



East Dakota Water Development District
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MINUTES
May 14, 2015

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on May 14, 2015, at the District office in Brookings. Chairman Jarrett called the meeting to order at 9:04 a.m. The following persons attended:

Directors Present

Mark Anderson
Lois Brown
Mary Ellen Connelly
Gary Duffy
Martin Jarrett
Kay Kassube
John Moes
Janelle Weatherly

Directors Absent

Jerry Soholt

Others Present

Jeff Barth, Minnehaha County Commission
Jeanette Deurloo, West Dakota Water Development District
Galen Hoogestraat, United States Geological Survey
Jesse Johnson, SD Corn
John Maursetter, Lake County
Darrell Raschke, Huron

Staff Present

Jay Gilbertson
Jeremy Hinke
Deb Springman

Administrative Items

Approval of Agenda

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

Minutes - The Board reviewed the Minutes of the meetings on April 16th, 2015.

Motion by Duffy, seconded by Weatherly to approve the April 16th, 2015, Minutes as presented. Motion carried unanimously.

Financial Reports - The Board reviewed the April 2015 Financial Reports.

Motion by Moes, seconded by Kassube to accept the April 2015 Financial Reports. Motion carried unanimously. Chairman Jarrett asked that the report be placed in the District files.

Report of Meetings and Conferences - Director Connelly attended meetings of the Central Big Sioux River Watershed Project Steering Committee on March 25th and the Friends of the Big Sioux River on May 7th. Both meeting were held in Sioux Falls.

Director Weatherly attended Earth Day activities at the Flandreau Public Schools on April 22nd and the 23rd Annual Big Sioux Water Festival in Brookings on May 12th.

Director Moes attended a meeting of the Grant County Planning & Zoning Board on May 11th in Milbank.

Chairman Jarrett attended Earth Day activities at the Flandreau Public Schools on April 22nd.

The Manager briefly commented on the following meetings he attended:

1. April 21st - Pierre. SD Non-Point Source (NPS) Task Force.
2. April 22nd - Pierre. NPS Project Coordinators Meeting.
3. April 27th - Vermillion. Clay County Planning & Zoning Board.
4. April 28th - DeSmet. Kingsbury County Board of Adjustment.
5. April 30th/May 1st - Rapid City. South Dakota Association of Rural Water Systems (SDARWS) Managers Group.
6. May 12th - Brookings. 23rd Annual Big Sioux Water Festival.
7. May 13th - Ortonville, MN. Minnesota River Headwaters Watershed Restoration and Protection Strategy (WRAPS) Partner meeting.

Upcoming Meetings -

1. **May 19 & 20** - University of Wisconsin, Madison, WI. Geological Society of America North-Central Sectional meeting.
2. **May 28 - 5:30 p.m.** - Tea Events Hall, Tea. Lewis & Clark Regional Water System 25th Annual Membership Banquet.
3. **June 15 - 10:00 a.m.** - Fire Hall, Renner. South Dakota Association of Conservation Districts (SDACD) Vermillion-Big Sioux Area Meeting.
4. **June 18 - 9:00 a.m.** - EDWDD Office, Brookings. June EDWDD Board of Directors meeting.
5. **June 23 - 9:00 a.m.** - Day County Courthouse, Webster. SDACD Coteau Area Meeting.
6. **June 24-26** - Duluth, MN. 2015 Minnesota Association of Watershed Districts Summer Tour.
7. **June 25 & 26** - Matthews Training Center, Foss Building, Pierre. South Dakota Board of Water & Natural Resources.

Payment Requests - SDSU (I) - In October 2014, the Board agreed to provide up to \$6,000.00 in cost-share assistance to Dr. Guanghui Hua, Department of Civil and Environmental Engineering at South Dakota State University (SDSU), for a project entitled, "Nutrient Removal from Agricultural Subsurface Drainage Using Denitrification Bioreactors and Phosphate Adsorbents II." The Manager indicated that SDSU has submitted a reimbursement request of \$530.47 for this project covering expenses incurred between February 1st and April 30th, 2015. This is the first billing for this project.

SDSU (II) - In October 2014, the Board agreed to provide up to \$6,000.00 in cost-share assistance to Dr. Kyungnan Min, Department of Civil and Environmental Engineering at SDSU, for a project entitled, "Controlling Harmful Algal Blooms in Eutrophic Lakes by Combined Phosphorus Precipitation and Sediment Capping." The Manager indicated that SDSU has submitted a reimbursement request of \$377.24 for this project covering expenses incurred between March 1st and April 30th, 2015. This is the first billing for this project.

The Manager requested authorization to pay both payment requests, for a total of \$907.71.

Motion by Kassube, seconded by Duffy to authorize payments totaling \$907.71 to SDSU as requested. Motion carried unanimously.

Out-of-State Travel Request - The manager requested Board authorization to attend the Annual Summer Tour conducted by the Minnesota Association of Watershed Districts (MAWD). The tour is being held in Duluth, MN, on June 24th - 26th, and will involve talks and tours covering water management issues in an urban setting. He indicated that he would be out of the office from Wednesday, June 24th through Friday, June 26th.

