Appendix A:

Water Plan Supporting Documents

- ~ Resolution to Update the Pope County Water Plan ~
- ~ Notice of Decision to Revise and Update Water Plan ~
 - ~ Public Open House News Release ~
- ~ Water Plan Public Informational Meeting Summary ~
- ~ Water Plan Public Informational Meeting Sign-In Sheet ~
 - ~ Pope County Water Plan Survey ~





POPE COUNTY RESOLUTION NO. 201214 RESOLUTION TO UPDATE THE POPE COUNTY COMPREHENSIVE WATER MANAGEMENT PLAN

WHEREAS, Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act, authorizes Minnesota Counties to develop and implement a local water management plan, and

WHEREAS, the Act requires that a county update and revise their local water management plan on a periodic basis, and

WHEREAS, the Act encourages that a county coordinate its planning with contiguous counties, and solicit input from local governmental units and state review agencies, and

WHEREAS, the Act requires that plans and official controls of other local governmental units be consistent with the local water management plans, and

WHEREAS, Pope County has determined that the revision and continued implementation of a local water management plan will help promote the health and welfare of the citizens of Pope County, and

NOW, THERFORE, BE IT RESOLVED, that the Pope County Board of Commissioners resolve to revise and update its current local water management plan.

BE IT FURTHER RESOLVED that Pope County will coordinate its efforts in the revision and update of its plan with all local units of government within the county, and the state review agencies; and will incorporate, where appropriate, any existing plans and rules which have been developed and adopted by watershed districts having jurisdiction wholly or partly within Pope County into its local water management plan.

BE IT FRUTHER RESOLVED that the Pope County Board of Commissioners authorizes the establishment of a Water Management advisory committee with the responsibility of revising and updating the plan and who shall report to the County Board on a periodic basis.

BE IT FURTHER RESOLVED that the Pope County Board of Commissioners delegates the Land & Resource Management office the responsibility of coordinating, assembling, writing, and implementing the revised local water management plan pursuant to M.S. 103B.301.

Adopted this 5th of June, 2012.

Paul Gerde, Pope County Board Chair

CERTIFICATION

I hereby certify that the above is a true and correct copy of a Resolution duly passed, adopted, and approved by the Board of Commissioners of Pope County on June 5, 2012.

Jim Thoreen, County Coordinator

Pope County, Minnesota

Date

Notice of Decision to Revise & Update Pope County's Water Plan

Pope County Water Plan Stakeholder:

Pope County is currently in the process of updating their Comprehensive Water Plan. As a valuable water plan stakeholder, you are being asked to complete the attached Pope County Priority Concerns Input Form. Please feel free to only complete as much of the information as you want (you may have to "Enable Content" after you open the file in order to complete the form...Microsoft Word should prompt you to do this). Simply input your answers by typing into the grey boxes, save a copy of the document, and e-mail me back a copy by July 19, 2012. The County Water Plan Task Force will then use this information to help write the County's Water Plan Priority Concerns Scoping Document.

In addition to completing a Priority Concerns Input Form, Pope County is holding an Open House for the County Water Plan on July 19, 2012. The Thursday meeting will take place in the Community Room located at the Pope County Courthouse from 5:00 to 6:30 p.m. A brief presentation will be given with discussion to follow.

Pope County has also created an online Water Plan Survey which can be accessed by the following link: http://www.surveymonkey.com/s/WRLXNKN

The meeting will be facilitated by Matthew Johnson from Midwest Community Planning, LLC. If you have any comments or questions, Mr. Johnson can be contacted at midwestplanning@gmail.com or by calling (320) 212-2042. Please feel free to forward this email to anyone else who may be interested in Pope County's Water Plan. Thank you!

June 19, 2012

From the Office of: Pope County Land & Resource Management

130 East Minnesota Avenue Glenwood, MN 56334

NEWS RELEASE

Pope County Water Plan Open House & Public Survey

Pope County is holding an Open House for the County Water Plan on Thursday, July 19, 2012. The Open House will take place from 5:00 to 6:30 p.m. in the Pope County Community Room located in the Pope County Courthouse (130 E. Minnesota Avenue in Glenwood). A brief presentation will be given with discussion to follow.

The purpose of the meeting is to encourage the public to help identify priority issues to be addressed in the County's Water Plan, which is currently being updated. A Pope County Water Plan Survey has also been developed, and may be accessed in the following website until July 19th: www.surveymonkey.com/s/WRLXNKN

Further information is available by contacting Steve Lawrence, Land & Resource Management Director at (320) 634-5715.

Pope County Water Plan Public Meeting Summary

Date: July 19, 2012

Time: 4:00 - 6:00 P.M.

Location: Pope County Courthouse ~ Glenwood, MN

Purpose: Water Plan Open House Issues Meeting

Various Water Plan stakeholders (i.e., County Board, SWCD, BWSR, etc.) met with the general public to identify and discuss issues related to updating the Pope County Water Plan. Fourteen people participated in the open house. The following issues were identified and discussed:

1) Wellhead Protection Plans

- a) Where have they been implemented?
- b) What measures are needed to protect the public water supply?
- c) What criteria have been developed to support land use decisions?

2) Pope County 8 Lake TMDL Plan

- a) Water Plan needs to incorporate the TMDL implementation steps.
- b) The County should examine developing a long-range policy on properly implementing the TMDL Plan over the next 20-30 years.
- c) The County should establish a policy on the examining the environmental impacts that land use decisions would have on the 8 Lake TMDL Implementation Plan. It was later added that environmental impacts should be examined in all land use decisions (not necessarily how they only impact the TMDL Plan).

3) Water Plan Task Force

- a) The County will put together a Water Plan Task Force to assist with developing the Water Plan.
- b) The Pope County SWCD will initially take the local lead in helping coordinate the water planning process.
- c) Mike Howe volunteered to represent the 8 Lake TMDL Plan on the Water Plan Task Force
- d) Participants encouraged the representation of agricultural interests on the Task Force.

4) Aquatic Invasive Species

a) Recently the DNR is investigating the presence of Zebra Mussels in Lake Minnewaska. If confirmed, this would be the first Zebra Mussel infestation in Pope County. The link to this story:

http://www.wctrib.com/event/article/id/95899/

b) A participant discussed that Eurasian Watermilfoil was recently removed by divers in Lake le Homme Dieu in Douglas County. The link to this story:

http://news.dnr.state.mn.us/2012/07/03/eurasian-watermilfoil-removed-from-lake-le-homme-dieu-in-douglas-county/

5) Land & Resources Department

- a) Would like the rebuilt department to take the lead on properly implementing the 8 Lake TMDL Plan.
- b) Zoning ordinances should be revamped to ensure that environmental effects are properly addressed during the permitting process.
- c) Would like the department to cooperative on enforcing the State mandate on no farming within 50-feet of protected waters.

6) Agricultural Drainage

- a) Many of the water quality problems would be improved with identifying key drainage improvements. Grant money may be available.
- b) Drainage systems are often not properly maintained.
- c) The State has an interdisciplinary Drainage Management Team that can provide expertise and assistance on drainage issues.
- d) Ditch authorities can require buffers without the redetermination of benefits.
- e) There is a lot of current positive energy surrounding identifying and fixing problems related to drainage. The intent is not to single out or pick on the farming community, but rather to work cooperatively on win-win scenarios.

7) Feedlots

- a) Most of the larger feedlot producers have properly implemented Best Management Practices to minimize pollution.
- b) Some smaller practices would benefit by receiving grant assistance.

8) Other Water Plan Issues

- a) Stormwater Management, especially with the City of Glenwood
- b) Promoting Best Management Practices (BMPs)
- c) Lake Ann has high nutrient levels
- d) A lot of State funds are currently available to implement water plan activities
- e) All water plan stakeholders should be pushed to identify how they can partner with the Pope County Water Plan
- f) Pope County Water Plan Survey was discussed and participants were encouraged to complete during the Open House or online at:

http://www.surveymonkev.com/s/WRLXNKN

Please Sign In!

Date: July 19, 2012

Location: Pope County

Purpose: Water Plan Open House

	Name	Representing	
1.	huan Tohrsrud	Pope Swes	
2.	Matt Johnson	MCP	
3.	Jim Haupert	Homeowner	
4.	Justin Stringler	Pape SWLD	
5.	Cody Rogahn	Pepe Co.	
6.	Kelly Zuchsen	tope SWCD	
7.	Jelf Henrikson	Rural Grove Lake	
8.	Gordon Wagner		
9.	Suha fratita binan	Pope lo Honesunen	
10.	John Leon	Vice President Cala	
11.	Judy Glass	Pelican R.V. Resort	
12.	MIKE HOWE	POPE 8-LAKETMDL COMMITT	SE.
13.	PETE WALLER	BWSR	
14.	Paul Gerde	Poge G. Comm 25. Son. paul-ge	rde0 copy
15.		V · J	mn.us.
16.			
17.			
18.			
19.		9	

	vnich of the following resources needs to be protected or improved the most in be County? Please select one
0	Ground/Drinking Water
(F)	Stormwater/Drainage Systems
Ó	Lakes/Streams/Rivers
Ô	Natural Habitat (i.e., prairie, wetlands, etc.)
Ö	Other
Oth	er (please specify)
	*
	What are the top five issues/threats to water resources in Pope County? Please ect up to five issues
	Failing Septic Systems
	Natural Habitat Destruction
	Soil Erosion
	Overuse of Groundwater Resources
	Ground/Drinking Water Contamination
	Declining Water Clarity/Quality
	Contaminated Runoff
	Lack of Environmental Education
	Lack of Enforcement
	Stormwater Contamination
	Drainage Systems
	Overapplication of Lawn/Garden Chemicals
	Overapplication of Agricultural Chemicals
	Aquatic Invasive Species
	Disposal of Hazardous Waste
Oth	er (please specify)

	*	
3. Please expl	n what can be done to assist with the issues/threats you identi	fied
in Question 2.		
	*	
	·	
Language .		
4. What other	ater resource concerns do you have regarding Pope County?	
	<u> </u>	
	*	
	LONE	

Powered by **SurveyMonkey**Check out our <u>sample surveys</u> and create your own now!

