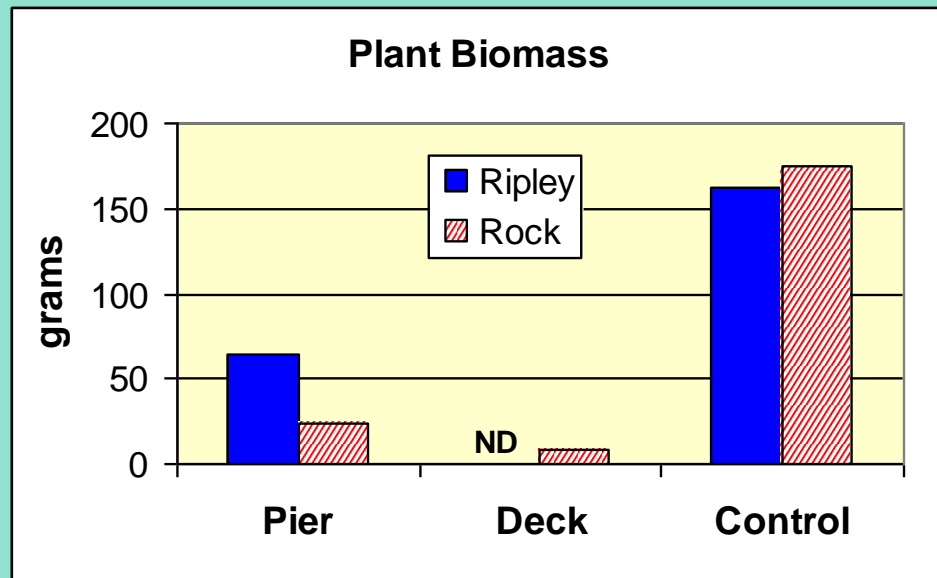
Paul Garrison, DNR

Dave Marshall, DNR

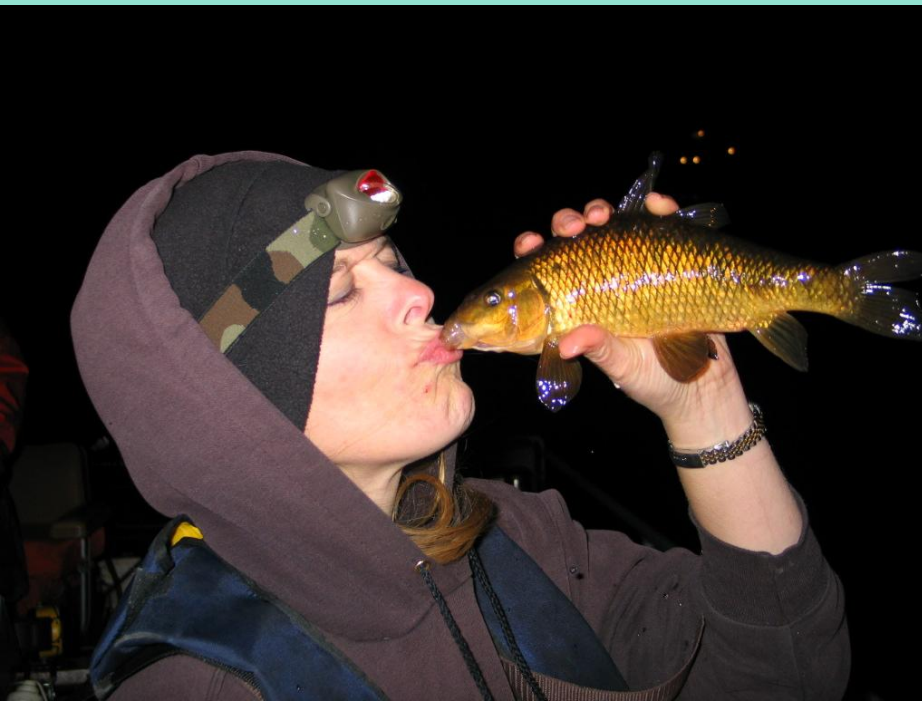
Laura Stremick-Thompson, DNR

Patricia Cicero, Jefferson County LWCD

Paul Dearlove, Lake Ripley Mgmt. Dist.



