

'Twas a Real Struggle, but Nebraska City Saved Its Power Plant



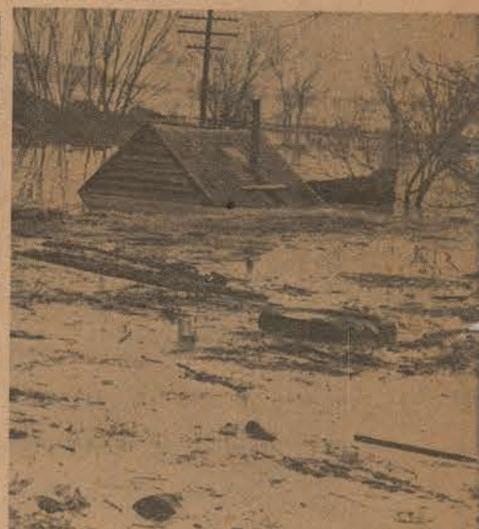
—World-Herald Photo.

Victory—Nebraska City's biggest worry was its power plant. Engineers and volunteers built a dike around the plant, strengthened it with sandbags and won a decision over the river which ran, outside the dike, well above the level of the plant. Seepage water into the plant was kept down by constant pumping.



—World-Herald Photo.

Lines Were Kept Busy—Field phone in one hand, orange in the other, Charles Platt, Omaha, mixed business with breakfast.



—World-Herald Photo.

It's Happened Before—Oft-flooded Hamburg, Ia., had no chance to miss this one when the Plum Creek levee broke east of Nebraska City. The photo at left shows the south end of the business district. At right a garage was engulfed by water and debris that included a tractor tire.



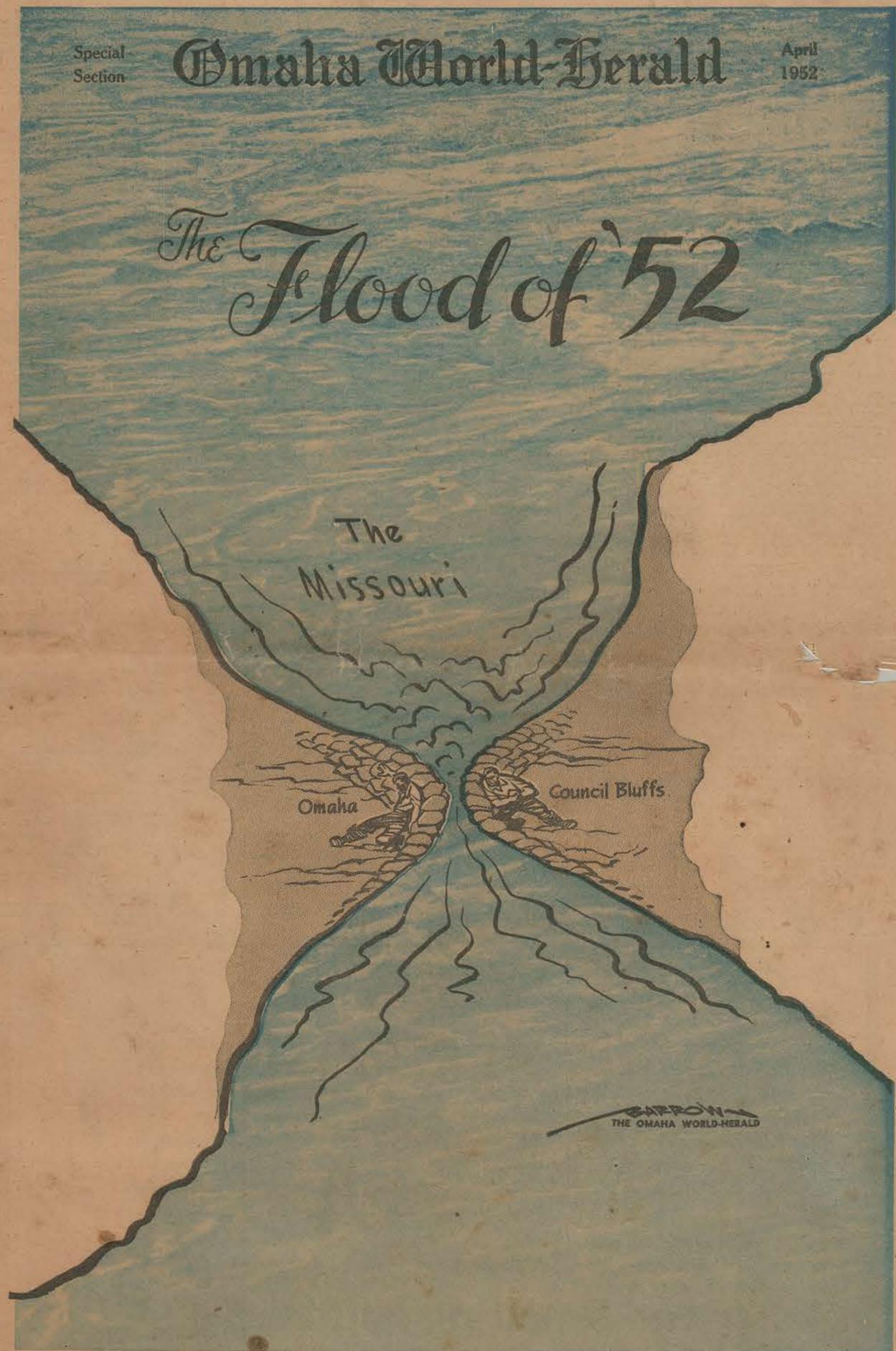
—World-Herald Photo.

Home Again—While the high water rolled southward into Missouri and Kansas to drive more people from their homes, Council Bluffs residents started moving back into homes that had been protected by the valiant levee battle. Mrs. Harry Springer watches furniture brought in.



—AP Wirephoto.

Airport Submerged—The Rosecrans Field airport at St. Joseph, Mo., lost its fight against the river. Planes and repair equipment had been evacuated here before the field was flooded.



The Flood of '52—Preface

Missouri River Boisterous Marauder Since Earliest Records

The following pages will tell, by word and picture, the story of the greatest recorded flood on the unruliest of North American rivers.

But before we get into that story we offer as a preface some geographic and historic background of the river that in April, 1952, flung its most raucous taunt against humanity.

The Missouri has been a boisterous hell-raiser ever since man first laid eyes on it.

The Canadian explorers, Father Jacques Marquette and Louis Joliet, came upon the Missouri in 1673 as they floated down the Mississippi. The Missouri was spewing its summertime rise into the Father of Waters.

Farther Marquette described it in his journal:

"I have seen nothing more frightful. A mass of large trees—real floating islands. They came rushing so impetuously that we could not, without great danger, expose ourselves to pass across."

The Missouri enters the Mississippi just above St. Louis. Above that union, it weaves and twists for a river distance of 2,465 miles.

Its farthest reaches tap the rivulets that cascade from glacial snowcaps dripping down the east slopes of the Rockies.

Intermediate tributaries feed it silt-laden waters that originate on semi-arid plains where nearly all of a year's rainfall may descend in two or three torrential storms.

Its drainage area covers 530,000 square miles—one-sixth the land area of the continental United States. Nebraska is the only state wholly drained by the Missouri, but parts of nine other states and a small slice of the Canadian Provinces of Alberta and Saskatchewan help keep it supplied with water.

The river itself begins as a union of three mountain streams which merge near the pretty little town of Three Forks, Mont. These are the Jefferson, Madison and Gallatin Rivers, all rising in the peaks west and north of Yellowstone National Park.

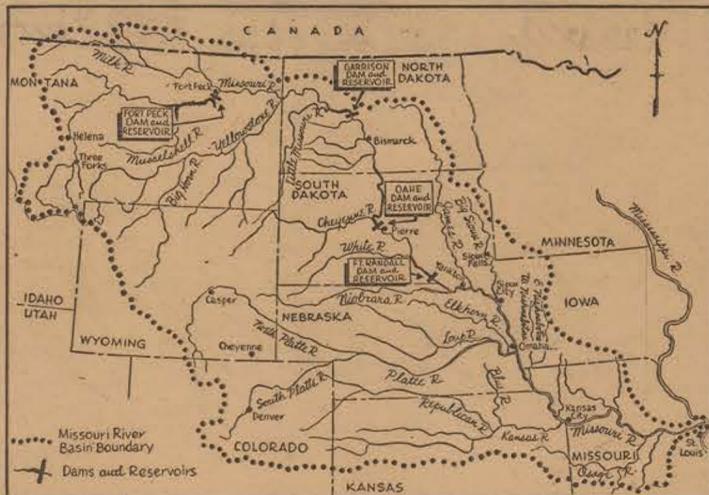
Such a clear and cool stream is the Missouri at this junction that if you visit it in summer you are almost certain to see fighting rainbows rising to the tantalizing flies of wading fishermen.

The river runs northward, then eastward, along the northern part of Montana. Where it enters North Dakota just above Williston, picking up the turbulent discharge of the Yellowstone, it begins a south-eastward slant along the eastern rim of its drainage basin.

And as it moves along, dropping from an elevation of four thousand feet at Three Forks to four hundred at St. Louis, it gains in muscle from the tributary systems that flow mostly from the west.

The Yellowstone, brings with it the Big Horn, Tongue and Powder from Wyoming.

The Knife, Heart, Little Missouri, Cannonball, Grand, Moreau, Bad, White, James, Big Sioux drain both of the Dakotas. The Niobrara and the Plattes



Missouri Basin—This map shows some of the reasons the Missouri always has been a bad actor. Note that many tributaries in the north part of the basin flow northward. In the spring, snow on their upper reaches melts while the tributary mouths and the mainstem may still be ice-clogged. Flood control in the Pick-Sloan Plan depends mainly on four reservoirs, only one of which (Fort Peck) is completed. When the three others are finished, their flood storage space can contain a volume of water nearly twice the size of the Flood of '52.



Missouri's Headwaters—Lieut. Gen. Lewis A. Pick points to the bubbling little stream that is the Missouri River where it is formed by the Jefferson, Madison and Gallatin rivers near Three Forks, Mont. With him is Nebraska Governor Peterson. Note the trout fisherman at left.

traverse Nebraska from trickling starts in Colorado. The Kansas River combines before it reaches the Missouri at Kansas City the principal rivers of Kansas as well as the Republican and Blue from Nebraska. From the State of Missouri the Grand and Chariton, the Osage and Gasconade Rivers pour steadily and sometimes overwhelming flows. Over this wide range of terrain nature can, and frequently has,

displayed a stormy temperament in several places at the same time. The products merge into the neck of the funnel that is the Missouri River itself—raging and tearing through the countryside.

When the combinations work just right, they produce the whopper floods of 1881, 1943 and 1952, which stand out above the lesser inundations that plague valley dwellers somewhere every year or two.

Historically, great names associated with the river have appeared in pairs.

There were Marquette and Joliet, the first white men to see it. Then came Lewis and Clark, the intrepid explorers who described it from its mouth almost to its source. Thomas Jefferson and Napoleon Bonaparte made the deal that added virtually all of the Missouri Basin to the United States. The basin made up about two-thirds of Jefferson's Louisiana Purchase. That 15 million dollar transaction put an original price tag of a fraction less than two cents an acre on the Missouri Basin.

More recently came Lieut. Gen. Lewis A. Pick and W. G. Sloan, who devised for the basin a system of flood control, irrigation, power production and navigation to tame and harness the river and put it to work.

Flood control features of dams on the main stream of the Missouri are designed to hold 15,465,000 acre feet of water. The Flood of '52 carried an estimated eight million acre feet above bankful stage, little more than half the flood storage capacity the reservoirs above Yankton, S. D., will have when completed.

Unfortunately, only Fort Peck in Montana had been completed in 1952. Its 3,500,000 acre feet of flood control storage helped by holding back water that otherwise would have added to the flood. But the Milk River, which enters the Missouri just below Fort Peck and was the original troublemaker in the Flood of '52, flowed unimpeded. So also did other downstream tributaries because the reservoirs that could have trapped them are not completed.

But the other dams are being built. Fort Randall, with 2,500,000 acre feet of flood storage, is to be closed in July this year. Garrison, with 5,800,000 acre feet of flood storage, is due for closure in the summer of 1953. Oahe is barely started but could be speeded, with adequate appropriations, to completion in 1956 or 1957. It will add 3,500,000 acre feet of flood storage.

Integral parts of the Pick-Sloan Plan, too, are the levees and flood walls at Omaha and Council Bluffs, which with almost superhuman help, saved those cities from heavy damage in the Flood of '52.

Time is still on the side of the river for another year or two. After that the man-constructed restraints will go a long way toward guaranteeing safety. Complete control will not be achieved until the maximum required safeguards are constructed.

Water Got Deep in Bartlett, Ia., and Just About Everybody Left



Water, Water Everywhere—Nearly every one got out of Bartlett, Ia., where the water really got deep. The arrow in the photo is just over the Burlington railroad right of way. Some hardy residents moved into the third floor of the high school building.

A JOB Well Done . . .