Appendix B:

Water Plan Priority Concerns Input Forms

- ~ The Minnesota Department of Agriculture ~
- ~ The Minnesota Pollution Control Agency ~
- ~ The Minnesota Board of Water and Soil Resources ~
- ~ The Minnesota Department of Natural Resources ~
 - ~ The Chippewa River Watershed Project ~
 - ~ The Sauk River Watershed District ~
- ~ BWSR's Official State PCSD Review Comments ~

Pope County 2012 Local Water Plan Priority Concerns Input Form

Please save a copy and email to Matthew Johnson, Midwest Community Planning, LLC midwestplanning@gmail.com by July 19, 2012

Your Agency/Organization: BWSR

Submitted by (name): Pete Waller, Board Conservationist, Fergus Falls

1. Top Priority Concern: Lake Minnewaska & other lakes currently not listed as Impaired (other than for Mercury) with organized lake associations

Why is it important the plan focus on this concern (include or cite relevant data)? Maintaining good water quality within non-impaired lakes is sound public policy (more effective and efficient to maintain than restore). Lakes are a reflection of their watersheds. Only local governments (county, cities, SWCD & WD's) working in conjunction with landowners can influence the impact of the watershed impact on lakes' water quality.

What actions are needed? Determine key locations and impacts to lake water quality of the non-impaired lakes. Once determined develop strategies (examples: education efforts, incentives and/or regulations) to improve or maintain good landuse practices. These strategies should be defendable to determine the level of responsibility/involvement of local governments. The following website provides an example used in Aitkin County: http://aitkincountyswed.org/PDF-Docs/WaterPlan6-24-09LargeLakes.pdf. Development of a stream power index using Lidar is another potential means of prioritizing where efforts should be placed.

What resources may be available to accomplish the actions? Clean Water Funding, state cost-share, federal USDA programs, state/federal easements, existing authorities (103E.221, 103B, local ordinances), the Glacial Lakes Environmental Trust Fund. Peter Mead, NRCS staffer is a good contact for GIS assistance.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? Watersheds of the lakes.

2. Second Priority Concern: Lakes Leven, Gilchrist, Reno, Ann, Malmedal, Strandness, Pelican & Emily (Listed as Impaired other than for Mercury)

Why is it important the plan focus on this concern (include or cite relevant data)? These 8 lakes are an important recreational and economic feature of Pope County. They are impaired and have Implementation Plans developed based on quantified goals to meet water quality standards.

What actions are needed? Develop an implementation strategy based on the TMDL Implementation Plan. What can/should be done, by whom, identify 'easy success' opportunities and determine impediments to additional implementation beyond the 'easy success' opportunities.

What resources may be available to accomplish the actions? Clean Water Funding, state cost-share, federal USDA programs, state/federal easements, existing authorities (103E.221, 103B, local ordinances), the Glacial Lakes Environmental Trust Fund. Peter Mead, NRCS staffer is a good contact for GIS assistance.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? Watersheds of the 8 Lakes.

3. Third Priority Concern: Chippewa River

Why is it important the plan focus on this concern (include or cite relevant data)? The majority of Pope County is within the Chippewa River Watershed and the river is impaired- i.e. the East Branch and Middle Mainstem basin as per the Chippewa River Watershed Project

What actions are needed? As per the recommendations of the CRWP 2010 monitoring report (website below):

The East Branch's major issue is e-coli with some localized issues with Total Phosphorus, Ortho Phosphorus and Turbidity. Livestock manure and non-compliant septic systems are likely source of the e-coli. These need to be fixed to limit feces coming into the water.

The Middle Mainstem '...cattle access to waterways must be controlled, ...areas along the river should be targeted for removing gullies and in the steep areas controlling field erosion,... areas without buffers should be protected, ...Lake Emily management actions that deal with the carp and lack of emergent vegetative cover need to be undertaken to hold down sediment and phosphorus...'

<u>http://www.chippewariver.com/documents/CRWP2010MonitorReport.pdf</u>
Contact Paul Wymar, CRWP Watershed Scientist for additional information.

What resources may be available to accomplish the actions? Clean Water Funding, state cost-share, federal USDA programs, state/federal easements, existing authorities (103E.221, 103B, local ordinances), the Glacial Lakes Environmental Trust Fund. Peter Mead, NRCS staffer is a good contact for GIS assistance.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? See above.

4. Fourth Priority Concern: Groundwater Quality Protection & Improvement

Why is it important the plan focus on this concern (include or cite relevant data)? Many of the wells in Pope County withdraw water from the shallow buried aquifers -

What actions are needed? Sealing abandoned wells in high priority areas.

Low pressure conversions of high pressure irrigators and Irrigation scheduling. See the East Ottertail SWCD CWF story for additional information at:

 $\underline{http://www.bwsr.state.mn.us/cleanwaterfund/stories/factsheets/EastOtterTail_GroundwaterProtection.}\\ \underline{pdf}$

What resources may be available to accomplish the actions? NRCS EQIP & Clean Water Funding (include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? The buried sand and gravel aquifers in the eastern portion of the county, areas within the County that are in Wellhead Protection Areas and other resources with maps such as 'Sensitive to Pollution of the Buried Aquifers' in the Pope County Geological Atlas at: http://files.dnr.state.mn.us/waters/groundwater_section/mapping/cga/c15_pope/pdf_files/plate09.PDF



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Water Planning Assistance

County Water Plans

In the State of Minnesota, the Board of Water and Soil Resources (BWSR) has oversight to ensure that county water plans are prepared and coordinated with existing local, and state efforts and that plans are implemented effectively. County Water Plans are a major tool for addressing water resource concerns in Minnesota. The Minnesota Department of Agriculture (MDA), through this website and via input on County Water Plans, seeks to provide current planning guidance and references to support the planning process.

The MDA has a role in protecting water quality as it relates to agricultural pesticides and fertilizers. We can provide technical information, financial assistance to implement specific programs, and education and outreach assistance.

At the beginning of the County Water Plan Update Process, State Agencies, including the Minnesota Department of Agriculture are invited to provide input, in the form of Priority Concerns to the County. MDA has selected five Priority Concerns to focus on in Minnesota.

The MDA has redeveloped it's process to comment on local water plans and to provide comments to local units of government. The MDA appreciates the opportunity to work with counties and other partners on these local plans. This information is general guidance primary focused on counties that are conducting 10-year water plan rewrites. The MDA will provide more specific comments to counties that are going through this process. Information provided may not specifically be applicable for 5-year water plan updates. For those counties working on the 5-year updates, the MDA may also provide detailed comments or guidance. In any case, MDA will work closely with the local unit of government to provide information.

Priority Concerns

Agricultural
Drainage,
Wetlands & Water
Retention

Agricultural
Chemicals &
Nutrients in
Ground & Surface
Water

<u>Livestock &</u>
<u>Manure</u>
<u>Management</u>

Agricultural Land Management

Targeting BMPs, Aligning Local Plans & Engaging Agriculture

MDA Contacts Ag Drainage Page 1 of 2



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Home > Protecting Our Lands & Waters > Water Protection > Water Planning Assistance > Ag Drainage

Agricultural Drainage, Wetlands and Water Retention

Why is it important the plan focus on this concern?

Adequate drainage can be a critical component of a successful farm operation. High crop and land prices have the potential of increasing conversion of pasture and forage land to row crops, which in turn may lead to the installation of new drainage systems or drainage improvements to existing systems. New drainage and drainage improvements represent an opportunity to design and install systems in ways that help reduce nutrient losses into surface water and positively affect the timing and flows of drainage water into surface waters. These efforts combined with wetland restoration and water retention initiatives can have positive impacts upon water quality in agricultural landscapes.

What actions are needed for Agricultural Drainage?

