

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records

Subgroup/Office of Origin: Americorps

Series/Staff Member: General Files

Subseries:

OA/ID Number: 24233

FolderID:

Folder Title:

Project Information: Flood Press Clips

Stack:
S

Row:
66

Section:
1

Shelf:
3

Position:
1

Joel
Berg

APA2099 01-25 Landowners, Tennessee Officials Clash Over Levees
01/25/1994 06:59 AM DO 38 Lines

Copyright 1993
The Associated Press
All Rights Reserved

MEMPHIS, Tenn. (AP) _ The U.S. Army Corps of Engineers are reviewing 35 applications from landowners to keep temporary levees up along the Mississippi River.

There may be as many as 60 such requests, officials said. The levees were put up by panic-stricken farmers who faced ruin because of flooding last summer.

Some environmentalists want the levees torn down, warning they could be dangerous to wetlands and farms downstream if flooding reoccurs.

Levees also stop the natural ebb and flow of water across the Mississippi bottomlands and sometimes pollute swamps.

Dan Sherry of the Tennessee Wildlife Resources Agency said the levees "were supposed to go up and then come down _ that's what temporary means."

There has been at least one lawsuit filed by a farmer claiming a levee builder was responsible for the ruining of his crops.

Those in favor of keeping the levees say it is expensive and unnecessary to tear down and rebuild every time it floods.

"It'll always happen again," said Hilton Fields, of Tunica, Miss. The farmer said his cotton fields get soaked anytime the river gets within four feet of flood stage. But Fields said he had no interest in defying officials if ordered to tear his levees down.

"They were nice to let us block it off and try to save our crops," Fields said. "We'll do whatever they want."

The Corps of Engineers is making a map of levees on the river from aerial photographs.

"We'll put all this together and make our decision to issue (permits) or take it down," said Randy Clark, a wildlife biologist with the Corps.

No permission is needed to build levees where federally regulated wetlands are not affected.

_AP-NY-01-25-94 0051EST

What are the causes of flooding?

11-24-93

The floods of 1993 in the Midwest have been touted as floods of the century. They are even being called a natural disaster. Some say that the heavy rains are part of the lingering effects of the 1991 Mount Pinatubo explosion in the Philippines. Some say it was a subsidized flood. Who is right?

Flooding can only occur when society persists in its attempt to wrest flood plains from rivers. Billions of dollars have been spent in the United States trying to do so. Flooding occurs when people build too close to an innocent little stream or draw. Flooding occurs when people build lake-side cabins below the lake's high water mark.

In just about every case, flooding boils down to lack of knowledge, poor planning or poor judgment. No one wants to take the blame for that.

Of course large rainfall amounts in 1993 were bound to cause some flooding. But the root cause was manmade. The crowning blow came from subsidized wetland drainage, which in turn spells subsidized flooding. Stream-straightening could be included in the root cause of flooding because it speeds runoff and tends to eliminate the wetlands associated with floodplains.

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

Our nation's flooding problems or subsidized flooding should probably be traced back to the Swamp Land Acts of 1849, 1850 and 1860. These acts granted all swamps and overflow lands to selected states, the first one being Louisiana. By 1860 these grants were extended to Iowa and Minnesota.

The original purpose of the grants was to enable states to reclaim wetlands by construction of levees and drains. No thought was apparently given to the areas that would receive the runoff or that anyone would build in floodplains or try to farm them.

In Iowa, wetlands were turned over to the counties, which bartered them or gave them away. Today more than 95 percent of wetlands in the drainage areas above Des Moines are gone. (That area is known as the southern extension of the Drift Prairie and part of an incomparable wetland ecosystem called the Prairie Pothole Region.) The area was unique for its efficient runoff retention. No man could design a better flood control system, but it is gone, and Des Moines suffered the consequences.

For almost a century our lawmakers and land development promoters had no idea that they would be the cause of the most costly flooding imaginable. It has been only in the last few decades that government has begun to recognize the values of wetlands. Even today many leaders and individuals of influence do not appreciate those values, with flood control probably of greater importance than wildlife habitat.

