

MINUTES
September 15, 2005

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on September 15, 2005 at the Midwest Dairy Institute, 48051 153rd Street, Milbank. Chairman Dempsey called the meeting to order at 9:30 a.m. The following persons attended:

Directors Present

Dave Bennett
Bill Dempsey
Curt Eggers
Doug Feten
Vincent Flemming
Kay Kassube
John Weidler

Others Present

Roy Bartholomy, U. S. Geological Survey
Shirley Flemming, Florence
Martin Jarrett, Big Sioux Community Water System
Steve Sando, U. S. Geological Survey
Leroy Stohr, Deuel County Conservation District
Ryan Thompson, U. S. Geological Survey

Directors Absent

Lois Brown
Royce Hueners

Staff Present

Becky Banks
Jay Gilbertson
Angela Guidry
Pat Hammond
Deb Springman

Administrative Items

Approval of Agenda - The Manager asked to have two items added the agenda; a project assistance request from the South Dakota Lakes and Streams Association and a report on the Streams Stats Program by the United States Geological Survey (USGS). **Motion** by Eggers, seconded by Feten to approve the agenda as amended. Motion carried unanimously.

Minutes - The Board reviewed the Minutes of the August 18, 2005 meeting. The Manager noted that the name of one of the persons attending the meeting was Laron Krause of Clear Lake, not Loren Krause of Goodwin. **Motion** by Feten, seconded by Kassube to approve the Minutes as amended. Motion carried unanimously.

Financial Reports - The Board reviewed the August 20054 Financial Report (Attachment A). **Motion** by Flemming, seconded by Eggers to accept the August 2005 Financial Report. Motion carried unanimously. Chairman Dempsey then asked that the reports be placed in the District files.

The Manager requested Board authorization for the Chairman and Vice-Chairman to sign District Resolution 05-1, Resolution providing that a tax be assessed and levied on all taxable property in

the East Dakota Water Development District. The resolution covers District tax collections for fiscal year 2006. The District Board approved the 2006 operating budget at the August meeting. The resolution covers the property tax income portion of the budget. The resolution is part of the package of material sent to all county auditors and treasurers in the District on or before October 1. **Motion** by Eggers, seconded by Kassube to authorize the Chairman and Vice-Chairman to sign Resolution 05-1. Motion carried unanimously.

Report of Meetings and Conferences - Director Eggers attended the ribbon-cutting ceremony for the Dewey C. Gevik Outdoor Learning Center near Wall Lake on August 29th

The Manager briefly commented on the following meetings he attended:

1. August 22nd - Trent - Nitrate sampling.
2. August 25th - Sioux Falls. Minnehaha County Ground Water Task Force.
3. September 2nd - Clear Lake. Court hearing on Special Exception injunction.
4. September 3rd - Huron. South Dakota Association of Rural Water Systems booth at SD State Fair.
5. September 9th - Pierre. South Dakota Nonpoint Source Task Force.

The Manager also participated in two radio interviews dealing with feedlot and water quality issues (KSOO, Sioux Falls, on August 30th and KWAT, Watertown, on September 7th.)

Upcoming meetings -

1. **September 14-16** - Brookings Inn, Brookings. South Dakota Water and Wastewater Association Annual Meeting.
2. **September 15 - 1:00 p.m.** - EDWDD Office, Brookings. South Dakota Lakes & Streams Association BOD meeting.
3. **September 18-20** - Sioux Falls. SDACD Annual Convention. EDWDD nitrate testing booth on the 19th.
4. **September 19 - 8:00 a.m.** - eastern South Dakota. Water quality issues tour for Region VIII representatives.
5. **September 20 - 2:00 p.m.** - Sioux Falls. South Dakota Conservation Commission.
6. **September 21 - 6:30 p.m.** - Deuel County Courthouse, Clear Lake. Zoning Board hearing on Tekrony CAFO request.
7. **September 22 - 9:00 a.m.** - Northern State University, Aberdeen. Northern Prairie Water Fest.
8. **September 22-23** - Matthew Training Center, Pierre. South Dakota Board of Water and Natural Resources.
9. **October 3** - Sioux Falls. Meyer feedlot judicial hearing.
10. **October 20- 9:00 a.m.** - EDWDD Office, Brookings. October EDWDD Board of Directors meeting.

