

WATERWAYS

A Quarterly Publication of the Iowa Drainage District Association

Volume 3, 2011

Control of Missouri River Flooding debated

The “Missouri River Compromise” article that appeared in the last issue of “Waterways”, laid out the perspective of Robert K. Schneiders on controlling flooding along the Missouri River. Mr. Schneiders suggestions did not sit well with Tom Waters who is the chairman of the Missouri Levee and Drainage District Association. I invited Mr. Waters to submit his own thoughts on the issue. They are shown below.

Congressional leaders and State officials are beginning to talk about taking a hard look at the management of the Missouri River flood control system. While the current high releases are primarily due to well above normal snow pack and rainfall occurring late in the season, it is true the management of the River has changed over the past several years.

The focus for the operation of the reservoir system has been pushed and tugged over for years. Interests in the Upper and Lower Basins have wrestled for decades over how to best manage this most valuable resource. However, more recently environmental interests have jumped into the debate and a focus on endangered species and habitat creation has gained the upper hand in the operation of the system.

Flood Control has taken a back seat in discussions relating to the operations of the system. If ever there was a time for flood control interests to speak out it is now. There are many ways to help the threatened and endangered species found in and along our River, but using a system designed to protect human lives and property should not be one of them. The federal government has spent and continues to spend millions of dollars on superficial studies and half-baked science experiments in an effort to answer questions,

which boil down to how to use the flood control system to benefit the environment and wildlife.

It is high time the question be changed back to how we can best use the Missouri River Reservoir System to improve Flood Control, protect human lives, property and the economy of the Midwest and the nation. The focus on flood control has been misplaced and it is my hope, if nothing else good comes from this horrific event we are experiencing, the focus on flood control will once again be placed in the forefront, where it has always belonged.

If you agree, I encourage you to support and thank those elected officials with plans to bring this issue before Congress and the Administration.

Iowa Supreme Court hears Calhoun Railroad Case

The Iowa Supreme Court heard the case of Chicago Central & Pacific Railroad Company v. Calhoun County on Tuesday, Sept. 20. The issue in the case is who has the responsibility to pay for repairs on drainage structures that are in railroad right-of way. So far, two courts have sided with the county board of supervisors and found that the responsibility should be the railroads.

Both IDDA and ISAC have filed “friend of the court” briefs in support of Calhoun County. ISAC Executive Director John Torbert attended the hearing.

It is not known when a decision will be rendered.

Waterways is a quarterly publication of the Iowa Drainage District Association. Comments can be directed to the association at:

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Iowa/Minnesota/South Dakota Drainage Research Forum Announced

It is Iowa's year to host the annual Iowa/Minnesota drainage forum. This year, South Dakota will also be participating. The forum, which is jointly sponsored by ISU, the University of Minnesota and South Dakota State University, will be held Tuesday, November 22 at the Arrowwood Resort and Conference Center in Okoboji, Iowa.

It is designed for anyone interested in agriculture drainage research issues and projects. Registration will begin at 8 a.m. and the program will run from 9 a.m. to 4 p.m. The program will feature results and updates on drainage research and on-farm products by university and agency researchers. The program is designed for all drainage stockholders including state and federal agency staff, county supervisors, crop consultants, academics, contractors, farmers and anyone else interested in drainage research issues in the upper Midwest. Early registration is \$60 and on-site registration is \$75. Additional information can be found at the program website—<http://www.aep.iastate.edu/drif/> Registration information is also available by phone at: 515/294-6429.



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Ag Drainage blamed for lake pollution in Minnesota

A comprehensive new study pinpoints agriculture—specifically, half a century of artificial field drainage—as the primary force behind the massive runoff of sediment that is adding pollution to the Mississippi River and threatening the future of Lake Pepin.

The study, presented recently at a conference in St. Paul, identifies with new precision the sources of sediment that is slowly filling in Lake Pepin (MN.), one of the state’s recreational jewels, and coursing down the Mississippi to the Gulf of Mexico, where it contributes to a massive “dead zone” that cannot sustain aquatic life.