★ ★ ★

We salute the people of Omaha and Council Bluffs and the Midwest for their heroic and successful fight against the "Mighty Mo" — to all the workers — to the brave housewives who took their added work and worries in stride — we offer our sincere congratulations. We are glad to have been of service — when our help was needed.

★ ★ ★

- Boyer Lumber & Coal Co.
- Bradford-Kennedy Co.
- Chicago Lumber Co. of Omaha
- Joyce Lumber Co.
- Platner Lumber Co.
- Ashton Wholesale Service

A Job Well Done . . .

The people of Omaha and Council Bluffs—separated by a river, yet bound by a river—saw disaster coming on the floodtide of the mighty Missouri. They battled it with every resource at their command to save their homes, their industries, their cities. Somehow, it seemed all along, that such courage and spirit could not be denied. It wasn't! They won against the river.

For a job well done you have earned the undying thanks of a grateful citizenry and the deep admiration of the Nation. We are proud to be a part of such a community...proud to be friends and neighbors of such courageous people as these.

American Smelting and Refining Co.

Miles of Flooding After Levee Breaks

26-A Omaha World-Herald, April, 1952.



Water Plant Saved—Plattsmouth, Neb., put up a terrific fight to save its water plant. It succeeded. This is a scene as the fight, with sandbag weapons, reached a peak.



Plum Creek Break—A 150-foot gap torn in the Plum Creek levee southwest of McPaul, Ia., flooded a wide area south to Hamburg, Ia. About two thousand workers had been ordered off the levee only an hour before it broke.



McPaul Goes Under—Water rushed through this little Iowa community toward the Plum Creek levee break. From the break the water rushed over an area 15 miles wide and 27 miles long.



United Air Lines Extends A Sincere Thank You

... to all who worked so long and hard to overcome the recent flood. It was a community effort OF WHICH all Omaha and Council Bluffs can well be proud. We say, "well done" to everyone of you!

THANKS ALSO, Omaha travelers, for your patience with the inconveniences imposed on United's operations by the flood emergency. All flights will be returned from Lincoln Airport to the Omaha Airport as quickly as facilities can be cleared for operation.

United Air Lines
1706 Douglas Street
Call WEBster 6700

The Flood of '52—Chapter One: Snow, Ice, Crazy Weather Conspired with the Ornerly Mizzou

3-A Omaha World-Herald, April, 1952.

The Missouri River flood of 1952 took a long time to build up. Its ingredients were the heavy snowfall of the upper plains area, the capriciousness of the prairie climate and the geography of the Missouri River itself.

The Missouri's ladder-shaped layout of tributaries is in a region where prairie climate is at its most extreme and perverse. Temperatures jump around wildly, seemingly independent of season or precedent.

The main stem of the Missouri, in its sweeping loop from Montana into North Dakota, flows through what the Weather Bureau recognizes as the nation's "cold trough." This is the pathway of weather moving down from the Arctic.

Temperatures go away down and cold lingers late. Winter's ice remains thick and unbroken in the river long after it has melted elsewhere.

As a result, unseasonable thaws often melt tributary streams to send their water piling into the unbroken ice of the main stream. The weight of the water tears and wrenches the ice loose and prods it downstream. Ice dams form. Water backs up behind. Local flooding results. Thus 1881. And thus, in its first phase, the flood of 1952.

Snow came early, fell heavily and lingered late throughout the upper plains area. Heavy in extent, it was heavy also in water content.

Pierre, S. D., measured 21 inches of snow which contained nine inches of water. The nine inches were 499 per cent of normal.

In the surrounding 80 thousand square miles, the moisture was 290 to 300 per cent of normal. In the Montana section of the upper Missouri watershed, the moisture was 135 per cent above normal.

Accompanying this heavy snowfall was weather that, even by Great Plains standards, was abnormally cold. The snow stayed in place. The wind packed it. It was compressed by its own weight. Gradually pressure formed a sheet of ice next to the ground that sealed off the snow and kept any of its moisture from percolating into the earth.

As the situation didn't look too bright, the snow cover was heavy too. The usual melting and a model behavior of the ice break-up resulted in virtually no flooding then.

Snow sampling crews covered the plains area in 50-mile grids. They weighed the findings against past performances of the weather. On March 5 came the first analysis:

"A cover of unusually moist snow upstream provides a possible Missouri River flood threat when the spring thaw comes. But there is no reason for undue alarm."

The cold hung on. The season came when days should be warm though nights would be cold. The time was at hand when the snow should be gradually lowering, trickling into soil that ordinarily soaks up moisture.

But normal things didn't happen. Winter's temperatures hung on. In mid-March, temperatures for the week averaged as much as 13 degrees below normal throughout the plains country. Every day of lingering cold increased the possibility that when the snow did go it would go suddenly.

Sampling crews went out again. This time they found more snow than three weeks before.

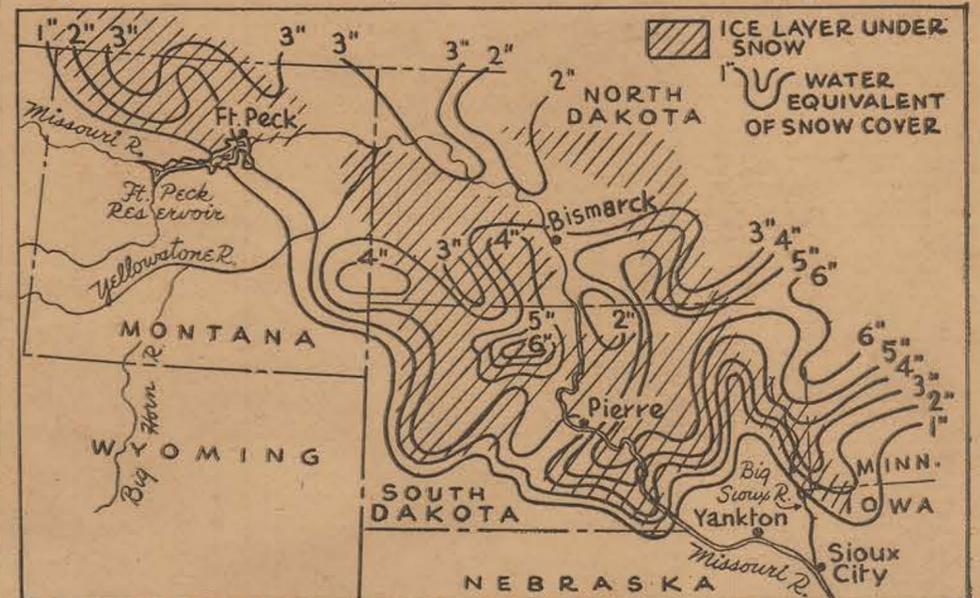
Said the analysis on March 25: "The threat of Missouri River flooding this spring is more serious than it was a month ago."

The gun was loaded. A quick thaw was the trigger that would set it off.

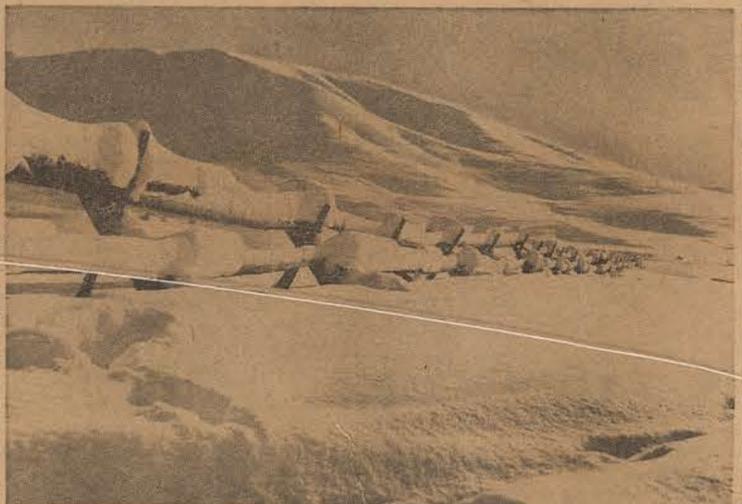
Nature pulled the trigger. Spring busted out all over the upper watershed of the Missouri. It came violently. Throughout the upper reaches temperatures mounted into the seventies and stayed that way day after day. Great Falls recorded 75 degrees. It was the highest temperature ever that early in a locality where spring ordinarily does not come until late May.

The snow turned to water. The ice beneath kept it from soaking into the ground. It trickled down the coulees and creeks. It raced into tributaries and hit the Missouri River at a gallop. In one week the snow melted.

From Glacier Park down, the warnings went up. First it was a pattern of repeated jams as the ice was torn out of the Missouri.



Just Before the Runoff—Army Engineers on March 20 charted the snow over the northern reaches of the Missouri Basin. Most of it was underlaid with ice. Water content of the packed mass ranged to six inches. When it melted it headed for the nearest streams. The lines, which look like contours, indicate not the depth of the snow but its water equivalent in inches.



Beautiful, But Loaded—Snow over the mountains and over the Northern Great Plains last winter had engineers and weather observers worried. They thought the stuff might carry dynamite for the farms and cities downriver on the Missouri.



Jam. Flood. Then, breaking loose, the water flowed again to re-jam and flood again.

The ice was stripped from the river. The snow melt hit the stream from those rivers of romantic names—the Knife, the Heart, the Cannonball, the Little Missouri.

The character of the flood changed. No longer was it a series of local ice jam floodings. It had become a generalized flood, the worst ever, with a crest that was to stretch out for a hundred miles.

Downstream, men whose life's work is the river looked at the tide upstream.

Army Engineers scarcely paused to shift gears as they went from Phase One to round-the-clock, all-out Phase Three alert.

Before Bismarck, the Weather Bureau predicted an Omaha stage of 25 feet—1.4 feet over the 1891 crest. When the crest hit Bismarck, 745 miles upstream, the reading was boosted to 28 feet. When Missouri felt the river, the prediction went up to 30 feet.

The river rolled. At the famed river experiment station at Clinton, Miss., Army Engineers put the flood through a full-scale model of the Missouri River. They measured its performance and studied its behavior.

At the Weather Bureau's river forecast center at Kansas City, the experts turned to a mechanical brain for help. Into it they fed all the data—volume, channel size, wind and rain factors—in all probable combinations.

At the Omaha Weather Bureau office, workers did it the hard way. They balanced the flood against past floods and worked out the calculations.

The findings, separately arrived at, checked. They were sent to Army Engineers, whose know-how was the framework upon which the flood fight was built.

An aid brought in the slip with the penciled figure as Brig. Gen. Don G. Shingler was holding a press conference.

The general studied the figure. Silence stretched out the moment before General Shingler turned back to the reporters.

He looked out over the top of his glasses, a habit when he is deadly serious.

"Gentlemen," he said. "I have just received a new river prediction from the Weather Bureau. They have boosted it to thirty-one point five."

At Left
Fifteen Feet of Snow—This trench into the Charles Kindopp ranch home southwest of Pierre, S. D., was six feet deep, but drifts sloped upwards to 15 feet.

From a Trickle Start in Montana, the River Gained Power Fast

The inexorable ways of the river call for residents of the tributaries to undergo their trial by water before a flood hits the main stream.

In the flood of 1952, first targets were the people along the valley of the Milk River in Montana.

Although the Milk's watershed looks impressively large on the map, it normally isn't much of a stream. In time of flood it, like other prairie streams, can become a terror.

Effects of a flood hit people more directly in the upper valley than they do in the southern reaches. The thin population is concentrated along watercourses, where water, timber and shelter are available.

The Milk, in its flood course from Glacier National Park to its confluence with the Missouri River a few miles below Fort Peck dam, hit a large percentage of the residents along its course.

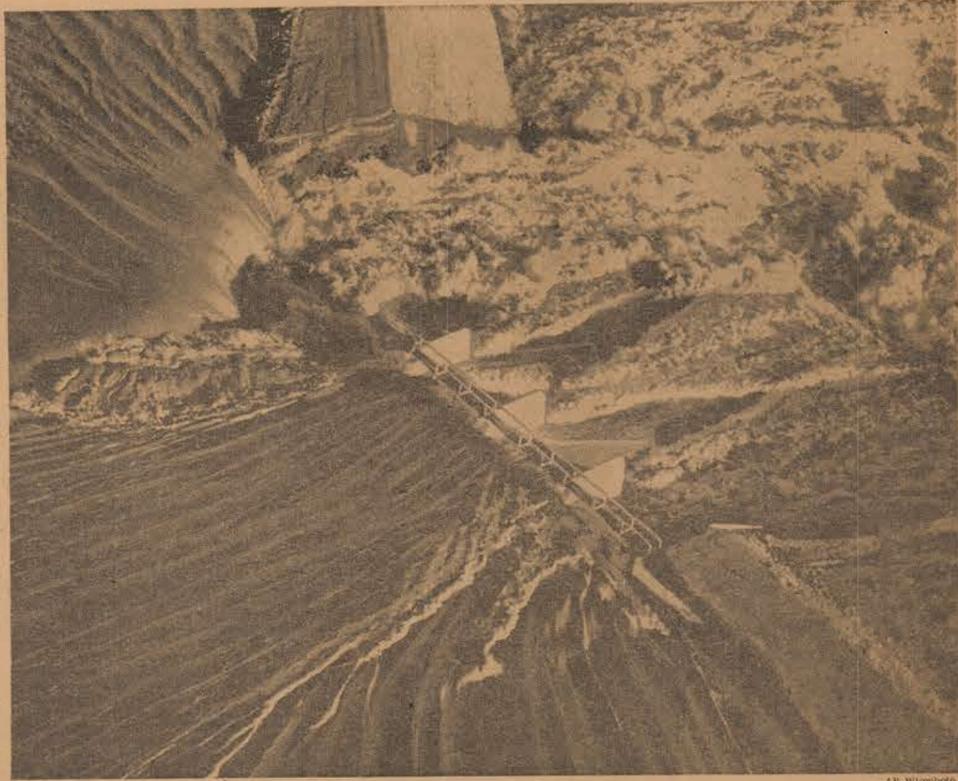
The ranchers fled. Then as the flood went on they returned in planes to shoot from the air livestock huddled on hummocks and facing drowning or starvation.

