

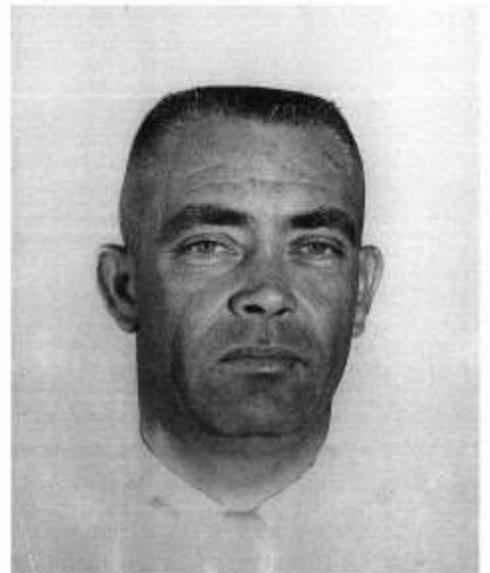
06-02-1972 Rapid City SD – Carter – Tank – Summers -3 FFs Flood Rescue Dam Fail

RAPID CITY FIRE DEPT.

<https://penningtoncountyemergency.wordpress.com/2015/06/09/remembering-the-flood-of-1972/>

Then: 1972

- Fire Chief Ken Johnson
- 71 responding personnel
- 3 Sub-stations, (Stations 3, 4, & 7)
- 3 Firefighters lost in the flood, Capt. George Carter, Lt. Henry "Hank" Tank, George "Ike" Summers



Now: 2012

<https://penningtoncountyemergency.files.wordpress.com/2015/06/newspaper-june-26-pd-and-fd1.jpg>

Firemen lose 3 in valiant effort

(From June 14 Journal)

The Rapid City Fire Department lost three men in Friday night's flood.

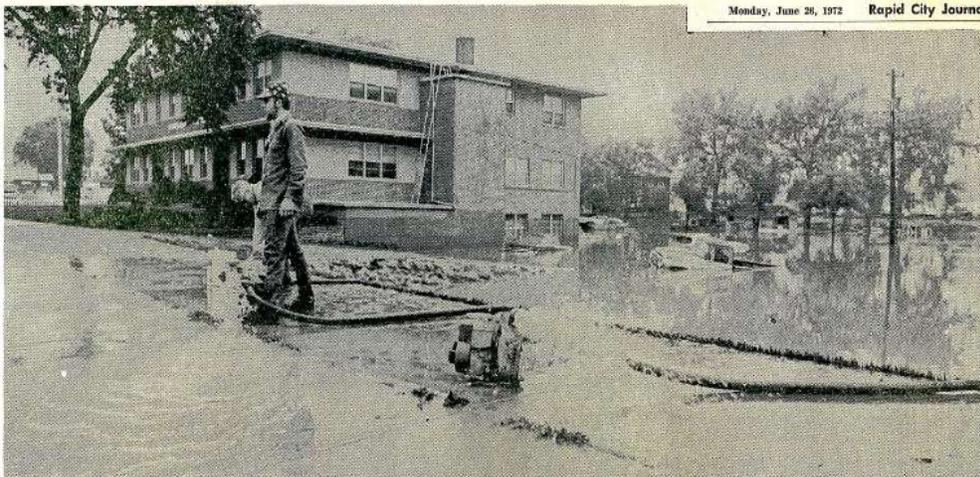
George Carter, 609 Haines, and George Summers, Brookdale Estates, have been found dead and Henry Tank, Bobbistdale, is reported missing and presumed dead.

Wayne Gramum, 702 E. Tallent, was with Carter, Summers, and Tank when he was injured. Gramum has 36 stitches in his left hand which he cut while trying to escape from a rapidly flooding house.

Gramum was inside the house trying to rescue a woman when the surge of water from the broken dam hit Carter, Summers, and Tank were outside the house, and were swept away by the water. Gramum smashed a window with his hand and climbed on to the roof of the house. He stayed on the roof as the house floated through Canyon Lake to the spillway, where he was able to get off.

A rescue wagon full of medical supplies, together valued by firemen at over \$8,000, was swept away by flood waters at Jackson Boulevard and 38th Street. Firemen also lost a variety of small equipment: flashlights, tools, rope, etc.

