



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

605-688-6741

605-688-6744 Fax

MINUTES
April 19, 2018

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on April 19th, 2018, at the offices of the Big Sioux Community Water System, 23343 479th Avenue, Egan. Chairman Jarrett called the meeting to order at 9:30 a.m. The following persons attended:

Directors Present

Lois Brown
Mary Ellen Connelly
Gary Duffy
Martin Jarrett
Kay Kassube
Dana Loseke
John Moes
Janelle Weatherly

Directors Absent

Mark Anderson

Others Present

Rose Grant, Grant & Williams, Inc.
Rachel McDaniel, South Dakota State University
Kip Rounds, SD Department of Game, Fish & Parks
Katie Voeltz, Grant & Williams, Inc.

Staff Present

Barry Berg
Tanner Clausen
Jay Gilbertson
Deb Springman

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Administrative Items

Approval of Agenda -

Motion by Loseke, seconded by Kassube to approve the Agenda as presented. Motion carried unanimously.

Minutes - The Board reviewed the Minutes of the March 15th, 2018, meeting.

Motion by Duffy, seconded by Connelly to approve the Minutes as presented. Motion carried unanimously.

Financial Reports - The Board reviewed the March 2018 Financial Reports.

Motion by Moes, seconded by Loseke to accept the March 2018 Financial Reports. Motion carried unanimously. Chairman Jarrett then asked that the reports be placed in the District files.

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Report of Meetings and Conferences - Directors Brown and Weatherly attended the March 21st meeting of the Big Sioux River Watershed Project Steering Committee in Sioux Falls.

Directors Brown and Kassube attended the South Dakota Ground Water Quality Conference in Pierre on March 28th.

Director Connelly attended the Friends of the Big Sioux River meeting in Sioux Falls on April 2nd.

Director Duffy attended the KingBrook Rural Water System Annual Meeting in Madison on April 3rd, and hearing on Kingsbury County Ditch #4 in DeSmet on April 4.

Director Moes attended the March 21st and April 18th meetings of the Lake Pelican Water Project District, and the March 16th meeting of the Upper Big Sioux River Advisory Board. All meetings were held in watertown.

Director Loseke attended the April 4th meeting of the Minnehaha County Commission, and the April 9th meeting of the Minnehaha County Conservation District. Both meeting were held in Sioux Falls.

Chairman Jarrett attended the Lake Madison Development Association meeting on April 12th.

The Manager briefly commented on the following meetings he attended over the prior two months:

1. February 22nd - Lake Norden. Agropur informational meeting.
2. February 23rd - Sioux Falls. KSOO radio interview.
3. March 2nd - Brookings. Big Sioux water Festival Steering Committee.
4. March 6th & March 21st - Brandon. City Water Committee.
5. March 8th - Pierre. Oahe District County Commissioners Association.
6. March 9th - Hermosa. Black Hills Area County Commissioners Association.
7. March 14th-16th - Denver, CO. EPA How's My Watershed Workshop.
8. March 19th - Howard. Howard City Council.
9. March 20th - Leola. Upper Missouri Valley County Commissioners Association.
10. March 21st - Sioux Falls. Big Sioux River Watershed Project Steering Committee.
11. March 21st - Brookings. Sioux Valley County Commissioners Association.
12. March 27th - Pierre. South Dakota Board of Water & Natural Resources.
13. March 28th - Pierre. South Dakota ground Water Quality Conference.
14. March 28th - Pierre. South Dakota Chapter, American Institute of Professional Geologists Annual Meeting.
15. April 3rd - White. Brookings-Deuel Rural Water System Annual Meeting.
16. April 12th - Britton. James River Water Development District Board Meeting.
17. April 16th - Brookings. Ground water protection ordinance updates discussion with Brookings Municipal Utility.

Upcoming Meetings -

1. **April 19th - 12 noon** - Sisseton. Lake Region Commissioners Association.
2. **April 20th 5:30 p.m.** - Vermillion. State Geologist Derric Iles retirement reception.

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3. **April 25th & 26th** - Ramkota, Rapid City. South Dakota Association of Rural Water Systems Manager’s Group Meeting.
4. **April 27th - 10:30 a.m.** - Ortonville, MN. Upper Minnesota River Watershed District Technical Advisory Committee.
5. **May 1st - 3rd**- Moorhead, MN. 2018 Joint Minnesota-North Dakota-South Dakota American Water Works Association Surface Water Treatment Workshop.
6. **May 2nd & 3rd** - Pierre. South Dakota Water Management Board.
7. **May 8th - 1:00 p.m.** - Fort Pierre. Climate Outlook Forum.
8. **May 8th - 6:00 (MST)** - Rapid City. West Dakota Water Development District Board of Directors.
9. **May 10th - 9:00 a.m.** - Mitchell. James River Water Development District Board of Directors.
10. **May 10th, - 1:15 p.m.** - Mitchell. Southeast Central County Commissioners District Meeting.
11. **May 14th - 11:00 a.m.** - Kennebec. Randall Reservoir County Commissioners District Meeting.
12. **May 15th - 9:45 a.m.** - South Dakota State University Campus, Brookings. 26th Annual Big Sioux Water Festival.
13. **May 17th - 9:00 a.m.** - EDWDD Office, Brookings. EDWDD May Board of Directors meeting.