- Water quality sampling on Rock Lake
- Nutrient & sediment sampling on 2 streams
- Recruit monitors for other lakes
- Assist DNR with special projects



Invasive Species

- AIS Coordinators
- Clean Boats/Clean Waters & AIS Monitoring Training
- Garlic Mustard Control
- Canada Geese Counts

Year	Canada Geese Counted
2002	347
2003	363
2004	449
2005	263
2006	362



Water Resources Staff

- Not many Counties have a dedicated water resources staff person
- DATCP staffing grants
- DNR lake planning, protection, AIS grants – staffing money for specific project
- Existing LWCD staff can diversify
- Other ideas to fund position - multiple lake districts and associations, RC&Ds, sanitary districts, other related entities

Enforcement of County/State Laws

- Every County LWCD is different
- Recent laws causing LWCDs to become more regulatory
- Assistance from DNR Conservation Wardens, County Zoning Departments
- One case – State Attorney General's office

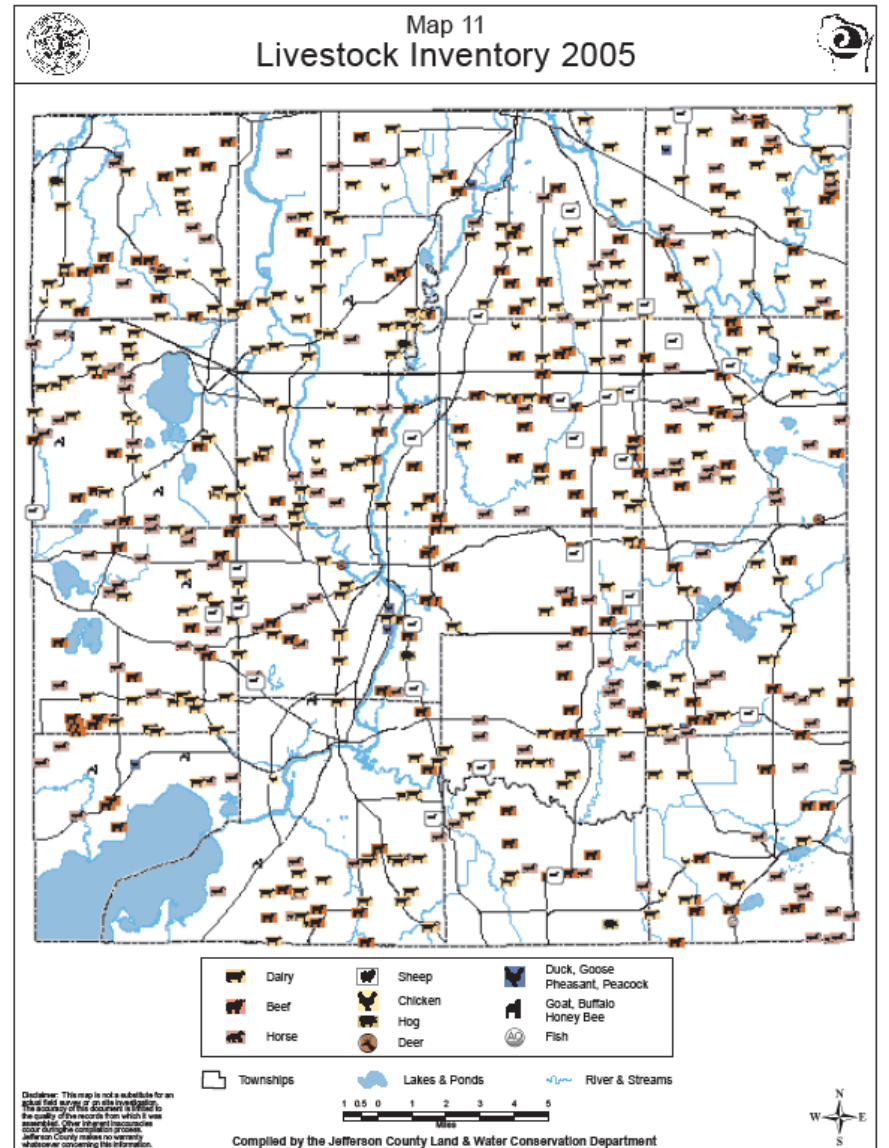
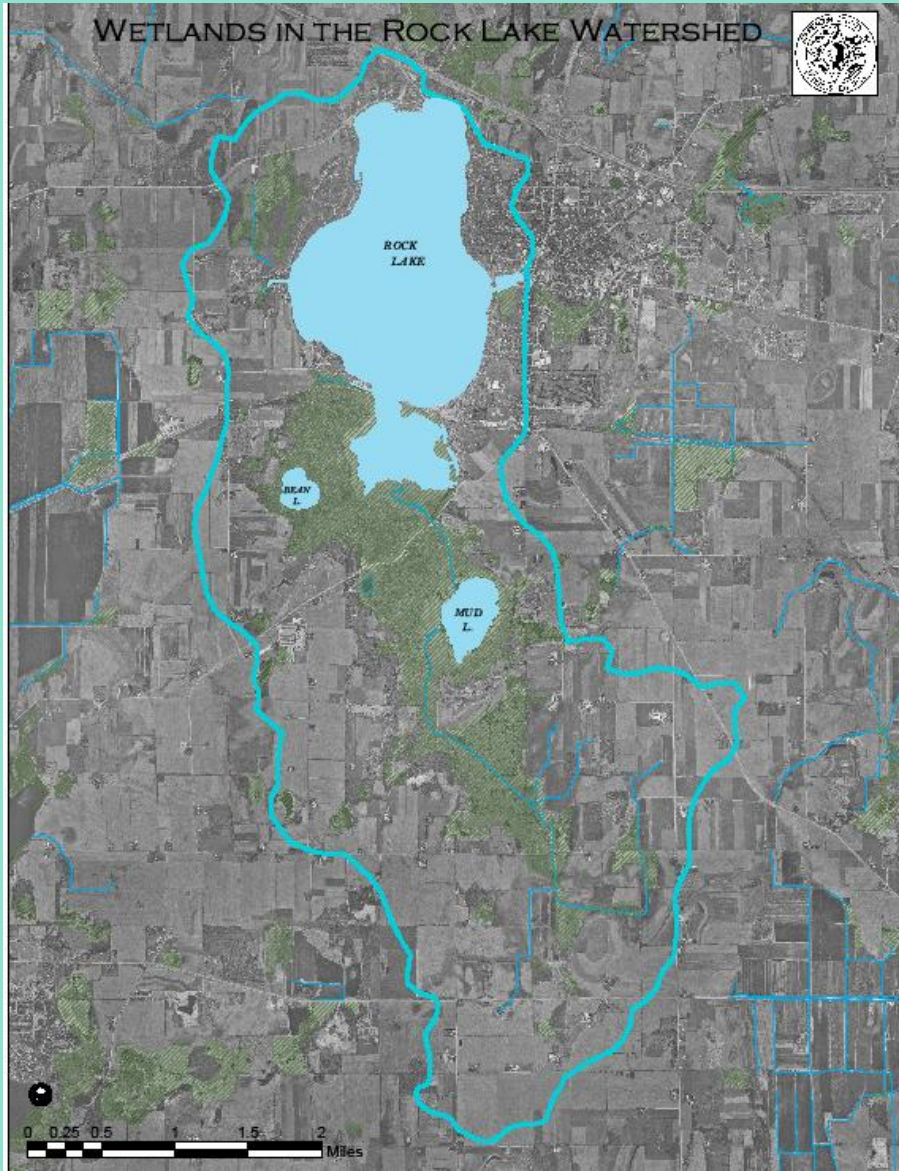




Education



Mapping



Visit Your LWCD

- Tell them what you/your group is doing
- Invite staff to meetings
- Ask LWCD what services they provide
- Talk about possible projects
- LWCDs can refer you to multiple experts and agencies



Restoration at Executive Residence

