



East Dakota Water Development District
132B Airport Drive
Brookings, SD 57006

605-688-6741

605-688-6744 Fax

MINUTES
June 18, 2015

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on June 18, 2015, at the EDWDD office in Brookings. Vice-Chairman Soholt called the meeting to order at 9:00 a.m. The following persons attended:

Directors Present

Lois Brown
Mary Ellen Connelly
Gary Duffy
Kay Kassube
John Moes
Jerry Soholt
Janelle Weatherly

Others Present

Steve Donovan, Ducks Unlimited
Roger Hageman, Lake County Commission
Dr. Lisa Kunza, South Dakota School of Mines & Technology
Jack Majeres, Moody County Conservation District
John Maursetter, Lake County
Kelsey Murray, South Dakota School of Mines & Technology

Director(s) Absent

Mark Anderson
Martin Jarrett

Staff Present

Kevin Christenson
Jay Gilbertson
Deb Springman

DRAFT

Administrative Items

Approval of Agenda

Motion by Duffy, seconded by Moes to approve the agenda as presented. Motion carried unanimously.

Minutes - The Board reviewed the Minutes of the May 14, 2015, meeting.

Motion by Moes, seconded by Kassube to approve the Minutes as presented. Motion carried unanimously.

Financial Reports - The Board reviewed the May 2015 financial statements.

Motion by Duffy, seconded by Connelly to approve the May 2015 financial statements. Motion carried unanimously. Vice-Chairman Soholt directed that the approved financial statements be placed in the District files.

DRAFT

Report of Meetings and Conferences - Directors Brown, Moes and Weatherly attended the Lewis and Clark Regional Water System Annual Meeting in Tea on May 28th.

Director Brown attended the June 17th meeting of the Central Big Sioux River Watershed Project Steering Committee in Sioux Falls.

Director Connelly attended meetings of the Friends of the Big Sioux River on June 4th and the Minnehaha County Conservation District on June 8th. Both meetings were in Sioux Falls.

Director Moes attended the meetings of the Lake Pelican Water Project District and the Codington County Planning Commission in Watertown on May 20th.

Vice-Chairman Soholt attended the 23rd Annual Big Sioux water Festival in Brookings on May 12th.

The Manager briefly commented on the following meetings he attended:

1. **May 19 & 20** - Madison, WI. Geological Society of America North-Central Sectional meeting.
2. **June 15** - Renner. South Dakota Association of Conservation Districts (SDACD) Big Sioux-Vermillion Area meeting.
3. **June 17** - Brookings. National Ground Water Association nitrate testing program interview.

Upcoming Meetings -

1. **June 23 - 9:00 a.m.** - Day County Courthouse, Webster. SDACD Coteau Area Meeting.
2. **June 24-26** - Duluth, MN. 2015 Minnesota Association of Watershed Districts Summer Tour.
3. **June 24 - 7:00 p.m.** - Ronning Library, 3100 East 49th Street, Sioux Falls. Friends of the Big Sioux River.
4. **June 25** - Matthews Training Center, Pierre. South Dakota Board of Water and Natural Resources.
5. **July 9 - 9:00 a.m.** - Kelly Inn, Yankton. James River Water Development District Board of Directors.
6. **July 8 & 9** - Matthews Training Center, Pierre. South Dakota Water Management Board.
7. **July 14 - 7:30 .m.** - Brookings (point of departure). South Dakota State University Extension Feedlot Tour.
8. **July 14 - 6:00 p.m.** - Rapid City. West Dakota Water Development District Board of Directors.
9. **July 15 - 7:30 p.m.** - Centerville. Vermillion Basin Water Development District Board of Directors.
10. **July 16 - 9:00 a.m.** - EDWDD Office, Brookings. July EDWDD Board of Directors.

Pathogenicity Potential of the Bacteria in Selected Locations of the Big Sioux River

Kelsey Murray, a graduate student at the South Dakota School of Mines and Technology (SDSM&T), provided an overview of the planned activities for the District-supported study entitled, "Pathogenicity potential of the bacteria in selected locations of the Big Sioux River." The effort will explore the creation of a new water quality monitoring metric that accounts for the pathogenic potential of bacteria in various aquatic environments.

