## Sedimentation on the Mo. River accelerated during 'II flood

By Randy Dockendorf

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The historic 2011 Missouri River flooding accelerated sedimentation and will affect the river for years in ways still not known, according to a river expert.

Tim Cowman, director of the Missouri River Institute (MRI) in Vermillion, spoke on the flooding during Monday's annual meeting of the Missouri Sedimentation Action Coalition (MSAC) in Wagner.

Cowman told the Press & Dakotan that the flooding's aftermath continues to exert a profound impact on the river itself.

"Moving this much water down the free-flowing river for three months at a time has had a significant impact. It's starting to impact the channel itself," he said.

"There has been a lot of sediment moved around on the channel. There has also been significant degradation and the significant deposition of sand in the channel. Now, we have a lot more sandbars. They are up to 10 feet out of the water, which is something unusual."

The flood has impacted backwaters adjacent to the Discovery Bridge at Yankton and at Ponca State Park, Cowman said. In addition, the three-month inundation of the cottonwood forests weakened the trees' root system, with many cottonwoods that could normally withstand high winds now blowing over.

"The river will pull itself back to equilibrium over the next few years," he said. "It's a much different river, and it will be several years like this."

This year's snowpack and precipitation in the Missouri River basin are back to normal and below-normal levels, Cowman said. However, he warned that a similar scenario existed last year before historic rainfalls in the upper basin during late spring

overburdened the system.

"The Missouri River still has a lot of power. We had gotten complacent and felt that we had tamed it when we put in the dams," he said. "But 2011 showed us that a lot can still happen to overwhelm what engineers put on the river. We need to keep that in mind as we go forward."

The lasting impact of the flood and the movement of sediment were on the minds of people who spoke to the Press & Dakotan prior to Monday's meeting.

To capture the flood's ongoing impact, MSAC commissioned more than 700 aerial images last November after the floodwaters receded, according to MSAC executive director Sandy Korkow of Springfield.

An estimated 89,700 acrefeet of sediment accumulates in the six Missouri River reservoirs annually, Korkow

However, she wasn't prepared for what she saw in the aerial photos.

"It has always been shocking to see how much sediment is in the river. But to see its movement from the air, it just puts things in perspective. You know it's there and it's not going to run away," she said.

"We're not sure how much more sediment entered the reservoirs as a result of the flooding. We know the energy involved gave the sediment more fuel to move, but it wasn't going past the dams as some might feel. People thought the sediment would get flushed down the system, but we know it didn't and is still in the reservoirs."

MSAC is finalizing a 16-minute video using the November shots, showing sediment's threat to all of the river's authorized purposes, Korkow said.

"I did hear a presentation at a river conference in Pierre on Friday, and the Corps is looking at different modelings and methods of forecasting (the river)," she said. "I think everyone is trying to gather more information and move forward in a positive way to better predict the future."

Mary Hurd and her husband, Rick, are still dealing with the flooding's aftermath for their riverfront property. The Hurds live about 15 miles west of Springfield.

Mary Hurd said several friends last weekend brought back the couple's dock that had floated downstream to Niobrara, Neb., even with a 1,000-pound weight attached to the structure.

"We have reclaimed 250 acres of our bottom ground. We thought we would try planting, but it just didn't look very good, so we may hold off a year," she said. "We still have a lot of sand that blew out of our family park and picnic shelter. Yesterday, the wind blew so hard from the south that we had such a sandstorm that we didn't see any fields south of the road."

The remaining sediment after the massive force of floodwater at 160,000 cubic feet per second – more than twice the old record – shows that flushing isn't a likely option for moving sediment, said MSAC technical coordinator Howard Paul.

"We could look at Dr. (Howard) Coker's proposed pipeline. We are also trying to find ways to reduce the amount of sediment getting into the river," he said. "This sediment issue is a major problem. It has to be addressed because it's not something that's quietly going away."

Despite the remaining sediment problems, MSAC has raised the issue's visibility since the organization was founded in 2000, according to MSAC chairman Larry Weiss.

"The flood last summer raised the visibility of sediment and how it impacts us," he said. "We are continuing to push what we can with the resources available to make





These aerial photos show the Missouri River near Vermillion before the 2011 flood (TOP) and after the flooding. The high waters dumped tons of sand and other sediment downstream. Vermillion is located at the top-center of both images.

(Photo: Missouri Sedimentation Action Coalition)

improvements."

Weiss saw the flooding and sediment impact as a Pierre resident, but he was still shocked at what he saw downstream.

"The amount of sediment on the banks right below Sioux

City was amazing," he said. "In Pierre, there was a lot of sediment moved, which brings to light the fact that there is bed erosion and bank erosion."

Despite the challenges of sedimentation, Weiss remains hopeful for the future.