Generally, local plans should provide guidance, objectives, goals and action items for further coordination of agricultural water management issues and Conservation Drainage (CD) implementation efforts at the local level. A number of CD practices exist to address water quality issues. There is no single CD practice that will address all agricultural drainage issues. However, multi-purpose approaches to managing water quality and quantity on the agricultural landscape using a suite of CD initiatives is the best approach. It is recommended that:

- Local plans discuss how CD practices can be utilized based on the drainage needs of the county coupled with associated water management issues.
- Local drainage authorities be proactive in encouraging the use of CD practices and designs during repairs and improvements of existing drainage systems.
- Redetermination of Benefits for ditch systems continue to be done in a proactive, consistent and systematic manner.
- Buffer initiatives continue to be implemented consistently and according to current drainage law.
- The local drainage authority continues to base drainage regulations on science and current best management practice knowledge.
- The local drainage authority consider multipurpose drainage approaches as developed by BWSR.

As a point of interest, a technical and scientific committee is currently addressing the effect of tiling upon flooding in the Red River Valley. Here's a <u>weblink</u> where two recent briefing papers can be viewed on this subject. This committee conducted an extensive literature review and developed a number of conclusions from the review in addition to a set of statements and recommendations from these papers. While this document and effort is specific to the Red River Valley, counties may find it useful to reference this report within the drainage discussion of draft water plan amendments or re-writes.

What actions are needed for Wetlands and Water Retention?

Properly locating wetlands and water storage or retention projects can be a strategic component of overall efforts to manage nutrients, sediments and water quantity issues. Counties may consider consulting with the Red River

Ag Drainage Page 2 of 2

Watershed Management Board – Flood Damage Reduction Workgroup to determine how flood damage reduction, retention and mitigation efforts have progressed in Northwest Minnesota in conjunction with wetland restoration (via various state and federal programs).

The Red River Valley has a long history of managing floodwater and constructing impoundments to manage floodwaters and significant insight could be gained by corresponding with this organization regarding water retention. A Technical and Scientific Advisory Committee as part of this Board has also developed a number of scientific papers on a variety of issues related to flood damage reduction. Specifically, counties should consider:

- Conducting/updating culvert inventories in conjunction with identifying where water retention projects can be constructed utilizing LIDAR and GIS technologies.
- Identifying projects where tile water from public drainage systems can potentially be used to augment long-term water levels in wetland restorations for water retention purposes.
- Working with local farmers on agricultural wetland mitigation banking initiatives and include agricultural sectors on overall wetland planning efforts.
- Identify areas where constructed wetlands can be located for treating tile drainage water.

What resources may be available to accomplish the actions for Agricultural Drainage, Wetlands and Water Retention?

- MDA Drainage Information
- MDA Drainage Demonstration Sites
- Conservation Drainage Practices
- Conservation Drainage Designs
- University of Minnesota Drainage Research
- · Board of Water and Soil Resources
- University of Minnesota Extension Service
- Red River Watershed Management Board

What area(s) of the county is high priority?

All agricultural lands of the county.

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Ag Chemicals Page 1 of 2



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Water

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Water

Water

Water

Water

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Water

Groundwater and Surface Water Protection: Agricultural Chemicals and Nutrients/Water Use/Land Management in Wellhead Protection Areas

Why is it important the plan focus on this concern?

Agricultural chemicals may contribute to water pollution from runoff into surface waters or infiltration into groundwater. Contaminated groundwater and surface water can affect human health as well as ecosystem quality. The protection of drinking water is an important health issue as approximately 75 percent of Minnesotans obtain their drinking water from groundwater. In areas with vulnerable groundwater, nitrates may exceed the drinking water standard. Once the standard is exceeded, it may be difficult to reduce the levels of contaminants. Therefore, it is highly desirable to prevent contamination of groundwater from occurring through protective actions in areas with vulnerable aquifers.

In areas with elevated nitrates in groundwater it is important to reduce their concentration. Similarly, pesticides may be present in shallow vulnerable groundwater. Agricultural chemicals are also frequently a concern related to surface water impairments under the clean water act. The most common agricultural sources of excess nutrients in surface water are chemical fertilizers and manure. Such nutrients contribute to eutrophication in surface water and have been identified as a source of hypoxia in the Gulf of Mexico.

What actions are needed?

- Continue the sealing of abandoned wells in agricultural landscapes and prioritize efforts for ISTS upgrades in sensitive areas. Utilize the MDA Ag BMP loan program and costshare programs to assist landowners in addressing these issues.
- Crop Irrigation Encourage the conversion of older irrigation systems to low pressure. MDA

What resources may be available to accomplish the actions?

The MDA prepares specific maps for counties to assist in local groundwater protection efforts. The maps should be used to prioritize groundwater BMP implementation, protection and restoration efforts. The Water Table Aquifer Sensitivity map classifies the county into three aquifer sensitivity ratings: low, medium and high. These reflect the likelihood that infiltrating precipitation or surface water would reach the water table possibly bringing surface contaminants with it. Priority should be given to the Drinking Water Supply Management Areas (DWSAs), Wellhead Protection Areas and to the areas given a high aquifer sensitivity rating.

Nitrate concentrations found in MDA monitoring wells and wells in the County Well Index (CWI) are also shown on the map. Concentrations greater than 3 mg/L indicate nitrate concentrations above background levels, while concentrations greater than 10 mg/L are above the nitrate drinking water standard. Additional websites:

EVALUATE

- Agricultural Chemical Monitoring and Assessment Programs
- Interactive Source Water Mapping Tool
- County Geologic Map Program
- <u>Farm Nutrient Management Assessment Program (FANMAP)</u>
- Nutrient Management Initiative

PREVENT

 Management Ideas for Wellhead Protection Programs Ag Chemicals Page 2 of 2

website on irrigation BMPs. The MDA recommends that this water plan consider the following items specific to irrigation:

- Water Quality BMPs for Agricultural Herbicides
- Water Quality BMPs for Nitrogen **Fertilizers**
- Develop and implement educational programs regarding water management in conjunction with nitrogen fertilizer management. Reference the following websites regarding coarse textured soils:
 - Best Management Practices for Nitrogen on Coarse Textured Soils

 Nutrient and Manure Management Planning
 - Best Management Practices for Nitrogen Use Irrigated Potatoes

 Nutrient and Manure Management Tables
- Promote the establishment and data access of local climate stations to irrigators for ET (evapotranspiration) estimates. Animal Mortality Composting
- Promote the use and availability of irrigation scheduling software and record keeping.
- Promote the use of the county soil survey and other localized soils information in determining soil moisture holding capacity on a field-specific scale.
- Encourage the use of soil moisture sensors (moisture blocks, tensiometers, etc.) and other advanced tools for determining crop water stress.
- Fertigation (nitrogen applied through the irrigation water) is an excellent option for irrigators to distribute small amounts of nitrogen (20-30 lb/A). See the website above regarding coarse textured soils for details. Note that a fertigation permit and the proper backflow equipment is required by the MDA.
- Provide assistance in irrigation uniformity testing and nozzle calibrations.
- Provide nitrate testing services on irrigation water to help promote N crediting concepts and environmental protection. MDA staff can help provide equipment and technical assistance.
- Promote hybrid and crop selection that have lower water and/or nitrogen requirements.
- Conduct training sessions and workshops for farmers that have agricultural production activities within wellhead protection areas and drinking water supply management areas. Encourage the use of the Nutrient BMP Challenge, Nutrient Management Initiative and similar tools within these areas. More resources regarding drinking water protection in agricultural settings.

What area(s) of the county is high priority?

Rural or agricultural areas that are actively growing crops/producing livestock, coarse textured soils areas and wellhead protection areas that have agricultural activity.

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Home > Protecting Our Lands & Waters > Water Protection > Water Planning Assistance > Livestock Manure Mgmt

Manure Management and Livestock Issues

Why is it important the plan focus on this concern?

Livestock manure used as fertilizer has benefited farmers for decades and if applied properly can meet crop nutrient requirements, build up soil organic material and decrease dependence on commercial fertilizers, increase soil fertility, and in some cases, reduce soil erosion. Manure as fertilizer is a constant reminder that we can reuse and recycle a product that was once thought of as a waste product with insignificant value. However, if manure is not properly applied it can lead to negative environmental impacts.

Manure, feed/silage leachate and milkhouse waste can be high in nutrient values, specifically pertaining to nitrogen and phosphorous. If improperly applied, manure does have the potential to contribute to nutrient loading and bacteria/viral levels of water sources. It is important for counties in the state to encourage the development of manure/nutrient management plans for the livestock producers within their borders. These plans address agronomic application rates for crops planted, buffered or protection areas around sensitive features, and reduce the potential of impacting surface or ground water.

Pasturing livestock is a common practice among livestock producers. Several studies and research through the University of Minnesota show that livestock grazing, if done properly, can enhance the quality of grazing lands. As your county is aware, pasture areas are often those areas that are not conducive to farming and generally contain sensitive landscape and surface water features. Nutrients left by livestock serve as a fertilizer source to pasture plant species, which then utilize and filter the nutrients rather than the nutrients being in excess and exiting the area in the form of runoff.

Types of vegetation, length of time in a pasture, stocking density and water availability are all issues livestock producers must be continued to be educated, in order to produce and utilize a productive, environmentally sound pasture or grazing system. Pastures or grazing systems not managed properly can restrict or eliminate vegetative growth and cover, which in turn can result in potentially negative water quality issues.