Most of the vehicles' engines and transmissions had rough use because of the constant soaking they took. Firemen said the affects of this won't show up for months. They said just about all the vehicles are scratched and dented.



Monday, June 26, 1972 Rapid City Journal F15

South Dakota Flood Deaths Exceed 200

RAPID CITY, S.D.

The death toll passed 200 Sunday as people in the scenic Black Hills of South Dakota began identifying their dead and cleaning away the debris from savage flooding that left hun-

dreds still missing and damage in the millions of dollars.

Civil Defense officials said the death count had reached 206, but feared the count would go higher. Relatives reported 500 persons still unaccounted for in the area.

Rapid City, a resort city of 43,000 about 20 miles north of Mt. Rushmore National Memorial, bore the brunt of the wall of water created when extraordinarily heavy rains forced the earthen Canyon Lake Dam to give way and Rapid Creek to overflow its banks.

National Guardsmen and volunteers joined in the search for more bodies in the flood-stricken southwestern portion of the state, declared a national disaster area Saturday by President Nixon. The designation made the area eligible for immediate federal aid.

The U.S. Army Corps of Engineers predicted damage would reach \$100 million. Homes were splintered, cars and mobile homes scattered about like toys by the flood waters.

Persons of all ages were cleaning debris and hauling it away with every available truck Sunday. Meanwhile, they also combed through the wreckage for more bodies. Many of the workers were standing in water to their knees.

The Daily News

Opinion Poll

QUESTION: "Who do you think will be elected president in the November election?"



A. J. Russell, 569 Jackson St. "Nixon, he's got too many people running against him, that people don't want for president. It's going to split the votes too much."

The Pennington County Health Department administered typhoid and tetanus shots to the survivors.

Gov. Richard Kneip, who toured the flood ravaged area Saturday and Sunday, said the final death toll may not be known for a week. He called the flooding the "worst disaster to strike this state."

"There are so many areas that have not been searched for bodies," the governor said. "In many instances we'll just have to wait for the water to subside so we can dig into the rubble." Sen. George McGovern left the presidential campaign trail to fly to his home state to survey damages to Rapid City and surrounding areas. He called the scene "incredible destruction and desolation... it goes beyond what anyone can comprehend."

The Rapid City water system remained inoperable Sunday. Drinking water was brought to designated places in the city from nearby Ellsworth Air Force Base.

The shock of death and the fear of disease—typhoid and tetanus—showed clearly on the faces of persons lined up Sunday at the Pennington County Health Department.

They were the survivors of the raging floods which killed scores of their friends, neighbors and relatives. And they, too, had been swept under the murky waters of Rapid Creek.

Darel Mowry, a health official, was shepherding the line and explaining. "You don't need the shots if you drank tap water. You don't need a tetanus shot if you've had one in the last five years."

A husky, dark-haired man in his 50s pushed his burly son to the front of the line.

"He was under the water. He has a sore throat," the father said.

The young man, Sam Chase, 21, looked from clouded eyes.

"I couldn't help it," he said. "My car was swept away. I was under the water. I got bruises and cuts."

Mowry pulled out a red marking pencil and scrawled "TY-TB" on the youth's arm, indicating he should get both shots.

"At the hospital," Chase murmured, "they said I could get tranquilizers here."

His father said, "His wife was one of the ones..." He didn't finish the sentence.

They went into the narrow white brick building where nurses had already given shots to more than 300 persons by noon.

Outside, the line was filling with men in blue jeans, crusted with the mire of the flood waters. Women in slacks and

soiled blouses held small children.

A woman tugging at two boys said to Mowry, "The kids got out into the mud. I don't think their heads went under," hoping that Mowry would soothe her fears. Mowry said, "It's all right. They're all right."

Two Men Wounded In Big Stone Gap

BIG STONE GAP, Va. — Police were investigating a shooting of two brothers at the home of Ralph Dykes, Sunday night.

Big Stone Gap police chief Chilton Stewart identified the men as Robert Jones, 20, and Henry Jones, 24, both of Appalachia.

Robert Jones was reported in

Bombs Raze Huge Enemy Power Plant

SAIGON — A U.S. spokesman announced Sunday, U.S. jets have destroyed a hydroelectric plant capable of producing 75 per cent of North Vietnam's power requirements.