Hayre, where martial law was declared, was a quick victim. An estimated 1,200 persons were driven from their homes. Damage was estimated at 300 million dollars.

Chinook, named for the warm winds that brought the community its trial, waged a valiant battle. Here the town worked against a tide that came within six inches of topping the levees on which they worked. As they toiled, workers kept an ear cocked for a siren that would warn of a break.

The Milk roared into the low-water stream bed of the Missouri below Fort Peck. Eighty thousand cubic second feet of water flowed into Fort Peck; the outflow was choked down to 4,500 cubic second feet. This knocked two feet off the flood crest at Omaha. It saved Williston, N. D.

Mandan, located near the confluence of the Missouri and Heart Rivers, squeaked through for the second time in three years. The



A Dam in the North Broke—When the Frenchman Creek dam near Hinsdale, Mont., gave way, it sent new flood waters storming into the Milk River and thence into the flooding Missouri. This spectacular photo was snapped by a Corps of Engineers photographer.

Turn to Page 6-A, Column 1.

Thank You!

GOOD NEIGHBORS



We, at the Omaha Municipal Airport, perhaps more than anyone else, owe an extra measure of warm appreciation to the thousands of men and women who labored to keep the old Missouri out of the airport.

To Civilian Defense, the Army Engineers, Strategic Air Command, Civil Air Patrol, National Guard, Coast Guard . . . and the YOLUNTEERS from everywhere who held the line against all threats—we send our humble thanks. Because of them, the virtual destruction of the airport was averted and damage has been reduced to a minimum.

We believe that people have never responded more quickly and whole-heartedly to a call for help. Our undying thanks, and the deep admiration of the whole community goes to these "Good Neighbors."



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A Buoyant Hope: That This May Be Last Great Missouri Flood

Below Omaha, the bottomlands of Iowa caught the full blast of the Missouri's power.

Despite a last-ditch stand by two thousand volunteers, the Plum Creek Levee near McPaul, Ia., crumpled. A murky wave bore down on Hamburg, Ia., 15 miles to the south.

Half that town of two thousand persons seemed destined for a soaking. Water topped an incomplete ring levee and buried 10 blocks. Another yard higher and the whole business district would have gone under.

Army Engineers cheated the flood of some victims. They dynamited a main-stem levee near the mouth of the Nishnabotna River. Water threatening Hamburg drained back into the Missouri.

Nebraska river cities like Plattsmouth, Peru, Brownville and Rulo were perched above the danger line. But they had to fight to protect their riverside utilities.

Co-eds from Peru State Teachers College filled sandbags in the rain. The college gym was a bedroom for 450 troops from Camp McCoy, Wis.

All bridges between Omaha and St. Joseph, Mo., were blocked. The flood backed deep into the



Ax-It Exit—The owner of this house five miles southwest of Council Bluffs stored his belongings in the attic when he abandoned his house. When he returned to salvage some furnishings he had to chop a hole in the roof to complete his mission.

Platte and Nemaha Rivers.

In the state of Missouri, Atchison and Holt County towns such as Langdon, Corning and Fortescue succumbed. Rosecrans Field at St. Joseph became a dirty lake.

Troops at Fort Leavenworth, Kans., lost a heart-breaking battle to save Sherman Air Force Base.

Kansas City worried briefly about a rain-fed Kansas River colliding with the Missouri torrent. But the new super dikes were more than adequate.

Long before the crest reached Kansas City, Omaha and Council Bluffs were bouncing back to normal.

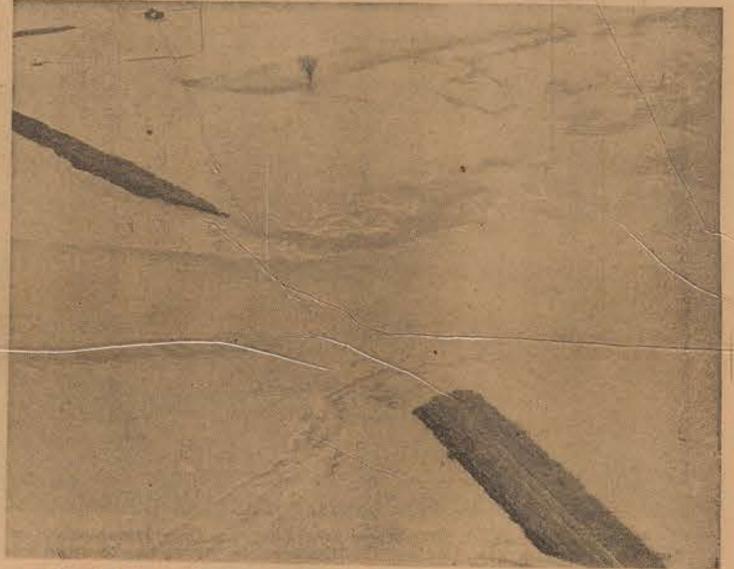
Even before the "all-clear" signal sounded, lowland industries were hauling back machinery. Evacuees, weary but thankful, carted back their refrigerators and beds.

Normal life was still a long way off for many homes in the huge basin. The stinking silt would eventually disappear. But the financial wounds would take years to heal and the broken dreams might never be repaired.

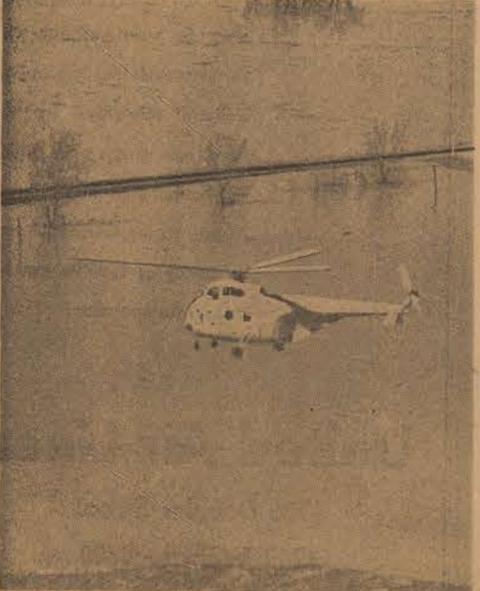
One hope buoyed everyone in the valley: That they might have witnessed the last great flood of the mighty Missouri.



Rescue Ship—This "sea-going" tractor was pressed into flood duty long before the crest reached the Omaha area. It helped evacuate 20 families south of Bellevue, Neb.



Headed for Pacific Junction—When this levee broke, a lot of water took off for Pacific Junction, Ia. Valiant work on dikes closer to town held down damage.



Bird's Eye View—A Coast Guard helicopter took Army Engineer Col. Delbert Freeman over the area east of Nebraska City. Just beyond the helicopter are Burlington tracks.



End of Road—Highway No. 2 east of Nebraska City on the Iowa bottoms lost chunks of paving and bridge approaches. This picture was made 10 miles east of the river.

For Some There Was Fun, but Sleep Was Welcome Anywhere



—World-Herald Photo.

Order in the Court—The Military Police Company of the Iowa-Nebraska Thirty-fourth Division was bivouacked in a District Court room in Council Bluffs. Men slept in the jury box, on lawyers' desks, spectators' seats. For fun, Sgt. 1/C Harold Kamm (left), Eagle Grove, Ia., used the judge's bench and "pronounced sentence" on his men when assigning work.



—World-Herald Photo.

Coffee and Doughnuts—The Salvation Army pulled in officers from out-of-town assignments, accepted volunteers for 12-hour tours of duty to serve levee workers. It borrowed kitchen facilities of restaurants and clubs to meet the demand for snacks and stew.



—International News Service Photo.

They Came from Everywhere—Mrs. Paul Nelson of Wamego, Kans., was typical of women who showed up in men's jobs, and also of the many who came great distances to help.



—World-Herald Photo.

Ham at Work—Radio "hams" were an indispensable part of a communications network. Joe Connell (above) of Council Bluffs, was one of more than one hundred who flocked to communications centers.



—World-Herald Photo.

An Early Victim—The Port of Omaha, outside the levee at the foot of Burt Street, was one of the first areas engulfed by the rising water. A day before the crest water swirled 20 feet deep around the grain elevator (right) and the gantry crane. Damage was estimated at 50 thousand dollars.



—World-Herald Photo.

Crisis Conference—Among officials on hand for the fight to control the Grace Street Sewer were Fire Commissioner William D. Noyes, Flood Co-ordinator E. I. Myers, Lieut. Gen. Lewis A. Pick and Col. Paul D. Berrigau of the Corps of Engineers.



—World-Herald Photo.

And Finally, Rest—Exhausted by the struggle, these soldiers fell asleep on the City Hall steps after an all-night vigil the night the crest passed Omaha.

A TRIBUTE TO THOSE WHO SERVED

Omaha Chamber of Commerce



108 SOUTH 18TH STREET
TELEPHONE ATLANTIC 1234
OMAHA 2, NEBRASKA

April 30, 1952

All of us should pause in grateful recognition of the heroic efforts of the men and women of the Omaha area, whose courage, diligence and resourcefulness made victory possible.

Faced with the greatest flood threat in a century, the people of Omaha and Council Bluffs banded together in an army of workers who did the greatest co-operative job in the history of our country.

This valiant army of volunteers snatched security from defeat and turned threat into victory.

No effort in the hundred-year history of Omaha was more magnificent. Never has there been such concert of purpose and such selfless devotion to a community task. Blessed with people of such fiber and determination, Omaha can look forward to a great future with confidence in her own strength and purpose.

To this vast army of men and women from the Omaha area, the Omaha Chamber of Commerce pays heartfelt tribute and deepest thanks.

In this great ordeal, we have tested the sinews of our community and found them strong!

We have tried the spirit of our people and found it matchless! Omaha has become a greater community through the shadow of disaster!

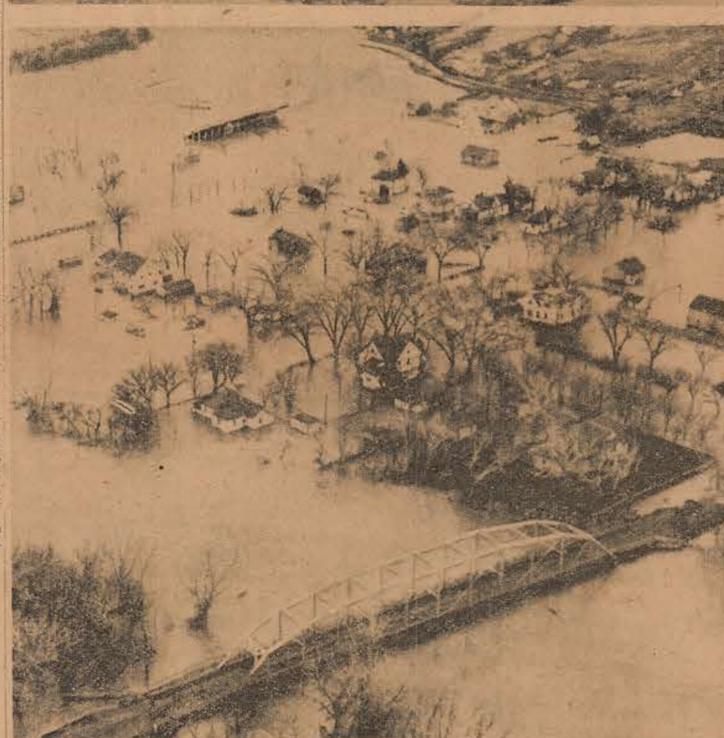
Every citizen will be ever grateful to the thousands of volunteers who performed so unselfishly and so valiantly.

Harold P. ...