Motion by Brown, seconded by Connelly to authorize the Manager's attendance at the Minnesota Association of Watershed Districts Summer Tour as requested. Motion carried unanimously.

United States Geological Survey Updates

Real-Time Nitrate Monitoring on the Big Sioux River - Galen Hoogestraat, hydrologist for the United States Geological Survey South Dakota Water Science Center (USGS) in Rapid City, presented a progress report on the real-time nitrate monitoring station that has been installed on the Big Sioux River near the Sioux Falls Airport. At its May 2014 meeting, the Board agreed to partner with the City of Sioux Falls and USGS to install and operate the device last year, with all parties agreeing to continue operation of the system in 2015. The monitoring station is operational, and the data can be viewed on-line at: <http://sd.water.usgs.gov/projects/RTnitrate/RTnitrate.html>.

Mr. Hoogestraat noted that the results collected so far in 2015 have been consistent with daily analyses being conducted by the City of Sioux Falls. The Manager noted that the results are also consistent with samples collected by the District this spring.

Long-term Stream Flow Trends in Eastern South Dakota - Mr. Hoogestraat also presented a progress report on a District-sponsored study assessing long-term river/stream gage records in eastern South Dakota. The effort, entitled "Assessment of Climatic Effects on Streamflow Characteristics in Eastern South Dakota," examined the records of 10 river gaging stations with long-term records in the watersheds of the Minnesota, Big Sioux, Vermillion and James Rivers. The purpose of the study was to assess whether or not variability in flow/discharge over time could be wholly attributed to climate (precipitation) or if other factors, such as land-use changes, might have impacts. In addition, climatic/precipitation records to include antecedent (prior water years) will be considered, and a formal publication describing the results of investigation. The effort cost \$105,500, with the District providing \$44,000, the USGS providing \$40,500, \$19,000 from the James River Water Development District and \$2,000 from the Vermillion Basin Water Development District.

The records of ten (10) gages were examined: Elm River near Westport, Firesteel Creek near Mount Vernon, James River near Scotland, Little Vermillion River near Salem, West Fork Vermillion near Parker, Big Sioux River near Watertown, Big Sioux River near Dell Rapids, Skunk Creek at Sioux Falls, Big Sioux River at Akron and Whetstone River near Big Stone City.

Mr. Hoogestraat indicated that the final report would be published this summer, but preliminary results suggested the following:

1. Overall stream flow measured at the ten gages has increased significantly since the early 1940s;

2. For sites in the James River and Vermillion River watersheds, precipitation appears to account for most of the changes;
3. For sites in the Big Sioux River and Minnesota River watersheds, precipitation appears to account for most of the change since 1980; and
4. For sites in the Big Sioux River and Minnesota River watersheds, other factors may have had a modest influence on stream flow changes between 1945 and 1980, although most of the change can be attributed to precipitation.

He also noted that there appears to be a significant change in the precipitation/runoff relationship around 1980. He suggested that ground water conditions may be a driving factor, but that assessment of this hypothesis would require further study. He noted that there did not appear to be any obvious changes attributable to the recent increase in agricultural drainage

Project Assistance Requests

Codington County Conservation District - The Manager presented a request for \$5,000 in District cost-share assistance from Sandy Law, Office Manager for the Codington County Conservation District (CCCD). CCCD has recently acquired a grass drill, which is used to plant native grasses by landowners within Codington County. The drill may also be used by residents/landowners of adjoining counties. The total cost of the drill is \$42,700.00. District funds would be used to offset a portion of these costs. The Manager indicated that the request was consistent with, and comparable to, similar requests from other conservation districts within the District (Miner, Moody, Brookings and Deuel). He recommended approval of the request, along with authorization to make payment.

Motion by Moes, seconded by Duffy to provide \$5,000 in District cost-share assistance to the Codington County Conservation District to support the purchase of a grass drill as requested, and to authorize payment of same. Motion carried unanimously.

District Updates

23rd Annual Big Sioux Water Festival - Deb Springman reported on the 23rd Annual Big Sioux Water Festival. She noted that it was by all accounts a great success, due in no small part to the efforts of 208 volunteers, presenters and supporters. Fifty-seven fourth grade classes from 31 schools across the District attended. The theme of the event this year was "Give Water A Hand." Ms. Springman noted that next year's event would be held on May 10, 2016.

Big Sioux River Watershed Project Memorandum of Understanding - The Manager presented a proposed Memorandum of Understanding (MOU) with the Moody County Conservation District (MCCD) to formally articulate and acknowledge District support of the Big Sioux River Watershed Project (Project). The District support of this effort is in the form of the collection and analysis of water samples to be used to assess the impact of this long-term watershed restoration effort. MCCD, as the primary sponsor of the Project, has submitted a Memorandum of Understanding (MOU) which formally defines the role the District will play in the most recent version of this effort (collection and analyses of water quality samples).

Motion by Connelly, seconded by Weatherly to authorize the Board Chair to sign the MOU as requested by MCCD. Motion carried unanimously.

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Adjournment

There being no further District business or issues for consideration, Chairman Jarrett declared the meeting adjourned at 12:15 p.m.

John G. Moes, Secretary

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