

Sand Hill River

Watershed District

ANNUAL REPORT 2013

HISTORY OF THE SAND HILL



Below the Hwy 9 bridge at Beltrami looking downstream

The Sand Hill River in its natural state passed north of the City of Beltrami in a poorly defined channel and dispersed into marshes which extended westerly for over ten miles before reappearing as a river which flowed into the Red River of the North by Bygland. In an effort to confine the Sand Hill River in a fixed channel, two state ditches were constructed during 1894-1898, substantially along the course now occupied by the present channel. The improvements were not adequate and additional construction was completed in 1917.

As drainage and flood problems persisted, the Corp of Engineers began a study of the river in 1942. As a result the Sand Hill Drainage and Conservancy Board was established by an order of the District Court of Polk County, State of Minnesota, on the 18th day of May, 1949 to carry out the Corps project to improve the main channel. The overall purpose of the Board was for "flood control and improvement of the Sand Hill River channel." Construction work was completed in the fall of 1954. The process to establish the Sand Hill River Watershed District was a Court Hearing

at Crookston, MN on August 28, 1974. The place of business of the Sand Hill River Watershed District was determined to be at Fertile, MN. The duties and responsibilities of the old Sand Hill River Drainage and Conservancy Board were given to the new District on May 28, 1975 in accordance with the Minnesota Watershed Act.

In 1976 the Sand Hill River Watershed District signed joint powers agreement with six other watershed districts to form an organization now known as the Red River Watershed Management board. In 1980 the Buffalo Red Watershed District joined and in 1994, Boise De Sioux also joined.

On March 8, 1978 the Sand Hill River Watershed adopted the Rules and Regulations pursuant to Minnesota Statutes. They were later amended on October 3, 1978.

The District's south boundaries were hydrologically determined and established at a hearing at the Fertile Community Center June 26, 1984. The north boundaries were established from the old Sand Hill Drainage & Conservancy District. The District encompasses 495 square miles, almost wholly in the south part of Polk County, with a small part in Mahnomen and Norman County. The area includes the entire drainage basin of the Sand Hill River.

The average width of the basin is 8 miles and it is approximately 55 miles long. The Sand Hill River originates in Sand Hill Lake, located about four miles south of

the City of Fosston and outlets two miles west of Climax into the Red River of the North. Elevation at the eastern end of the watershed is nearly 1,350 feet above sea level with an elevation of 850 feet at the western end.

Approximately 90 percent of the land in the District is used for agricultural or agriculturally related purposes. The watershed can be divided into three areas as follows:

- a.) West End: This is the Red River Valley area, which was the bed of Glacial Lake Agassiz. It is nearly level and almost all cultivated. It extends easterly from the Red River of the North to a point about 6 miles west of the City of Fertile.
- b.) Central Region: This area is located from 6 miles west of the City of Fertile to a point about 3 miles east of the City with a major drop of nearly 300 feet in elevation from east to west. This area has considerable wetlands, gravel ridges and scrub tree growth.
- c.) East End: The upper reaches of the watershed are glacial in origin and its soil support agricultural uses. It is mostly gently rolling terrain with numerous potholes, the majority of which have been drained.

"I AM VERY PROUD OF THE WORK THE DISTRICT HAS ACCOMPLISHED IN 2013. WE HAVE COME A LONG WAY AND AM LOOKING FORWARD TO 2014."

DANIEL WILKENS

2013 Highlights

The district began negotiations between Reiner Contracting, the contractor for Project # 24 regarding their additional pay request for costs incurred with the addition of 18" CS pipes and gates. The district could not reach negotiations using an arbitrator, thus it has now turned into a lawsuit.

Phase 6 was introduced to the managers and the project team by Chuck Fritz in 2012. A subcommittee was formed to determine possible holding sites within the district using the tools of Phase 6.

A letter of intent was sent to the US Army Corp of Engineers in January of 2013 on behalf of the Fish Passage project.

The district started the process to redetermine the benefits in coordination with Polk County.

Homes were placed for sale using a sealed bid method to prepare for the Climax Ring Dike construction.

TARGETED WATER DEMONSTRATION PROGRAM

In 2013, legislation was passed that required the MN BWSR to award grants to local government units organized for the management of water in a watershed or sub watershed that have multi-year plans that will result in a significant reduction of water pollution in a selected sub watershed. Priority in making grants must be given to the three to six best designed plans each year. Based on this legislation, BWSR created the Targeted Watershed Demonstration Program and is seeking nominations for three to six project watersheds to participate. Eligible watersheds are those where the change required to achieve a water quality improvement is known, the types of actions required to achieve those results have been identified, and a



significant number of those actions can be implemented within a four-year time frame. Priority will be given to watersheds where there are current water quality impairments or priority water resources near the tipping point of becoming impaired. Proposed watersheds should have the threat to the water resources clearly identified, a thorough understanding of the pollution sources and pathways within the watershed, and baseline water quality data against which change can be assessed. Preference will be given to watersheds that are 10 or 12-digit Hydrologic Unit Codes. While protection of high quality resources is important and a critical part of the Clean Water effort, this program focuses on demonstrating water quality improvements, not on sustaining high quality systems.