President
Omaha Chamber of Commerce

Milk River, Lower Tributaries Pooled Their Flood Volumes

Continued from Page 4-A.
 Army Engineers' levees around the town, the Bureau of Reclamation Heart Butte dam upstream provided the margin of safety.
 At Garrison dam, upstream from Bismarck, the ice jammed behind a construction bridge. Water washed room-size cakes of ice three miles off the flats.
 When the jam let go, it went all at once. The result was a wall of water that engulfed North Dakota's capital city of Bismarck. Water stretched from Bismarck to Mandan, seven miles across the bottoms.
 Several homes were torn from their foundations and floated away. One man moved his house to a telephone pole. A man was rescued by helicopter from a farmhouse roof after clinging for 44 hours.
 By the time Bismarck was passed the flood had become so mammoth that in most places there was no fighting it. Flight, and not fight, was the only course.
 Pierre concentrated on saving these fundamentals of urban life—the water supply and the power plant. The plant was saved. Three of the community's four wells were engulfed.
 Both Pierre and its across-stream neighbor, Fort Pierre, were major victims. One third of Pierre's 5,720 residents were homeless. All of Fort Pierre, locale of one of two major American Fur Company posts in the old days, was inundated.
 At Moberly, S. D., the flood measured 440 thousand cubic second feet, which put it in the same league with last year's Kansas City flood.
 Yankton got off lucky. Not so Sioux Falls, where trouble came from the Big Sioux rather than the Missouri. A levee was flanked, water went over the Sioux Falls Air Base. The 1,400 persons living in a war-time barracks that had been converted into a housing project were forced out.
 South Sioux City fought. Residents knew in advance they were doomed. They were trading effort for time, to win a few more hours to get things squared off before the water hit.
 The river crumpled the community's primary dikes and then rolled over secondary dikes constructed in the business district.
 South Sioux City suffered heavily. The town was half deserted; 500 homes suffered damage. Short water rations were decreed to ease the load on the sewer system. The bridge to Sioux City was cut off for the first time since its construction in 1896.
 Sioux City was the major urban victim of the flood upstream.



Above
Flood Starter—This was the scene at Glasgow, Mont., April 10 when the Milk River was dumping its flood into the Missouri. In 11 days the river had done \$2,000,000 damage, left 3,000 homeless. This was the starter of the Flood of '52.

Hardest hit was the industrial area. The Sioux City stockyards were embargoed and the packing plants closed.
 The sewer system was knocked out of a 10 by 26 block area, extending the flood's hardship to places where no water hit. The sanitation menace created delayed the return of victims to their homes.
 Mayor Ralph Henderson estimated the community's loss at \$2,500,000.
 At Sioux City much of the river's flow swept in a shortcut across the curving arc that was South Sioux City. There the water seemed to gather itself as it pointed a great looping punch downstream towards Omaha and Council Bluffs.
 Upstream was the dreary aftermath of the flood. The water, contaminated by contact with a thousand cesspools and barnyards, spilled into water wells. The bloated carcasses of animals putrefied in the sun. Filth and slime. Everywhere the smell of dead vegetation, dead land, dead water.

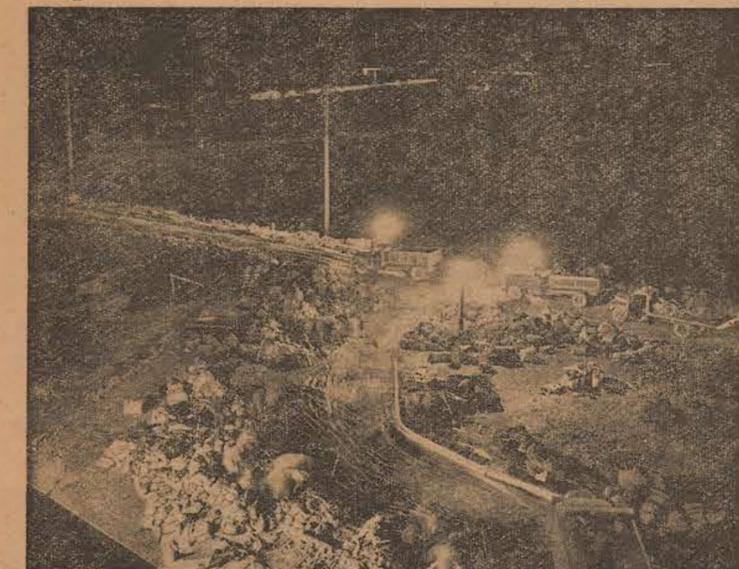


Dike Break Adds Trouble—Protection of a housing development at Sioux Falls, S. D., ended when a dike broke and let the Big Sioux ramble through.

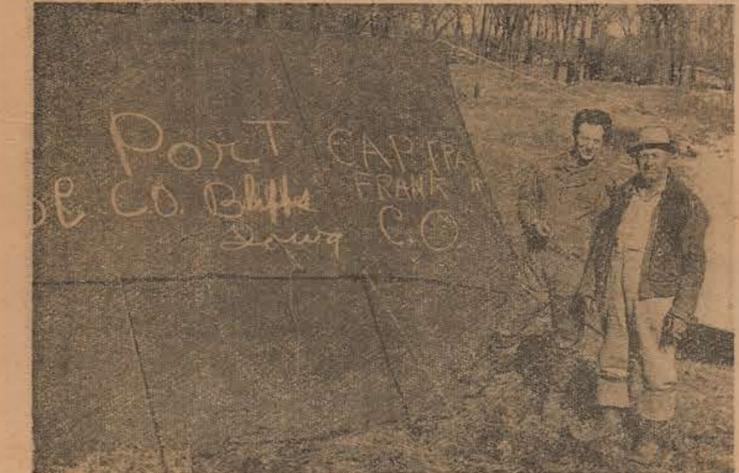


Another Tributary Joins In—Renner, S. D., near Sioux Falls, was swamped with water from the Big Sioux, a Missouri River tributary.

Night Caused No Slackening, for River Raged 'Round Clock



No Time for Sleep—Under floodlights, headlights, flashlights and portable carbide lamps, men and trucks are shown working on the Council Bluffs levee at the north end of Twenty-fifth Street. In center foreground are bales of sandbags ready for filling. At left, blurred figures are men with shovels filling the bags. Then there are trucks, loading up to move down the levee where a furious battle was waged.



Too Much for Schultz—Frank Schultz (right), who bills himself as "captain" of the "Port of Council Bluffs," stayed in his fishing cabin below Ak-Sar-Ben Bridge during the 1943 flood. But when the crest prediction for 1952 came through Mr. Schultz got assistance from Marvin Osborne, 3220 Avenue C, and pitched a tent on the "dry" side of the levee. His cabin washed away, too.

A Dash of Spice Was Added . . .

And Not Long to Wait—World-Herald Reporter Tom Allan came back to Omaha from South Sioux City, Neb., as the crest was passing the latter city. He brought a half-gallon jug of Missouri River water. Fastened on it was a note to City Editor Lou Gerdes from Bill Lee, editor of the Dakota County Star: ". . . Herewith is, exclusive to you, a sample . . . The other 300,300-400,000 1/2-gallons will be along soon."
Slow Down—On flooded Grand Avenue in the Sioux City, Ia., suburb of Morningside, merchants had a complaint—against speeding. They said motor boats were moving too fast, stirring big waves which broke store windows.
1952 Neah—Mr. and Mrs. Walter Cramer of South Sioux City rode out the flood in an "ark" tied alongside their flooded cottage. They lived aboard the 28-foot houseboat seven days.
Worst Hardship—Tom Cooper, marooned five nights and four days in his attic in South Sioux City, was barefooted, had only a couple of cans of beans, some crackers and eggs which he ate raw. But food wasn't what he missed most.
 "What I wouldn't have given for a chew of 'snoose' about the second day!" he told his son who rescued him.
Indian No Lie—Farmer-Pilot Ralph Beerman knows the Indians were telling his grandfathers the truth. Ralph was tooling a cub plane over South Sioux City looking at the awesome spread of muddy water.
 "My granddad used to tell about the Indians telling him the Missouri had flooded the valley from hill to hill," Ralph said. "Now I know they weren't kidding."
Brand New, Too—An evacuee from the East Omaha danger area was downcast when his request for a pass to return home was denied. He had taken everything of value with him when he left his house—except one. He had forgotten his brand new toilet seat. "Why, I paid \$12 for it," he told police.
Taking All Corners—"We always come down to fight your Golden Gloves teams—now we're willing to come down and fight your river," Jack Fickler of Ashland, Neb., told Omaha Flood fight officials. He is perennial coach of the Ashland fight teams. He said 35 business men of Ashland—which often is flooded by Salt Creek—had expressed willingness to shut up shop and come to Omaha.
George's Luck—George W. Winkler, head of Omaha Police Department communications, had been setting up electrical equipment for several years to meet an emergency like Omaha's flood. But came the flood and where was George? In St. Joseph Hospital several days for an examination.
Mr. Dike Was There, Too—A man approached the information desk in the Council Bluffs City Hall, identified himself as an insurance specialist from Exe Moines. He said he had been sent to assist during the high-water emergency. His name: E. M. Flood.
What a Hangover!—A nattily-dressed man was digging sandbags on an Omaha levee. He wore no overshoes or raincoat and the soggy bags were staining his sport coat. "How come you're down here dressed like that?" a fellow-worker asked. The answer: "I was drunk and the police picked me up. It was either go to jail or down here. So here I am."
Pay Up—The sightseeing mania paid off for The World-Herald Flood Relief Fund for the Red Cross. A seventeenth-floor office in the Medical Arts Building offered a good flood view. This sign was put on the door: "Admission only by contributions to the flood relief fund."
Courtesy—A dike-worker, weary and mud-spattered from a day's labor on the river, boarded a crowded bus. He stood near an elderly woman who was sitting. "Have you been working on the dikes?" she inquired. He said yes. "Will you take my seat?" she offered. The man declined.
Unexpected Compliment—Rescuers floating down a South Sioux City street in a boat heard a raucous voice in one of the flooded homes. They found a disheveled parrot in a cage in danger of drowning. They took the cage from the house into the boat. As they started the motor, the parrot cocked a beady eye at his rescuers and croaked: "Good boys! Good boys!"
Crazy Cool—Company employees guarding the Independent Metal Products Company, Eleventh and Grace Streets, during the flood lagged a confused cool, or madden. With all that water to land in, the waterfowl flew into a company building, crashed into a steel beam, broke its neck.
All this and More—Beating the Missouri River at Omaha and Council Bluffs took, among other things: 421,600 man-hours of work by troops, Army Engineers and contractor's staffs; 5,500,000 sandbags; 1,396 dump trucks; 52 radio cars; 38 draglines; 83 scoops; 2,500 carbide flares.

The Reward of Merit . . .

Thanks to thousands of determined people—the rampaging Missouri was contained in the Omaha-Council Bluffs channel. Many thousands of homes and scores of businesses and industries have been spared millions of dollars of damage. Hardship and tragedy was reduced to a minimum.

Although our Grace Street area proved to be one of the weak spots—hundreds of willing workers turned the tide in our favor. Without them our losses would have been incalculable.

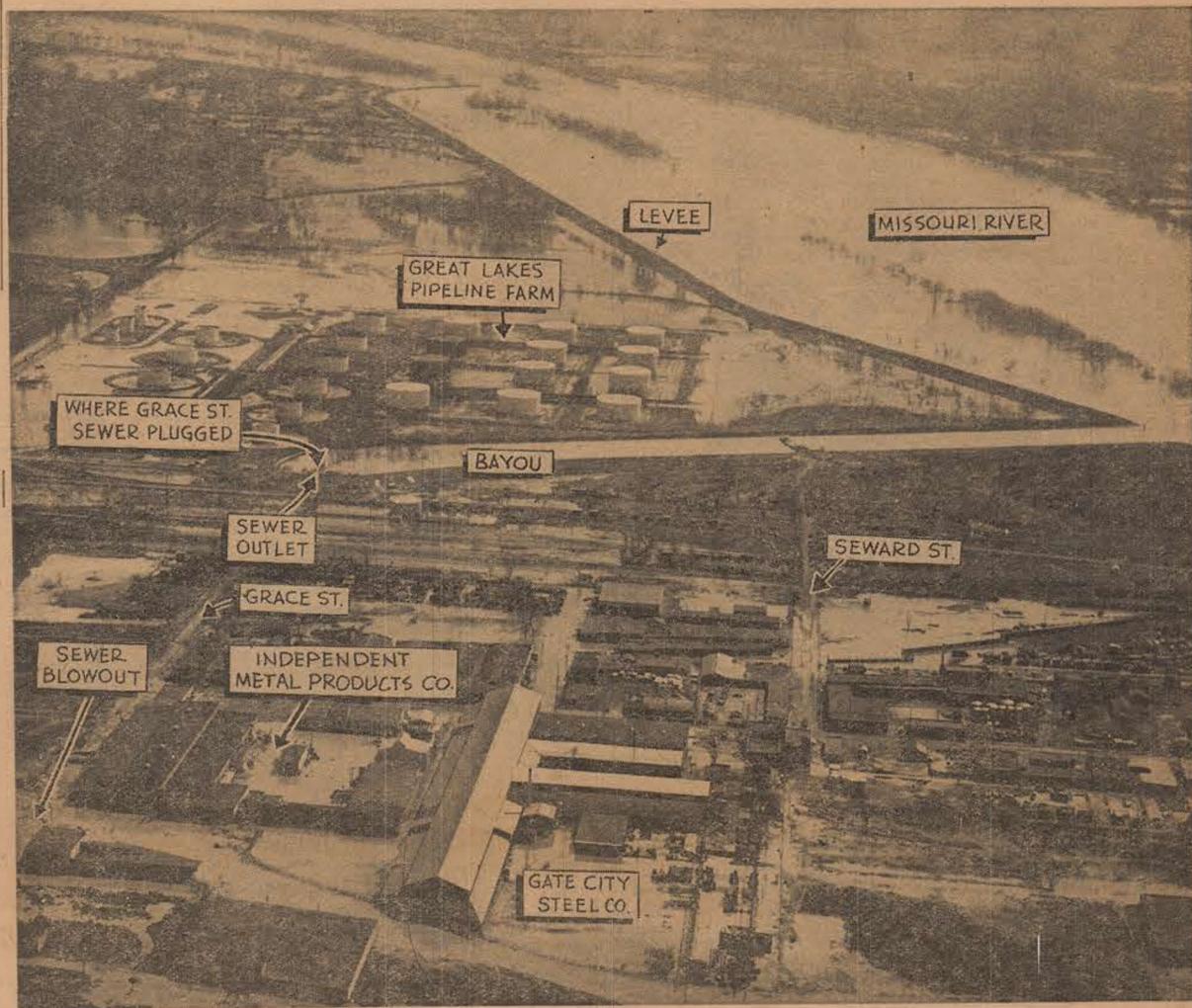
The least we can do is to point out the merits of neighborliness and friendly cooperation have their own reward—and give humble thanks they exist in such quantity in our community.