It may be long past time that consensus be gained in how one looks at flooding. Definitions of flooding range from a deluge (a situation where water may be out of place) to simple inundation (water is where it belongs). Very often we are confronted with photos of flooding that simply are wetlands with ponded water. This water is where it is supposed to be, and in its proper context should not be looked on as flooding.

(Part one of six.)

11-25-93

Not all wetlands are the same

Much unnecessary controversy is being stirred up over the definition of wetlands by some groups to create confusion and allow wetland destruction without having to answer to the public.

Actually, the definition of a wetland is quite simple. The soil and plants dictate whether a site is wetland or not.

Wetlands are transitional between terrestrial and aquatic systems. They support plants that grow in water or in oxygen-deficient conditions. The major point of conflict in determining what is a wetland and what is not has been the difficulty in discerning the break between ephemeral ponding (non-wetland), which is generally short-lived and in uncultivated situations, and temporary ponding (wet meadow), where there is evidence of hydric soil.

Temporary wetlands are generally cultivated when they occur in cropland and usually dry up early in the growing season. They are excellent flood protection because they dry up before runoff occurs. They are also the backbone for early spring food production for migrating water-loving birds.

Temporary wetlands are unique in providing an abundance of invertebrates upon ponding, even though these organisms have been dormant during dry periods.

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

Seasonal or shallow marsh wetlands may be planted during dry years when they occur in cultivated fields. They are high producers of forages (up to three tons per acre) when managed for river grass, slough sedge or Reed canary grass. These wetlands are also excellent flood control basins as they are usually dry when runoff occurs. During wet years when basins hold water past the growing season, higher-than-normal waterfowl production results.

In soils mapping, seasonal wetlands correlate well with poorly drained soils. Lacking a precise definition of farmed wetlands, these soils are often fall-tilled so it may be said they are farmed basins.

Semi-permanent or deep marsh wetlands are ponded year-around except during drought periods. They are relied upon for late season water. In spite of holding water year-around, they are still excellent flood control basins because a high percentage of them do not overflow or have no outlet. A high proportion of this type of wetland in northeast Iowa, southwest Minnesota and southeast South Dakota are now gone.

The consequences of wetland drainage is something decision-makers and lawmakers have persisted in sweeping under a rug. They simply did not and do not want to face the reality of past actions.

Instead, billions of dollars have been spent to correct or attempt to mitigate the damage caused by wetland drainage — "flood control" dams, channel-straightening, dikes, levees, etc.

Dikes and levees tend to reduce the volume of streamflow and cause additional flooding upstream. It can have the opposite effect, too. Recently the mayor of Canton, Mo., proclaimed, "We got help from broken levees up north. Anything that gave way up there was a plus for us."

Without doubt, wetland drainage has put a lot of land into cultivation. In the 1993 major flood problem area of South Dakota, Minnesota and Iowa, this wetland conversion figure is about 6 million to 7 million acres. Some of those former wetlands are commanding annual upland payment rates of at least \$50 to more than \$100 dollars per acre under USDA's Conservation Reserve Program.

(Part two of six.)

What are the causes of flooding?

11-26-93

Various sources say it is impossible to gauge precisely how much of this year's flooding could have been prevented or reduced if wetlands would have been preserved. Is it necessary to be precise?

Studies were made in the Devils Lake Basin of North Dakota on water storage capacity of natural wetland depressions. They showed that depressions store about 72 percent of the total runoff volume from a two-year frequency runoff and about 41 percent of the total runoff volume from a 100-year frequency runoff, which was the magnitude of the 1993 runoff.

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

The Devils Lake Basin is similar to the rest of Drift Prairie, except the parts in southwest Minnesota, southeast South Dakota and northwest Iowa. They contain deeper depressions and are (were) capable of storing a much larger percent of runoff. Due to this alone, the wetlands in the major 1993 flood area were capable of taking care of considerably more than 41 percent of a 100-year frequency runoff. Many cities and towns would have been happy to see just half of the runoff they got.

