



East Dakota Water Development District
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MINUTES
October 19, 2017

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on October 19, 2017, at the Buffalo Ridge Resort & Business Center, 1312 Coteau Street, Gary, SD. Chairman Jarrett called the meeting to order at 9:31 a.m. The following persons attended:

Directors Present

Mark Anderson
Lois Brown
Mary Ellen Connelly
Martin Jarrett
Kay Kassube
Dana Loseke
Janelle Weatherly

Directors Absent

Gary Duffy
John Moes

Others Present

Scott Anderson, Minnehaha County
Mitch Enderson, Lac qui Parle/Yellow Bank Watershed District
Trudy Hastad, Lac qui Parle/Yellow Bank Watershed District
Derric Iles, SD DENR Geological Survey Program
Gregg Jorgenson, Banner Associates
Nick Krohe, SD DENR Geological Survey Program
Julie Steen, City of Brookings

Staff Present

Jay Gilbertson
Deb Springman

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Administrative Items

Approval of Agenda

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

Minutes - The Board reviewed the Minutes of the September 21st, 2017, meeting. The following changes were made:

Directors Absent

~~Mark Anderson~~ Kay Kassube

Report of Meetings and Conferences - Directors Brown, Connelly, Loseke, **Weatherly** and Moes attended the Mayor's Big Sioux River Water Summit in Watertown on September 20th.

Directors Brown ~~and Weatherly~~ attended the September 14th meeting of the Big Sioux River Watershed Project Steering Committee in Sioux Falls.

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Motion by Loseke, seconded by Connelly to approve the Minutes as so amended. Motion carried unanimously.

Financial Reports - The Board reviewed the September 2017 Financial Reports.

Motion by Connelly, seconded by Kassube to accept the September 2017 Financial Reports. Motion carried unanimously. Chairman Jarrett then asked that the reports be placed in the District files.

Meetings and Conferences - Director Anderson attended the October 4th meeting of the Sioux Falls Infrastructure Review Committee in Sioux Falls.

Director Brown attended the September 28th SD Board of Water and Natural Resources tour of water resource projects and activities in the Vermillion area.

Director Kassube attended the Mayor's Big Sioux River Water Summit in Watertown on September 20th.

Director Loseke reported on meetings with City of Sioux Falls Public Works staff on September 27th and the Minnehaha County Conservation District on October 16th. Both meetings were in Sioux Falls.

Director Weatherly reported on hearings for several concentrated animal feeding operations in Moody County.

The Manager briefly commented on the following meetings he attended in the past month:

1. **September 28 & 29** - Vermillion. South Dakota Board of Water and Natural Resources tour and meeting.
2. **October 10** - Armour. South-Central Water Development District Board of Directors.
3. **October 10** - Rapid City. West Dakota Water Development District Board of Directors.
4. **October 17** - Madison, MN. Lac qui Parle/Yellow Bank Watershed District TEAM (Together Everyone Achieves More) meeting.
5. **October 17** - Brookings. Big Sioux River 'relocation' discussion.
6. **October 18** - Centerville. Vermillion Basin Water Development District Board of Directors.

Upcoming Meetings -

1. **October 24th - 10:00 a.m.** - Hayti. Hamlin County Commission.
2. **October 25th & 26th** - Deadwood. South Dakota Association of Rural Water Systems Manager's Group.
3. **October 27th - 9:00 a.m.** - SD School of Mines & Technology, Rapid City. Kelsey Murray, PhD defense.
4. **November 2nd - 3:00 p.m.** - Pipestone, MN. AREA II Minnesota River Basin Projects/Redwood-Cottonwood River Control Area Annual Legislative Gathering.
5. **November 8th** - South Dakota State University, Brookings. Eastern South Dakota Water Conference.
6. **November 9th - 9:00 a.m.** - Matthews Training Center, Pierre. South Dakota Board of Water and Natural Resources.

