

JACKSON COUNTY LOCAL WATER MANAGEMENT PLAN PRIORITY CONCERNS SCOPING DOCUMENT

April 2007

Prepared for the Jackson County Local Water Management Plan Task Force
By Jackson County Planning & Environmental Services and Southwest Regional Development
Commission

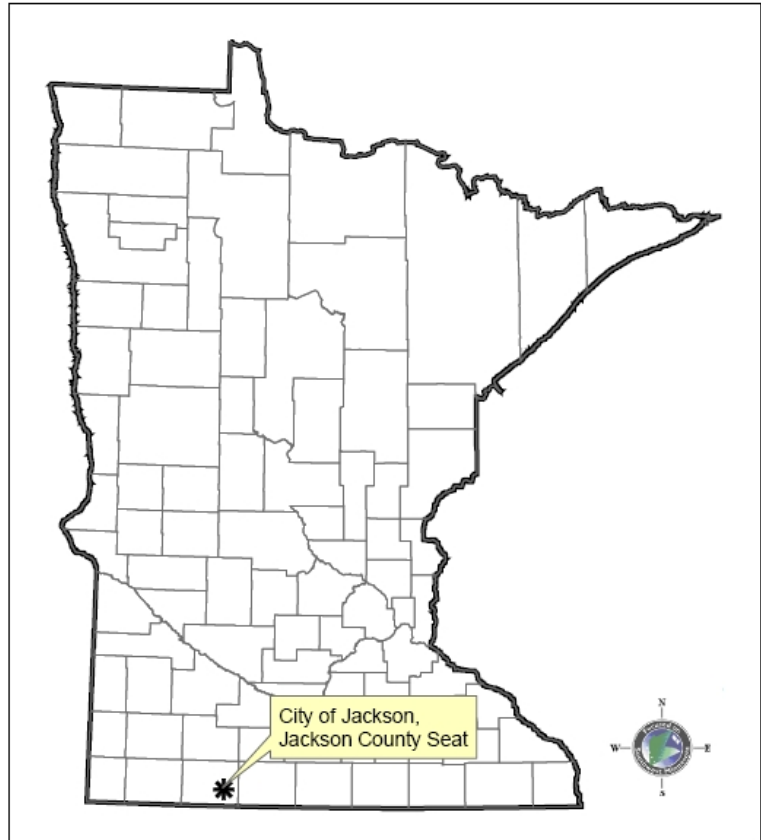
A. INTRODUCTION

A.1 County Primer

Jackson County is located in the southwestern corner of Minnesota, adjacent to Martin, Watonwan, Cottonwood, Murray, and Nobles counties. The City of Jackson is the county seat. Jackson County's population in the 2000 U.S. Census was 11,268, with a density of 16 persons per square mile. The Minnesota State Demographic Center estimates the current population (2005) is 11,175. The Demographic Center projects total population of 11,470 by 2030.

Jackson County is typical prairie environment, with average annual precipitation between 26" and 28". The eastern part of the county is an essentially nearly flat to gently rolling landscape. In the center, the West Fork of the Des Moines River flows along the east side of the Altamont moraine, with a valley floor about 100 feet lower than the surrounding landscape. The Heron Lake system give evidence of an ancient glacial lake that once covered much of the northwest part of the county. The southwestern part of the county is characterized by hills and small bodies of water. Six major watershed areas cover the County: the Watonwan and Blue Earth flowing easterly to the Minnesota River; the East Fork Des Moines, and Upper and Lower portions of the West Fork Des Moines River which flows through Iowa to the Mississippi River; and the Little Sioux River which flows through Iowa to the Missouri River.

The City of Jackson (pop. 3,501) and Lakefield (pop. 1,721) are the largest cities in the county. The dominant land use in the county is agriculture. University of Minnesota Remote Sensing analysis has found 82% of land under cultivation, 5.6% in grassland or wetlands, 3% forested,



2% water, and approximately 7.5% developed. The 2002 U.S. Census of Agriculture reports 989 farms on 398,068 acres in Jackson County. Of these, 372,634 acres were in cropland. There were 203 farms with cattle, 144 with hogs, and 44 with sheep.