Ms. Murray noted that a wide range of bacteria, including *Escherichia coli* (*E. coli*), are commonly found in the environment and the human body, often performing beneficial functions. However, there are varieties of bacteria that can be harmful and potentially fatal to people. Testing for specific pathogenic bacteria in water is impractical, so risk is currently assessed by measuring the total number of *E. coli* bacteria present.

DRAFT

If total counts exceed certain thresholds, then the odds that actual harmful varieties are present is considered sufficient and the sample is considered “impaired.” A significant number of lakes, streams and rivers in South Dakota are currently considered impaired as the result of high *E. coli* bacteria levels, and significant public resources are being directed toward bacterial load reductions.

Ms. Murray’s study, to be conducted under the supervision of Drs. Lisa Kunza and Linda DeVeaux of SDSM&T, will examine the pathogenic genetic material within bacteria present in waters of the Big Sioux River and Skunk Creek. The project will seek to develop reproducible genetic fingerprints for the pathogenic genes that make the bacteria at these sites toxic, which in turn could be used to better assess the potential adverse impacts to human health.

Six sampling sites have been selected in Minnehaha County for the study. Four sites are on the Big Sioux River in the area around the City of Sioux Falls, and two sites are on Skunk Creek near Colton. All are currently being sampled as part of the District’s 2015 water quality sampling program. District staff will collect the samples and ship them to SDSM&T for analysis.

The Manager stated that following the meeting, Ms. Murray and Dr. Kunza will visit the sampling sites with District staff.

Ducks Unlimited in South Dakota

Steve Donovan, Great Plains Region Manager of Conservation Programs for Ducks Unlimited, provided an update on the programs and activities of his organization.

Project Updates

Big Sioux River Watershed Project - Jack Majeres, Chairman of the Moody County Conservation District Board of Supervisors, provided an update on the Central Big Sioux River Watershed Project.

Mr. Majeres requested that the Board formally appoint Director Lois Brown as the District representative on the Steering Committee. The Board had previously appointed (former) Director Roger Scheibe to this position, with Director Brown as the alternate.

Motion by Duffy, seconded by Kassube to designate Director Brown as the District representative on the Big Sioux River Watershed Project Steering Committee, with Director Weatherly as the alternate. Motion carried unanimously.

2015 Nitrate Monitoring Project - The Manager reviewed early season results of the District’s nitrate testing program. The effort involves weekly water quality sampling and analyses from numerous collection sites in the Big Sioux River and Minnesota River watersheds. The monitoring was prompted by recent developments in Iowa over nitrate contamination of the public water supply for the City of Des Moines. Although similar conditions would not be expected to exist at this time in South Dakota, the current effort will provide a base line against which future trends might be assessed.

The Manager offered the following general observations:

1. Through early June, most samples collected from the Big Sioux River above the City of Sioux Falls contained low concentrations of nitrate (less than 2.0 mg/L);

DRAFT

2. Nitrate levels immediately below the City of Watertown were slightly elevated, but well below the 10.0 mg/L maximum contaminant level (MCL);
3. Nitrate levels in samples collected below the City of Sioux Falls have had concentrations in the 2.0 to 7.0 mg/L range; and
4. In the most recent round of sampling (June 8-15), elevated nitrate concentrations (2.0 to 5.0 mg/L) were found in all river samples as far north as Flandreau.

The Manager noted that these were very preliminary results. He also noted that in putting together the presentation (merging data files with GIS maps/records), staff had recognized several missing test results. Staff will be working to update the files to encompass all of the available data, and a similar update will be provided at the July Board meeting.

Executive Session

Motion by Duffy, seconded by Weatherly to go into executive session at 11:25 a.m. to discuss personnel and legal issues with the Manager/Treasurer. Motion carried unanimously.

Vice-Chairman Soholt declared the executive session closed at 11:45 a.m.

Adjournment

There being no further District business, Vice-Chairman Soholt declared the meeting adjourned at 11:45 a.m.

DRAFT

John Moes, Secretary

DRAFT