Producers in watersheds that are impaired due to fecal coliform/E coli impairments need to be encouraged to be involved in TMDLs developed in the region. Local producer involvement on water plan advisory committees and water quality initiatives will provide additional insight into how producers can work with agencies to improve water quality.

What actions are needed?

- Continue and renew education and outreach efforts on manure/nutrient/pasture management planning and implementation. Work closely with local NRCS staff on this issue as well as regional MPCA staff.
- Encourage livestock producers to work with Technical Service Providers and/or Certified Crop Advisors to better utilize and understand the value of using GIS/GPS technologies in developing:
 - Manure management plans.
 - Comprehensive nutrient management plans
 - Pasture management plans

- Rotational grazing plans
- Encourage involvement from livestock producers located within impaired watersheds and vulnerable areas in the landscape. One such approach may be the development of a <u>local agricultural advisory</u> committee.
- Continue and/or make it a priority to provide technical and financial assistance for livestock producers
 to assist them with adopting best management practices to reduce impacts from manure runoff and
 manure storage structures or areas.
- Encourage livestock producers to participate in an on-farm environmental assessment program. A
 number of livestock producer groups in the state have specific programs that are available to their
 members. The <u>Livestock Environmental Quality Assurance (LEQA)</u> program is available to all livestock
 producers in Minnesota. LEQA is an on-farm environmental assessment and results in a water quality
 score for a farm.

As ecosystem services are better defined, producers that participate in an on-farm environmental assessment may be better situated to participate in future water quality or ecosystem services trading markets.

What resources may be available to accomplish the actions?

- MDA Ag BMP Loan Program
- Sustainable Ag Loan Program
- NRCS Cost Share Programs
- BWSR Cost Share Funds
- MPCA 319 Grants
- Minnesota Rural Finance Authority Loans
- Livestock Environmental Quality Assurance Program (LEQA)

What area(s) of the county is high priority?

Feedlots with open lots in shoreland or near sensitive water features and land where manure is applied in shoreland or near sensitive water features. Pasture areas located adjacent to shoreland areas.

Contacts/Resources:

MDA Livestock Resources

MPCA Feedlot Program

University of Minnesota Manure Management and Air Quality Education and Research

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Minnesota Dept. of Agriculture, 625 Robert St. N, St. Paul, MN 55155-2538, mda.info@state.mn.us

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Ag Land Mgmt Page 1 of 2



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Agricultural Land Management

Why is it important the plan focus on this concern?

The MDA recommends voluntary approaches to addressing soil loss and soil erosion issues and offers some suggestions as outlined below to engage agricultural producers in your county. Many advances have been made over the past decades to assist crop and livestock producers in managing their lands, including both from a technological and scientific standpoint. Advancements have also been made in recent years regarding seed technology, nutrient placement and timing of application, crop physiology research and overall land management, including improved soil and water management techniques. However, on certain soils, steep slopes, hydrologic settings or unique landscape features, there may be a need for additional voluntary measures to be implemented.

What actions are needed? What resources may be available to accomplish the actions?

The water plan should consider including discussion about how to further encourage voluntary initiatives, such as the use of:

- Enhanced use of <u>Precision Agricultural Technologies (PCT)</u>. While adoption of PCT has been widely adopted and accepted by many agricultural producers, there may be additional opportunities to further encourage the voluntary use of PCT in various agricultural settings of the county.
- <u>Cover crops</u> when appropriate. The use of cover crops may not be conducive to every crop rotation or landscape setting. However, certain cover crops can be beneficial for soil quality improvements, erosion control and soil fertility.
- Innovative <u>residue management</u> techniques that are crop rotation appropriate and designed to fit the needs of individual farming operations.
- Survey tools. The MDA developed a diagnostic tool a number of years ago called Farm Nutrient Management Assessment Process (FANMAP) to get a clear understanding of existing farm practices regarding agricultural inputs such as fertilizers, manures and pesticides. The use of FANMAP or other survey tools may be useful in certain areas of the county when working on a minor watershed basis. Contact the MDA for more specifics about how FANMAP can be used in your county.
- Enhanced promotion of buffer strips, filter strips, water and sediment and control basins and grassed waterways in areas with steep slopes, coarse soils and other high priority areas. The MDA realizes that resources are needed to accomplish promotional and educational initiatives to encourage the adoption of these types of practices. Your county may want to partner with other local units of government in promoting higher levels of adoption for the above mentioned BMPs.

What area(s) of the county is high priority?

All agricultural areas of the county. Specifically important for areas with steep slopes or coarse soils.

Targeting BMPs Page 1 of 2



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Targeting of BMPs, Aligning Local Plans and Engaging Agriculture

Why is it important the plan focus on this concern?

Technical, financial and staff resources are becoming more difficult to retain and obtain. As resources are scarce, the targeting of agricultural BMPs and conservation structures to the most vulnerable areas of the landscape is critical. The goal should be to target conservation practices to the areas of the landscape where they will be most effective to meet local and regional water quality and ecosystem goals and objectives.

New tools and technologies are making it possible to <u>target conservation practices</u> to specific areas of the landscape. State agencies are working together to support the development of new technologies and to make them available to local partners through training and online resources. This area of research is developing and more tools such as digital terrain analysis, are made available each year. These resources should be used whenever possible. A multi-faceted approach to implementing BMPs on the landscape is an important component of preserving, conserving, enhancing and sustaining water and natural resources. It is recommended that consideration be given towards further developing and enhancing relations with all local conservation partners to align goals, objectives and outcomes of local plans to meet local water quality goals.

It is recommended that the authors of the local water plan continually review and acknowledge areas of shared concern and opportunity between complementary plans and to foster new partnerships. Considerations should be given for further engaging the agricultural sector while developing new plans or updating existing plans. Agricultural producers involved with local TMDL implementation plans, local water management plan advisory committees, NRCS local workgroups and other local committees can provide additional insight into agricultural landscape management.

What actions are needed?

- Utilize targeting tools and technologies to locate BMPs and conservation structures using the targeting tools.
- Consider and implement multifaceted approaches to working with agricultural producers.
- Further engage local partners on conservation implementation such as NRCS staff, local conservation groups, lake associations, etc.
- Foster new relationships with the agricultural sector or enhance existing relations. Consider joint meetings of NRCS local work groups and local water management plan advisory committees.

What resources may be available to accomplish the actions?

Agricultural producers are key stakeholders in working with local, state and federal agencies on implementing positive changes within the agricultural landscape. The <u>Clean Water Fund Activities</u> website was developed to encourage producers to become involved at the local level with impaired waters issues.

The Minnesota Conservation Funding Guide provides more detailed information about funding opportunities. This guide complements, but does not replace the customized local expertise available via SWCDs and other local units

Targeting BMPs Page 2 of 2

of government to landowners throughout Minnesota. The guide provides contact information for Minnesota's 90 local SWCDs and other organizations that help landowners plan and implement conservation.

The Minnesota Agricultural Water Resource Center may be able to provide additional expertise on engaging agricultural producers in your county.

What area(s) of the county is high priority?

All areas of the county.

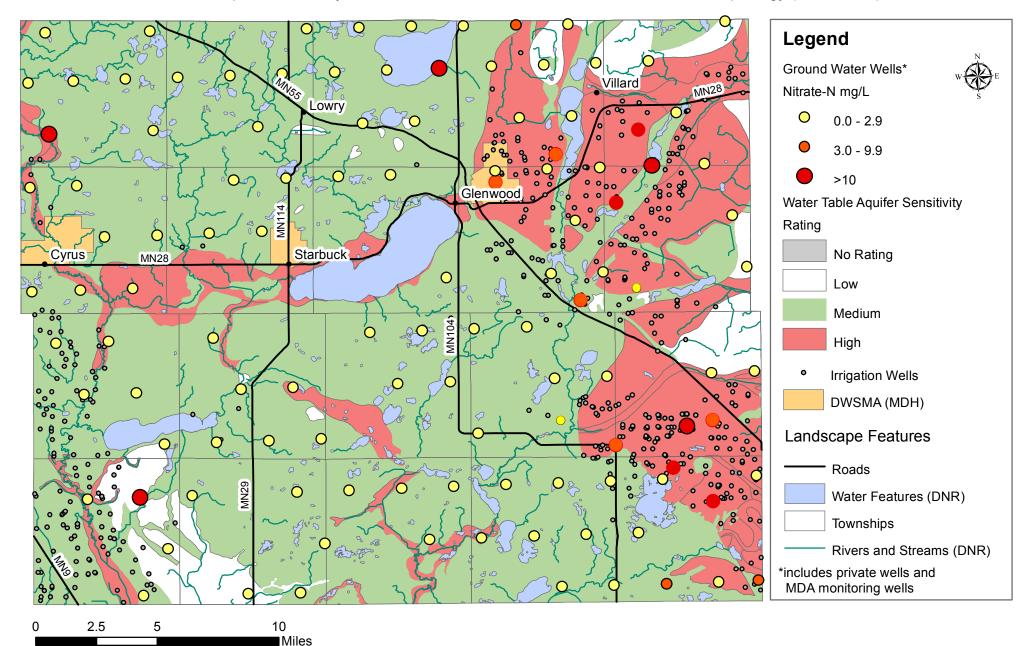
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POPE COUNTY WATER TABLE AQUIFER SENSITIVITY

Water Table Aquifer Sensitivity based on Sediment Association of Minnesota Geormophology (DNR, 1997)







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August 7, 2012

Mr. Matthew Johnson Midwest Community Planning, LLC Post Office Box 541 Willmar, MN 56201

RE: Pope County Priority Concerns Local Water Management Program

Dear Mr. Johnson:

The Minnesota Pollution Control Agency (MPCA) is pleased to provide priority concerns for consideration in Pope County's (County) Local Water Management (LWM) planning efforts. We trust these priority concerns will be helpful with developing the forthcoming Priority Concerns Scoping Document (PCSD) and Local Water Management (LWM) Plan.

