



East Dakota Water Development District
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MINUTES
October 17, 2013

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on October 17, 2013, at the Terry Redlin Environmental Center, Bramble Park Zoo, 800 10th Street NW, Watertown. Chairman Jarrett called the meeting to order at 9:35 a.m. The following persons attended:

Directors Present

Lois Brown
Mary Ellen Connelly
Gary Duffy
Martin Jarrett
Kay Kassube
John Moes
Roger Scheibe
Jerry Soholt

Others Present

Pat Callan, Town of Florence
Bonnie Dybedahl, SD Farm Bureau
Nathan Edwards, SDSU State Climate Office
Roger Foote, Upper Big Sioux River Watershed Project
Guanghui Hua, SDSU Civil & Environmental Engineering
Jesse Johnson, SD Corn
Todd Kays, First District Association of Local Governments
John Maursetter, Lake County
Dennis Skadsen, Northeast Glacial Lakes Watershed Project
Dennis Today, SDSU State Climate Office

Directors Absent

Mark Anderson

Staff Present

Jay Gilbertson

Administrative Items

Approval of Agenda

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

Minutes - The Board reviewed the Minutes of the September 19th, 2012 meeting. Director Connelly suggested that language be added on page 5 under the section describing the project assistance request from the Brookings Municipal Utilities that would clarify why they were undertaking the installation of the observation wells. The Manager suggested the following language be added, "**Mr. Witt indicated that this effort was instigated in part by planned development adjacent to the well field.**"

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

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Financial Reports - The Board reviewed the September 2013 Financial Report.

Motion by Duffy, seconded by Kassube to accept the September 2013 Financial Report. Motion carried unanimously. Chairman Jarrett then asked that the reports be placed in the District files.

Meetings and Conferences - Director Moes attended the October 16th meeting of the Lake Pelican Water Project District in Watertown.

Director Scheibe reported on a meeting of the Sustainability Council for the US Dairy Industry held in Madison, WI, on October 15 & 16.

Chairman Jarrett attended the September 26th meeting of the Lake County Clean Water Committee in Madison.

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

1. **September 23** - Lake Benton, MN. Lincoln-Pipestone Rural Water Wellhead protection Plan public hearing.
2. **September 26** - Madison. Lake County Clean Water Committee.
3. **September 27** - Pierre. South Dakota Board of Water and Natural Resources.
4. **October 2** - Milbank. City of Milbank Twin Brooks collection galleries source water protection discussion.
5. **October 7** - Watertown. Sioux Rural Water System source water protection discussion.

Upcoming Meetings -

1. **October 19 - 9:00 a.m.** - South Dakota State University (SDSU) Oak Lake Field Station, White. Oak Lake Field Station Research Retreat.
2. **October 23 & 24 - 9:30 a.m.** - Kelly Inn, Yankton. 2013 South Dakota Planners Association Annual Conference.
3. **October 30 - 8:00 a.m.** - Student Union, SDSU, Brookings. Eastern South Dakota Water Conference.
4. **October 31/November 1** - Deadwood Mountain Grand, Deadwood. South Dakota Association of Rural Water Systems Manager's Group Meeting.
5. **November 7 - 10:00 a.m.** - Matthews Training Center, Pierre. South Dakota Board of Water and Natural Resources.
6. **November 14 - 8:00 a.m.** - SDSU Extension Regional Center, 2001 East Eighth Street, Sioux Falls. 2013 Iowa-Minnesota-South Dakota Drainage Research Forum.
7. **November 14 - 9:00 a.m.** - Huron. James River WDD Board of Directors Meetings.
8. **November 21 - 9:30 a.m.** - Water Reclamation Plant, 4500 North Sycamore, Sioux Falls. November EDWDD Board of Directors Meeting.

Payment Requests - The Manager presented three payment requests:

South Dakota State University - At the October 2011 Board meeting, the District pledged up to \$60,438 in support of a project entitled, "Agricultural Subsurface Drainage Impacts on Hydrology in Eastern South Dakota." The request is for \$3,895.52 for project expense reimbursement for September 2013.

United States Geological Survey - At the May 2012 Board meeting, the District pledged up to \$25,000 in support of a project entitled, "Assessment of Climatic Effects on Streamflow Characteristics in eastern South Dakota." Work on the project has been completed and we have received a request for full payment of the District's share, \$25,000. A report on the project will be presented at the November Board meeting.

Town of Kranzburg - At the May 2013 Board meeting, the District awarded cost-share assistance of ten percent (10%), up to a cap of \$1,000, toward the completion of a facilities plan of the drinking water distribution system for the Town of Kranzburg. The work has been completed, at a total cost of \$10,000, and the town has requested payment of the District share.

The Manager indicated that the total of the three requests was \$29,895.52. Further, payment would complete the District's obligation for the USGS and Kranzburg projects.

Motion by Duffy, seconded by Kassube to authorize payment of \$29,895.52 to cover the three requests as presented. Motion carried unanimously.

Project Assistance Requests

Town of Florence - Pat Callan, President of the Town Council for the Town of Florence, presented the Board with three requests for project assistance. The community requests funding to offset the cost of developing engineering studies/facility plans for its drinking water and waste water systems. The drinking water study is expected to cost \$10,000, and the waste water study \$12,500. The Town has requested and been granted funding for these studies through the State's Small Community Planning Grants Program (SCPGP), receiving \$8,000 and \$10,000 respectively for the studies. On behalf of the Town, Mr. Callan requested District cost-share assistance with the balance of the projected costs for the two efforts.