The plant was wrecked Saturday in the first attacks of the war against Hanoi's hydroelectric installations. The strikes were aimed at the strategic Red River Valley.

More special air raids were carried out Sunday by Air Force fighter-bombers against scores of railroad cars isolated by cuts along North Vietnam's northeast and northwest rail lines to China, informants disclosed. The sources described the raids as "successful."

The informants estimated that as many as 600 railroad cars trying to move south from China with war materials were strung out along the network, severed by weeks of U.S. air strikes. Most were reported on sidings. Earlier, air force F4 Phantoms cut the Lang Dang railroad bridge and the Tam Dan highway bridge along the northeast rail line about 60 miles above Hanoi, spokesmen said.

fair condition Sunday night in Holston Valley Community Hospital in Kingsport, Tenn., and his brother listed in good condition in Norton Community Hospital.

Stewart said officers had been called to Dykes' home where a fight reportedly was in progress.

Police said they were later called to the house to investigate a shooting, which was reported at 2:41 a.m.

A gun had been found but the police chief said it is not believed to have been the one used in the shooting.

Robert Jones reportedly was shot four times and his brother twice.

Thousands Attend Singing

BIG STONE GAP, Va. — An estimated 5,000 to 8,000 persons gathered at Ballitt Park here Sunday for the 52nd annual Tri-State Singing Convention and they were greeted with clear skies and cool temperatures for those who arrived early.

The election of officers came first with John Dorton reading the slate of officers selected by the nominating committee.

The officers, most of them re-elected, were Johnny Wilson, president; Paul Harry Miller, vice president; Clara Craft, secretary; treasurer, with Claude Akers, Fred Tate, Monte Craft and Paul Carter as committeemen.

The office of business manager was left open until W.M. Holbrook could be contacted.

the 164th day of 1972.
the when:
the negro civil rights leader Medgar
Evers was killed in 1967 that states could not
be denied.
The death of Edward Finch Cox in the
afternoon of the White House.

iefs. . .

On Sunday to an American and
the Frankfurt, a hospital spokesman
for Taubert said Mrs. Harry C.
a boy. The 31-year-old mother
is doing well. Taubert said Mrs.
is receiving hormone treatment at the
hospital section.

THE PRINCIPLE of the United Methodist
conference in Knoxville with 1,100 delegates
from Philadelphia delivered the
message and ministers attending the
statements will be announced Wed-

acting dean of the University of
Tennessee, was found dead Sunday in his
apartment in a Knoxville architectural
office Saturday night. He was found
by a few fellow workers. He be-

He was accidentally in Tennessee this
morning. Among those killed was
a Knoxville lawyer, who died Sunday
riding overturned in his back

for Andrei A. Gromyko will
be a sign of omnic cooperation with Western
countries - day visit to France today,
said Sunday. France is the Kremlin
- Europe and the only non -
- Leonid I. Brezhnev, Soviet
leader, since Nikita S. Khrush-

the Defense Services committee inquiry
into the retirement of an Air Force
officer authorized bombing attacks on
North Vietnam as early this year. Prior to his
visit, Gen. John D. Lavelle declined
to comment. The New York Times Sunday that
the attacks were without written orders, and
that the U.S. bombing policy in April.

Historical Vignette: The Rapid City Flood, June 1972

<http://www.nwo.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/581806/historical-vignette-the-rapid-city-flood-june-1972/>

The Rapid City Flood, June 1972

The citizens of Rapid City, South Dakota, thought of their visitors and themselves when they won Works Progress Administration funding in the 1930's to build Canyon Lake Dam on Rapid Creek. The 1,000-foot-long dam was built on the edge of the city. With a 70-foot base and 30-foot crown, the 20-foot-high dam backed up a 40-acre lake for recreation. The lake was great for fishing and boating, but the dam's 3.5-foot free-board was inadequate for containment of any substantial flood.