1. Impaired Waters/Total Maximum Daily Loads

The federal Clean Water Act requires states to adopt water quality standards to protect the nation's waters. These standards define how much pollution can be in a surface and/or groundwater while still allowing it to meet its designated uses, such as for drinking water, fishing, swimming, irrigation or industrial purposes. Many of Minnesota's water resources cannot currently meet their designated uses because of pollution problems from a combination of point and nonpoint sources.

Addressing impaired waters in LWM plans is voluntary. However, the MPCA strongly encourages counties to consider how their LWM plans address impaired waters, as identified on the "Final List of Impaired Waters" available on MPCA's website at:

http://www.pca.state.mn.us/water/tmdl/tmdl-303dlist.html#finallist

It is suggested the LWM Plan:

- identify the priority the County places on addressing impaired waters, and how the County plans
 to participate in the development of Total Maximum Daily Load (TMDL) pollutant allocations
 and implementation of TMDLs for impaired waters
- include a list of impaired waters and types of impairment(s) (see table below)
- identify the pollutant(s) causing the impairment (see table below)
- address the commitment of the County to submit any data it collects to the MPCA for use in identifying impaired waters, provide plans, if any, for monitoring as yet unmonitored waters for a more comprehensive assessment of waters in the County
- describe actions and timing the County intends to take to reduce the pollutant(s) causing the impairment, including those actions that are part of an approved implementation plan for TMDLs

Regional TMDL reports for mercury have been approved by the U.S. Environmental Protection Agency (EPA). The MPCA recommends counties address waters listed for pollutants/stressors other than mercury and polychlorinated biphenyls (PCB) in their LWM plans.

The list of impaired waters in the County is provided in the table below.

Clean Water Act Section 303 [d] List of Impaired Waters in the County.

Reach

Assessment Unit	ID	Impaired Use	Impairment Cause	Impairment Status
	07010202			T1404 D
Ashley Creek: Headwaters to Sauk Lk	-503	AqRec	Escherichia coli	TMDL Required
Ashley Creek: Headwaters to Sauk Lk	07010202 -503	AqLife	Oxygen, Dissolved	TMDL Required
Chippewa River: Little Chippewa R to Unnamed cr	07020005 -504	AqLife	Turbidity	TMDL Required
Chippewa River: Little Chippewa R to Unnamed cr	07020005 -504	AgCons	Mercury in Fish Tissue	TMDL Approved
Chippewa River: Stowe Lk to Little Chippewa R	07020005 -503	AqRec	Fecal Coliform	TMDL Approved
Chippewa River: Stowe Lk to Little Chippewa R	07020005 -503	AqLife	Turbidity	TMDL Required
Chippewa River: Stowe Lk to Little Chippewa R	07020005 -503	AqCons	Mercury in Fish Tissue	TMDL Approved
Chippewa River: Unnamed cr to E Br Chippewa R	07020005 -505	AqLife	Fishes Bioassessments	TMDL Required
Chippewa River: Unnamed cr to E Br Chippewa R	07020005 -505	AqRec	Fecal Coliform	TMDL Approved
Chippewa River: Unnamed cr to E Br Chippewa R	07020005 -505	AqLife	Turbidity	TMDL Required
Chippewa River: Unnamed cr to E Br Chippewa R	07020005 -505	AqCons	Mercury in Fish Tissue	TMDL Approved
County Ditch 6: Unnamed cr to Ashley Cr	07010202 -521	AqLife	Fishes Bioassessments	TMDL Required
County Ditch 6: Unnamed cr to Ashley Cr	07010202 -521	AqLife	Aquatic Macroinvertebrate Bioassessments	TMDL Required
Little Chippewa River: Unnamed cr to Chippewa R	07020005 -530	AqRec	Escherichia coli	TMDL Required
Little Chippewa River: Unnamed cr to Chippewa R	07020005 -530	AqLife	Fishes Bioassessments	TMDL Required
Little Chippewa River: Unnamed cr to Chippewa R	07020005 -530	AqLife	Turbidity	TMDL Required

Lakes

Assessment Unit	ID	Impaired Use	Impairment Cause	Impairment Status
Amelia	61-0064-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Ann	61-0122-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Emily	61-0180-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Gilchrist	61-0072-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Grove	61-0023-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Johanna	61-0006-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Leven	61-0066-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Malmedal	61-0162-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Minnewaska	61-0130-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Pelican	61-0111-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Reno	61-0078-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Scandinavian	61-0041-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Signalness	61-0149-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Strandness	61-0128-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Villard	61-0067-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Westport	61-0029-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required

The County should consider participating with other units of government in the watershed to develop and implement TMDL implementation plans once TMDL studies receive final approval from the EPA. Grant funding applications for TMDL impaired water implementation projects may request citations from local water plans identifying water bodies as County priorities. This documented commitment by a county may improve an applications ranking and ultimately the County's ability to secure implementation funding.

Areas of the County that should be considered priority waters are the impaired water bodies and reaches of impaired water bodies on the Clean Water Act 303 [d] TMDL List. We believe the County should consider impaired waters as a top priority for discussion in the LWM Plan.

Draft/public noticed TMDL studies and approved TMDLs and implementation plans can be viewed on MPCA's website at: http://www.pca.state.mn.us/index.php/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/tmdl-projects-and-staff-contacts.html

MPCA Environmental Data Access System

The water quality section of MPCA's Environmental Data Access (EDA) system allows visitors to find and download data from surface water monitoring sites located throughout the state. Where available,

conditions of lakes, rivers or streams that have been assessed can be viewed. We encourage the County to visit this site for water quality monitoring data which may be useful with LWM planning efforts: http://www.pca.state.mn.us/data/edaWater/index.cfm

2. Feedlot compliance - finding/fixing problems (inspections)

The Pope County Eight Lakes TMDL identifies manure management as the largest contributor of phosphorus in the Anne Lake watershed.

Actions needed include a complete inventory of pathways (surface drainage & tile drainage) within the watershed of Ann Lake. Manure management plans should be written to prevent any manure from reaching Ann Lake through the identified pathways.

The Pope County Eight Lakes TMDL Implementation Plan can be used to guide this work. A steering committee has been established to coordinate decision making, investigate funding opportunities and provide for civic engagement.

High priority areas of the County are all lake watersheds within Pope County, but the eight lakes in this TMDL Study should receive priority, with the Ann Lake watershed receiving the highest priority.

If we may be of further assistance, please contact Tim James in the Detroit Lakes Regional Office at 218-846-8103 or Dave L. Johnson in the St. Paul Office at 651-757-2470.

Thank you and we look forward to reviewing the forthcoming PCSD and LWM Plan.

Sincerely,

Rebecca J. Flood Assistant Commissioner

Mun J. Flor

RJF/DLJ:kb

cc: Ron Shelito, Minnesota Board of Water and Soil Resources Tim James, Minnesota Pollution Control Agency, Detroit Lakes Office

Pope County 2012 Local Water Plan Priority Concerns Input Form

Please save a copy and email to Matthew Johnson, Midwest Community Planning, LLC midwestplanning@gmail.com by July 19, 2012

Your Agency/Organization: MN DNR/Division of Fish & Wildlife/Fisheries

Submitted by (name): R. Dean Beck

1. Top Priority Concern: Stormwater Runoff

Why is it important the plan focus on this concern (include or cite relevant data)? State climatology records describe a sustained increase in average annual precipitation. Climate change projections also include increasing air temperatures and an associated frequency and severity of storm events. Pope County encompasses a land area transcending from glacial ridge to outwash plains. Landscape attributes include a rolling topography, areas of steep slopes, and extensive areas of sandy and highly erodible soils. Approximately 80% of the land area is in agricultural production. Many depressional wetlands were drained to increase crop production. Subsurface tiling has increased in response to higher commodity prices in order to remove pooling water and excessively wet soils in the root zone. Significant rainfall events on moderately sloping and erodible soils have great potential to result in erosion, soil displacement, and accelerated nutrient loading to surface waters. Drainage modifications have also increased volume and rapidity of runoff delivered to streams and lower basins. Hydrological alterations have increased streambank erosion and downstream flood potential. It can be projected that moderate precipitation events now deliver an equivalent volume of runoff as did severe storm events prior to extensive production enhancements. Downstream impacts of runoff on sediment delivery and water quality degradation of Pope County's lakes is readily evident. Seven of Pope County's 13 priority lakes are listed on the MPCA 303d listing of Minnesota's impaired waters

What actions are needed? The Pope County Water Plan should promote overhaul of antiquated ditch laws that favor drainage practices and supersede environmental laws and downstream impacts. Tiling activities should be regulated. In reality, corrective actions carry great potential for political push back. The water plan should stress wetland restorations for stormwater retention, bolster incentive programs to sustain marginal croplands in set aside programs, and continue to promote other soil conservation practices.