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7. **November 15th - 8:00 a.m.** - St. Paul, MN. Minnesota Ground Water Association 2017 Fall Conference.
8. **November 16th - 9:30 a.m.** - Water Treatment Plant, 2100 North Minnesota Avenue, Sioux Falls. November EDWDD Board of Directors Meeting.

Payment Requests - The Manager presented several payment requests from District-sponsored activities that will require Board action. He noted that the requests were in order and consistent with provisions set by the Board at the time of award. He requested Board authorization to make the following payments:

<u>Grant Recipient/Activity</u>	<u>Requested Amount</u>
SDSM&T/Seasonal bacteria pathogenicity in BSR/SC (Kunza)	\$ 2,987.85
SDSU/ <i>E. coli</i> & antibiotic resistance in tile water (McDaniel)	\$ 405.33
City of Sioux Falls/2017 Mayor’s Big Sioux River water Summit	<u>\$ 500.00</u>
Total	\$ 3,893.18

Motion by Kassube, seconded by Weatherly to authorize payments totaling \$ 3,983.18 as requested. Motion carried unanimously.

Travel Authorization - The Manager requested Board authorization to attend the Minnesota Ground Water Association 2017 Fall Conference in St. Paul, Minnesota, on November 15th. He noted that the theme of the event was, "The Effect of Agriculture on Groundwater Resources," a topic of clear interest in eastern South Dakota as well. He would travel to St. Paul on the 14th, returning to Brookings late on the 15th.

Motion by Brown, seconded by Loseke to authorize the out-of-state travel as requested. Motion carried unanimously.

State Conservation Commission Nomination - The Manager presented a request from the South Dakota Department of Agriculture for a nomination to represent water development districts on the State Conservation Commission. Under South Dakota Codified Law 38-7-4 (Composition of commission - Appointment and terms of members - Vacancies), the Governor appoints a commission member from a list of three names recommended by the water development districts.

He stated that Tom Glover of Burke (and a South-Central Water Development District director) currently holds this position. Mr. Glover is interested in continuing to serve, and South-Central WDD will be submitting his name for consideration. While the Governor is likely to re-appoint Mr. Glover, the water development districts should still provide a list of potential candidates.

Motion by Weatherly, seconded by Kassube to submit the name of Director Lois Brown for consideration for appointment to the State Conservation Commission representing water development districts. Motion carried unanimously.

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Project Assistance Requests

City of Brookings Parks, Recreation & Forestry Department - Julie Steen, an educational volunteer with the City of Brookings Parks, Recreation & Forestry Department, presented a request for support of environmental education efforts at the City's Larson Nature Center. The Nature Center provides a range of classroom and field-based educational activities to area and regional K-12 students. Historically, these efforts have frequently made use of materials and resources provided by the District. The Manager noted that the Larson Nature Center have ready access to District resources, there are times when needed materials are not available due to other commitments. The proposed activity would involve the creation of similar and/or complimentary educational resources, in the form of trunks containing materials focusing on "Garbology," 'Stewards of Nature,' and 'Prairie Potholes.'

Ms. Steen noted that the projected total cost for this effort was \$9,950, and that the City was requesting \$5,175 from the District. The balance of support would come from the South Dakota Geographic Alliance (\$1,400), 319 Information and Education support from the SD Discovery Centered (\$2,000), and the City (\$1,375). She also noted that the educational materials would be available for use by others engaged in environmental education in the region, including the District.

Motion by Brown, seconded by Kassube to award \$5,175 in project assistance support to the City of Brookings Parks, Recreation & Forestry Department as requested. Motion carried unanimously.

City of Lake Norden - Gregg Jorgenson, PE, Banner Associates, presented a request on behalf of the City of Lake Norden for District cost-share assistance to cover a portion of the costs of an investigation of raw water source options and modifications or additions to the City's water treatment plant. The study is in response for a proposed expansion of an existing industry (cheese producer Agropur, Inc.) within the community, which would result in a significant increase in water consumption. The City's existing well field may be at capacity, and the water treatment plant is aging, and there are questions as to the City's ability to meet industry demand, as well as any resulting growth. The study is projected to cost \$12,900, and the City is seeking up to fifty percent (50%) of the cost from the District.