We also want to extend our thanks to all of our customers who have been so patient during the disruption of our normal service.

"Always Buying Waste Paper"

EPSTEIN PAPER & METAL CO.

WE 2030 1201-25 GRACE ST. WE 2031



—World-Herald Photo.
 The Final Skirmish—This diagrammed photo, taken the morning after, shows what happened the night of April 18 when the Grace Street Sewer erupted. Pressure of the flood water, backing through the bayou and into the sewer outlet (18 feet below the river surface) cracked the concrete tube and caused flooding of about one thousand acres. The battle went on all night before the break was brought under control.

AN INSPIRING EXAMPLE

Together with their friendly neighbors from hundreds of surrounding communities, the citizens of Omaha and Council Bluffs have waged and won a gallant battle against the river.

In looking back upon this tremendous effort, we marvel not so much at the final victory as at the indomitable spirit that made it possible. In the sandpits . . . on the levees . . . through every phase of the heroic fight . . . thousands of unsung heroes labored unceasingly and unselfishly in a common cause.

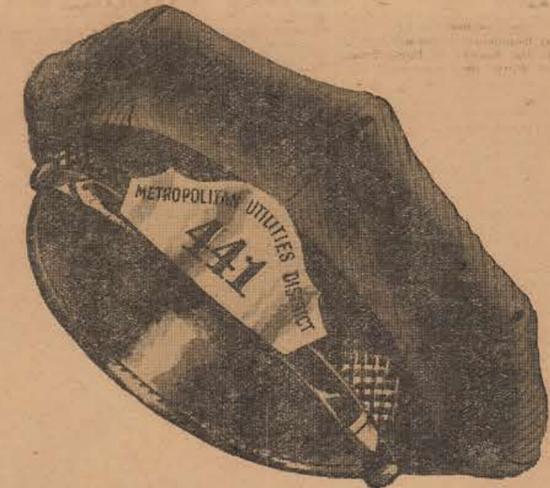
We are proud of the many organizations and individuals who played a part in this great midwest drama. And we are proud of our employees;—who came here from every one of our branches to aid in the fight.

From the inspiring example set by these splendid men and women, the entire nation may well learn a lesson in courage and capability.

ROBERTS DAIRY COMPANY

Thank You Neighbors

for helping us do a job!



Our hat is off to YOU . . . and the uncounted others who fought to conquer the raging Missouri. It was work . . . hard, dirty, grueling, tense work. But who of us will ever forget the thrill of that memorable period of complete and selfless cooperation! America stood breathless while this momentous battle was fought to a finish.

Protecting your vital gas and water service was only a small part of the tremendous job accomplished by the joint efforts of thousands. So it is with humility that we report to you on the emergency work done by men and women of your Utilities District.

Fully a week before the crest was due, thorough precautions were begun at the Florence Pumping Station. Dikes were thrown up. Low level pumps at the river station were shut down and standby steam pumps in the main plant on high ground were put into service. Men carried over 300 tons of lead and sand to the floor of the river station to prevent it from floating in rising water. After rail entry was cut off, trucks brought supplies for purifying water.

To aid Omaha's sister city, men of your Utilities District . . . in a matter of hours . . . laid 6,000 feet

of 12-inch water main from 9th and Douglas, across Ak-Sar-Ben bridge to the Council Bluffs water works. This main stood ready to furnish 4,000,000 gallons of pure water per day to Council Bluffs if its water system became flooded. Similarly, the Utilities District spearheaded a temporary, gas pipe line from 9th and Douglas to supply Council Bluffs if necessary.

The Utilities District ice plant was turned over to the Red Cross for storage of evacuated household goods, and several tracts of land were made available for livestock refuge.

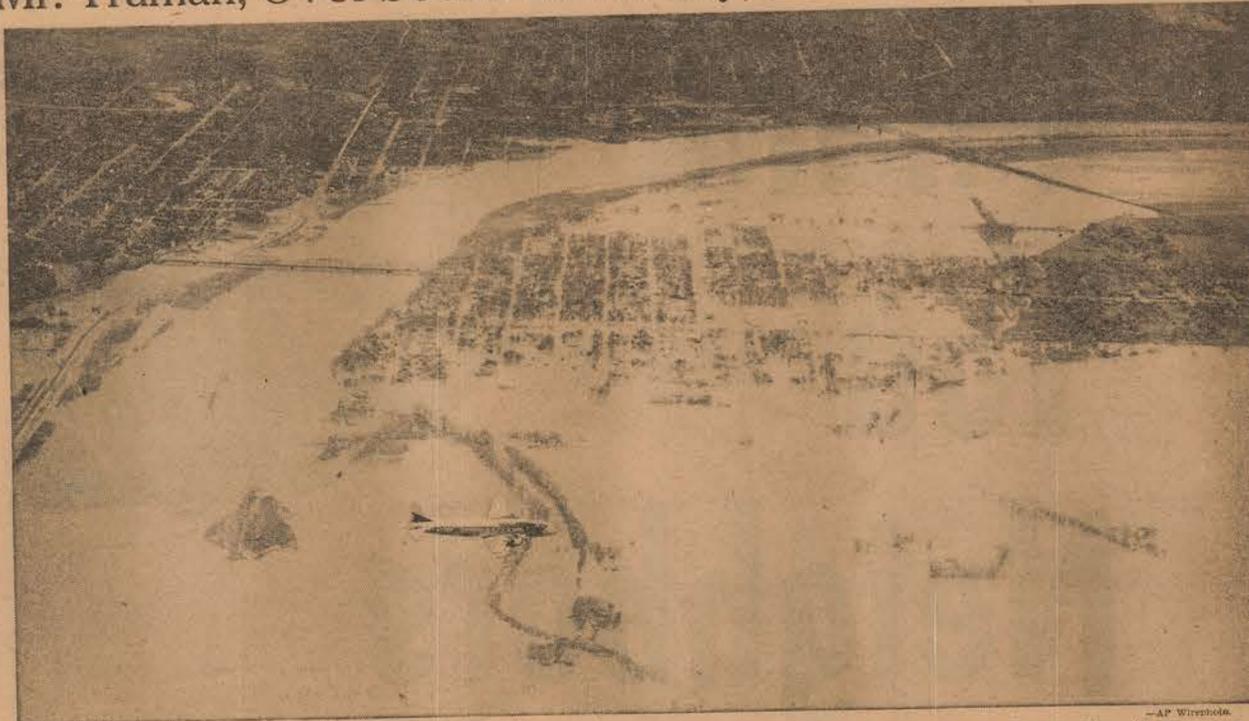
Through the entire crisis, the District cooperated fully with Civilian Defense and civil authorities whose help was invaluable. Every possible person was released for flood work on District installations.

The Board of Directors of the Metropolitan Utilities District especially salutes the District's men and women who worked so feverishly and valiantly through the long days of emergency. And we gratefully thank all our neighbors for their great assistance in the total job of preventing a major catastrophe.



Dependable GAS and WATER Service!

Mr. Truman, Over South Sioux City, Saw a Riptide of Water



The President Gets an Eyefull—President Truman flew over the rampaging Missouri April 16, landed in Omaha to confer with governors of seven Midwest states. The photo shows the presidential plane, the Independence, above inundated South Sioux City, Neb. Sioux City, Ia., is at left.



The devotion and loyalty of every man and woman at Orchard & Wilhelm Co. enabled the management to evacuate two floors of their warehouse in the danger zone and supply more than 300 people to work on the dykes and otherwise guard the safety of the industrial area. The company also sent all large furniture trucks and all but two of their small trucks to the work of evacuation.

Orchard & Wilhelm Co.

Flood 'Army' Had to Be Fed, 'Deserted City' Had to Be Guard



It Hurts a Little—Janette Anderson, 2, showed the normal reaction when her mother, Mrs. Max L. Anderson (center), took her to a Council Bluffs center for typhoid inoculation.



Army Travels on Stomach—Relief agencies didn't forget the Napoleonic maxim. They went to the levees, fed the workers. Red Cross served 330 thousand "snacks" of coffee and sandwiches, some 15 thousand hot meals. Salvation Army workers did about an equal job in their mobile canteens. This picture shows Hostess Hazel Christensen at her job.



Animals Weren't Forgotten—Here Capt. Ole Rasmussen (right) and Sgt. 1/C Emmett F. Muller of the National Guard take care of a lost kitten in Council Bluffs. Animal shelters in both cities fed cats, dogs, rabbits, goats.



On Guard—When Council Bluffs' West End was emptied three days before the crest National Guardsmen and civilian police set up check points to watch traffic. Those who didn't have passes were ordered out. This was to protect against looting of homes that were vacant for a week to 10 days.



Our Hat is Off

to the thousands of people who so unselfishly did their part during the recent flood threat. We are proud to be a part of a community where the true meaning of cooperation became a working reality. It is from our heart when we say to the many... "Thanks for your help."

EATON METAL PRODUCTS CORPORATION

13th and Willis Ave.

Omaha, Nebraska

Everyone Helped in Everyone's Fight to Straitjacket the River

Flood-fighting officials bemoan the fact that they can never give individual thanks to the thousands who joined in the battle. The photos below are of typical individuals who joined in one brawny force to repel the invader.



A boss . . . Capt. David M. Bailey, Fort Leonard Wood. An expert . . . Herb Jackson, Memphis, Tenn. A shoveler . . . Chuck Johnson, Council Bluffs.



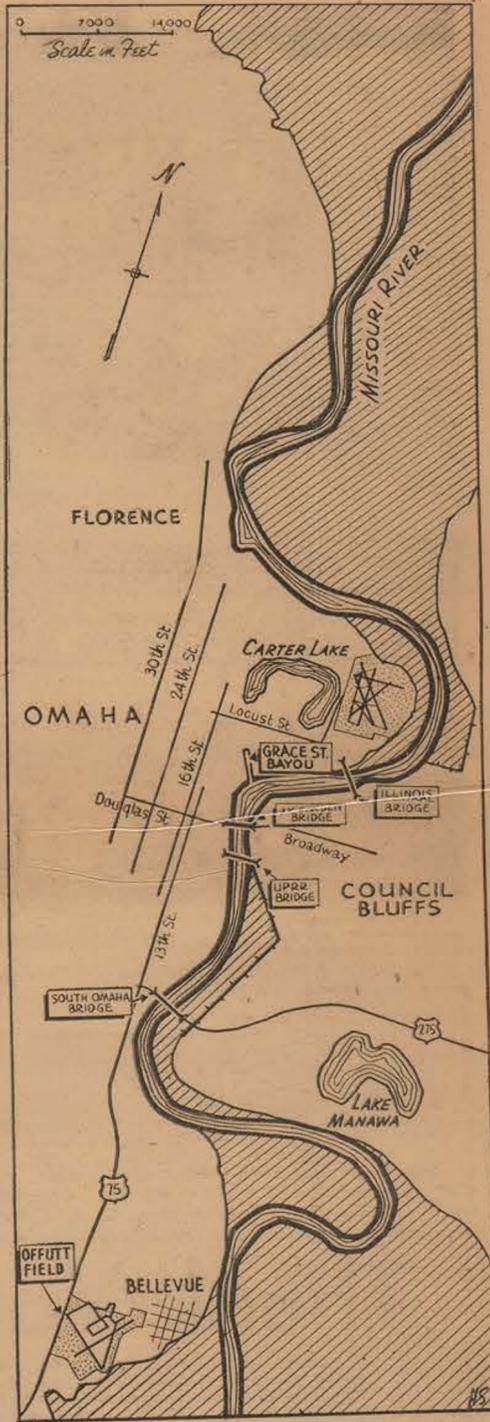
A Red Cross girl . . . Karen Sorensen, Council Bluffs. A volunteer . . . Ivan Ives, Council Bluffs.