Project Assistance Requests

Big Sioux Community Water System - Martin Jarrett, Manager of the Big Sioux Community Water System (BSCWS), presented the Board with a request for cost-share assistance for the completion of engineering facility plans. BSCWS is looking at a two-part project to upgrade their system in the coming year (2006). In preparation for their State Water Plan application, they have engaged Banner Associates to complete an engineering study of the proposed activities. The study will cost \$7,000, and they are requesting \$3,000 from the District. Mr. Jarrett reviewed the proposed actions, which involve adding a 700,000 gallon clear well at the Egan water treatment plant and upgrading the water delivery capacity in the Lake Madison area.

Motion by Kassube, seconded by Eggers to provide \$3,000 in District cost-share assistance to BSCWS for completion of the engineering facility plans as requested. Motion carried unanimously, with Director Bennett abstaining.

South Dakota Lakes and Streams Association - The District has been asked to sponsor a refreshment break at their upcoming annual meeting in Watertown on October 29th. The District has provided similar assistance in the past. The Manager recommended providing \$100 from the Districts Small Education Grant Fund. **Motion** by Weidler, seconded by Flemming to provide \$100 in District assistance to the SDLSA for their Annual Meeting, with the funds to come from the Small Education Grant Fund. Motion carried unanimously.

USGS Gaging Station Support for FY 2006

The Manager reviewed the proposed joint funding agreement between the District and the USGS for support of stream gaging stations for Fiscal Year 2006 (October 2005 - September 2006). During FY2005, the District provided cost-share assistance for three gages: Big Sioux River near Bruce, Willow Creek, and the Big Sioux River below Watertown. The Manager recommended the Board authorize support for the following gaging stations for FY 2006:

<u>Location</u>	<u>Cost</u>	<u>EDWDD % of Local Cost</u>
Big Sioux River near Bruce	\$6,500	100 %
Willow Creek near Watertown	\$1,049	50 % (shared with Watertown)
Big Sioux River below Watertown	<u>\$4,875</u>	75 % (shared with Watertown)
	\$12,424	

Motion by Kassube, seconded by Bennett to approve the joint funding agreement for \$12,424 to continue support of District gaging station activities and to authorize the Chairman to sign the FY 2006 joint funding agreement. Motion carried unanimously.

The Manager noted that the two gages in the Watertown area provided data for the North-Central Big Sioux River Watershed Assessment Project. This project will end in the coming year, and he did not expect to endorse District cost-share for these stations beyond FY 2006.

United States Geological Survey - Water Resources Division Projects

Emerging Contaminants - Steve Sando, hydrologist for the USGS in Huron, presented the results of a study of “emerging” contaminants in the Big Sioux River at sites around the Watertown, Volga and Brookings wastewater treatment facilities. The compounds investigated cover a broad range, including household and industrial chemicals, human and veterinary medicines, pesticides and herbicides and other organic compounds typically found in municipal wastewater. For the most part, these organic wastewater compounds (OWCs) are not regulated, and the study, cost-shared by the District, was conducted as a reconnaissance survey.

Water samples were analyzed for 125 different OWCs, using four separate analytical methods. The compounds were grouped into six different compound classes:

1. human pharmaceutical compounds,
2. human and veterinary antibiotic compounds,
3. household, industrial, and minor agricultural compounds,
4. polyaromatic hydrocarbons,
5. major agricultural herbicides and
6. sterol compounds.

About 40% of the OWCs analyzed were detected, with another 40% going undetected. Problems with the analytical methodology resulted in the tests for the remaining 20 % yielding unacceptable results (neither the presence or absence could be reliably determined).