Depressions in the 2.4 million acre Devils Lake Basin could store 619,000 acre feet in a 100-year runoff. Shallow depressions comprise about 412,000 acres or a little more than 17 percent of the Basin.

Historically the drainage area above Des Moines, Iowa, of 6 million to 7 million acres probably contained about 1.5 million acres of wetlands. Based on the Devils Lake study and Iowa's topography, with wetlands undrained, there would have been at least 2 million acre-feet less runoff for Des Moines to handle. That is the equivalent of more than 3,000 square miles inundated with water one foot ty and Spink County combined.

The above information may not be precise, but the general picture is there for anyone to see. Sioux Falls can look upriver if it cares to, as can many other towns and cities hit with water they did not expect. It was worse than it should have been.

(Part three of six.)

A history of wetland mismanagement

One has to be astounded by the United States' history of wetland mismanagement. Until the 1970s, there had been more than a century of wetland disposal without much regard as to where the water was going or how it got there. An extended period of out of sight-out of mind.

Up until the '70s, local, county, state and federal funds were being spent for wetland drainage. In recent years, tax money for this purpose has been drying up, but drainage continues in spite of the demonstrated values of wetlands. In the drift prairie alone, wetland drainage continues at the rate of about 33,000 acres annually.

The federal government began recognizing the value of wetlands in the 1960s. Many county and state governments still are not of that mind and some officials still do not favor wetland preservation by any means.

Until the 1970s, we had one arm of the federal government preserving wetlands and another arm providing cost-share and free engineering for wetland drainage. Now we are at the point of paying landowners to preserve wetlands.

We have spent billions of dollars to drain and dispose of wetlands and billions of other dollars for "flood control" structures. As long as society insists on living on flood plains, the costs for flood control will continue. The corps of engineers does not mind — it only preserves its empire.

Local entities are balking at paying even a small part of the repair bill for federally constructed levees. Other dikes and levees will be repaired with a government cost-share of 75 or 80 percent. Congress does not hesitate to spend federal money this way.

Prior to the building of the chain of Missouri River dams, Elmer T. Peterson in his book, "Big Dam Foolishness," stated that in the long term our electrical power would come from coal and not hydropower. He is being proven right. His main point, however, was that it was foolishness to permanently flood hundreds of thousands of acres of land to protect people and businesses on a few thousand acres of land.

Those that persisted in "developing" flood plains for their use and profit at public expense won out.

(Part four of six.)

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

Once a flood plain, always a flood plain

The fact that many wetlands in the drift prairie will take care of a summer's rainfall of 60 inches without overflowing usually falls on deaf ears. Yet, we have many areas in the upper part of the James River Basin that are capable of doing so.

Unfortunately many have been altered. In the extreme upper end of the James River, Wells County drain number one opened a closed basin that provides an outlet for over 1,200 acres of wetlands. In a year like 1993, the runoff from this area alone probably totalled more than 2,500 acre feet. Not too far away the Heimdal-Hamberg Slough complex has been in the long-term process of being altered.

In southwest Stutsman County, N.D., a deep marsh basin has a 10-foot gash cut out of its side. Not far away is Rainy Slough, with a 20-foot gash, so water cannot get deep. Near Hurdfield, N.D., a large deep marsh basin has a 15-foot gash.

These are examples of areas that would have never come close to overflowing, even with a 100-year runoff. Fortunately in many cases like this the runoff does not reach the James River, so problems created at lower elevations are local.

More than 250,000 acres of wetland have been drained in the six counties through which the James River flows in North Dakota. If half of this additional runoff went to other watersheds or ended up in local closed basins, this would still mean that more than 125,000 acre feet of additional North Dakota water ends up in the James River heading south. It is little wonder that the flood plains at Columbia experience inundations in about one-of-three years now.

Everyone from real estate developers to farmers knows that the cheapest land is subject to ponding. Then if public entities will spend money to "protect" their property, their land suddenly becomes high-priced land. This "protection" gives the false sense of security needed to secure users and buyers.

There is an old saying, "Once a flood plain — always a flood plain." The summer of 1993 should have brought his lesson home.

