



East Dakota Water Development District
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MINUTES
May 17, 2012

The Board of Directors of the East Dakota Water Development District (EDWDD) held a regular meeting on May 17, 2012 at the District office in Brookings. Chairman Jarrett called the meeting to order at 9:05 a.m. The following persons attended:

Directors Present

Lois Brown
Mary Ellen Connelly
Vincent Flemming
Martin Jarrett
Kay Kassube
Roger Scheibe
Jerry Soholt
John Weidler

Directors Absent

none

Others Present

Dave Bartel, James River Water Development District
Shirley Flemming, Florence
Jeppe Kjaersgaard, SDSU Water Resources Institute
John Moes, Florence
Ryan Thompson, United States Geological Survey

Staff Present

Jay Gilbertson
Kristi Thielen

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Administrative Items

Approval of Agenda - The Manager asked to have the assistance request from the Town of Florence dropped from the agenda. **Motion** by Soholt, seconded by Brown to approve the agenda as amended. Motion carried unanimously.

Minutes - The Board reviewed the Minutes of the meetings on April 19, 2012. **Motion** by Soholt, seconded by Kassube to approve the April 21st Minutes as presented. Motion carried unanimously.

Financial Reports - The Board reviewed the April 2012 Financial Report. **Motion** by Weidler, seconded by Scheibe to accept the April 2012 Financial Report. Motion carried unanimously. Chairman Jarrett then asked that the report be placed in the District files.

Report of Meetings and Conferences - Directors Brown, Connelly, Flemming, Kassube, Scheibe and Weidler attended the Big Sioux Water Festival in Brookings on May 8th. They noted that former Director Robert Todd was also present as a classroom guide.

Chairman Jarrett attended the Lake County Clean Water Committee meeting in Madison on April 26th.

Upcoming Meetings -

1. May 18 - 12 noon - Clark. Sioux Valley County Commissioners Group.

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2. May 23 - 5:00 p.m. - Webster. SD Game, Fish and Parks Northeast Regional Advisory Panel.
3. May 24 - 5:45 p.m. - Tea Events Center, Tea. Lewis & Clark Regional Water System Annual Meeting.
4. June 5 - 1:00 p.m. - Sioux Valley Energy Building, Colman. Central Big Sioux River Watershed Project Steering Committee.
5. June 8 - Keystone. South Dakota Association of Rural Water Systems (SDARWS) Board of Directors.
6. June 12 - 9:00 a.m. - Day County Courthouse, Webster. South Dakota Association of Conservation Districts (SDACD) Coteau Annual Area Meeting.
7. June 18 - 3:00 p.m. - Community Center, Parker. SDACD Vermillion-Big Sioux Annual Area Meeting.
8. June 21 - 9:00 a.m. - EDWDD Office, Brookings. June EDWDD Board of Directors Meeting.

Project Assistance Request

United States Geological Survey - The Manager reviewed a proposal from the United States Geological Survey (USGS) South Dakota Water Science Center in Rapid City about examining the river/stream gage records in eastern South Dakota. The study, *Assessment of Climatic Effects on Streamflow Characteristics in eastern South Dakota*, would examine the records of long-term river gaging stations in the watersheds of the Minnesota, Big Sioux, Vermillion and James Rivers and assess whether or not variability in flow/discharge could be wholly attributed to climate (precipitation) or if other factors, such as land-use changes, might have impacts. Ryan Thompson, USGS Huron Field Office, reviewed the details of the proposal. The total project cost would be \$45,500. The request to the District is for \$25,000, with the balance to be provided by USGS. Work on the assessment would start this summer, and be completed by April 1, 2013.

The Manager noted that with the ongoing interest in water management/drainage and flooding, such an investigation would hopefully provide a foundation for assessing the extent to which man-made changes may be having an impact. Mr. Thompson indicated that there were a number of stream gaging stations within the District and adjacent areas that should provide a sound basis for assessment.

Motion by Kassube, seconded by Soholt to allocate \$25,000 in District project assistance funds to the USGS for the *Assessment of Climatic Effects on Streamflow Characteristics in eastern South Dakota* study as requested. Motion carried unanimously.