2013 WATER FESTIVAL

The district participated in the Northwest MN Water Festival held for area 4th grade students, on September 25, 2013 at the Polk County Fairgrounds in Fertile. Schools participating were Fosston, Win-E-Mac, Fertile, RLCC, Ada Borup, Norman County East, Norman County West, Climax-Shelly, Fisher, Ogema,

St. Michaels. Topics covered include watersheds, flooding, water quality, water resources and a water arcade. The same event was held in Warren, MN on September 24. In 2013 there were a record 677 4th grade students participating at the two events.



FUTURISTIC DISTRICT PLAN-TMDL

Daniel Wilkens, Administrator of the district has been exploring the possibility of retiring within the next couple of years. In an effort to plan the future of the district and the direction for it's focus, a futuristic planning committee has been formed and met periodically throughout the year.

The committee consisted of members from various agencies, including BWSR, the Sand Hill Advisory Committee, Houston Engineering, and the RRWMB. All in attendance, were invited to give their opinion to advise the managers as they discuss the future of the district and which qualities should be sought when seeking Wilkens's successor.

While Wilkens hasn't retired yet, a plan is set in motion for the district and conversations continue to take place regarding the future direction of the Sand Hill River Watershed District.

PHASE 6

Zach Herman of Houston Engineering was assigned to the Sand Hill River Watershed District to evaluate flood holding sites within the district, funded by the RRWMB. Sites were prioritized throughout the basin. This model, Expanded Distributed Detention Strategy, will give the accumulative effect of any project they may want to look at on the Red River. Phase 6 project is a tool made available to the district to locate potential sites within our watershed and helps gain valuable information as to drainage area, amount of storage, etc. The Distributed Detention Strategy will use the HECRAZ modeling recently completed by the COE to model its effect on the Red River of the North at any point along the system as it flows north into Lake Winnipeg.

MPCA continues to coordinate with the District and is participating in the process and/or taking the lead role in the process. The TMDL study for the Sand Hill River Watershed will be reimbursed to the district from MPCA for \$150,000 for the first year and \$100,000 for the second year. This process began in July of 2010.

Stephanie Johnson, Houston Engineering, spoke in the area to train people on the use of Lidar and it's benefits. The district began Phase II.

River Watch

Win-E-Mac and Climax-Shelly high schools and the Fertile home school group continued to perform water quality monitoring in 2013 through the International Water Institute's River Watch program. The River Watch monitored field conditions at 12 sites along the Sand Hill River, recording dissolved oxygen, water temperature, conductivity, pH, and water levels. Impairments found were similar to previous years with transparency (water clarity) impairments in the western end of the watershed and in the Winger area while dissolved oxygen did not meet state standards in the area upstream of Rindal. River Watch teams will kayak their local river reaches in 2014



2013 Highlights

The district continues to coordinate and cost share with the local SWCD's for the sediment basin program. The Sand Hill River Watershed District was selected for the Soil and Water Conservation Cooperator of the Year Award and attended the annual conference held in Bloomington in December of 2013.

The final hearing date was June 17, 2013 at 1:00pm at the U of M Crookston for the redetermination of Polk County Ditches in our watershed.

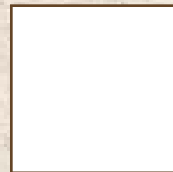
In March, the board agreed to stop the Project Team meetings until such time as the State and Federal Agencies agree to move forward in a positive direction.

Twenty-nine permits were brought before the board in 2013.

The Sand Hill Advisory Committee met once this year and recommended Manager Stuart Christian for reappointment.



SAND HILL RIVER
WATERSHED DISTRICT
PO BOX 584
FERTILE, MN 56540



MEET OUR BOARD OF MANAGERS



Name	Address	County	Contact	Term Held	First Appt.
Stuart Christian	39261 Woodside Dr. SE Erskine, MN 56535	Polk	(218) 687-3570	Chair	9/23/99
Scott Balstad	33393 420th Street SE Fosston, MN 56542	Polk	(218) 435-2173	Vice-Chair	5/17/10
Phillip Swenson	4253 340th Avenue Fertile, MN 56540	Polk	(218) 945-6223	Treasurer	5/17/12
Robert Brekke	PO Box 156 Nielsville, MN 56568	Polk	(218) 946-3375 (218) 946-2875	Secretary	5/17/99
Roger Hanson	24112 440th Street SW Beltrami, MN 56517	Polk	(218) 926-5770		5/17/78