When one looks at the area hardest hit by flooding in 1993, there appears to be a balance between the area drained and the area flooded. The flood storage capacity for 100-year events in the drift prairie alone in an undrained state would have been more than six million acre feet (over 9,000 square miles, one foot deep).

Add to that the 30 million acres of wetlands that have been lost in the six upper Mississippi River states, and the flood storage lost by wetlands in place (undrained) could have held back over 30 million acre feet of runoff, the equivalent of over 45,000 square miles of water one foot deep.

(Part five of six.)

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

Slowing course of wetland destruction

12-3-93

It is doubtful that the wetland drainage situation can be reversed to reduce flooding to a appreciable degree. However there are some things that can be done to slow wetland destruction.

Removing undrained wetlands and restored wetlands from the tax rolls appears to be the most powerful incentive to preserve wetlands. This way everyone will share in the benefits and everyone will share in the costs. As it is now, the incentive is to destroy and make the wetland more "productive" and there is no disincentive to transfer a private "problem" to a public problem.

An added disincentive to drain would be to tax drained wetland at a much higher rate than other land. This way the person or party draining water for private gain would tend to pay for the cost of taking care of the added runoff.

Prior to the inception of the federal wetland preservation program, the usual comment was that those interested in wetland preservation should buy the wetlands or pay for their preservation. Local or state governments were not interested, so the U.S. Department of Interior began to purchase wetlands in the 1960s. When the success of the program became obvious, opposition was not long in coming and continues today.

State or local governments have not offered much as a solution. They could use tax abatements as an incentive, but fail to seriously consider them. They do not see it as a way to cut costs for roads, bridges or sediment removal.

Programs to implement wetland restoration have been funded to a limited degree in recent years and have been very successful. However funding will be a problem. It cost billions of dollars to do the drainage work, so it will take a long time to undo even a part of the damage. One thing in favor of wetland restoration is that it will be cheaper to restore a wetland than it was to drain it.

Some local governments are not providing any public financial assistance to flood victims except for help to relocate outside the flood plain. This is probably the best and cheapest long-term solution to flooding.

When you see a depression with water ponded in it — thank the landowner. After all, that individual made the decision not to drain. They decided not to pass the water on downstream for someone else to bear the expense of its journey or make room for it at its destination.

There is a bumper sticker that says, "Drained Sloughs are Everybody's Flood & Water." That message should have been well understood in 1993.

GUEST



Erling "Punch" Podoll, of rural Frederick, is a retired biologist who was with the USDA Soil Conservation Service.

EDITORIAL

Guest editorial: A technical description of a wetland was inaccurate in a guest editorial by Erling "Punch" Podoll on Nov. 25, due to an editing error. The statement should have read, "Temporary wetlands correlate well with poorly drained soils. In soils mapping, seasonal wetlands correlate well with very poorly drained soils. Lacking a precise definition of farmed wetlands, these soils are often fall-tilled so it may be said they are farmed basins."

Subject: AGRICULTURE :agriculture the team is scheduled to give a privated bri
BUSINESS W

* UPI

Mail Id: IPM-197-931129-011700777

Farming Today

By United Press International

-29-

Canadian flood-fighters honored by USDA

A team of Canadians who helped with flood recovery in the U.S. Midwest this year will be honored today (Monday) by the U.S. Department of Agriculture. The team is scheduled to give a privated briefing from the U.S. Soil Conservation Service, the Canadian Embassy and the USDA before being feted at a luncheon.

Tomorrow, the group will be given a tour of the White House.

The team is from the Prairie Farm Rehabilitation Administration, based in Winnipeg. The 10 PFRA engineers and technicians spent the last three months at several locations in the U.S. midwest, helping the Soil Conservation Service. Their tasks included managing the rebuilding of dikes, levees and pumping plants.

Much of the Midwest was hit by record or near-record flooding that destroyed or damaged crops and infrastructure.