A.2 Plan Information

The Jackson County Board of Commissioners adopted a resolution in August 1987 to enter into a Joint Powers Agreement with twelve other counties, to develop a county comprehensive water plan according to Minnesota Statutes in effect at that time. Following two public meetings to explain the process, a survey was sent to 1100 county residents. A workshop in July 1988 reviewed results of the survey and developed 25 issues, which were then discussed by the Water Planning Committee during 11 work sessions in 1989. The first water plan was approved by the Minnesota Board of Water and Soil Resources (BWSR) on 28 November 1990, and adopted by the County Board on 10 December 1990.

The second edition of Jackson County's water plan, now in effect, was approved by BWSR on 7 January 1998, and adopted by the County Board on 9 March 1998. This plan expires on 31 December 2007. The Jackson County Board of Commissioners adopted a resolution on 26 September 2006 to revise the current plan, according to Minnesota Statutes now in effect.

Jackson County Planning and Environmental Services is responsible for local water management in Jackson County, including facilitation of public input and convening the Jackson County Local Water Management Task Force. Jackson County has retained the Southwest Regional Development Commission to assist with writing the Plan update. Task Force membership currently includes:

Local Water Management Task Force Members

- Steve Anderson, Dickinson (Iowa) Clean Water Alliance
- Steve Beckel, Water Superintendent, City of Jackson
- Karen Boysen, Des Moines River Clean Water Partnership
- Ed Eigenberg, Mayor, City of Wilder
- Jason Espenson, Co-Chair, Fish Lake Association
- Robert Ferguson, Jackson County Commissioner
- Larry G. Hansen, Board Member, Jackson County SWCD
- Larry Liepold, Jackson County Pork Producers
- Joel Poppe, Jackson County NRCS
- David Pribyl, Jackson County Conservation League
- Kelly Rasche, City Administrator, City of Lakefield
- Craig Rubis, Jackson County Commissioner
- Tom Timko, Jackson County Planning Commission
- Jan Voit, Administrator, Heron Lake Watershed District
- Ben Crowell, Jackson County Planning and Environmental Services
- Brian Nyborg, Manager, Jackson SWCD
- Gordon Olson, Director, Jackson County Planning and Environmental Services

B. LIST OF PRIORITY CONCERNS

The *Jackson County Local Water Management Plan* to be developed in 2007 will cover ten years, with a 5-year implementation schedule. The Plan will address the following priority concerns.

B.1 Summary of Priority Concerns:

These concerns were considered to be priorities for local water management in Jackson County. A general concern for intergovernmental and inter-basin cooperation was prevalent throughout the discussion.

1. Prevent Soil Erosion

- Hold water on the landscape
- Perennial cover, buffers and conservation tillage
- Construction impacts
⇒ *Highly-erodible land and shoreland areas*

2. Feedlots & ISTS (Individual Septic Treatment Systems)

- Nutrient management
- Feedlot inventory and registration
- Appropriate technology for ISTS and community sewer systems
- ISTS compliance with regulations
⇒ *Shoreland and un-sewered communities*

3. Drainage Management

- Restoring natural hydrograph (flows)
- Structures and technology
- Wetland restoration
- Quantity and quality of water in the drainage system
⇒ *Heron Lake watershed and Des Moines River above Jackson Dam*

4. Improve Surface Water Quality

- Stream bank and lakeshore development
- Impervious surface areas
- Flooding
- Impaired Waters
⇒ *Shoreland areas and TMDL-listed waters*

5. Protect Groundwater

- Wellhead protection and aquifer recharge
- Abandoned wells
- Long-term water supply
⇒ *DWSMAs and areas not currently served by public/community systems*