Scientists said it’s the latest in a growing body of evidence indicating that transformation of the land from prairie and wetlands to corn and soybeans—not, as some have argued, more rain and natural erosion—has accelerated the rate of sedimentation.

“It’s the weight of the evidence,” said Peter Wilcock, a geography professor from Johns Hopkins University.

He was not involved in the study but attended the University of Minnesota’s annual Water Resources Center conference, where it was presented.

The issue is controversial because it lands squarely on farmers and the economic choices they face, especially at a time of high prices received for corn and soybeans. Tile drainage has helped make fields along the Minnesota River valley some of the most productive land in the country.

Some say the study leaves unanswered questions about the forces that are in play.

“I don’t think they’ve proven their point,” said George Rehm, a retired University of Minnesota soil scientist who now leads research for an industry group, the Minnesota Agricultural Water Resource Center.

70 years of data

The new research, conducted by scientists at the St. Croix Watershed Research Station and the University of Minnesota, included examination of rainfall, flow

and land use changes along the 21 tributaries to the Minnesota River.

Researchers analyzed more than 70 years’ worth of precipitation and other data from the river basin’s 21 watersheds. They found that field drainage and loss of wetlands across the landscape is adding enormous volumes of water to the state’s second-largest river. That added volume scours the fragile, sandy banks, sending millions of tons of sediment downstream to the Mississippi, where it settles out in Lake Pepin.

Jason Ulrich, the university research fellow who presented the findings, said that rainfall increased between 6 and 15 percent in eight of the 21 watersheds. Flow—the volume and speed of water—in the Minnesota increased by about the same amount, he said.

But since much of the rain is held on the land or absorbed by plants, it does not account for all the added volume in the river.

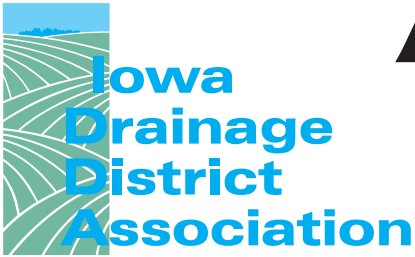
“Sixty to 90 percent is unaccounted for,” he said, leaving field drainage as the primary contributor.

Dan Engstrom, a scientist with the St. Croix Research station, said much of the water that now ends up in groundwater and in rivers used to lie across the surface of the land and slowly evaporate. That process is part of what’s been lost, he said.

Rehm said, however, that drainage may actually slow erosion of the river banks because it takes water out of the ground quickly, which prevents the river banks from sloughing away after heavy rain falls.

The contentiousness of the debate among scientists, farmers and agricultural interests is similar to the debate about climate change, Wilcock said. The science has become entangled in advocacy, he said. That interferes with getting to the more important research—whether sedimentation can be slowed or reversed, and what that will cost.

“Do we really need to answer the question to take action?” he asked.



Annual Conference

December 2, 2011

Starlite Village Hotel • Fort Dodge, Iowa

7:45 a.m. Registration Opens

8:30 a.m. IDDA Annual Business Meeting

9:00 a.m. Mr. Dean Lemke, Natural Resources Engineer Supervisor, Iowa Dept. of Agriculture and Land Stewardship: "Iowa's Strategy to Reduce Nutrients to Water and the Impact on Drainage Districts"

9:45 a.m. Mr. Kevin Griggs, Griggs Environmental Strategies: "The Iowa Agricultural Mitigation Bank"

10:20 a.m. Ms. Jamie Ridgely, Vice-President, Planning and Projects, Agren, Inc.: "The Raccoon River Master Plan"

11:00 a.m. Dr. Matt Helmers, Iowa State University: "Bio-mass Production Impacts on Water Flow and Nitrate Loss"