-29-

Phrase: (FLOOD* AND IOWA) OR (FLOOD* AND ILLINOIS) OR (FLOOD* AND KANSAS)

Copyright
 BUSINESS WIRE [BW01W] via NewsNet
 Monday November 29, 1993
 Update #: 9 Item #: 25

NATIONAL WEATHER SERVICE GEARS UP FOR MISSISSIPPI RIVER FLOOD THREAT; SPEEDS
 INSTALLATION OF CLIENT/SERVER COMPUTERS AND X-DESIGNER GUI TOOL TO IM

prediction

News/Business Editors and Computer Writers

WASHINGTON--(BUSINESS WIRE)--To maximize its ability to respond to the next flood season this spring, the National Weather Service Office of Hydrology is launching the installation of a new client-server computer system at its offices along the Mississippi River.

The Office of Hydrology is replacing a mainframe-based system with workstations in its Kansas City and Minneapolis offices ahead of schedule, using the X-Designer GUI builder to speed application development.

Eventually, all 150 National Weather Service Forecast offices will be switched to workstations linked over wide area networks, streamlining communications as the River Forecast Centers monitor daily river conditions at more than 3,000 sites throughout the United States.

"Because the ground is already so saturated along the Mississippi and Missouri Rivers, we want to make sure the most advanced technical resources are in place to help with river forecasting before next spring's snow-melt period," said George Smith, research hydrologist, Office of Hydrology.

"Although our mainframe-based system did a good job last year, we're making improvements in both simulation and visualization capabilities by moving to distributed computing."

Previously, all NWS River Forecast Centers obtained data from a central batch-oriented mainframe in Suitland, Md. The new system, tested during the past two years in the Tulsa, Okla., Center, improves communications among the offices, as well as collaboration among local networked workstations.

The computer system upgrade is part of an entire National Weather Service modernization known as AWIPS -- Advanced Weather Interactive Processing System -- led by prime contractor Planning Research Corp. (Lake Fairfax, Va.).

While PRC works on the overall forecasting system, the Office of Hydrology has geared up for the flood season by developing a river forecasting application using X-Designer (distributed by V.I. Corp., Northampton, Mass.).

X-Designer speeds application development, works across heterogeneous computer platforms and creates user interfaces that can be easily ported to whichever software applications PRC ultimately selects for the entire National Weather Service.

"We had to have a product that would be transparent across IBM RS/6000 and Hewlett-Packard 750 workstations, would generate ANSI-standard C and Motif calls, and that would be fail-safe no matter which products PRC eventually picks," said Smith.

* "After writing our original interfaces by hand for the Tulsa

Lives adrift, flood victims try to be thankful

By Jim Salter
ASSOCIATED PRESS

FOLEY, Mo.—The dining room table where Ferd Ruegg would have carved his Thanksgiving turkey lies in a heap. The television that would have shown parades and football games is smashed against a wall of his condemned house.

"The only thing I'm going to be thankful for is that we're moving to the hills, away from the river," said the 44-year-old Ruegg, his determined composure wavering.

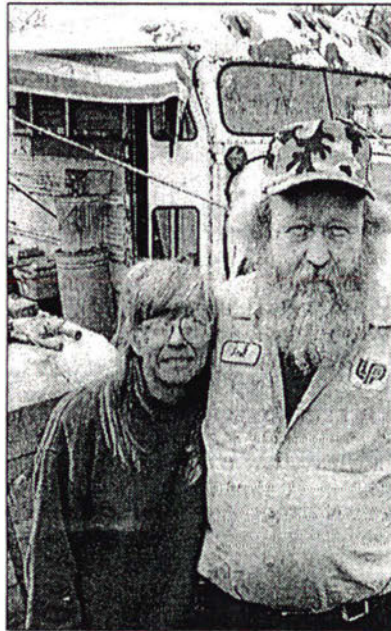
He and his wife, Mary, and a son are living in a school bus as they wait to build a house to replace the one lost to last summer's flooding along the Mississippi River. Their seven grown children, most of whom lived within shouting distance, are scattered.

It has been nearly four months since the floods. Dozens of people died and thousands of families were displaced. Whole towns were virtually obliterated.