Public Opinion Surveys Regarding Big Sioux River Water Quality

Results of 2006 Survey - The Manager reviewed the findings of the public opinion survey conducted as part of the first segment of the Central Big Sioux River Watershed (Implementation) Project. The survey, intended to gage public attitudes regarding water quality issues in the Big Sioux River watershed, was conducted by a Sioux Falls-based firm (AMR), with input from District staff and Paulsen Marketing, a Sioux Falls-based public relations firm working with the project. A copy of the survey questions was distributed.

Proposal 2012 Follow-Up Survey - The Manager noted that one work plan element of the current Central Big Sioux River Watershed Project (Phase II) is a public opinion survey, similar to that run in 2006. The intent is to re-assess current public beliefs and attitudes concerning pollution in the Big Sioux River, and to evaluate the causes and potential implications of changes in these attitudes/opinions since 2006.

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Paulsen Marketing has prepared a series of proposals to re-run the survey, which vary according to the number of desired responses. In 2006, there were a total of 149 responses. The results were meaningful, but a larger number of responses would be preferable. Options for generating 200/300/400 responses have been developed. The Manager said the questionnaire would be similar to the 2006 benchmark study, but it was likely that some of the questions would be changed slightly and an additional question or two may be added to reflect current interests. It appears that it will take approximately 6-8 weeks to complete the project once final approval is given to proceed.

The Board had several questions about the relative impact on survey results of the three proposed response rates. They concurred that increasing the number of responses is desirable, but had questions about the necessary number of responses.

Motion by Brown, seconded by Sohlt to table final action of the proposals until the June 21st Board meeting. The Manager indicated that he would get answers to the Board's questions/concerns and present them at that time. Motion carried unanimously.

South Dakota State University Projects Updates

Dr. Jeppe Kjaersgaard, South Dakota State University (SDSU) Water Resources Institute (WRI), provided a summary of several projects that the District has supported.

Nitrates in Ground Water CES Publication - In 1973, the SDSU Cooperative Extension Service published a pamphlet entitled "Nitrates in South Dakota Drinking Water." At the urging of the Manager, SDSU staff have updated this publication. He noted that the basic science and message has not changed, but acknowledged that the nearly 40-year old document required improvements. The new version was released in late April, and can be found on-line at: <http://igrow.org/up/resources/07-2000-2012.pdf>. Printed versions of the document were distributed to the Board.

The Watershed Approach CES Publication - In March 2006, the District agreed to fund (\$3,500) the publication of a document discussing the importance of addressing water resources issues at the watershed scale. The document was to be modeled after a similar publication developed by the CES in Texas. A variety of staffing complications at SDSU had kept this effort from moving forward, but this spring Dr. Kjaersgaard and others have brought this document forward to the point that a final draft is now under review. CES will make the document available on its website, and the District funds will be used to print paper copies for general distribution. The Manager noted that this publication should be a particularly important resource for the recently announced State Watershed Advisory Task Force as it begins its deliberations on how best to address state-wide water management issues.

Tile Outlet Bioreactors - Last spring, the Board approved funding in support of an effort to assess the use of on-site bioreactors in the removal of nitrates from water emanating from agricultural tile outlets. Drain tile effluent generally contains relatively low concentrations of sediment and those contaminants that tend to bind to such particles (like phosphorus). However, concentrations of soluble substances, like nitrate, tend to be quite high. The investigation will examine the practicality of removing some of these excess nitrates from the tile water before it enters rivers and streams. Dr. Kjaersgaard stated that the demonstration sites had been selected, and installation of the bioreactors should be completed by the end of the summer.

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Assessment of Winter Application of Manure - The District is providing support, along with several other interested parties, in a WRI investigation of the impacts of application of manure during the winter. The practice is one that is generally discouraged, but also one that is widely used, particularly when storage becomes an issue. The study is intended to identify, if possible, those conditions under which the practice would be least problematic.

As part of the effort to monitor outflow from their demonstration plots, WRI staff installed cameras at the sampling points that take pictures every few minutes. He showed two time-lapse sequences of images from earlier in the year - one showing outflow resulting from snow melt, and the other recording runoff following a major spring storm.

Adjournment

There being no further District business or issues for consideration, Chairman Jarrett declared the meeting adjourned at 11:40 a.m.

Roger Scheibe, Secretary

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