There was considerable discussion among Board members about the expenditure of District funds in support of an economic development activity for a single industry. It was acknowledged that the effort would provide the City and its citizens with important information about their drinking water system, even if the economic development does not take place. However, the timing of this effort is clearly driven by the pending decision by the business in question. Mr. Jorgenson noted that the City has requested that Agropur participate in the cost of the effort, but no response has been received to date.

Motion by Kassube, seconded by Weatherly, to provide District cost-share assistance to the City of Lake Norden to cover one-third (1/3) of the costs, up to a maximum amount of \$4,300, of the proposed investigation of raw water source options and modifications or additions to their water treatment plant, contingent on a like amount of support being provided by Agropur. Motion carried with Directors Brown, Kassube and Weatherly, along with Chairman Jarrett, supporting, and Directors Anderson, Connelly and Loseke opposed.

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Reassessment of the Granite wash Aquifer in Eastern Grant County

Nick Krohe, geologist with the Department of Environment and Natural Resources (DENR) Geological Survey Program, presented an update on his examination of the Granite wash aquifer in eastern Grant County. He noted that a few years ago, the DENR Water Rights Program permitted an irrigation well in this aquifer about 10 miles southeast of Milbank. This well was the first, and so far only, such permit in this “aquifer,” about which the State’s knowledge and understanding was limited. The aquifer is a buried unit, defined as occurring around the fringes of the granite quarries in eastern Grant County. The aquifer material was most often composed of what was interpreted as concentrations of mineral grains, predominantly quartz, derived from fluvial erosion and deposition of chemically-weathered granite. At the request of the Water Rights Program, the Survey began a more detailed investigation of nature and distribution of this aquifer. The effort involved the drilling of numerous test holes and the installation of observation wells. The formal investigation was completed earlier this year, with a final report in preparation.

Mr. Krohe stated that he has come to two major conclusions as a result of the study. First, the areal extent of the unit as previously defined is/was significantly over-estimated. He noted that in many instances, when test holes penetrated in-place weathered granite, only the coarse, residual mineral grains were recognized, while the accompanying kaolinitic clays were not. The interval was described as composed of coarse mineral grains, which would be presumed to produce water in significant amounts. As such, the aquifer has been mapped wherever weathered granite has been encountered (or projected), an area which encompasses up to 230 square miles. In the study, wells installed in the in-place weathered granite yielded very little water.

The ‘actual’ granite wash aquifer, as originally defined fluvially transported and deposited mineral grains derived from the weathered granite, has a much smaller areal extent, covering perhaps an order of magnitude less territory. The irrigation well that initially prompted this investigation is in this unit, suggesting that it is capable of producing large volumes of water. Analytical results of water samples collected from the weathered granite and the ‘actual’ granite wash aquifer are pending.

Mr. Krohe also showed the Board examples of sediment samples and rock core collected during the investigation, to demonstrate the difference between the two units.

Lac qui Parle-Yellow Bank Watershed District Update

Trudy Hastad, Lac qui Parle/Yellow Bank Watershed District (LQPYB WD) Administrator, and Mitch Henderson, LQPYB WD Watershed Projects Coordinator, provided with an overview of their activities and function, and to provided updates on topics of mutual, cross-border interest. LQPYB WD encompasses the watersheds of the Lac qui Parle and Yellow Bank Rivers within the State of Minnesota. Each are tributaries to the Minnesota River. The headwaters of both rivers are located in northeastern South Dakota, and also entirely within the East Dakota Water Development District. The common boundary between the two entities extends from a few miles south of Big Stone City in northeast Grant County to Lake Hendricks in northeast Brookings County.

<http://www.lqpybwatershed.org/>

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Adjournment

There being no further District business, Chairman Jarrett declared the meeting adjourned at 12:10 p.m.

John Moes, Secretary

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