A soldier . . . S. Sgt. Leandro Rosario, Camp McCoy. A bulldozer driver . . . Virgil Dunn, Red Oak, Ia.



—Wacil-Herald Photos.

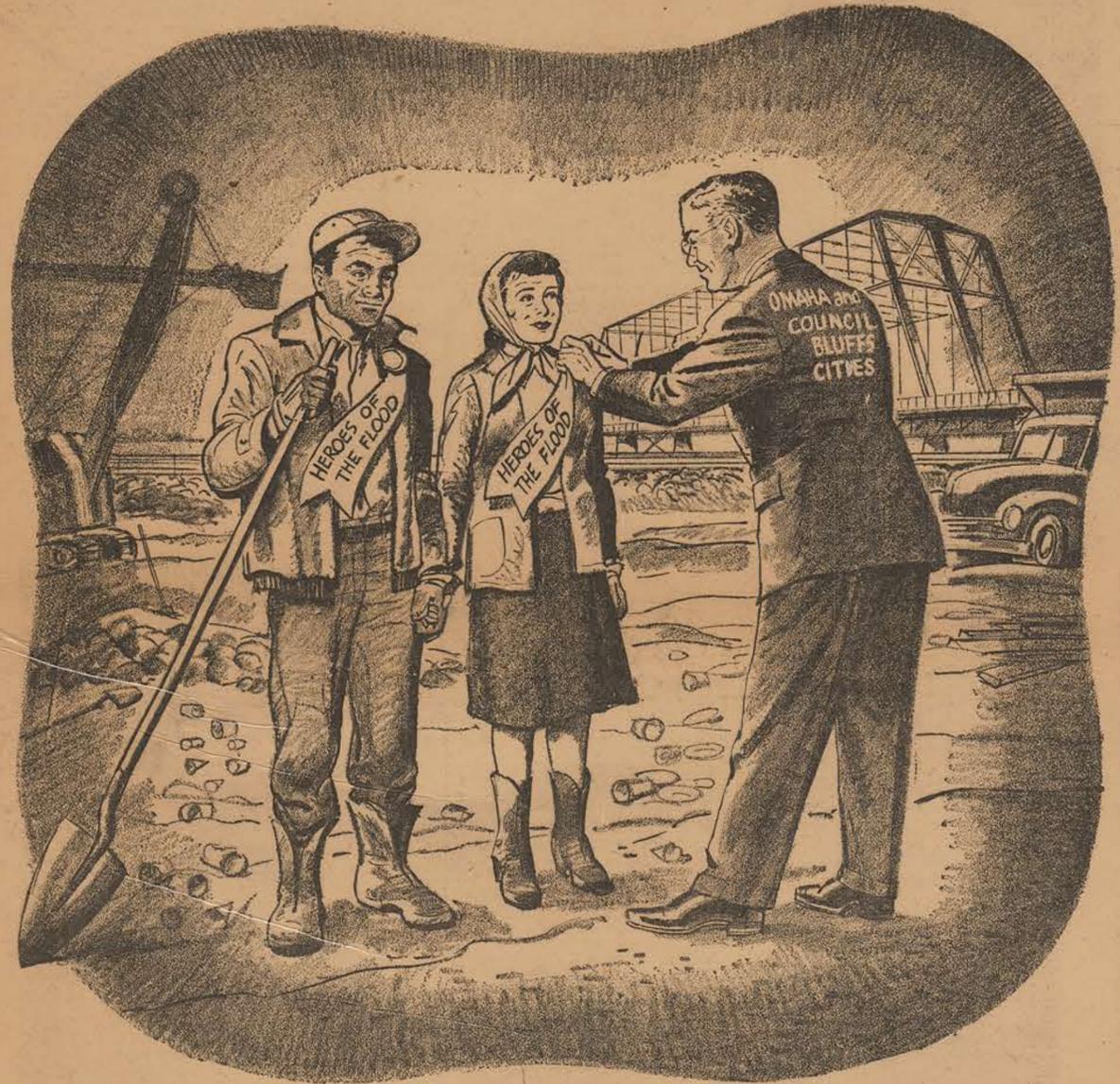


Omaha-Bluffs Funnel—Water that poured over lowlands from bluff to bluff above Omaha and Council Bluffs and stretched up to 14 miles in width had to pass through a funnel a scant quarter-mile wide where the Ak-Sar-Ben Bridge crosses the river. The tremendous pressure of this narrow waterway against the dikes that protected Omaha and Council Bluffs is what caused anxious minutes, hours and days in the two cities.

At Left

Can't Quit Now—When engines couldn't do the job, people could. This truck, helpless to fight the Grace Street sewer break, became stuck in the slimy roads. Quickly 15 men from a sandbag crew put their shoulders to the job and freed the truck to go for another load of sandbags.

For Distinguished Service



*Glory Dwells Where
Glorious Deeds Are Done*

OMAHA and COUNCIL BLUFFS STREET RAILWAY COMPANY

10-A
Omaha World-Herald, April, 1932

Water Rolled Over Roads—There Was Fishing in City Streets



Highway Waterway—The old Ninth Street Road west of Sioux City, Ia., was a torrent after the wild Missouri had torn through dikes in this area.



They're Bitin'—Right on the main street in South Sioux City, Water Superintendent Herbert Treadway caught those channel catfish.



Last Trip—Mr. and Mrs. Ted Mayberry of South Sioux City toted a high chair and the family cat on their last trip out of their basement home.



Unintended Raft—A lumber yard's stock in trade floated away in South Sioux City.

We're Proud . . .

Yes, we are proud to have been a part of the community effort that kept the angry flood waters away from our homes and our industries.

Protecting the generating facilities of the District's power plant was a big job, but that job was accomplished and uninterrupted electric service was maintained throughout the emergency.

We're glad the crisis is over . . . and we gratefully acknowledge the help that we received from everyone.

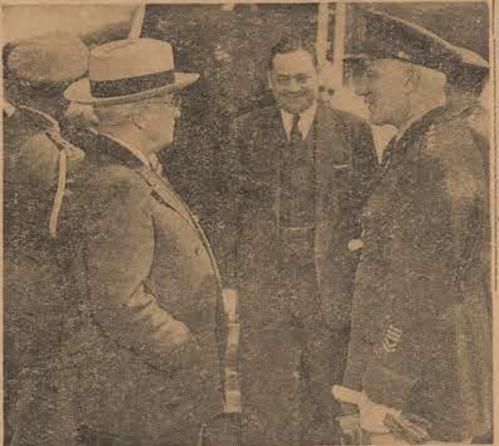
Omaha Public Power District

19-A
Omaha World-Herald, April, 1932

The President Wanted Action—Even Women Filled Sandbags



Double Exposure—A photographer accidentally made two pictures on one film, caught the spirit of the round-the-clock battle. At lower left is a levee patrolman standing his lonely vigil. Above and at right, a sandbag crew works feverishly on a seepage spot.



Quit Fooling Around—That was advice of President Truman (left), when he consulted Midwestern Governors and Engineer officials, including Lieut. Gen. Lewis A. Pick (right). Replied Nebraska Governor Peterson: "Missouri River governors have not missed a single lick" in seeking flood control.



Rain Didn't Stop Them—Rain frequently was a nuisance but didn't stop levee work crews. This line of trucks on the levee at the end of Adams Street in East Omaha battled road muck resulting from the April 12 rains and kept going.



The Weaker Sex? — Women got into the battle. This group, employes of the Nebraska Bag Company, loaded thousands of sand bags. Other women drove trucks and thousands worked in Red Cross shelters, mobile canteens, medical centers.

Thank You, Neighbors!

For every member of our organization, we gratefully extend thanks to the leadership of our City who carefully and wisely made plans to meet the challenge of the mighty Missouri; to the thousands of men and women of this community who unselfishly helped make these plans work. This united spirit has been a revelation to everyone and will be an inspiration for years to come.

The following firms loaned their trucks and drivers that we might move our lumber to a safe and dry place on the Snell Sash & Door Co. property:

- Boyer Lumber & Coal Co.
- Chicago Lumber Co.
- Disbrow & Company
- Holland Lumber Co.
- Rivett Lumber Co.
- Snell Sash & Door Co.

We can never forget the gracious assistance of the employees of Disbrow & Company, The Overhead Door Co. and the offers of assistance from many other sources. To each of these we most humbly and sincerely say, thank you!

To the Great Architect of the Universe, we are most grateful for sparing this community from the ravage of a great flood.

ADAMS & KELLY CO.

12th to 13th on Nicholas

By JOHN A. PATTERSON,
Secretary-Treasurer

Flashboards Raised Protection Level on Levees, Floodwalls



DOTTED LINE INDICATES TOP OF CONCRETE FLOOD WALL

Near Peak—The morning of April 17 the river climbed to 30 feet. This scene, looking north from the Ak-Sar-Ben Bridge, shows the water against the wooden flashboards bolted atop the flood wall. The men, trucks and buildings were some 12 feet below the water level.



No Busy Lines Here—Thousands of phones were removed from homes and business houses in Council Bluffs and East and North Omaha in advance of the expected flood. Putting them back after the crisis was a big job.



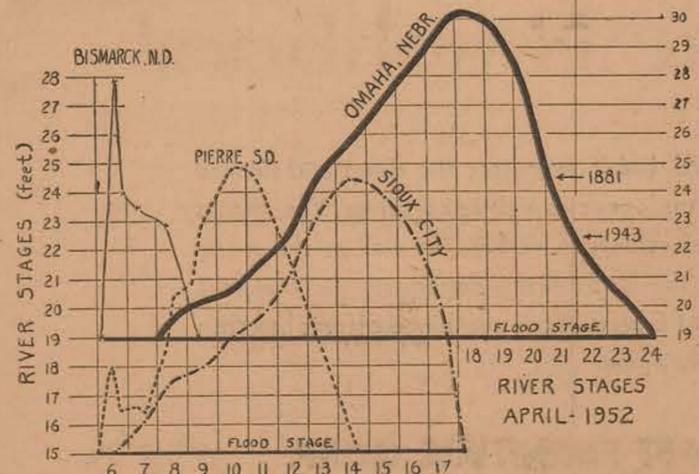
Flashboards Going Up—Near the new water works intake station north of Council Bluffs, carpenters work against the rising river level to drive and brace 2x4's, then face them with long planks. Sandbags front and back completed the barricade. About 800 thousand board feet of lumber were used this way.



Obstinate — Mrs. Mary Kohout, living only 100 yards from the river near the foot of Hickory Street, refused to move. Said she: "What the hell? I ain't afraid of that old river."



Dry Land Boat—When Red Cross, Bellevue Rescue Squad and Offutt Air Force Base men removed some 20 families from lowlands April 9 the flood had just started. A boat, not needed immediately, was towed over mud roads.



Flood at a Glance—Here is Weatherman E. F. Stapowich's chart of river stages at four major cities during the flood period. The sharpest rise is the one at Bismarck, April 6-7, when an ice jam caused water to back up. There is no direct relation between readings at different cities, since "zero" stages vary.

Traffic Halts but People Smile as They Fight Back at the River



Crest near—This was the scene in Sioux City and South Sioux City as the river neared its crest. Note the highway bridge blocked by water.



It Could Be Worse—Mid-western people can take adversity with a smile. Like these folks getting off a relief train that carried them from South Sioux to Sioux City.



The Man With a Shovel—Bob Romans, silhouetted against the night sky, symbolizes all the men with shovels who preserved a west side dike at South Sioux City which kept part of the city from going under.



Business—but Not as Usual—Keeping a store open for food customers was no small job. Grocer Jack Engel of South Sioux City is transferring a quarter of beef, boat-delivered from Sioux City, to his car for transport to his store.



"Man, Does That Taste Good!"—Tom Cooper, 69, spent four days, five nights in a South Sioux City attic. He lived on crackers, cold beans, raw eggs. Finally rescued by his son Harold, he relishes a bowl of hot soup.



Deserted Highway—This was the scene near Dakota City, Neb., as the water poured over highways and farms.

Farmers Move Stock Into Hills as Water Covers Broad Plain

The headlines grew bigger and blacker as the river roared south. Thousands of acres were added daily to the flood areas as agricultural levees were broken or topped.

And as the flood at Sioux City, Ia., and South Sioux City, Neb., worsened daily, uneasy residents farther south, rural and urban, prepared to meet the highest river ever recorded.

The man-in-the-street suddenly realized he might soon be the man-at-the-dike.

On the lowland farms, hasty moving preparations were made. Veterans of Missouri River floods who aren't readily scared seemed to sense that "this is the big one."

Truck operators worked days and nights hauling out livestock to temporary havens on hill farms. People in the towns rushed out to help farmers load feed and get it out, remove furniture or move it to second stories.

One favor the onrushing river had bestowed. It had provided ample warning of its coming and a fairly good idea of what it would do.

The hungry river gobbled up fertile lowlands all along the one-hundred-mile Omaha-Sioux City strip. It spread to six miles, 10 miles, 14 miles... the estimates were almost incredible.