What resources may be available to accomplish the actions? TMDL implementation plans provide a platform for stormwater management projects and afford access to Clean Water Legacy funds. Existing soil conservation programs and funding support are available from the Department of Agriculture. Some project funding support is also available through the Chippewa River Watershed Clean Water Partnership. I would hope that shoreland property owners, municipalities and other local government entities would be advocates to address downstream impacts of drainage.

What areas of the county are high priorities? Trappers Run Creek and Little & East Branches of the Chippewa River watersheds.

2. Second Priority Concern: Groundwater Protection and Conservation

Why is it important the plan focus on this concern (include or cite relevant data)? Pope County soils overlay gravel outwash and glacial till. Early maps indicate approximately 90% of the landscape is covered by moderately to excessively drained soils. Pope County is included as one of 12 counties occurring in the Central Sands region of Minnesota. High permeability of soils, sand and gravel deposits, and a shallow water table present significant potential for nutrient and chemical leeching and groundwater contamination. The MPCA has identified the Bonanza Valley area and an aquifer in southwest Pope County as "vulnerable aquifers" with high potential for groundwater contamination. Five of 93 private well water samples analyzed in 2011 exceeded the EPA Maximum Concentration Limit of 10 mg/L of nitrogen-nitrate for safe drinking water.

Light and sandy soils have prompted use of irrigation systems to maximize crop yields. Well monitoring studies indicate a potential to mine groundwater resources and impact water supply and stream flows during extended dry periods. Groundwater appropriation permits have been suspended at times in response to well impacts and low flows in the East Branch Chippewa River. Returning marginal croplands back into production can be expected to stimulate expansion of irrigation systems and greater groundwater and surface water appropriations.

What actions are needed? Necessary protection strategies may include wellhead protection and sealing, chemical management, restricting use of shallow, sand point wells for potable water, managing land use activities in recharge areas, promoting more efficient irrigation systems, or limited or better allocating appropriations.

What resources may be available to accomplish the actions? Many pertinent programs and initiatives exist with BWSR, MPCA, DOA, and DOH. Programming has included wellhead protection and well monitoring. Now that the Geological Survey has been completed, there would appear to be opportunities to expand groundwater protection programming and focus efforts in critical or problem areas.

What areas of the county are high priorities? That portion of the county within the Central Sands region which includes much of eastern Pope County (Bonanza Valley). Nitrates and agri-chemical levels can be expected to increase in surface waters in response to subsurface tiling in less well drained areas of the county. Some shoreland property owners continue to use shallow point wells for potable water supply. Residential wells below manure pits and old landfills should also be a high priority for monitoring.

3. Third Priority Concern: Water Plan Administration and Organizational Efficiency

Why is it important the plan focus on this concern (include or cite relevant data)? Completion of TMDL studies for eight impaired basins in Pope County, development and approval of water quality improvement implementation plans for those basins, and availability of Clean Water legacy funding has generated momentum and optimism for successfully addressing water quality and quantity issues in much of Pope County. Unfortunately, existing organizational structure, administrative challenges, and political realities make it difficult to advance projects and measure outcomes and effectiveness. Due in part to multiple program support from State and Federal entities, existing workloads, necessity of citizen participation, and funding constraints, there has been a lack of leadership with a mandate to lead, coordinate, and implement water plan and TMDL initiatives. Authorization and freedom to act in administering the water plan are limited by Pope County Commissioners and their individual interests and agendas. Little progress has occurred outside of existing SWCD and NRCS programming. The issues addressed are complex, encompass multiple fields of scientific study, and require a leader with the organizational ability, communications and social skills to sell plan initiatives, and dedicated time necessary to coordinate, complete and evaluate plan success.

What actions are needed? There is need to fund and hire a water plan and TMDL manager or coordinator with the knowledge, experience, and skills to effectively advance and administer implementation plans and action strategies. The position would require some autonomy from local politics to withstand financial and administrative constraints imposed by elected officials and special interests. It may be appropriate for such a position to be hired and appointed by BWSR with joint funding and endorsements by all partners. The position template may reflect that of a Department of Agriculture Resource Conservation and Development Coordinator.

What resources may be available to accomplish the actions? Cooperative funding commitments, political will or a joint powers agreement, and necessary position support

What areas of the county are high priorities? County-wide

Chippewa River Watershed Water Plan Priority Concerns Input Form

Please save a copy and email to Matthew Johnson, Midwest Community Planning, LLC midwestplanning@gmail.com

Your Agency/Organization: Chippewa River Watershed Project

Submitted by (name): Kylene Olson

1. Top Priority Concern: Surface Water Quality

Why is it important the plan focus on this concern (include or cite relevant data)? The Chippewa River has 14 reaches in Chippewa County listed on the impaired water list

What actions are needed? Erosion and sediment control, nutrient management, ag land management

What resources may be available to accomplish the actions? Clean Water Legacy funds, BWSR, state cost share, NRCS, EQIP, Water Plan, MPCA

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the Chippewa River Watershed are high priority? Mainstem of Chippewa River, Dry Weather Creek, Shakopee Creek (aka JD18), Lines Creek, Spring Creek and the county ditches

2. Second Priority Concern: Water Quantity

Why is it important the plan focus on this concern (include or cite relevant data)? Loss of wetlands, higher than normal flows, flooding which increases erosion

What actions are needed? Address runoff impacts, wetland restorations, upland storage, replace open tile intakes with alternative intakes

What resources may be available to accomplish the actions? Clean Water Legacy funds, BWSR, state cost share, NRCS, EQIP, Water Plan, MPCA (include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the Chippewa River Watershed are high priority? Mainstem of Chippewa River, Dry Weather Creek, Shakopee Creek (aka JD18), Lines Creek, Spring Creek and the county ditches

3. Third Priority Concern: Soil erosion

Why is it important the plan focus on this concern (include or cite relevant data)? The Chippewa River is impaired for turbidity, lack of filter strips and wetlands

What actions are needed? BMPS targeting reduced runoff, wetland restorations, soil management, soil

What resources may be available to accomplish the actions? Clean Water Legacy funds, BWSR, state cost share, NRCS, EQIP, Water Plan, MPCA (include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the Chippewa River Watershed are high priority? Mainstem of Chippewa River, Dry Weather Creek, Shakopee Creek (aka JD18), Lines Creek, Spring Creek and the county ditches

Pope County 2012 Local Water Plan Priority Concerns Input Form

Please save a copy and email to Matthew Johnson, Midwest Community Planning, LLC midwestplanning@gmail.com by July 19, 2012

Your Agency/Organization: Sauk River Watershed District

Submitted by (name): Lynn Nelson

1. Top Priority Concern: Ashley Creek Watershed

Why is it important the plan focus on this concern (include or cite relevant data)? Ashley Creek is an important water resource to Sauk Lake and the Sauk River. It has been placed on the state 303d impaired waters list for low dissolved oxygen since 1998 and recently listed for E.coli bacteria (2010) and Aquatic Macroinvertebrate Bioassessments and Fishes Bioassessments (2012). The 2009 Sauk Lake TMDL study identified Ashley Creek as a primary nutrient contributor to Sauk Lake, especially during snow melt and rain events.

What actions are needed? Cattle exclusion, riparian buffer strips, bank stabilization and manure management along the creek and its tributaries. Increase public outreach and education.

What resources may be available to accomplish the actions? EQIP, MRBI, or CWF working with the local SWCD, NRCs, Pheasants Forever, Sauk Lake Association and the Sauk River Watershed District.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? West Port Township and Grove Lake Township.

2. Second Priority Concern: West Port Lake

Why is it important the plan focus on this concern (include or cite relevant data)? West Port Lake is the headwaters of Ashley Creek and is impaired for excessive nutrients.

What actions are needed? Reduce nutrient runoff to the lakes by establishing native buffers, cattle exclusion, manure management and public outreach and education.

What resources may be available to accomplish the actions? EQIP, MRBI, or CWF working with the local SWCD, NRCs, Pheasants Forever, Sauk Lake Association and the Sauk River Watershed District.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? Westport Township

3. Third Priority Concern: County Ditch 6

Why is it important the plan focus on this concern (include or cite relevant data)? County Ditch 6 is a tributary to Ashley Creek. It has been listed as impaired for Aquatic Macroinvertebrate Bioassessments and Fishes Bioassessments (2012). It is located in the upper reaches of the watershed and contributes to the declined water quality in Ashley Creek.

What actions are needed? Install native riparian buffer strips, bank stabilization and manure management along the ditch. Increase public outreach and education.

