

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

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MINUTES November 16, 2018

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on November 16, 2018, at the Water Purification Plant, 2100 North Minnesota Avenue, Sioux Falls. Chairman Jarrett called the meeting to order at 9:35 a.m. The following persons attended:

Directors Present

Mark Anderson
Mary Ellen Connelly
Gary Duffy
Martin Jarrett
Dana Loseke
John Moes
Janelle Weatherly

Directors Absent

Kay Kassube

Others Present

Jeff Barth, Minnehaha County Commission Guanghui Hua, South Dakota State University John McMaine, South Dakota State University Jesse Neyens, City of Sioux Falls Public Works John Parker, Minnehaha Conservation District Tim Stefanich, City of Sioux Falls Public Works

Staff Present

Barry Berg
Tanner Clausen
Jay Gilbertson

Administrative Items

<u>Approval of Agenda</u> - The Manager requested addition of a Project Assistance Request from Dr. Guanghui Hua, South Dakota State University (SDSU).

Motion by Loseke, seconded by Moes to approve the agenda as amended. Motion carried unanimously.

Minutes - The Board reviewed the Minutes of the October 18th, 2018, meeting.

Motion by Anderson, seconded by Weatherly to approve the Minutes of the October 18th, 2018, meeting of the East Dakota Water Development District Board of Directors as presented. Motion carried unanimously.

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

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

<u>Report of Meetings and Conferences</u> - Directors Anderson, Connelly and Loseke attended the October 18th tour of the Sioux Falls waste water treatment facility hosted by the Friends of the Big Sioux River in Sioux Falls.

Director Anderson attended a public informational meeting on the Big Sioux River flood prediction model on October 23rd in Sioux Falls.

Chairman Jarrett reported on the October 25th meeting of the Lake Madison Development Association.

Director Loseke attended the Iowa/Minnesota Drainage Research Forum held in Owatonna, MN, on November 13th.

Directors Loseke and Moes attended the Livestock Development Forum held in Brookings on November $15^{\rm th}$.

The Manager briefly commented on the following meetings he attended:

- 1. **October 22nd** Madison, MN. Lac qui Parle/Yellow Bank Watershed Restoration and Protection Strategy (WRAPS) meeting.
- 2. October 24th & 25th Deadwood. South Dakota Association of Rural Water Systems (SDARWS) Managers Group Meeting.
- 3. October 25th Rapid City. West Dakota Water Development District Executive Committee.
- 4. October 26th Salem. Vermillion Basin Water Development District expansion discussion.
- 5. **November 1** Redwood Falls, MN. Minnesota River Basins AREA II/Redwood-Cottonwood Rivers Control Area Legislative Gathering.
- 6. **November 5th 8th -** Colorado Springs, CO. US Environmental Protection Agency National Non-Point Source Pollution Workshop.
- 7. **November 13th -** Owatonna, MN. Iowa/Minnesota Drainage Research Forum.
- 8. **November 15th** Brookings. East River Electric Livestock Development Forum.
- 9. **November 15th** Milbank. Lake Region County Commissioners meeting.

Upcoming Meetings -

- 1. **November 17th 10:00 a.m.** Bramble Park Zoo, Watertown. 'Healing the Earth Water Seminar
- 2. **November 26th 5:30 p.m.** City Environmental Office, 1017 E. Chambers St., Sioux Falls. Sioux Falls TMDL Update Public Meeting.
- 3. **November 30th 9:30 a.m.** Central Electric Cooperative, 25487 403rd Avenue, Mitchell. Dakota Rural Action CAFO Information Forum.
- 4. **December 5th 1:00 p.m.** Brookings. Brookings County Conservation District Board of Supervisors.
- 5. **December 5**th & 6th Matthews Training Center, Pierre. SD Water Management Board.

- 6. **December 6th 10:00 a.m.** Downtown Hilton Holiday Inn, Sioux Falls. Big Sioux River Watershed project Steering Committee.
- 7. **December 6th 1:00 p.m.** Downtown Hilton Holiday Inn, Sioux Falls. Big Sioux River Water Summit.
- 8. **December 10th 10:00 a.m.** Matthews Training Center, Pierre. SD Nonpoint Source Task Force.
- 9. **December 11th 11:45 a.m.** Convention Center, Sioux Falls. Ag United Annual Luncheon.
- 10. **December 11th 4:00 p.m.** Lake Area Technical Institute, Watertown. Lake Kampeska Masters Plan Open House.
- 11. **December 13th 9:00 a.m.** Kelly Inn, Yankton. South Dakota Invasive Mussel Summit.
- 12. **December 20th 1:00 p.m.** EDWDD Office, Brookings. December EDWDD Board of Directors meeting.