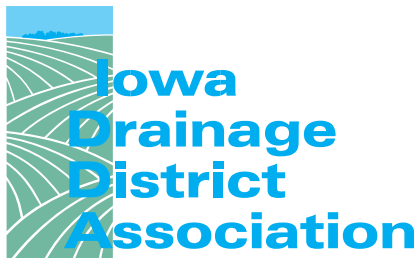
11:40 a.m. Sponsor Presentations

12:15 p.m. Buffet lunch

1:00 p.m. Mr. Chuck Gipp, Deputy Director, Iowa Department of Natural resources: "Managing Change at the Iowa DNR"

1:45 p.m. Adjourn

Registration Form



Annual Conference

December 2, 2011

Starlite Village Hotel • Fort Dodge, Iowa

Name _____

County/Company _____

Address _____

Phone _____ E-mail _____

Please use one registration form for each person attending. **Pre-registration cost is \$40. On-site registration will be \$50.** Registration fee includes morning coffee & rolls, noon meal, all conference handouts and conference gift item. Speakers and some sponsors are exempt from the registration fee. On-site registration will also be available. Registration refund requests must be in writing.

Send check, warrant or money order to:

IDDA
c/o TP Anderson Company
P.O. Box 509
Humboldt, IA 50548

Questions – Contact IDDA Executive Director John Torbert at 515/221-1961 or jtorbertidda@mchsi.com.

Please return registration form no later than Monday, Nov. 28, (if possible) for purposes of meal count. Refund requests must be in writing.

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Executive Director Notes

Well fall is here with the beautiful colors, combines rolling in the fields and a chill in the air. Of course, that means that the IDDA annual conference is right around the corner. The program for this year's conference and a registration form are found elsewhere in this newsletter. We have an excellent program put together for you and hope you can attend on December 2.



On another note, in late August, I was invited along with some other Iowans to attend a meeting of the Gulf Coast Ecosystem Restoration Task Force in Biloxi, Mississippi. The task force was appointed by President Obama to make recommendations on healing the coast from the BP oil spill. Dean Lemke from IDALS headed our contingent and addressed the task force on "Seeing the Gulf from Iowa: Farmer to Farmer Exchange." Iowa is consistently recognized by gulf coast groups for the work going on in this state to reduce nitrogen and phosphorus transport down the Mississippi River to the Gulf. It was a fascinating trip and we were treated to some real southern hospitality.

I have started my county visits again so will try to get to all IDDA member counties again before July 1st.

Hope to see you all on December 2 in Ft. Dodge.

Unattributed Wisdom

"Good habits should be cultivated; bad ones plowed under."

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Iowa CREP celebrates 10 years



Iowa Secretary of Agriculture Bill Northey hosts the CREP celebration.

On September 23, a ten year 'birthday' celebration was held for the Iowa Conservation Reserve Enhancement Program. Under the CREP program, advanced computer technology is used to site and build wetlands that remove nitrate from tile drainage water. Removal of nitrate helps protect drinking water supplies and reduce hypoxia in the Gulf of Mexico. The program is implemented in partnership with the USDA Farm Service Agency. Research at Iowa State University has demonstrated that strategically sited and designed wetlands can remove 40 – 90% of nitrates and over 90% of herbicides from cropland drainage waters.

Since the program's beginning, 54 wetlands have been built and 18 more are currently in the developmental stages.

The celebration was held at Reiman Gardens in Ames. IDDA received a "Certificate of recognition" during the celebration for being a strong supporter of the CREP program.

New Buffer type shows promise

A new type of conservation structure, first tested in Iowa, shows promise as a way to remove nitrate and other nutrients from tile drainage water before it reaches streams, rivers and other surface water, conservation researchers say.

The structure, called a saturated buffer, incorporates a shallow tile drain that redirects field tile drainage along the buffer edge. This action raises the water table and causes the drainage water to seep through the root zone of already-established buffer strips, planted with grass, trees or bushes.

Research sponsored by the Iowa State University's Leopold Center and conducted along Bear Creek in Story County, has shown that levels of nitrate entering streams is significantly reduced by the saturated buffers.