What resources may be available to accomplish the actions? EQIP, MRBI, or CWF working with the local SWCD, NRCs, Pheasants Forever, Sauk Lake Association and the Sauk River Watershed District.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What areas of the county are high priority? West Port and Grove Lake Twps.



January 24, 2013

Paul Gerde, Chairperson Pope County Commissioners Pope County Courthouse 130 E. Minnesota Avenue Glenwood, MN 56334

RE: Official Comments pertaining to the State Review of the Pope County Priority Concerns Scoping Document.

Dear Mr. Gerde:

Pursuant to M.S. section 103B.313, subdivision 5, this letter communicates the State's official comments pertaining to the priority concerns Pope County has chosen to address in the update of their Local Water Management Plan. The Board of Water and Soil Resources (BWSR), along with the state review agencies, received Pope County's Priority Concerns Scoping Document (PCSD) on December 3, 2012.

The Pope County Water Plan Task Force reviewed concerns raised during the data collection process and selected the following priority concerns for the water plan update:

- Reducing Priority Pollutants ~ Surface Water Quality
 - o TMDL Implementation
 - Feedlot/Livestock Management
 - Subsurface Sewage Treatment Systems
 - Aquatic Invasive Species
- Erosion and Sediment Control
- Surface Water Management
 - o Agricultural Drainage
 - o Stormwater Management
 - Wetlands and Water Storage/Retention
 - Shoreland Management
- Groundwater Quality & Quantity
 - Wellhead Protection Areas
 - **Drinking Water Quality**
 - o Groundwater Quality
- Plan Administration
 - Watershed Focus
 - Stakeholder Cooperation
 - Raising Public Awareness

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Mr. Paul Gerde January 24, 2013 Page Two

The BWSR received comments from the Minnesota Department of Agriculture (MDA), Minnesota Pollution Control Agency (MPCA), Minnesota Department of Natural Resources (DNR) and Minnesota Environmental Quality Board (EQB) on the Pope County PCSD during the official review period.

MDA concurs with the priority concerns identified and feels the process to identify the priority concerns was adequate. MDA asked Pope County to consider when drafting the LWP the development of a local drainage management and technical team and also develop a drainage management plan for the county or update any existing plan.

MPCA concurs with the priority concerns identified and feels the process to identify the priority concerns was adequate. MPCA encourages Pope County to use the water quality monitoring data within their Environmental Data Access System in future water management efforts.

EQB concurs with the priority concerns identified and feels the process to identify the priority concerns was adequate.

DNR concurs with the priority concerns identified and feels the process to identify the priority concerns was adequate. DNR recommends Watershed Resource & Protection Strategy Plans (WRAPS) and Total Maximum Daily Loads (TMDLs) be used by Pope County in potential project development.

The BWSR North Region Water Plan Committee (Committee) met with Pope County on January 9, 2013 to discuss the content of the PCSD, state review agency comments on the PCSD, and recommendations for the content of the final LWP. The Committee presented its finding to the BWSR board at its meeting on January 30, 2013.

The Committee commends Pope County for the process used to select the priority concerns. The priority concerns to be addressed in the plan were deemed to be appropriate; the BWSR does not recommend or require any changes to the PCSD as drafted. Please proceed with the development of your next LWP.

Sincerely

Brian Napstad, Chair

Minnesota Board of Water and Soil Resources

cc:

Luan Johnsrud, Pope SWCD Ron Shelito & Pete Waller, BWSR Molly MacGregor, DNR Art Persons, MDH Rob Sip, MDA Rebecca J. Flood, MPCA

Kate Frantz, EQB

Appendix C:

Public Review Documents

- ~ The Minnesota Board of Water and Soil Resources (BWSR) ~
 - ~ The Minnesota Department of Natural Resources (DNR) ~
 - ~ Sauk River Watershed District ~
 - ~ Pope 8 Lake TMDL Committee ~
 - ~ Public Hearing Transcript ~
 - ~ Summary of Draft Water Plan Changes ~

Submitted by BWSR Board Conservationist Pete Waller

Matt & Luan,

Things are looking pretty good. That said of course I have comments. Two broad categories for those comments:

Potential edits for consideration by Matt; and

An Implementation schedule or means of prioritizing the greater than 150 action items.

There are a couple items with specific years and ~15 items that reference 'annually', that still leaves at least 130 action items.

Over 150 actions items (1.E.3 AIS Task Force created - 2013); (2.F.2.d Conduct Tillage Transect – 2014,2016, 2018);

Action Items with an Annual schedule:

- 2.F.7 Ashley Creek project install 1 mile;
- 3.G.1.a ID where maintenance is needed & maintain 1 mile county ditch system;
- 3.G.2. a Implement 1 Conservation Drainage Practice;
- 3.H.2.a Design & install a minimum of 3 rain gardens;
- 3.I.2.c Increase the number of WRP easements by 2;
- 3.I.2.d. Increase the number of wetlands in the wetland banking system by 1;
- 4.K.1.d Implement 2 abandoned wells in Wellhead Protection Areas;
- 4.L.1.C Implement 2 groundwater BMPs projects;
- 4.L.1.d. seal 4 abandoned wells;
- 4.L.2.a. review data & prioritize BMP Programs accordingly;
- 4.L.3 pesticide container collection day;
- 4.M.1.a. monitor 20 groundwater well test sites (for what?)
- 4.M.1.b. review data & prioritize BMP Programs accordingly;
- 4.M.2.a. convert 2 convention irrigation systems to conservation systems;
- 4.M.2.c. participate in MDA's Irrigation Workshops

Chapter 1 is the PCSD. Here instead of as an appendix as guidance suggests. OK no need to comment on this chapter as it's gotten the State's Official response.

Are the following comments/materials incorporated?:

- Matt Fisher's erosion/sedimentation;
- Sauk's materials of 3/21 5:14PM email from Lynn Nelson
- Steve Hofstad's 3/13 4:24 Pm on WCA pg 2-41
- Jeff Hrube's Lake Assessment 3/15 @ 4:37PM email pg 3-3 1.A.2a)
- 103E.021 subd 6 3/13 2:30 email
- City of Glenwood storm water plan
- FY13 CWF SSTS ~\$65,000 grant in action items
- Pg 2-30 tillage transect tables that Justin put together?

Task Force members: Joyce Cieluch, PCA really?

Add SWCD Board of Supervisors as this is their Comp Plan via resolution?

Executive Summary

On pg v:

- Specific dates of the 10-year paln with 5-year implementation (same for the cover)?
- Add something for the SWCD adoption as Comphensive Plan via resolution.

On Pg vii

- Local budgets include County's 103E admin costs, WD's, Chippewa JPB, Landowners (for each initiative's summary budget also)
- Something regarding implementation is depend of receiving grants.

Page 2-2 – mention the newly formed Chippewa River JPB?

2-6 last paragraph, first line typo "Each" should be "East"

Pg 2-7 City of Glenwood's Storm water plan should be summarized/incorporated (plan included in appendix). Its included on pg 3-18 as a action item.

Pg 2-10

- Table2B What's the Target Start/Completion of?
- Last paragragh references entire 8 Lake TMDL can be viewed on line. Insert link?

Pg 2-13 Last 2 Actions for Gilchrist Lake – Why's Lake Swenoda lumped and then split/separate?

Pg 2-21 What about the \$63,560 FY13 CWF SSTS grant/project?

Pg 2-33 Section 3 web link of Pope County Ditch Inventory, August 2001?

Pg 2-38

- Proactive/systematic redetermination of benefits- Really? The Commissioners & Dave are comfortable with this? Also see pg 3-16 action item does not seem consistent with "Proactive/systematic".
- "Multipurpose drainage approaches as developed by BWSR (refer to Appendix B)" Where & what is this?

Pg 3-2 Chippewa River Watershed Project & the newly formed JPB?

Pg 3-14 install 1 mile buffer per year along Ashley Creek- that's a huge number? Realistic?

Pg 3-16 3.G.1c) See comment above

3.G.1.c) complete County Ditch Inventory- How's this different that the August 2001 inventory?

March 18, 2013 Miersch, Janell (DNR)

Emailed to midwestplanning@gmail.com

Hi Matt,

Nice day, huh? I live less than 2 miles from the office so I no excuse to not get here today.

I have two small edits for you to consider on your draft Pope Water Plan:

1. Page 8 item #1.B.11 the lake is one word "Westport" just like the township and town of Westport

2. Page 25 item #4.M.3 The county Geologic Atlas will be reviewed by Commissioners and staff of County & SWCD on Tuesday May 14, 2013, then probably every 5 years, so you can change those dates or not...

Janell Miersch

DNR Area Hydrologist

Division of Ecological and Water Resources

1509 1st Avenue North

Fergus Falls, MN 56537

direct telephone: <u>218-739-7576 X 232</u>

From: Lynn Nelson [mailto:lynn@srwdmn.org]
Sent: Thursday, March 21, 2013 5:14 PM

To: Johnsrud, Luan - NRCS-CD, Glenwood, MN

Subject: RE: Pope County Water Plan Public Review Draft 3-19-13

Luan,

I had a chance to review the Pope County Water Plan and I have a few comments, which you can disregard if you wish.