C. PRIORITY CONCERN IDENTIFICATION

C.1 Public and Internal Forums

- 4/11/2006 Jackson County Board of Commissioners contracts with Southwest Regional Development Commission (SRDC) for technical assistance to update the Jackson County Water Plan.
- 9/26/2006 Jackson County Board of Commissioners approve resolution of intent to revise and update the local water management plan.
- 11/08/2006 Notice of Decision to Revise and Update the Local Water Management Plan provided by email and/or postal service to local units of government, organizations and responsible agencies as suggested and required.
- 11/14/2006 Jackson County Water Planner and SRDC Development Planner meet with BWSR field rep to discuss PCSD workplan.
- 12/15/2006 Requested date for priority concerns, comments and information to be returned to Jackson County Planning & Environmental Services Office.
- 1/18/2007 Meeting Notice published as display ad in *Jackson County Pilot*.
- 1/25/2007 Local Water Management Plan Update Information Meeting held in the evening with Task Force as public hearing on priority water management concerns for Jackson County, at the Jackson County Resource Center in Jackson, Minnesota. 17 in attendance (see below).
- 2/16/2007 KDOM-AM/FM interview with Southwest Regional Development Commission Development Planner, discussing water plan updates.
- 3/05/2007 Continuation of Local Water Management Plan Update Information Meeting with Task Force and staff held at Jackson Pizza Ranch. 20 in attendance (see below).

C.2 Summary of Comments Received

The Jackson Soil and Water Conservation District provided their annual workplan to inform the water planning process. The Heron Lake Watershed District also provided their Rules and Regulations (2005). No other plans or controls were received from any state or local agencies. Jackson County Planning & Environmental Services administers the *Jackson County Development Code* (zoning ordinances), and has found no conflicts with other plans currently in place.

The following comments were received prior to the initial Task Force meeting:

Board of Water and Soil Resources (BWSR)-

- Erosion / Nutrient Management
- Lake protection from development and agricultural land use
⇒ Heron, Fish, Loon, Iowa Great Lakes
- Feedlot Management / Nonconforming ISTS (Individual Septic Treatment Systems)
- Drainage Management / Wetland Enhancement and Restoration.

MDA-

- Conservation Tillage and Drainage – soil erosion, TMDLs
- Manure Management and ISTS
 - ⇒ Lakeshore and unincorporated communities
- Pesticide and nutrient impacts to shallow groundwater in sensitive areas
 - ⇒ alluvial or outwash sand along rivers / areas adjacent to Des Moines River
- Pesticide and nutrient impacts to surface water

DNR-

- Holding Water on the Landscape – hydrograph restoration
- Buffers on Ditches, Streams and Rivers
 - ⇒ Native vegetation in riparian corridors
- Fish Passage
- River and Stream Channel Restoration
- Ag BMPs — Agricultural Best Management Practices
- Ethanol Plant Impacts — groundwater consumption

EQB-

- Ground Water Contamination Susceptibility
- TMDL Impaired Waters
- Population growth
- Ground Water Availability

MDH-

- Proper sealing of unused or abandoned wells
- Ground Water Protection
- Inventory of Wells
 - ⇒ Areas close to a public water supply well

MPCA-

- Impaired Waters / Total Maximum Daily Loads (TMDLs)
- Feedlots
 - ⇒ Sensitive groundwater areas, shoreland, county ditches, DWSMAs
- Nonconforming ISTS (Individual Septic Treatment Systems)
- Stormwater

City of Alpha

- Drainage north on Main/CR #45
- South end of Alpha – drainage ditch

Hunter Township

- No concerns

Round Lake Township

- Hog Confinement Buildings
 - ⇒ >3 confinement buildings per 160 acres

West Heron Lake Township

- Watershed's Control of Water Level
- Tile replacement
- Rural Septic
- Water from outside the county

Jackson SWCD

- Water Quantity
- Water Quality

Martin SWCD

- Impaired Waters / Total Maximum Daily Loads (TMDLS)
- Wetland Protection / Restoration
- Low Impact Development (LID)
- Drainage System Management
 - ⇒ East and West Fork Des Moines River

Nobles County

- ISTS (Individual Septic Treatment Systems)
- Feedlots
- Community ISTS
- Wellhead Protection

C.3 Summary of Task Force Proceedings.