"This (problem) didn't start yesterday, and it's not going to end tomorrow," he said. "People shouldn't become discouraged. We have made a lot of progress since we started this organization."

## Ry Cleo Frickson

By Cleo Erickson
Excerpts from the Plain Talk

1973

At the January 2nd,
Chamber Board meeting four
new members were installed.
They were Dr. Harold Fletcher,
Rosemary Ballard, Tom
Anderson and Paul Larson.
Larry Mart was named the new
President with Rosemary
Ballard, Vice President and
Dave DeRouchey, Treasurer.
Retaining board members are
Dale Clement, Joe Reedy and
Norris Erickson.

The City Council and Chamber of Commerce sent a telegram last week to the Milwaukee Railroad urgently requesting more boxcars for Vermillion. There was a half million more bushels of corn harvested in the area than was expected. The railroad has cabled back that they are doing the best they can in a difficult situation, but "they cannot make any promises"

make any promises".

A new store in town is

"Frabrific Fabric Center" that is opening in the former Tiny Tiger building. The store will have hundreds of materials to choose from and a large variety of laces and all sewing needs. Personnel will be Jan Green and Lynn Hoesing. The general manager will be Pat Forred.

The Senior Citizens Center has leased a bus from Dayhuff-Cleaver. It is a 12 passenger Chevrolet. People who wish to be placed on the route should call the Senior Citizen Center. The bus is not just for the use of the Senior Citizen Center but is also to serve others need.

Mark Sunday, February 18, 3pm on your calendar as this is the date of the dedication of the new Middle School.

The new Gibson store had their grand opening last week. Vermilion is fortunate to have these new businesses in town.

Over 70 Senior Citizens attended the Hawaiian Party at the Center on Friday. Several members that made a recent trip to Hawaii shared their experiences and over 80 slides

## **SESQUICENTENNIAL HIGHLIGHTS**

were shown of the trip. Nora Hyde and Anna Hansen were in charge of the lunch that consisted of Hawaiian punch, tea sandwiches, fresh pineapple bits and coffee from a Hawaiian tea table featuring a fruit center piece and Aloha napkins they had purchased there. Several members wore muu mus, Aloha sun hats and bead leis. A grass skirt and other souvenirs were on display.

The Middle School will offer a "History of Vermillion" course to all 7th and 8th grade students.

Lil' Duffer says, "We think we have the best shakes and malts in Vermillion and we want everyone to try them so---"on Saturday only, March 24, 1973 malts and shakes are 10 cents each---no limit.

Stop soaking the pots and

pans, stop at Modern Electric and get a new Kitchen Aid Dishwasher with the exclusive SOAK CYCLE that does your soaking automatically.

Burbank is celebrating its Centennial in June this year. Anyone with items of information concerning the town and its history should contact Agnes Malloy.

Many people in the area have shown an interest in the history of the Plain Talk. Carl Rauk was the first to call in and give this information. The Plain Talk was started in 1883 by Thomas H. Ayers, a Democrat. He accompanied Governor Andrew E. Lee to Pierre as his private secretary after his election in 1890. He sold the Plain Talk to W. R. Colvin (father of Bob Colvin who owned the Broadcaster for

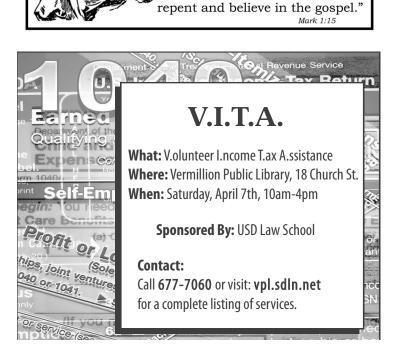
many years). After his death, it was published by A. L. (Patsy) Davenport until his death in 1921 when it was purchased by C. T. Boltad. After his death in 1939, C. D. DeVany and his son Guy bought it. Guy continued after the death of his father until it was sold to W. S. Gibson in 1949 and Mr. Gibson later sold it to the present owners. The Plain Talk bought the Dakota Republican from A. L. Lathrop and J. B. Townsley in 1947 and combined the two papers.

Mrs. Pearl Howey says that Lake Coma was located on the SW ¼ of Section 4 in Prairie Center Township and was on a

farm owned at that time by Anders J. Opland. She found the information in the 1901 Clay County Atlas. Mrs. Mary Nelson tells us that it dried up during the draught in the early 1930's and Mrs. Nelson adds that Lake Emilene is south of the location of Lake Como and used to cover 17 acres. It is reported to be 7 ½ feet deep. It was located on the farm of G. A. Anderson with a small portion of it on the farm of Fred Brownson. Young people came from miles to skate there. No one knows where either of the names of the lakes came from.







God's message of hope for us.

"Hear the word which the

"Christ Jesus came into

the world to save sinners."

The time is fulfilled and

the kingdom of God is at hand:

Lord speaks to you."



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