One of those towns was Foley, a community of mostly white frame houses about 50 miles north of St. Louis. All but two or three of the 75 homes were damaged, Mary Ruegg said.

Sadder still, the flood seemed to drown the town's spirit. Only a couple dozen of Foley's 200 residents have returned since the waters receded in August, she said.

Before the flood, most of the



AP photo

Ferd and Mary Ruegg of Foley, Mo., stand in front of the school bus they've lived in since floodwaters ruined their home.

Ruegg clan lived on 12 acres in the Foley Bottoms, about a mile from the Mississippi. The Rueggs and their 26-year-old son, Ferd III, lived in the main house Ruegg's grandfather built in 1935.

Their twin 18-year-old daughters, another son and an 80-year-old boarder lived in the surrounding cabins.

In June, the Mississippi began to rise. Eventually, 15 feet of water covered all but the roof of the main house. "And fish were eating my garden," Mary Ruegg said.

Not wanting to leave the property, the Rueggs tied a pontoon boat to a tree in the front yard and moved on board.

In September, it began getting too cold at night to stay there, so Ruegg began fixing up the old school bus he'd bought years ago for deer-hunting trips.

"When it really gets depressing is at night when that bus gets ice-cold," Mary Ruegg said. The bus is heated with a small gas furnace she bought with \$250 she won playing the lottery. "That's about the only good luck we've had lately."

State, federal and county officials agreed the buildings on the property were a total loss. They also agreed that because of the danger of another flood, the Rueggs could not rebuild there.

Only the main house was insured. The Rueggs used the insurance money to buy land in the hills west of town, where they plan to build a new home and hope to be in by spring.

But a new house fails to replace their snuffed-out dreams.

"I planned to retire there," said Ruegg, who works for an insulation manufacturer. "I intended on the cabins to become rental property. I was going to try to

take an easy life if the cabins would pay for themselves, maybe work six more years and then retire and work a backhoe.

"But it didn't pan out that way."

The Rueggs, married 20 years, said their fierce devotion to one another has helped pull them through the ordeal.

Living on the boat, fighting off snakes, bugs and looters, "it would get so depressing at times I literally thought about diving in ... but I couldn't do that to him," Mary Ruegg said.

"Without her, I don't know what I'd do," Ruegg said. "We have one another, and that's what really counts."

This Thanksgiving will be spent with a neighbor, with turkey and all the trimmings. But it won't be the same.

"My kids are so far apart and so scattered because of the flood—that's what hurts the most," Mary Ruegg said.

At a grocery just up the road, Judy Nealy said the Rueggs' story is the same all over town.

"It used to be you'd come in here, look out the window and see people working in the garden and hanging clothes. Now I don't see anybody."

Staring out that window, Nealy pointed to a glimmer of hope: "I see a few people over there are starting to decorate for Christmas. It's helping to cheer things up."

getting more standardized code than we could possibly generate ourselves."

The Office of Hydrology is also working with groups overseas in China, Switzerland and Sweden that are interested in using U.S.-developed applications to enhance their river forecasting.

Using X-Designer has eased the usability and training process in these countries. "By providing mouse- and icon-driven interfaces, we've eliminated a lot of the language barriers associated with strictly text-based interfaces," noted Smith.

X-Designer not only provides a means for creating Font Sets, but its Compound String Editor makes it possible to set up multi-segment Motif strings. "As business becomes more global, so must applications. We have optimized the internationalization features of Motif, while keeping X-Designer easy-to-use," said Derek Lambert, president, Imperial Software Technology.

X-Designer, a highly intuitive and easy-to-use graphical user interface builder for the X Window System, is the fastest interactive tool available for creating, prototyping and testing Motif-based user interfaces. Manufactured by Imperial Software Technology Ltd., (Reading, United Kingdom), it is distributed in the United States by V.I. Corp., Northampton, tel: 800/732-3200.

X-Designer is widely used by leading corporations, universities and U.S. government agencies including the Department of Defense, Department of Commerce, Army Corps of Engineers, Internal Revenue Service, Air Force, Army and Navy.