1) On page vii it begins to list the goals of the water plan. They are well defined however, for someone who would used this plan for a grant application it needs to have numbers associated with them. In grant applications, such as the BWSR CWF, we are required to site the a goal and objective that supports the grant applications. It would be most beneficial if they went something like this:

Priority Concern: Surface Water Quality,

Goal 1: Improve Surface Water Quality to enable water resources to support their designated uses..

From there the objectives would be identified such as Objective A: Complete a full inventory of the ravines along the south shore of Lake Minnewaska.

Action Item 1: Survey and develop preliminary plans to repair and enhance the ravines.

By arranging and prioritizing the goals and objectives one can site them easier and may benefit the county later when it come time to quantified what has been done in the plan. Such as Priority 1, Goal 1, object Acompleted.

- 2) On page vii, the second arrow item does not have a measurable amount. All the other listed items have a quantifiable number. For this ten year plan, maybe you can say reduce phosphorus loading by 3-5%. By doing this, you have a goal to achieve and then something to compare to at the end of the 10 years. If you achieve more than 5% than the county just looks fabulous.
- 3) From the SRWD perspective, it would be nice if the water resources within the District could be identified by name, much like the Chippewa River areas of concern. Even if just <u>Ashley Creek watershed</u> is mentioned, that would cover just about everything.
- 4) The definition boxes that are integrated into the plan was a good addition.

Thank you for giving the SRWD an opportunity to review the water plan.

Environmental Project Coordinator Sauk River Watershed District 524 4th Street South Sauk Centre, MN 56378

Lynn Nelson

Phone: 320-352-2231 Fax: 320-352-6455

email:<u>lynn@srwdmn.org</u> websitewww.srwdmn.org

March 18, 2013

Mike Howe 8-Lake TMDL Committee

Emailed to midwestplanning@gmail.com

Matt – I like the action items found in the document. One thing I know has been talked about lots at the TMDL committee is improving the Little Chippewa contribution of sediment & phos upstream of MN TH 28. I would recommend adding an action item that addresses that item in the Lake Emily section. Perhaps such as: Make a concerted effort to apply BMP's in the Little Chippewa watershed upstream of MN TH 28.

Another item I did not see (although I may have missed it) is a need to make a concerted effort to establish ownership of project structure (such as in the Malmedahl drawdown). Suggestion: Establish a committee of LGU's and stakeholders (COLA, Lk. Assns. Etc.) to create a process of establishing ownership of water improvement projects in the County.

Thanks for the opportunity to comment.

Mike



OFFICIAL PROCEEDINGS Pope County Board of Commissioners April 2, 2013

The April 2, 2013 Regular Board meeting was called to order at 9:00 a.m. by Chair Larry Lindor with the following members present: Commissioners Larry Kittelson, Cody Rogahn, Paul Gerde and Gordy Wagner. Also in attendance were County Attorney Neil Nelson and County Coordinator Jim Thoreen.

On motion by Wagner, seconded by Gerde and unanimously carried the Board approved the amended agenda with the addition of: Discussion of the Status of the Tax Forfeited Property in Glenwood known as the "Culligan buildings".

On motion by Rogahn, seconded by Kittelson and unanimously carried the Board approved the Official Proceedings of March 19 and 26, 2013 with them corrected to read that Commissioner Gerde made the motion to appoint ex-officio members to the Glacial Lakes Environmental Trust Fund Advisory Board and, further, that the motion read "...appointment as ex-officio members, *or their designees*,...

Earl Hauge of Glenwood, presented a letter stating his concerns that the Board's recently-authorized bond sale was excessive and that the proposed Highway Department Building program was unnecessary. The Board took his comments under advisement.

On motion by Rogahn, seconded by Wagner and unanimously carried, the Board adopted Resolution No. 201318, Authorizing Participation in Planning Process and Execution of Sub-Grant Agreement, as it relates to the Hazard Mitigation Plan.

Pursuant to published notice, at 9:30 a.m. Chairman Lindor opened a Public Hearing on the proposed 2013-2023 Pope County Water Plan, with emphasis on the 2013-2018 implementation plan; said plan brought forth by the Pope County Water Plan Task Force and prepared by Midwest Community Planning of Willmar, MN. Present for the hearing was Luan Johnsrud, Chair of the Task Force, and Matt Johnson of Midwest Community Planning. No citizens appeared to offer comments; Mr. Johnson summarized several written comments submitted to the office. The Chairman closed the Public Hearing at 9:48 a.m. Ms. Johnsrud and Mr. Johnson summarized the next actions in the process to adopt a revised water plan, noting that it would be brought back to the Board for final consideration in June.

On motion by Kittelson, seconded by Rogahn and unanimously carried the Board approved the County Surveyor's recommended correction to the Plat of Belgum and Ternquist's Addition to the Village of Farwell wherein a revised legal description will correct an errors, omissions or defects in the land description of said plat, in that it lacks a basis of bearing; said correction to be recorded.

On motion by Wagner, seconded by Gerde and unanimously carried, the Board adopted Resolution No. 201317, a resolution in support of increased transportation funding in the State of Minnesota.

On motion by Gerde, seconded by Rogahn and unanimously carried, the Board awarded the 2013 bituminous paving package for all projects to Riley Brothers Construction of Morris, MN in the amount of \$2,149,239.97; list of said projects on file in the office of the Pope County Engineer.

On motion by Rogahn, seconded by Kittelson and unanimously carried, the Board awarded the 2013 county road dust control contract to Tri City Paving of Little Falls, MN at the rates quoted and on file in the Engineer's office.

On motion by Kittelson, seconded by Rogahn and unanimously carried, the Board, accepting the recommendation of the County Planning Commission, authorized issuance of a conditional use permit to Kevin and Beverly Anderson, Glenwood, MN to develop a 12 lot commercial planned unit development to accommodate seasonal recreational park model units on their property in Sec. 27, T125N R36W; said permit subject to the conditions recommended by the Pope County Planning Commission.

On motion by Rogahn, seconded by Gerde and unanimously carried, the Board approved the 2013 Prairie Lake Youth Programs Contract amendment to add 50 additional bed days in 2013 at the same rate quoted for the current year.

On motion by Cody, seconded by Kittelson and unanimously carried, the Board approved the request of Human Services to hire one new eligibility worker to handle the increased workload to enroll individuals who are eligible for public healthcare insurance programs, under the federally mandated Affordable Care Act (ACA).

On motion by Gerde, seconded by Wagner and unanimously carried, the Board approved a request for a Confession of Judgment submitted by Phil Serrin for property in the City of Glenwood, specifically parcel no. 21-0197-000.

On motion by Wagner, seconded by Gerde and unanimously carried, the Board authorized the renewal of the On-Sale and Sunday Liquor License to Pezhekee Lounge, Inc.

On motion by Kittelson, seconded by Rogahn and unanimously carried, the Board authorized issuance of a permit to conduct excluded bingo as requested by the Farmers Sportsman League of Terrace, MN for an event on April 20, 2013.

On motion by Rogahn, seconded by Wagner and unanimously carried, the Board authorized payment of bills in the amount of \$26,115.00 and supplemental bills in the amount of \$49,992.59 for a total of \$72,107.59.

On motion by Wagner, seconded by Gerde and unanimously carried the Board entered the Per Diem Expense Reports into the record.

County Attorney Nelson reviewed with the Board the status of the tax forfeited property in downtown Glenwood referred to as the "Culligan buildings," particularly as to the potential sale of the property.

On motion by Rogahn, seconded by Kittelson and unanimously carried, the Board requested that the County Attorney prepare a statement of conditions which will accompany the sale of tax forfeited properties known as the "Culligan buildings" in Glenwood, MN; said conditions to include a requirement for deposit of \$25,000 into an escrow account to be held for no more than six months, until all the buildings are demolished by the property purchaser and, should the buildings not be demolished within the time frame or in accordance with law and/or ordinance, the escrowed \$25,000 shall revert to the County.

Chairman Lindor adjourned the meeting at 11:33 a.m.

Jim Thoreen, County Coordinator

Larry Lindor, Chairman of the Board

Summary of Final Pope County

Water Plan Changes

Based upon feedback received during the public draft review period and at the public hearing, which took place on April 2, 2013, the following summary of changes were made to the Pope County Water Plan:

- 1. The cover was revised to show the duration of the plan (2013-2023) with a five-year implementation plan (2013-2018).
- 2. The Table of Contents was updated will be proofed and finalized after BWSR plan approval due to potential changes.
- 3. The footnote in the entire plan was updated to say 2013-2023 rather than 2012-2022.
- 4. Chapter Two: Assessment of Priority Concerns
 - a. Make text revisions based upon stakeholder comments, including removing reference to Minnesota Department of Agriculture employee Rob Sip.
 - b. Added language on Ashley Creek.
- 5. Chapter Three: Goals, Objectives and Action Steps
 - a. Revisions were made to Action Steps based upon the feedback received during the Public Review Period and during the Public Hearing.
- 6. Chapter Four: Water Plan Administration
 - a. Added Table 4A: Pope County Water Plan Project Implementation Priorities after meeting with the Pope County Water Plan Task Force .
- 7. Added new Appendix C (Public Review Documents)