January 25, 2007
Water Plan Update Information Meeting

Attendees

Name	Organization
Deloris Kruger	Round Lake Township
Clifford Hamann	Round Lake Township
John Shepard	SRDC
Loren Tusa	County Commissioner
Steve Beckel	City of Jackson
Brian Nyborg	Jackson SWCD
Chris Bauer	Heron Lake Watershed/SWCD
Larry Liepold	Pork/Ag Producers
Tabor Hoek	BWSR
David Fisher	Sioux Valley Township
Gordon Fisher	Sioux Valley Township
Don Majerus	Sioux Valley
Roger Ringkob	County Commissioner/City of Jackson
Craig Rubis	County Commissioner
Ben Crowell	Jackson County Environmental Services Officer
Gordon Olson	Director, Jackson Co. Planning & Env. Serv.
Karen Pressley	Jackson County, Adm. Secretary

Gordon Olson explained to the audience the purpose of this meeting is to plan for updating the current Water Plan which was developed in 1987, revised in 1997 and is now ready for the 3rd revision.

John Shepard stated that the old plan has a lot of good background information, but we should narrow down the priorities and come back with approximately five good priorities and stick with them. John stated the plan should be focused on achievable goals and measurable results.

John then went over the priority concerns that Jackson County received back. The summary of those concerns was provided.

Each member present then stated what their individual concern was:

Chris Bauer – HLWSD/SWCD

- Water quantity – too much water - more soil loss issues
- Working land – work on erosion issues; keep soil where it belongs
- Land retirement – CRP, CREP & RIM
- Tools are not as effective
- Landowners are not wanting to retire crop land
- SWCD saw a 70% re-enrollment in CRP

Steve Bekcel – City of Jackson

- Wastewater & infrastructure; causing problems with discharge
- Inter-connect with Red Rock Rural Water
- Aging infrastructures

Gordon Olson asked Steve if he knew how many septic systems were in the City limits and Steve responded that quite a few have been eliminated or redone and some are still in the planning stage.

Loren Tusa – County Commissioner

- TMDL
- Economic development
- Jackson dam
- Ag processing – water quality & quantity
- Buffer strips – concentrate on phosphorus and potash

Larry Liepold – Pork producers/Ag producers

- Balance between industry/agriculture/residential
- Conservation so livestock production can grow
- West Heron Lake township is constantly wet
- Age of tile system – modernizing ag tile (flow rate)

Clifford Hamann – Round Lake Township

- Saturation of feedlots

Gordon Fisher – Sioux Valley Township

- Manure management
- Streams
- Erosion
- DNR/FWS need to explain their restoration projects
- Protected waters
- Public land use; golf course/residential fertilizer applications

Craig Rubis – Commissioner

- Surface water
- Erosion

Roger Ringkob – Commissioner

- Des Moines River quality

Ben Crowell – Jackson County Feedlot Officer

- Open lot runoff
- Feedlot runoff
- Nutrient management
- Proceed with feedlot inventory from Level II to III (check for pollution hazards and prioritize and receive cost share dollars).

Gordon Olson – Director, Jackson County Planning & Env. Services

- Seeing trends
- Pattern tile drainage
- Change of hydrograph
- Control drainage
- Age of tiles and ditches
- Ditch mapping
- TMDL
- Water quantity

After this discussion, John Shepard suggested that we review these concerns and come back with a clarified list. It was agreed that this committee will meet again on March 5, 2007, at 10:00 a.m.

March 5, 2007
Water Plan Update Meeting
Minutes

Attendees

Name	Representing
Joel Poppe	Jackson County NRCS
Ed Eigenberg	City of Wilder
Jason Espenson	Fish Lake
Craig Rubis	Commissioners
Ben Crowell	Jackson Co. Planning & Env. Services
Robert Nielson	Middletown Township
Bill Roder	Middletown Township
Ken Lucht	Middletown Township
Dave Pribyl	Jackson County Conservation League
Stephen Beckel	City of Jackson
Steve Anderson	Dickinson County Clean Water Alliance
Cliff Hamann	Round Lake Township
Joel Wiese	Round Lake Township
Delores Kruger	Round Lake Township
Jan Voit	Heron Lake Watershed District
Larry Liepold	Ag – Jackson County Pork Producers
John Shepard	SRDC
Brian Nybord	Jackson County SWCD
Gordon Olson	Director, Jackson Co. Planning & Env. Ser.
Karen Pressley	Jackson County, Adm. Secretary

Gordon Olson gave a brief background of the current water plan: We currently work from the second water plan that was written in 1997 and will expire at the end of 2007. The new plan will focus on items that can be accomplished, therefore it will be a much smaller document.