-0-

Note to Editors: See X-Designer at FedUNIX Booth No. 615
V.I. Corp.

Midwest braces for another flood season

By Richard Meryhew
Staff Writer

1/3
Minn Star Trib

River flows are slowing, precipitation is down and the 90-day forecast for the Upper Midwest calls for a drier-than-normal winter.

Good signs all after the flood of the century.

Still, many in the Midwest are crossing their fingers. Flood season 1994 is just 10 to 12 weeks away, and much of the Corn Belt is still drying out and cleaning up from last summer's great soaking.

"Definitely, we shouldn't drop our

guard," said Dean Braatz, a hydrologist for the National Weather Service River Forecast Center in Minneapolis, which charts river activity in the upper Mississippi River basin. "We're not out of the woods yet."

No one is predicting flood levels similar to last summer — at least not yet. And not all weather experts and river watchers agree on the potential for serious flooding this spring.

In general, however, most acknowledge that conditions are ripe for modest flooding along the upper Mississippi and its tributaries.

"Unless it is exceptionally dry in the remaining winter and spring, there will be flooding," said Stanley Changnon, retired principal scientist with the Illinois Water Survey.

"It'd probably be normal spring flooding on the Mississippi and its tributaries. You'll be reaching flood levels, but not by a whole lot."

Changnon estimates that there is a 75 percent to 80 percent chance for spring flooding in the Upper Midwest and a 30 percent to 35 percent chance for severe flooding.

Braatz figures the odds are less than that.

based largely on October and November soil moisture readings for much of the Upper Midwest.

"I'd accentuate the word 'potential,'" Braatz said. "The potential is there if all these things come together. But right now, so much is unknown."

"We could have little pockets of flood potentials, and it'd be greater in some areas than others. That's not unusual."

The degree of flooding, if it occurs, depends on several factors, including soil saturation levels, snowfall, spring rain and

Flood continued on page 3B

Flood/Dry weather has helped speed up evaporation

Continued from page 1B

the rate of snow melt.

Recent soil-moisture readings compiled for the Weather Service for the Dakotas, Minnesota, Wisconsin and Iowa showed moisture levels slightly above normal, and soils generally drier than a year ago, when heavy fall rains soaked the ground and paved the way for heavy spring runoff.

Braatz said dry weather during the past three months has allowed much of the water that accumulated over the summer to evaporate faster than many weather watchers anticipated.

"What I'm saying is that the soil moisture is not that much different than what we had prior to the last year," he said. "It's nearing normal. But the jury is still out. [The chance for flooding] all depends on the warm-up and rain in the spring."

Braatz said he also has been encouraged by river readings from Guttenberg, Iowa, and St. Louis that show that the rate of flow for the Mississippi River is slightly below normal for this time of year. The readings are another indication that the ground is

drying out and the runoff has slowed.

"I put a lot of stock in those numbers," Braatz said. "Things are, I think, in pretty good shape."

Changnon said that damp soil in the southern half of the Upper Midwest, particularly in Illinois and Missouri, is still cause for concern. He said he drove across Illinois two weeks ago and found "water ponded everywhere."

He said the soil in some parts of the Upper Midwest is wetter than it has been in years.

"We still have levee districts in northern Illinois that are flooded," said Richard Sparks, a river researcher with the Illinois Natural History Survey, a state agency. "We have flooding here in Havana [Ill.] The groundwater table is so high. If we have slightly above average rains, or perhaps even normal rains, in the spring of 1994, we are likely to experience major flooding again."

Another reason some prognosticators have expressed concern is the continued presence of El Nino, a mass of warm water in the southern Pacific

"Knowing what I know, I'd certainly be getting ready."

Stanley Changnon with the Illinois Water Survey

that some weather experts believe contributed to the steady stream of Midwest thunderstorms last summer.

Normally, El Nino remains on the western side of the Pacific Ocean. But its presence on the eastern side during the past two summers has led some researchers to theorize that there's a direct link between El Nino and the cooler, wetter summers of the past two years.