Payment Requests - The Manager presented the Board with four (4) payment requests from District-sponsored activities that required Board action. He noted that the requests were in order and consistent with the conditions established by the Board at the time of the awards.

<u>Grant Recipient/Activity</u>	<u>Requested Amount</u>
SDSU/Alternative ag media for nitrate bioreactors (Hua)	\$ 979.36
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SDSU/Bioreactor impacts on <i>E. coli</i> and antibiotics resistance (McDaniel)	\$ 22.45
SDSU/Storm water runoff treatment (Hua)	<u>\$ 192.50</u>
Total	\$ 2,173.67

Motion by Duffy, seconded by Brown to authorize payments totaling \$ 2,173.67 as requested. Motion carried unanimously.

Travel Authorization - The Manager requested Board authorization to attend the 2018 National Nonpoint Source Training Workshop to be held in Colorado Springs, CO, from November 5-8. This is the bi-annual gathering of federal, state, local and tribal entities working on nonpoint source (NPS) issues. In the off years, regional training meetings are held. He has been approached about presenting on South Dakota Non-Point Source success stories and the District’s water quality sampling efforts.

Motion by Moes, seconded by Weatherly to authorize the Managers attendance at the 2018 National Nonpoint Source Training Workshop to be held in Colorado Springs, CO, as requested. Motion carried unanimously.

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2016 Fiscal Audit Report

Rose Grant, CPA, and Katie Voeltz, CPA, of Grant & Williams, Incorporated, of Sioux Falls, reviewed the Final Audit Report of the District finances during 2016. Copies of the report were distributed to Board members.

Ms. Voeltz stated that the District's financial position was very strong. Minor deficiencies (findings) noted in prior Audit reports had been substantially addressed, and that the Manager would be working with the District's accounting firm to further streamline the District's record keeping. There were no substantial accounting errors or significant problems with the District's fiscal accounts and records, beyond the perennial issue of internal control over financial reporting, a common problem with entities with small staff.

Ms. Grant noted that word had been received that the audit report had been reviewed and accepted by the South Dakota Department of Legislative Audit (DLA). The Manager stated that when the formal notice of the DLA approval was received, a public notice was placed in the official newspapers of the District indicating that the audit had been completed and is available for examination, as required by South Dakota Codified Law 46A-3D-4.

Motion by Kassube, seconded by Weatherly to accept and approve the 2016 fiscal audit report. Motion carried unanimously.

Project Updates

SD Game, Fish & Parks - Kip Rounds, Habitat and Access Biologist for the South Dakota Department of Game, Fish and Parks (GF&P) provided an overview of the Departments programs dealing with fisheries management. He also reviewed the procedures by which private individuals, government entities and commercial operations could obtain a permit to use chemical or mechanical means to remove vegetation in South Dakota lakes.

South Dakota State University - Dr. Rachel McDaniel, South Dakota State University (SDSU) Department of Agricultural and Biosystems Engineering (ABE) provided an update on District supported research entitled, "Impact of woodchip bioreactors on Escherichia coli (E. coli) concentrations and antibiotic resistance in tile drainage water." Dr. McDaniel also provided an update on other investigations she is involved with that are looking at the fate and transport of bacteria, particularly *Escherichia coli* (*E. coli*).

Project Assistance Request(s)

SDSU Agricultural Experiment Station - The Manager presented a request on behalf of Dr. John McMaine, South Dakota State University Department of Agricultural and Biosystems Engineering, for District project cost-share assistance. Specifically, Dr. McMaine is working with staff of the Agricultural Experiment Station to assess the impact of using winter rye as a cover crop. The project will involve intense monitoring of nitrate inputs and exports, to include sampling of the nitrate concentrations in water from sub-surface tiles lines beneath the field plots. The request would provide

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support to gather nitrate concentration data remotely, by way of autonomous probes. The initial plan was to physically collect samples from the lines on a weekly basis, but it is expected that the autonomous probes would collect analyses over much shorter time periods, perhaps as often as every 15 minutes. The Manager noted that the research group had only recently become aware of the availability of such technology, and its use on the project would require additional financial resources. The estimated costs for the equipment, which would provide data collection for six (6) discharge lines, is estimated to be up to \$27,000. However, there remain several questions about just what equipment would be needed, so actual costs might be less.

Motion by Duffy, seconded by Moes to provide District cost-share assistance to cover one-third of the costs of equipment acquisition, up to a maximum of \$9,000.00.

Discussion of the motion generated a number of questions that the Manager was unable to address to the satisfaction of the Board.

Motion by Weatherly, seconded by Connelly to table the request. They noted that there were several questions about specific project activities and details that were unresolved, and that while support was likely to be provided eventually, it was important to get answers before making a final decision. Motion carried unanimously. The Manager noted that he would make arrangements to have a project representative at an upcoming Board meeting.