<u>Payment Requests</u> - The Manager presented several payment requests from District-sponsored activities. 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:

Grant Recipient/Activity	Red	quested Amount
Town of Oldham/Drinking water system facility plan development		\$ 1,000.00
SDSM&T/Water quality data trend analysis (Kunza)		\$ 798.63
SDSU/Use of agricultural residue in nitrate bioreactor (hua)		\$ 227.96
	Total	\$ 2,026.59

Motion by Duffy, seconded by Weatherly to authorize payments totaling \$2,026.59 as requested. Motion carried unanimously.

Project Assistance Request(s)

SDSU Storm water Filtration Project - Dr. Guanghui Hua provided the Board with an update and summary on the District-funded project entitled, "Development of Mixed Media Filtration for Stormwater Runoff Treatment in South Dakota." The project explored options for creating small-scale filtration basins into which municipal storm water could be directed with a goal of reducing the sediment, nutrient and/or bacteria load they are carrying before they enter a river/stream. The project started with laboratory tests to assess the applicability of various media under various conditions, leading to a field demonstration located adjacent to the Camelot Intermediate School in Brookings. Results suggest that a mixed media of natural rock products and iron/steel scraps are effective at reducing bacterial and nutrient loads in storm water runoff.

Dr. Hua is proposing to pursue additional funding to continue this line of investigation. He has developed a companion project, entitled "Bacteria Removal from Storm water Using Steel Byproduct Filters," with the goal of evaluating the long-term performance of a field steel byproduct filter for *E. coli*/bacteria removal in storm water. Laboratory experiments will also be conducted to evaluate different environmental factors that can affect *E. coli*/bacteria removal using steel byproduct filters. As with the original project, primary funding (\$70,000) is being sought from the United States Department of Transportation Mountain Plains Consortium. However, this grant source does require one to one

match. SDSU would provide \$40,000 in in-kind support, and Dr. Hua requested \$30,000 from the District.

Motion by Duffy, seconded by Anderson to provide District cost-share assistance of up to \$30,000 to Dr. Hua and SDSU in support of the project, "Bacteria Removal from Storm water Using Steel Byproduct Filters," as requested, subject to the project also receiving support from the USDOT Rocky Mountains Plains Consortium. Motion carried unanimously.

Regional Water Resource Activities Updates

<u>Friends of the Big Sioux River</u> - Dana Loseke, Chairperson of the Friends of the Big Sioux River, provided the Board with an overview of organizations activities and function, and to provided updates on topics of mutual interest and concern.

City of Sioux Falls - Tim Stefanich, City of Sioux Falls Public Works Department, briefed the Board on 'recent' reports of aquifer contamination from perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). He noted that the chemicals PFOA and PFOS were widely used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials that are resistant to water, grease or stains. They were also used for firefighting at airfields and in a number of industrial processes. It is in the latter role (fire fighting at airfields), that the shallow Big Sioux Aquifer in and around the Sioux Falls airport that has apparently resulted in problems. Detection of these chemicals at very low levels was first noted several years ago, and use of any impacted wells has been suspended. Monitoring continues, and while detections have been minimal, the wells remain off-line. The City is working with the Air National Guard to remediate the area.

<u>Grant Conservation District</u> - John Parker, District Manager for the Minnehaha Conservation District, provided the Board with an overview of organizations activities and function, and to provided updates on topics of mutual interest and concern.

<u>SDSU Agricultural & Biosystems Engineering</u> - Dr. John McMaine, SDSU Department of Agricultural & Biosystems Engineering, provided an update on his efforts on the District supported efforts to promote Low-Impact Municipal Development. He provided examples from several workshops that have been held, and images of a rain installed in Sioux Falls.

Adjournment There being no further District business, Chairman Jarrett declared the meeting adjourned at 12:53 p.m. John Moes, Secretary