**Courtesy Lincoln-Mercury, Inc., Rapid City.
Graphic Restoration by Al Barrus**

As Rapid City grew, so did the need for drinking water. Deerfield Dam on Castle Creek, built during the 1940's, supplied that need but still did not give complete flood protection. When nearby Ellsworth Air Force Base became a Strategic Air Command facility, the larger Pactola Dam was built. Authorized under the Pick-Sloan plan, Pactola was just a few miles above the city on Rapid Creek. This large earth-fill dam stored water for drinking, irrigation, and recreation and had a free-board to contain floodwater.

The Cheyenne River, which receives the waters of Rapid Creek, has flooded 33 times since 1878. Snow melt contributes to the flooding of the river, but intense thunderstorms are more likely to cause high water. The most damaging of the Cheyenne's floods rose on Rapid Creek during 12 and 13 June 1907. The storm centered on Fort Meade, north of Rapid City and close to Sturgis. It dumped over seven inches of rain on the area.



Pumping at pool behind Ft. Meade Dam

Such storms are dangerous. In 1957, the Corps of Engineers proposed flood control projects at Belle Fourche, Spearfish, New Underwood, Sturgis, and Rapid City. The Corps wanted to channelize Rapid Creek at Rapid City to carry 6,000 c.f.s., only half of what the 1907 flood dumped into the stream. To get the project, the citizens of Rapid City had to buy rights-of-way and lengthen nine highway bridges. They blanched at the \$2.7 million price tag and, like their fellow citizens everywhere in the Black Hills except Belle Fourche, decided not to help build the project. As a result, none of the projects were built before 1972.

Working under the National Flood Insurance Act of 1968, the Soil Conservation Service delineated Rapid Creek's flood plain. With

proper legislation and zoning laws, this designation helped make the area's inhabitants eligible for Federal flood insurance. The city quickly passed the laws and zoning regulations to qualify for the insurance; however, few residents bought the protection. By early 1972, the city took flood control measures, bought three blocks of land along Rapid Creek, and moved 22 families from them. The beginning of a "green-way," an urban flood way, was thus set afoot.

The occurrences of 9 and 10 June 1972 surprised and shocked Rapid City. A southeast breeze pushed the mass of moist air that hung over the high plains up against the Black Hills. Then it began to rain. The airport at Rapid City recorded 2.75 inches; a station to the south noted 3.5 inches. Pactola Dam got nearly six inches, and the little town of Nemo to the northwest gauged seven inches in six hours. Isobar maps of the storm showed that some of the areas in the vicinity received 14 inches. No one anticipated such a deluge.

By 7 p.m., flood waters rolled over the high ground north of Rapid City. Mayor Don Barnett began appealing to campers to seek safety. Inside the town itself, few people took seriously the warnings of impending danger. Before midnight, water poured into picturesque Canyon Lake. At the flood's peak, the narrow canyon carried 50,000 c.f.s., or roughly 1.5 times the normal volume of the Missouri at Omaha.



5th Army opening road to stranded town

The runoff turned Rapid, Boxelder, and Boulder Creeks into raging rivers, and the old Fort Meade Dam at Sturgis nearly collapsed. The rain below Pactola Dam gathered in Dark Canyon. Rapid Creek ran through the canyon, flowed onto the plain, and normally followed a lazy curve. But on June 9, the roaring waters simply rushed straight ahead into the Swiss Chalet subdivision. Only three of the 42 homes in the development survived the flood. The bridge that carried Highway 40 over the creek was 18 feet above bed, but the wall of water that swamped it and tore it away was over 20 feet high.



Nebraska National Guard, Omaha World Herald photo

Mobile homes were torn away from their moorings, tossed about on the waters like matchboxes, and carried into Canyon Lake. Some smashed into the dam embankment, weakening it. At midnight, the battered structure was over-topped, the cascading water washed its earthen slope away, and a five-foot wall of water descended on

the sleeping residents of the town. Slabs of concrete and pavement the size of house walls floated on the water.

Rushing down the valley and through the plain, the torrent destroyed bridges, tore away telephone poles, broke gas mains, and cut the town in two.

Among those who lost their homes to the debris-choked waters was Mrs. Francis Case. She was the widow of the South Dakota Senator who had done so much through his office to mitigate the damages caused by floods. Case had seen that the Red Dale Gulch Dam outside Rapid City was built to protect others from floods. When his widow returned to her home, most of it was gone. Four of her neighbors' homes had also been swept away. "I don't think anyone would want to live out here again," she said dejectedly. "I guess I will just have to start over again."