Mr. Sando reviewed the occurrence of the various groups at the three testing sites. OWCs were detected at all sites, and in all samples, the levels found were often quite low (near the detection limit). In general, the compounds were not likely to represent a significant health risk. However, he did note that during periods of low flow in the river, discharge from the wastewater treatment plants represented a significant percentage of total flow volume. Under these conditions, the impact of the OWCs might be worth further study.

The results of the investigation will be published as a USGS Open-File Report. The report is currently under review by USGS and District staff.

StreamStats - Ryan Williamson, USGS, presented a summary of the StreamStats Program, a web-based application for stream flow information. The program is designed to:

- 1) provide estimates of streamflow statistics, basin and climatic characteristics, and other information for user-selected points on ungaged streams;
- 2) automatically measure basin and climatic characteristics for ungaged sites using GIS; and
- 3) provide published streamflow statistics, basin and climatic characteristics, and other information for data-collection stations.

The USGS is currently working with the State Department of Transportation to bring the program to South Dakota. He also provided background information on the development and use of the program, using examples from other states.

The Manager noted that while there exists sufficient information to develop the South Dakota

version of the program, some of the data sets were not of the best quality. He would be visiting with USGS staff and others to see if District assistance could be applied toward improving the data going into the program, which would result in better and more useful outputs.

School and Bullhead Lakes Watershed Assessment Project

Becky Banks and Deb Springman presented a summary of the results of the School Lake and Bullhead Lake Watershed Assessment Study (Study). A total of four lakes (Wigdale, School, Bullhead and Round) and their watersheds were assessed during the investigation, covering a total of roughly 22,000 acres. School Lake and Bullhead Lake were listed in the *1998 303(d) Impaired Waters of SD* report as impaired due to elevated nutrient levels. In subsequent reports, Bullhead Lake was removed from the list. The study found that all four lakes were impaired to varying degrees. Total maximum daily load (TMDL) reports will be prepared for each.

Water quality samples were collected at seven in-lake locations. One was collected in Wigdale Lake, and two samples each in the remaining lakes. Samples were also collected at three tributary locations. A total of 109 samples were collected. In-lake chlorophyll-a samples were taken and plant surveys completed. Each lake exceeded the regional trophic state index (TSI) target score of 65. Wigdale had the highest value (80), followed by Round (70.3), Bullhead (68.8) and Round (65.4).

Land use within the watershed was studied and feedlot inventories completed. Row crops are found over roughly 48% of the watershed, with the balance in grass and pasture. Eight feedlots were identified, with four considered potential contaminant sources.

Recommendations for implementation activities currently include: removal of the carp population, exclusion of livestock from lakes and waterways, creation of vegetated buffers around the lake and tributary streams, and a survey of septic systems in the watershed. Barley straw has been suggested as a method to reduce the algae population in the lakes. Installation of an aerator in Bullhead Lake may help with winter kill of fish.

DENR has completed a first review of the draft final report. Staff will be submitting the revised version, along with the four TMDL reports to the State within the next month.

Actual implementation activities for this area will be handled by the Deuel County Conservation District, as part of their Deuel County Lakes Project.

Project Updates

Big Sioux River Watershed Assessment Projects - The Manager and staff reviewed recent activities on the Central Big Sioux River (CBSR) and the North-Central Big Sioux River/East Oakwood Lake (NCBSR) Assessment Projects. The final report and TMDL reports are under final review by DENR staff, and it is expected that the TMDL reports will go out for public notice within the next two weeks. Work continues on the NCBSR final report and TMDL reports. Land use analysis using the AnnAGNPS model is underway, along with in-lake modeling for Johnson Lake, Tetonkaha Lake,

and East Oakwood Lake.

Central Big Sioux River Implementation Project - The Manager and project leader Angela Guidry met with representatives of the Northern Prairies Land Trust to discuss developing an easement program.