"There are signs the water temperatures out there are warming up again," Braatz said.

Changnon said he isn't prepared to establish a link between El Nino and the floods.

"No doubt, much of the weather pat-

terns of North America are generated somewhere in the Pacific," he said. "It has some influence on North America, but not all. Most of the El Nino work I've seen ... has not shown much relationship between El Nino conditions and the Upper Midwest. It's mostly far West and some in the South."

Still, Changnon said, it's probably wise for Midwesterners to brace for more flooding.

"Knowing what I know, I'd certainly be getting ready," he said.

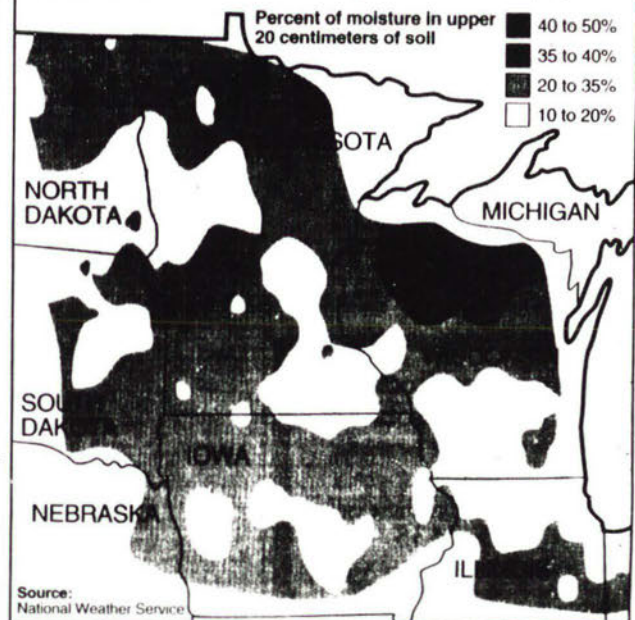
To be sure, some folks aren't taking chances.

In Illinois, communities are stockpiling sandbags. In Missouri and Illinois, where summer flooding was the worst, transportation officials have delayed some work on roads, highways and bridges until the threat of spring flooding passes.

"I'd say the chances of a major flood aren't good," Braatz said. "But then, if you'd have told me at the beginning of this [past] year that we'd get record flooding, I would have said, 'No way.'"

Soil isn't so soggy

Soil moisture readings in the Upper Midwest are nearing normal for this time of year, which diminishes the chance of significant runoff come spring.



Star Tribune Graphic

a0628 r w ----- Flood-Student Aid,250

11-09 1:59p

Extra Aid For Students From Flood States

WASHINGTON (AP) - Students from Midwest states devastated by last summer's floods will get \$20.9 million in additional aid, including funds for work-study programs on flood cleanup and recovery, the Education Department said Tuesday.

"As part of the flood assistance effort, we are working with schools and the states to involve students in community service, which offers an education in itself," Education Secretary Richard Riley said. "Their hard work will aid many struggling to return their lives to normal."

The supplemental aid is in addition to \$30 million in emergency Pell Grants made available to needy post-secondary students in August. The department estimated that 32,000 students would benefit from the total emergency funding.

The \$20.9 million breaks down this way:

- \$8.3 million for work-study programs.

- \$8 million in Supplemental Education Opportunity Grants.

- \$4.6 million for Perkins loans.

The department said Perkins loans and Supplemental Education Opportunity Grants would go to students from nine flood states - Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota and Wisconsin - whose families suffered financial loss in the floods. Students may attend schools in other states.

The work-study funds will be awarded to 81 schools in the flood region. The department said the additional money became available when colleges around the country were asked to refund unspent

*Joel -
FyI. Were
getting radio and
other requests as
well. Thank you
for all of your help!
- Catherine*

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages ▶ 1

To	Joel Berg	From	Catherine Tojicich
Dept./Agency	USDA	Phone #	401-5931
Fax #	720-5043	Fax #	401-2854

NSN 7540-01-317-7368

5099-101

GENERAL SERVICES ADMINISTRATION