Dawn came over wet and leaden clouds to find an automobile perched crazily atop a huge sundial in Canyon Lake Park. The gray light shone on 1,800 tired and wet South Dakota National Guardsmen who had been frantically engaged in rescue work throughout the



**Food and supplies arrive for stranded families,
World-Herald photo**

night. They had been undergoing their annual two-week training duty at Camp Rapid on the outskirts of the city. Airmen from nearby Ellsworth came in to assist, and troops were on their way from Fort Carson.

South Dakota's adjutant general, Major General Duane L. Corning, had difficulty moving his troops the very short distance into town. The bridges on Interstate 90 were out. Highway 40, which shared the flood plain with Rapid Creek, also lost its bridges. The Interstate 190 business loop was available, but large boulders blocked the streets while dangling bridges hampered the rescue effort. Five blocks of homes paralleling the creek were gone, and 80 blocks of pavement were torn up.

The light of day' revealed the devastation. One-third of the city had been under from five to 10 feet of water. Wreckage was strewn everywhere. Some signs of panic and desperation were seen. Cases of looting were reported, and a group of bystanders was shot at from a passing car. Men and women in drenched civilian

clothing directed traffic for the overburdened police force. Mayor Barnett imposed a 9 p.m. curfew, and Police Chief Ronald Messer called for 1,500 military policemen to maintain order.



South Dakota National Guardsmen

Initially, it was presumed that 155 people had drowned, but the final count was 244. Five hundred more were missing and 5,000 were homeless. Two National Guardsmen were among the missing, as were three firemen who vanished while fighting a house fire caused by leaking gas. Rushing water pushed the house off of its foundation, and the dwelling smashed into the firemen, shoving them into the rushing waters of Rapid Creek.

In Sturgis, flood-waters destroyed five homes, damaged 50, and pushed many mobile homes off of their foundations while filling them with mud. On Bear Butte Creek, a motel was extensively damaged, and park facilities were demolished. Bridge approaches and portions of Highway 14A between Deadwood and Boulder Canyon washed out. All of north Sturgis was covered with water while many streets were damaged, their surfaces broken and covered with debris. No lives were lost in Sturgis, but the Red Cross gave over 800 typhoid shots and patients, staff, and residents of the Sturgis Community Hospital and Community Nursing Home were moved to the Fort Meade Veterans Hospital and McKee Nursing Home. Some Sturgis residents went to Rapid City as volunteers because the damage there was greater than in their own town.

After receiving confirmation of the damages, President Richard M. Nixon declared the Black Hills and Rapid City as disaster areas. Immediately, Federal agencies focused their attention on the town. Director of the Office of Emergency Preparedness George Lincoln and Presidential adviser Robert Finch flew to Rapid City to assess the damage.



South Dakota National Guardsmen



Four Presidents' Motel at Highway 16 at Keystone, South Dakota, had to be torn down.



Park facilities demolished

Several Federal offices offered aid to the victims. Food stamps were quickly made available to the victims of the flood by the Department of Agriculture. The Department of Housing and Urban Development brought in mobile homes as temporary shelters. The Small Business Administration and Farmers Home Administration provided low-cost loans to those whose homes and businesses had been destroyed.

The Corps of Engineers already had personnel on the scene from its area office at Ellsworth Air Force Base. When the Omaha District Office received word of the disaster, a team

quickly flew to the area. District staffers established their emergency headquarters at the South Dakota School of Mines. They quickly gathered evidence to establish the flood as a "class A" emergency, under which all of the Corps' skills could be brought to bear. Almost immediately, the Corps team contacted the Associated General Contractors of South Dakota to determine the availability of crews and construction equipment. The team, led by the District Engineer, Colonel Billy P. Pendergrass, directed the builders in the dirty business of removing debris and cleaning up the city.



Explosives in place on right abutment of Fort Meade Dam

painfully slow, but the removal of water from the lake significantly diminished the pressure on the dam's base. The situation there still remained critical. As one

After the Corps' damage assessment teams surveyed the area, Lieutenant Colonel Kenneth B. Austin, the Deputy District Engineer, awarded 11 contracts for debris removal. Ten covered Rapid City and the 11th Fort Meade. The cleanup was the first step toward putting the city back on its feet.