Groundwater Projects - The Deputy Manager reviewed efforts to create a more detailed map of the occurrence of shallow aquifers in the greater Sioux Falls area. This map will be used as a basis for ground water protection efforts.

The Manager continues to work with the Town of Trent to address their nitrate problems.

A second spectrophotometer has been order to support District nitrate testing clinics. The District will have a nitrate testing booth at the Annual Meeting of the South Dakota Association of Conservation Districts in Sioux Falls on September 19th.

Following the meeting, the Board and District staff toured the Midwest Dairy Institute facility.

Adjournment

There being no further District business, Chairman Dempsey declared the meeting adjourned at 12:55 p.m.

Doug Feten, Secretary

**East Dakota Water Development District
Custom Summary Report
August 2005**

	<u>Aug 05</u>
Ordinary Income/Expense	
Income	
4050 - Grants	
4007 - Local Nitrate Testing Outreach	6,414.82
Total 4050 - Grants	6,414.82
4100 - Tax Rev	
4140 - Current Tax Revenue	1,355.10
4150 - Prior Tax Revenue	133.45
4180 - Miscell. Tax Revenue	79.99
Total 4100 - Tax Rev	1,568.54
7000 - Interest Income	1,571.21
Total Income	9,554.57
Gross Profit	9,554.57
Expense	
5700 - School/Bullhead Lakes Asses.	
5720 - Travel SBLAP	19.00
Total 5700 - School/Bullhead Lakes Asses.	19.00
6050 - Vehicle Expense	
6052 - Lease Expense	292.91
Total 6050 - Vehicle Expense	292.91
6070 - BOD Travel & Ent	
6072 - BOD Travel	301.92
Total 6070 - BOD Travel & Ent	301.92
6080 - Capital Outlay Items	
6082 - Equipment and Furniture	199.99
6085 - Computer Equipment	1,700.11
Total 6080 - Capital Outlay Items	1,900.10
6530 - Miscellaneous	119.01
6540 - Maintenance	
6541 - Office Maintenance	275.00
6542 - Equipment Maintenance	38.31
Total 6540 - Maintenance	313.31
6550 - Office Supplies	346.47
6551 - Office and Garage Materials	15.87
6560 - Payroll Expenses	
6103 - Payroll Taxes	1,534.20
6561 - Retirement	143.89
6562 - Health Insurance	2,033.00
6564 - Retirement Admin Co. 2	187.42
6569 - Payroll Expenses - Other	7,431.22
Total 6560 - Payroll Expenses	11,329.73
6565 - Payroll Expenses for Board	730.00
6566 - Payroll Expenses Technical	
6570 - Retirement Technical Asst. - Co	541.17
6571 - Technical Asst. Employ. 2 Co.	187.42
6566 - Payroll Expenses Technical - Other	11,904.24
Total 6566 - Payroll Expenses Technical	12,632.83
6690 - Rent	
6691 - Office Rent	1,500.00
Total 6690 - Rent	1,500.00

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August 2005**

	<i>Aug 05</i>
6880 - Telephones	
6881 - Cell Phone	114.08
6882 - Office Phone	209.38
Total 6880 - Telephones	323.46
6900 - Travel & Ent	858.42
6940 - Utilities	
6928 - Trash Removal	62.92
Total 6940 - Utilities	62.92
Total Expense	30,779.72
Net Ordinary Income	-21,221.15
Other Income/Expense	
Other Expense	
8050 - Project Expenditures	
8053 - Education Small Grants Prog 03	70.00
8059 - SDACD - WFPAP 04	10,415.00
8061 - Lake CD - Bourne Slough 03	750.00
Total 8050 - Project Expenditures	11,235.00
8700 - Uncommitted Project Funds	
8712 - Renner Sanitary District 05	850.00
Total 8700 - Uncommitted Project Funds	850.00
Total Other Expense	12,125.00
Net Other Income	-12,125.00
Net Income	-33,346.15