The third project is in response to local concerns that the community's waste water lagoons may be leaking. They have engaged the services of an environmental consulting firm to conduct an investigation, which will involve the collection of five drill cores from the margins of the lagoons, which will be tested for permeability. The total projected project cost is \$3,500. This effort is not eligible for SCPGP funds.

The Manager noted that for these types of efforts and overall project costs, District cost-share assistance would typically be fifty percent (50%) of the projected local share. In the case of these three efforts, this would amount to up to \$1,000 (10% total project costs) for the drinking water facility plan, up to \$1,250 (10% total project costs) for the waste water facility plan, and up to \$1,675 (50% of total project costs) for the lagoon investigation. This would amount to a total of up to \$3,925.

Motion by Kassube, seconded by Moes to provide District cost-share assistance to cover fifty percent of the local costs for the three studies, up to a cap of \$3,925. The motion carried unanimously.

SDSU Civil & Environmental Engineering Department - Dr. Guanghui Hua, Assistant Professor in the SDSU Civil and Environmental Engineering Department (CEE), presented a request for District cost-share assistance for a proposal he is developing for funding by the US Geological Survey 104(b)

Program managed by the SDSU Water Resources Institute (WRI). Entitled “Nutrient Removal from Agricultural Subsurface Drainage Using Denitrification Bioreactors and Phosphate Adsorbents,” the project would be a joint effort of faculty from CEE (Drs. Hua and Schmit) and the Agricultural Engineering Department (Drs. Hay and Kjaersgaard).

The objective of this project is to assess the viability of using steel by-products, such as steel wool or metal shavings, as an adsorption media to remove phosphorus in tile drain water. The proposal is for laboratory work only, with field trial to follow if things look promising. The project would be conducted in concert with research already underway on agricultural drainage tile water treatment being conducted by Dr. Kjaersgaard and others at SDSU.

The total proposed budget for the one-year project is \$70,122. \$23, 153 is to be requested from the 104(b) Program, with SDSU providing \$40,969 as in-kind match. Dr. Hua’s request of the District is for \$6,000 in support. District funds would be used to cover supply and materials costs.

Motion by Kassube, seconded by Duffy to pledge District cost-share assistance of \$6,000 toward support of the project entitled, “Nutrient Removal from Agricultural Subsurface Drainage Using Denitrification Bioreactors and Phosphate Adsorbents,” as requested. Motion passed with Directors Brown, Connelly, Duffy, Jarrett, Kassube, Moes and Soholt in favor, and Director Scheibe opposed.

Water Resource Activities Updates

Upper Big Sioux River Watershed Project - Roger Foote, Project Coordinator for the Upper Big Sioux Watershed Project, briefed the Board on project activities. One activity of note is an effort to use a former water treatment plant located on the shore of Lake Kampeska for phosphorus removal. Lake water is drawn into the plant and held in tanks that contain a variety of algae. As the algae grow, they draw nutrients, including phosphorus, from the water. After a period of time, the water is returned to the lake. He noted that initial results are promising, but they have learned that a wide range of factors impact the efficiency of the process. He invited the Board to the facility when the next meeting is held in Watertown.

Northeast Glacial Lakes Watershed Project - Dennis Skadsen, Project Coordinator for the Northeast Glacial Lakes Watershed Project (NGLWP), briefed the Board on project activities. He noted that while a large part of the project coverage area falls outside of the District, in 2012 the NGLWP expanded to include the watersheds of the Whetstone and Yellow Bank Rivers, which are in Grant and Deuel Counties, and that District cost-share assistance funds are being utilized in these watersheds.

First District Association of Local Governments - Todd Kays, Executive Director for the First District Association of Local Governments, briefed the Board on South Dakota Department of Agriculture (SDDA) County Site Analysis Program (Program). The Program builds on a pilot project funded by the District to identify sites for the location of large animal feeding operations in Brookings and Moody Counties that met county and state set-back requirements and had access to adequate transportation, power and water. The SDDA Program is quite similar, but also covers commercial and industrial development within the agricultural industry. Mr. Kays noted that the support pledged by the Board for CAFO site analysis of Minnehaha and Lincoln Counties in December 2012 would likely go unexpended because of the SDDA Program.

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South Dakota Automatic Weather Data Network - Dr. Dennis Todey, SDSU Extension State Climatologist, and Nathan Edwards, SD Climate Office, provided the Board with an overview of the South Dakota Automatic Weather Data Network (SDAWDN). Eleven automated weather stations are located within the District - South Shore, Lake Cochrane, Oak Lake, Volga, Brookings, Aurora, Flandreau, Baltic, Dell Rapids, Sioux Falls (57th St) and Sioux Falls (Landfill). In January, the Board agreed to provide a grant of \$6,000 in support of the SDAWDN, to be applied toward the District sites as needed. Information from the weather stations can be accessed at the SDAWDN website, http://climate.sdstate.edu/climate_site/ag_data.htm.

Adjournment

There being no further District business, Chairman Jarrett declared the meeting adjourned at 1:15 p.m.

Roger Scheibe, Secretary

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