District Program Updates

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Agropur (Lake Norden cheese plant) Surface Water Discharge Permit - The Manager reviewed the terms and conditions of the DRAFT Surface Water Discharge (SWD) permit that has been proposed for the expansion of the Agropur, Incorporated, cheese plant in lake Norden. On April 11th, the Surface Water Quality Program of the South Dakota Department of Environment and Natural Resources (SD DENR) issued a public notice on the receipt and recommendation on the request for a SWD permit.

Under the DRAFT SWD permit, Agropur would expand its existing waste water treatment system, and discharge treated waste water into the Big Sioux River at a point about three miles northwest of the community of Estelline. The DRAFT SWD permit, and associated Statement of Basis, describe the terms and conditions necessary to qualify for such a permit, along with the SD DENR assessment of the environmental impacts of the proposed activities. It includes descriptions of the required treatment processes, along with water quality and water quantity testing, recording and reporting requirements. SD DENR is accepting public comments on the DRAFT SWD permit until May 11th.

Chairman Jarrett raised concerns about the level of nitrates that would be discharged under the proposed activities. Under the conditions of the DRAFT permit, Agropur would be required to measure, record and report nitrate concentrations, measured in milligrams per liter (mg/L), three (3) times per week over the effective life of the permit. Testing is to be completed on samples collected near the end of the treatment process, prior to being piped to the point of discharge. However, there are no limitations in the DRAFT Permit on the actual concentration of NO₃-N contained within the discharge. According to information provided by Agropur, included in the SD DENR Statement of Basis, the effluent from the facility will contain nitrate at concentrations of 37 mg/L.

The Manager noted that during the past several years, the District has been monitoring nitrate concentrations along the length of the Big Sioux River. In general, nitrate levels have been quite low (less than 2.0 mg/L), except immediately below facilities with SWD permits, such as Watertown and Sioux Falls waste water treatment facilities. The elevated nitrate concentrations have been found to persist downstream for many miles, particularly during periods of lower overall stream flow. He noted that one of the District monitoring sites is approximately ½ mile downstream of the proposed discharge location.

Chairman Jarrett expressed concern on behalf of the numerous public water supplies (PWSs) that are located downstream of the point of discharge. Most PWSs utilize the shallow Big Sioux aquifer, which is hydraulically connected to the Big Sioux River. The worry is that if unconstrained discharge of nitrates continues into the river, there will be significant adverse impacts on the PWSs and the tens of thousands of customers.

Motion by Loseke, seconded by Kassube to direct the Manager to prepare a letter on behalf of the Board of Directors expressing concern over the lack of any restrictions on the amount of nitrate that could be contained in the treated waste water to be discharged from the proposed Agropur facility into the Big Sioux River. The comments should note that the Board's concern is based on the cumulative impact of this and other dischargers of nitrates (permitted or otherwise) into the river, and express a desire to address this potential problem before drastic remedial action might be needed to protect regional drinking water supplies. Motion carried unanimously. The Manager noted that he would have the Chairman review the draft letter before sending it as a formal comment on the proposed permit.

Resolution of Recognition - The Manager noted that Derric Iles, State Geologist (Administrator of the Geological Survey Program within SD DENR) was retiring on April 20th, and requested that the Board adopt District Resolution 18-1 (attached). He noted that during Mr. Iles tenure, he had been involved in numerous investigations and activities that provided an invaluable benefit to both the residents of the District and the citizens of South Dakota.

Motion by Duffy, seconded by Kassube to adopt Resolution 18-1 as requested. Motion carried unanimously. Chairman Jarrett noted that both he and the Manager would be present at a retirement function for Mr. Iles on the 20th, and would present the Resolution to him at that time.

Adjournment

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

John Moes, Secretary

DRAFT RESOLUTION 18-1

RESOLUTION RECOGNIZING DERRIC ILES FOR HIS MANY YEARS OF SERVICE TO THE CITIZENS OF THE EAST DAKOTA WATER DEVELOPMENT DISTRICT

WHEREAS, Derric Iles, as a hydrologist and as State Geologist for the South Dakota Geological Survey, has participated in and directed numerous investigations into the water resources of the State of South Dakota, including many such studies within the East Dakota Water Development District; and

WHEREAS, as a result of the work of Derric Iles, the critical groundwater resources of eastern South Dakota have been identified and described; and

WHEREAS, Derric Iles has consistently been a leader in the efforts to protect the water resources within the East Dakota Water Development District through research and education efforts; and

WHEREAS, as a further result of the work of Derric Iles, the East Dakota Water Development District, and other agencies, organizations and individuals interested in the sound management of water resources, have been able to effectively and successfully implement protective measures to insure that current and future residents of the District will have access to clean, good quality groundwater for human consumption and economic and agricultural development:

NOW, THEREFORE BE IT RESOLVED, by the East Dakota Water Development District Board of Directors, that Derric Iles be recognized for his efforts and leadership, and that he be thanked on behalf of all the citizens of the District for his many years of public service.

Dated this 19th of April, 2018, with the approval of the East Dakota Water Development District Board of Directors.

Martin Jarrett, Board Chairman
East Dakota Water Development District

Jay Gilbertson, Manager
East Dakota Water Development District