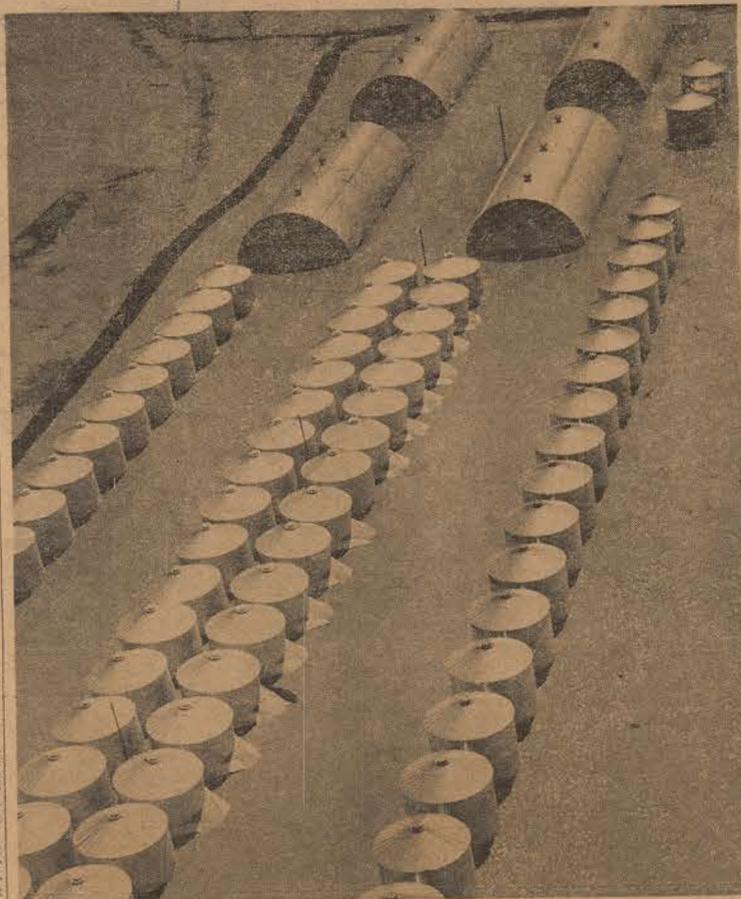
The list of evacuated towns got additions daily. Water swept into Whiting, Mondamin, Modale, Ia. Desperate efforts were made to ring communities with walls of earth.

Levees blew out near Blencoe, Ia., near Herman, Neb. Stretches of Highway 75 and lesser arteries disappeared from view.

Water crept under the famed "dry-land" bridge at Decatur, Neb. At one time there was a theory that the flood might put the bridge into business by crawling under it permanently. But after the water dropped back, the channel was still a river's width east of the bridge.

Blair, Neb., had a different problem. It worried about the river pulling out from under its automobile and railroad bridges. But again the channel returned to its accustomed place.

A 1½-mile, community-built dike near Decatur was credited with preventing the river from slashing a new channel through the Burt



Feed for Ducks, Fish—Two Government grain bin sites at Blencoe, one at Whiting were caught in the flood. More than two-thirds of the 1,590,219 bushels of corn the bins contained was damaged when the wet corn expanded and burst the bins. Some of it went down the river to feed ducks and fish. Top photo at right is a closeup of the mess after the flood subsided.

County "depression" all the way down to Tokamah.

When it reached the lowlands north of Blair, the crest was bulging badly. Water hung back in previously unflooded valleys and lapped higher on flood plain farm buildings, higher than the residents ever had seen.

Heavily-traveled Highway No. 20 was under water over most of its length between the Blair bridge and Missouri Valley, Ia. Damage may keep the highway closed more than two months.

As the crucial moment for the metropolitan area neared, all eyes were on the Blair bridge river gauge—last one above Omaha.

Up and up it crept—from 22.8 feet to 23.1 feet to 23.5 feet—then 23.4 feet. The crest had passed Blair and was hurtling down the narrowing neck of a funnel.

Could Omaha and Council Bluffs squeeze that monstrous deluge between them into a 1,500-foot channel?



—World-Herald Photo.

Families from Lowlands Lived in Trailers—on Higher Ground



"Christmas Tree"—In Council Bluffs, evacuating families hung toys and other items in trees to keep them above the expected water level.



Ten's a Crowd—At Miller Park in Omaha and Kirn Field in Council Bluffs many families parked trailers brought from lowland areas. Here is the family of Mr. and Mrs. Floyd Shields, packed into the smallest trailer in Miller Park. Some 60 families parked there, used the North Branch YMCA for baths and recreation.



Train Service Cut—Where the Illinois Central Railroad tracks cut through the levee in Lakeview Park on the north edge of Council Bluffs, sandbags were piled to shortstop the river.



Roadblock—One rainy night in Council Bluffs, trucks loaded with huge boulders were sent out Twenty-fifth Street to work on the levee. They found the road impassable. They backed into adjoining streets, dumped their loads and rushed back for other assignments.



Plenty of Elbow Room—At the Army Engineers' Florence Boat Yard, boats were the only means of travel five days before the crest arrived. From this spot, workboats and barges operated along the levees, carrying rock and sandbags.

A Page in History

When the history of the Missouri's greatest flood is completed, the Omaha-Council Bluffs chapter will certainly be one of the most heroic. For nothing could be more inspiring than the story of thousands of unselfish men and women working day and night to avert the tragedy of a major flood.

The Omaha Production Company wants to express its sincere gratitude not only to the people who helped in the evacuation of our plant, but to everyone connected in any way with the courageous battle against the river... to all those who thronged the levees and for long, sleepless, restless hours did the back-breaking labor which in truth saved our cities from the river.

Omaha Production Company

DIVISION OF SPERRY CORPORATION

Thanks . . .

Yes, thanks—a small word, but it expresses the deep and sincere appreciation of our 238 employees as well as ourselves. Yes, thanks to the many thousands of volunteer workers, as well as the many relief organizations, and the U. S. Army Engineers, the National Guard, and the U. S. Coast Guard. Your combined efforts held our loss to a minimum. Thanks again.

MASTERCRAFT FURNITURE CORP.

1111 NO. 13TH ST.

OMAHA

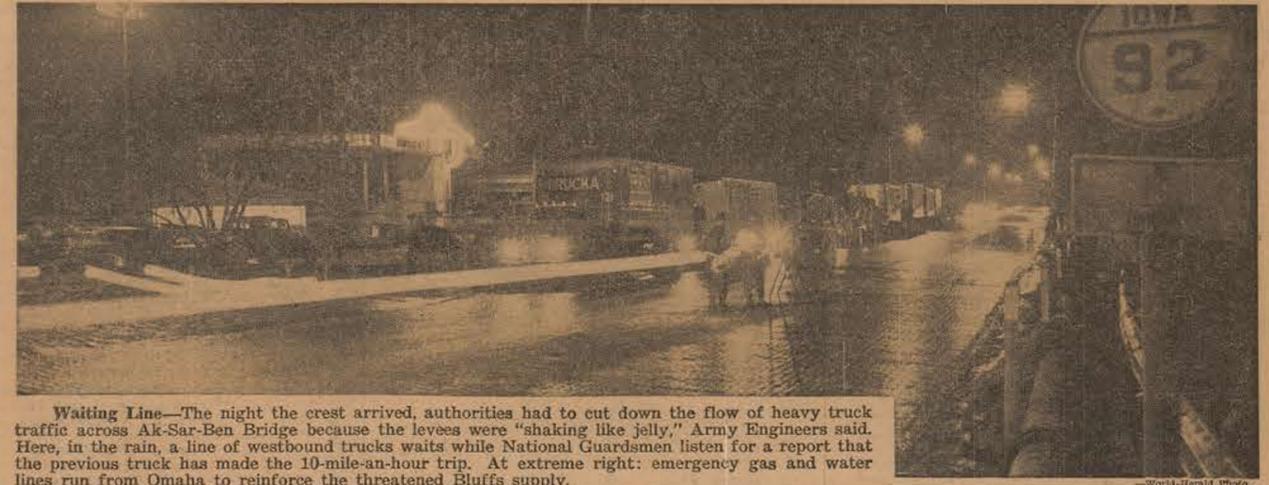
Huge Air Force Planes Brought a Stream of Equipment, Troops



Little Berlin Airlift—In some of the Air Force's biggest cargo planes came a steady supply of cots, blankets, medical supplies, troops and their equipment. Here are troops of an engineer combat battalion from Camp McCoy, Wis., unloading through the clamshell nose doors of a huge C-124. —AP Wirephoto.



Trouble from Below—Seepage through underground works, especially sewers, was a problem. Here three volunteers pile sandbags around a leaking manhole south of Thirteenth and Webster Streets. —World-Herald Photo.



Waiting Line—The night the crest arrived, authorities had to cut down the flow of heavy truck traffic across Ak-Sar-Ben Bridge because the levees were "shaking like jelly," Army Engineers said. Here, in the rain, a line of westbound trucks waits while National Guardsmen listen for a report that the previous truck has made the 10-mile-an-hour trip. At extreme right: emergency gas and water lines run from Omaha to reinforce the threatened Bluffs supply. —World-Herald Photo.

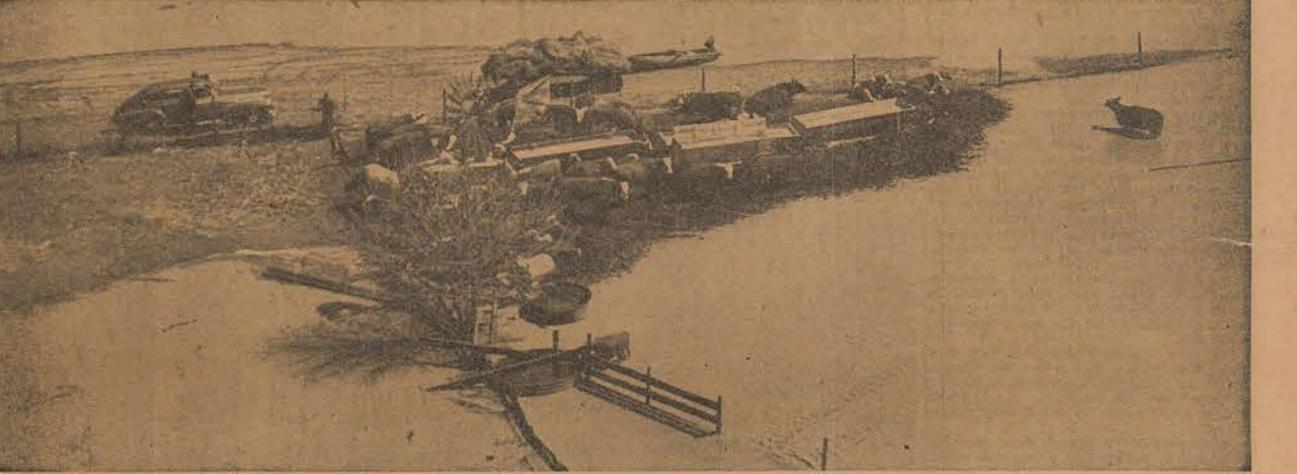
Communities Helped Each Other as the Flood Crest Rolled On



This Dike Protected a Neighbor—Decatur and Tekamah, Neb., are rival Burt County communities in many affairs. But when the flood crest threatened to cut a new channel southeast of Decatur that would have threatened Tekamah, citizens of Decatur and farmers pitched in to build a dike that held the river back.



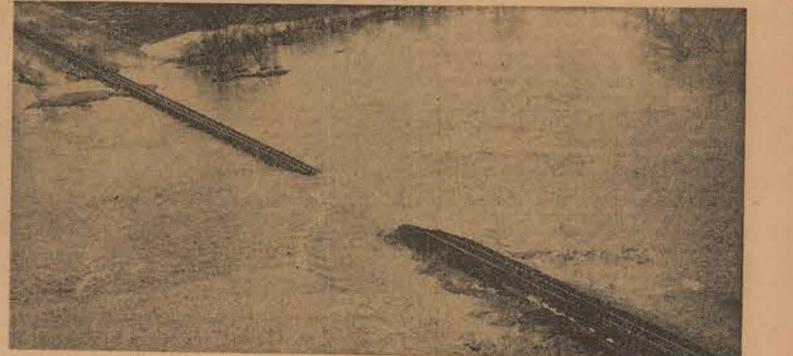
Water Under the Bridge—This new span at Decatur, built on dry land and awaiting a move of the channel to put it into service, finally had water under it. The main channel is beyond the end of the span.



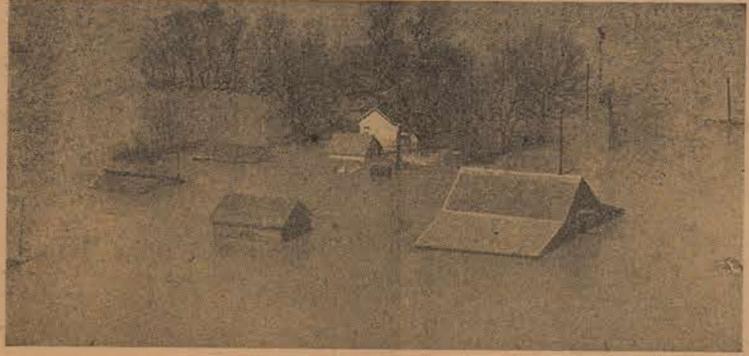
The Cattle Got Feed—and Water—This scene on a farm one mile southwest of Blencoe shows difficulties typical of those many bottom-land farmers faced all along the river. The cattle, marooned on a high spot, were being cared for. The farm auto had been marooned and access to the feedlot was by boat and outboard.