Tests in three states

To further test this promising technology, the national Agricultural Drainage Management Coalition (ADMS) plans to establish a total of nine saturated buffer strips evaluation sites next year in Iowa, Illinois and Indiana. The nearly \$400,000 cost of the research is being funded, in part, by a Conservation Innovation Grant from the USDA's Natural Resources Conservation Service. The remaining funding is being provided by cash and in-kind contributions from ADCM members.

Saturated buffers appear to be another valuable tool that farmers in Iowa and other Midwestern states can use in their continuing effort to reduce nitrates and other nutrients from surface waters while continuing to produce the crops the world demands, said Rick Robinson, environmental policy advisor for the Iowa Farm Bureau.

Farmers in Iowa have already voluntarily installed a wide variety of other structures such as buffer strips, wetlands and terraces. "It's going to require a broad array of technologies to further reduce nutrient loss while maintaining productivity from our land," Robinson said. "These saturated buffers can be part of that. Progress is critical as environmental activists push for mandatory rules to impose numeric water quality standards for states in the Mississippi River basin,"

The agricultural drainage community is also excited about the saturated buffer technology, said Char-

lie Schaffer of AgriDrain Corp, who is President of ADCM. The buffers give farmers another tool to protect the environment while producing crops, he said.

Treats Drainage Water

The key to the saturated buffer is that it treats drainage water, while traditional buffer strips typically treat only surface runoff, said Dan Jaynes, a soil scientist at the USDA's National Laboratory for Agriculture and the Environment (formally known as the Soil Tilth Lab).

"Instead of allowing the water to shoot right under the buffer to the stream, this gives us an opportunity to intercept it and take some of the nitrate out," Jaynes said at a recent field day to highlight saturated buffer research. "We are really able to get a better use out of our buffer strips with this," he said.

Jaynes and ISU's Tom Isenhardt have conducted research on the technology since the saturated buffer was installed at the Bear Creek site in the fall of 2010.

At the same time, Jaynes said, it's important that the saturated buffer does not hinder drainage from the field and is not cost prohibitive to install. "We want them to be able to stay completely out of the farmer's way."

Source – Iowa Farm Bureau Federation.

Agenda IDDA Business Meeting December 2, 2011 8:30 am

- Call to order
- Introduction of IDDA board and staff
- Remarks by President Harlan Hansen, Humboldt County Supervisor
- Approval of 2012 Legislative Objectives
- Nominating committee report - Phil Condon, Webster County Supervisor
- Remarks by Executive Director John Torbert
- Adjourn to IDDA annual meeting

FSA adopts new position on drainage ditch maintenance in CRP buffers—local committees to decide

The United States Department of Agriculture’s Farm Service Agency (FSA) has decided to turn the decision of whether or not to allow maintenance of drainage ditches on Conservation Reserve Program (CRP) acres over to county FSA committees. This is a major victory for IDDA and other ag groups - specifically the Iowa Farm Bureau (IFB) – who had actively lobbied for the change.

Earlier this year, federal policy that had been in place since 1998 was changed to prohibit maintenance activities on CRP land during the primary nesting season for game birds and other wildlife of May 15 to August 1st. Prior to the policy change earlier this year, waivers had routinely been granted for such maintenance work. While the reason for the prohibition was never explained, it was felt that the FSA was reacting to legal challenges over its decision to allow haying and grazing on CRP land.

The IFB, in their analysis of the issue said that weather had far more impact on pheasants, quail and other bird species although habitat was important. The IFB stated

that “Given the temporary, limited and periodic nature of ditch maintenance (once approximately every thirty years, but then only on 3% of the district’s ditches), it seemed that this action would have a minimal effect, if any, on nesting habitat.”

Rick Robinson, IFB environmental policy advisor urged any farmers and landowners who may have lost program benefits or had CRP contracts cancelled due to the earlier policy change should check with their county FSA office to seek relief from those agency actions. Robinson added that some penalized farmers may also see refunds for CRP contracts that were terminated with rental payments due. Others may have had payment reductions assessed for noncompliance and may be due a reimbursement.

It should be noted that the FSA policy change is limited in scope. It only applies to ditch maintenance and specifically excludes tiling work.



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