Gordon also covered some the funding that is covered through the current water plan from the Natural Resources Block Grant: ISTS loan program; Abandoned well cost share program; AgBMP program; surface water sampling and other miscellaneous education programs.

John Shepard gave a brief synopsis on how the process started. Jackson County has asked the SRDC to be the technical writer of the plan. This new process will develop an achievable plan that will have three to five priority concerns. After the last meeting we ended with nine categories and they need to be narrowed down. Each of the categories were presented and discussed. A summary of those categories is below.

Each category was discussed, with opportunity for those in attendance to comment. Issues were grouped into five broad categories. No obvious areas for geographic focus were determined. Each issue had area where work most needed to be done. John and Gordy would work on the language and revise the five categories to draft the Priority Concerns document for BWSR.

Jackson County Local Water Management Plan Update -- Summary of Priority Concerns submitted through February 2007

	BWSR	MDA	DNR	EQB	MDH	MPCA	SWCD	Martin Co. SWCD	Nobles County	Alpha	Round Lake Twp	West Heron Lake Twp
SOIL EROSION	Soil Erosion and Nutrient Management. Residue Mgmt. Transect Surveys Buffers Nutrient Mgmt.	Conservation Tillage	Create & Promote buffers on ditches, streams and rivers. Promote Ag BMP's				Water Quantity as it relates to erosion control and drainage. Perennial Covers.	Wetland Protection and Restoration.				Water coming from outside the county, i.e. Lewis and Clark will add to the problem of excess water.
DEVELOPMENT	Development of Lakeshore Priority Lakes Ordinance Update ISTS, Feedlots, Buffers							Low Impact Development through a Land Use Ordinance.				
FEEDLOTS/ISTS	Feedlot Program and ISTS Program Non-Compliance Prioritize	Manure Mgmt. and ISTS Non- Compliance Nutrient and Manure Management Plans.				Feedlots, Manure Management ISTS and Unsewered Areas		ISTS & Feedlot Issues. Unsewered Area's Cost Share Needed.			Swine Confinements and the proper handling of waste. Density Issues.	Rural Septic Systems need to be upgraded.
AG DRAINAGE SYSTEM	Drainage Mgmt. Update drainage maps etc. Utilize the drained wetland inventory.	Drainage Mgmt.	Wetland Restoration to slow water movement. Mitigate drainage impacts.					Drainage System Management. Controlled Drainage and BMP's.	Drainage Issues. Flooded Basements.			Drainage System. Aging Public Drainage System.
GROUNDWATER QUALITY		Protection of Shallow Ground Water. Monitor existing groundwater.		Groundwater Contamination. Reduce Risks	Groundwater Protection Seal Abandoned Wells. Groundwater protection through land use. Well inventory.				Wellhead Protection. Protection of Source Water.			
SURFACE WATER ISSUES		Surface Water impacted by pesticides and nutrients. Sample those waters.		Impaired Waters Issues.		Impaired Water Issues	Surface Water Quality.	Impaired Waters.				Control of Surface Water Levels.
AQUATIC LIFE			Fish Passage- eliminate unintentional barriers.				Buffers, Restore Wetlands	BMP's etc.				
RIVER AND STREAM CHANNELS			River and Stream Channel Restoration.									
GROUNDWATER QUANTITY			Groundwater Quantity- Relates to ag processing plants such as ethanol.	Groundwater Availability Issues.								

D. PRIORITY CONCERN SELECTION

The Priority Concerns listed above (Section B) were selected by the Local Water Management Plan Task Force members after reviewing the concerns submitted by state and local agencies and the public. Letters were presented at the public input meeting and discussed. Staff then reviewed and refined focused Priority Concerns for Task Force consideration. After further discussion, the Task Force members selected the Priority Concerns by consensus.

E. PRIORITY CONCERNS NOT ADDRESSED BY THE PLAN

The Jackson County Local Water Management Plan Task Force carefully considered all concerns submitted, as well as concerns of individual members representing a diverse constituency in the County. Concerns beyond the specific focus of the Priority Concerns listed above are typically beyond the scope of local water management, or are currently or potentially being addressed by other entities which work closely with the Jackson County Planning & Environmental Services Office.