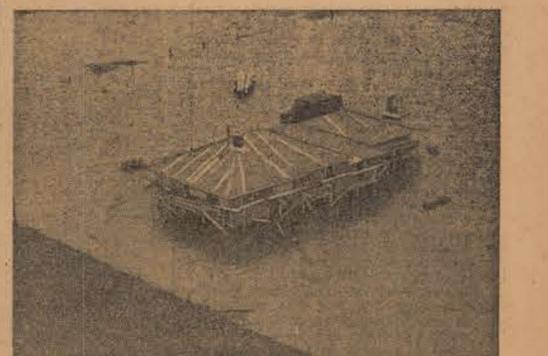
Emergency Food Center—Mrs. Nina Bracken (right) and daughter Janice feed flood workers Farmer Harvey McIntosh, Art Zahner and Patrolman Don Drustrup at Modale.



Service Discontinued—Even Casey Jones couldn't have made it through this. North Western Railroad tracks between Blair and Missouri Valley were washed out near California Junction.



Going Under—As the flood moved relentlessly toward the narrows between the Omaha and Council Bluffs levee systems, it fanned out over the rich farmlands to the north. These farm buildings near Little Sioux, Ia., stand deep in the muddy current.



Completion Delayed—Carpenters will have some extra work on this new house under construction in the Blencoe area. —World-Herald Photos.

To All Who Served . . .

We wish to offer our most sincere thanks to all of you that so generously gave your time and efforts to the task of helping defeat the muddy Missouri.

Your efforts were not in vain.

Also, a special salute to the thousands of housewives that so generously gave their time preparing sandwiches and lunches that were served by our many charitable organizations.

Granger Bros. of Council Bluffs



The Bigger They Come the Harder We'll Fight—That Was the Spirit of Omaha and Council Bluffs People as the Big Muddy Met Its Master

Brig. Gen. Don G. Shingler's press conference bombshell announcement that Omaha and Council Bluffs faced a 31.5-foot river crest was made Monday, April 11.

For nearly a week the two cities had been organizing a defense against a record flood, calmly, confidently, efficiently. But they hadn't expected anything that big. Behind a levee system designed to protect them against 26.2 feet, they had felt they could give a couple of feet and still whip the odds.

But 31.5? Well, we'd take that on, too. Everybody pitched in to work harder than ever before.

National Guardsmen, Regular Army troops, Corps of Engineers officers and civilian technicians, Civil Defense forces, city officials, Red Cross workers, Salvation Army officers and volunteers, Air Force work parties, Civil Air Patrol cadets and officers, sheriff's deputies, work teams from factories and stores, truckers, herds of individual volunteers, utilities employes and others swarmed behind the dikes.

From the smaller towns, from other states, from high places far from the raging river came hordes of people ready and willing to do what might be asked for as long as it might be needed.

The battle had built up from a rather leisurely start to a full crescendo in about this sequence:

Monday, April 7—Council Bluffs Mayor James Mulqueen, Acting City Manager Kenard Gardner and their flood-control aids looked at Council Bluffs' levee system, found it in "excellent condition."

But they realized the vulnerability of their city. Most of Council Bluffs' homes are on the three-mile-wide flood plain. A levee failure could open more than half the city to flood water. So they and City Council members were more than willing to talk business when the Corps of Engineers asked them to appoint a disaster committee.

Tuesday—Omaha's Mayor Glenn Cunningham passed along to Civil Defense Director Sam Reynolds a request from the East Omaha Drainage District, which maintains the Omaha levees. The district wanted to know if Mr. Reynolds could provide guards to keep sightseers off the levees over the week end.

The river was expected to crest at 26 feet, more than a half foot below the "design flood" for which the levees were built. "Sure," said Mr. Reynolds. "It will make a good practice run for our civilian policemen."

Wednesday—"We haven't seen anything yet," said Brig. Gen. Don Shingler, Missouri River Division Engineer. The crest prediction was upped 2.5 feet.

Thursday—E. L. Myers, consulting engineer for the East Omaha Drainage District, flew from Kansas City to head Omaha's Flood Steering Committee.

Friday—The crest prediction was upped 1.5 more feet. Army Engineers started letting emergency contracts. Eight contractors were hired to add a two-foot "lift" to the 23 miles of Omaha-Council Bluffs levees.

Mayor Mulqueen issued the first of a series of evacuation orders, telling everyone west of Thirtieth Street in Council Bluffs to move to higher ground.

Calls for volunteer workers went out. **Saturday**—Rain made slimy mire of levee access roads.

Bulldozer operators, truck drivers, carpenters worked through the chilly night, to get roads in shape to keep the levee-raising going. Along the critical north end of the Council Bluffs levee, they laid more than a mile of timber road—2x12s in railroad-tie fashion, topped with parallel rows of doubled 2x12s for trucks to travel on.

Sunday—The river climbed past 25 feet, exceeding the 1881 record nearly a foot. Council Bluffs and East Omaha evacuations swelled to a torrent.

In industrial plants workers hung machinery from girders, boarded windows, piled sandbags around doors and basement windows.

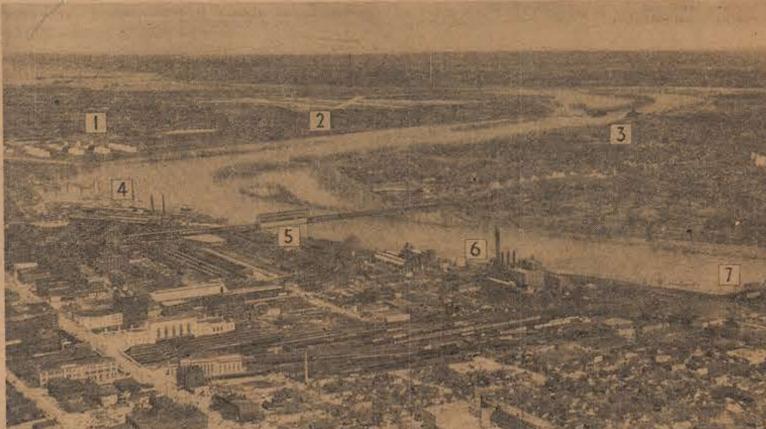
Bulldozers, draglines, loaders, trucks swarmed to vacant lots, fields and park areas where dirt could be obtained. Swiftly it was transported and the levees grew and fattened on it.

Army Engineers hired four companies to place flashboards on levees to be faced and backed by hundreds of thousand sandbags.

The World-Herald began a relief fund, surmising that "its readers, as always in such circumstances, will wish to throw out a lifeline." In two weeks World-Herald readers sent more than \$127,000, the largest amount of money ever raised by the readers of a single Nebraska newspaper for relief purposes, and money was still coming. The fund was administered by the Red Cross. Simultaneously a fund for the Salvation Army mounted to above \$78,000.

Monday, April 14—The almost unbelievable crest of 31.5 feet was predicted to reach here Thursday. Lieut. Gen. Lewis A. Pick, Chief of Army Engineers, arrived. Action became so rapid that none could keep track of the whole picture.

From Camp Carson, Colo., Camp McCoy, Wis., and Fort Leonard Wood, Mo., came six thousand troops trained in construction work.



The Battleground—Here Omaha and Council Bluffs fought the river. Numbered landmarks: 1, Great Lakes Pipe Line Terminal; 2, Omaha Municipal Airport; 3, Illinois Central Railroad Bridge; 4, Union Pacific Railroad Shops; 5, Ak-Sar-Ben Bridge; 6, Omaha Public Power District main generating plant; 7, Union Pacific Railroad Bridge.



The Endless Procession—Loads of dirt totaling 21 thousand tons were hauled to the Mosquito Creek levee south of Council Bluffs to raise a three-mile stretch. The over-all job on both sides of the river took 225 thousand cubic yards of earth.



Too Young?—Disregarding a rule about workers being over 18, Harvey Paley, 15; Phil Schragger, 16; Bill Connolly, 15, showed up in a sandbag line.



A Rescue—Along the bottoms near Bellevue, air-men and civilians helped residents move. Unable to walk, Mrs. Anna Covrig, 92, was lifted into a truck.



Fifteen thousand an hour—At Sixtieth and Walker Streets in North Omaha (above) and at other sites crews worked to fill sandbags. About 5 1/2 million were ordered.



Time Won't Wait—Nobody watched the clock for getting time when a sandboil or seepage developed. They worked through the night passing sandbags from one man to the next. When one trouble spot was patched, there always was the job of rebuilding stockpiles for the next emergency.



No Man's Land—Except for the men struggling to keep up the levees ahead of the river's steady climb, the West End of Council Bluffs was deserted after the April 12-13 week end. This area lies just below the river bend called "The Narrows," where a levee break could have covered thousands of acres. Broadway is at the left.

Tuesday—Council Bluffs was evacuated to Seventh Street.

Sandboils began to appear all along the levee system. Each called for quick erection of a ring of sandbags until the water pressure was equalized. In some places the levee was getting boggy. The stamp of a foot could make the top quiver.

Wednesday—President Truman met with Midwestern governors in Omaha, called for "action" by Midwesterners to promote flood control.

Thursday—The river had climbed to a stage of 29.07 feet that morning. "Today is the critical day," General Pick said.

The Weather Bureau predicted the crest's arrival by late evening. Along most of the levee system water lapped at sandbags. Saturation was so nearly complete, engineers said, the levees had settled several inches.

The concrete floodwall was bending from the weight of the water. At collection points trucks loaded with sandbags sat nervously awaiting emergency calls.

Through the night rain splattered. Under carbide and emergency electric lights, lines of volunteers shuffled with sandbags. The sound of pumps and portable generators muffled conversation. Now and then the voice of a Mississippi River-trained levee boss would twang:

"Any men sittin' around up theah? We could use a few men heah."

In Omaha, Mr. Myers alternated shifts with his top assistant, Ed Foster. In Council Bluffs, Mayor Mulqueen, Mr. Gardner and Councilman Frank Griffith rotated the command job.

The river crept up to 30.2 feet, dropped and raised nervously for several hours. **Friday, April 16**—At 8:30 a. m. the river stood at 30.24 feet. That was the crest and the highest stage ever recorded here.

Two or three hours later it was apparent the crest was past. The levees still held. But there was another fight ahead.

Late Friday afternoon Ed Foster took a "break" from his desk. He got back about 6:45 p. m. in time for a phone call:

"Big break in the Grace Street Sewer. They want five hundred men and half a million sandbags."

Mr. Foster had never seen the Grace Street Sewer before he was appointed to the flood committee. But he had studied it after he learned it might be a weak link.

The picture was clear in his mind as he hurried to his car—equipped with radio telephone because of the flood emergency—and sped toward the scene.

The sewer, he knew, was made up of two parallel concrete tunnels, each 7.9 feet in cross section. When it burst it was carrying back pressure from the river of about seven thousand pounds per linear foot of tube. Plugging a break from the land side probably would be impossible. The volume of flow could cover two thousand acres with a foot of water every 24 hours.

And if the tremendous pressure on the tunnels continued to cause ruptures working back toward the levee, a whole section of levee could go, and the battle could be lost.

As he drove, he began giving orders over the car phone. He called the Paxton & Vierling Iron Works and asked them to deliver 20 steel I-beams, each 20 feet long, to the foot of Seward Street. He called the Omaha Steel Works and placed an identical order.

When he reached the levee around the long bayou into which the Grace Street sewer empties, Mr. Foster found a milling mass of volunteer workers, troops and Army Engineers. Sandbags and boulders they dropped in front of the sewer mouth were useless.

Mr. Foster outlined his plan. Engineers agreed. Action started. Trucks poured gravel on the soft roadway to lead the steel trucks to the levee. Sandbag crews built up the sodden grade to bear the weight of trucks.

In the bayou were two barges and a tow-boat. Mr. Foster directed the troops as they lifted the thousand-pound beams from trucks and laid them on a barge in a neat row.

Then, with a Corps of Engineers man probing the murky whirlpool that marked the sewer's mouth, the barge was worked gently into position. It was a precarious attempt. It had to be done just right, and was.

It was nearly midnight when they started dropping the beams overhead.

Then a large load of rock was brought in. A nerveless bulldozer operator shuttled his growling monster across the narrow deck, shoving the boulders into the water.

With the grillwork of beams in place, and the rock in front of it, the flow began to lessen.

Then from the levee, the familiar chain of sandbag tossers came out across the barges, dropping sandbags in the water. The bags filled the chinks. The flow at the sewer break cut suddenly to a relative trickle.

It was 4 a. m. Saturday. Tired faces of the Grace Street crew brightened.

By Saturday afternoon, the Missouri had settled sullenly back to less than 26 feet. Already it was rolling against the cities and farmlands to the south.