In addition to the 2,500 guardsmen who worked 12-hour shifts on the cleanup, volunteers, organized in platoons of 20, participated in the effort. Each platoon was assigned to one of 58 devastated blocks along a one-mile stretch of the creek. The municipal auditorium and Central High School auditorium were filled with tables stacked with necessities to help the victims. Hot dishes, sandwiches, and salads were set out on the auditorium tables to feed the volunteers and the homeless.

As the Army's civil works agent, the Omaha District had responsibility for the Fort Meade Dam. The 69-year-old structure near Sturgis straddled Deadman Gulch and Deadman Creek. At one time, the lake behind the dam had supplied the local Veterans' Administration hospital with water. In June 1972, the dam, which was 215 feet wide and 56 feet high and stored 21 million gallons of water, had a different purpose; it supplied a modicum of protection against floods. The torrential Friday rains over-topped the dam, washed away much of its face, and tore away a section of the crest. The District quickly went to work to restore Fort Meade. The spillway was widened, while pumps flown in from Kansas City drew the reservoir down to 10 feet. The pumping was

engineer said, "If it does not rain by Friday, odds are very good the dam will hold. If it rains, we do not have much odds."

Despite these efforts, too much water remained behind the dam. If it burst, a wall of water would inundate the lower end of Sturgis. Families were evacuated from the threatened area. The town's fire siren was manned at all times to give a 12-minute warning if the rains came and the dam broke.

Deputy District Engineer Austin came to Sturgis with Walter Linder and J.F. Kelley and examined the data. They met with the townspeople concerning the structure's fate. The three wanted to breach the dam, which they considered a menace. Acutely aware of what had happened at Rapid City, the residents wanted to keep it to hold back the water.

As the draw-down continued, Austin and the engineers went against the wishes of the townspeople. They had a special team flown in from the Corps' Explosive Excavation

Research Laboratory in Livermore, California. Under darkening skies, the decision was made to destroy the dam rather than risk the break that could cause a 10-foot wall of water to roar through Sturgis. The experts placed 3,000 pounds of explosives at selected spots on the structure. The blast, accompanied by a 200-foot fireball, blew a wedge 20 feet wide at the dam's base and 80 feet wide at the crest. The rubble was cleared and one threat was eliminated.



After explosion showing structure gap



Cleanup after blast-cutting

Eight days after the downpours that brought the flood-waters, there was again high water. In the early evening the rains came, and Rapid Creek went slowly out of its banks. Again, Mayor Barnett declared martial law, and low-lying areas were evacuated. While many people moved to



Removal of debris

higher ground, others sought the dangerous refuge of their roofs. Many of their belongings, which had been spread on lawns to dry, were again covered with silt. A panel truck carrying six people plunged into a ditch, and two of the occupants drowned. The struggle to bring the town back to a semblance of normality was underway. Civil defense emergency headquarters in the Pennington County Courthouse helped in the effort to obtain stability. Local law enforcement agencies replaced the military in authority and the job of damage assessment continued.

The total loss figure did not include other costs. The Department of Housing and Urban Development supplied \$8 million in temporary housing. The State of South Dakota and the U.S. Department of Labor paid over \$250,000 in unemployment benefits. The Department of Health, Education, and Welfare - now the Department of Health and Human Services - spent another \$100,000 to repair schools, while the Department of Transportation and the Forest Service paid a total of about \$20 million for road repair. Total Federal expenditures were nearly \$165 million.



Note cars in Canyon Lake bed, 16 June 1972

Corps of Engineers cleanup operations continued after the waters subsided. The Corps awarded and supervised 44 contracts for the removal of over 1.2 million cubic yards of silt and debris at a cost of almost \$2 million. Local governments spent an additional \$1.5 million on debris removal. For this they were reimbursed by the Office of Emergency Preparedness.

The disaster at Rapid City influenced enactment of a national dam safety



Flood damages from Deadman Gulch at Sturgis, South Dakota, in 1976



program. Public Law 92-367, passed in August 1972, required the Corps of Engineers to inspect every dam in the country which threatened life or property and also to inspect dams with high downstream hazard potential. Whenever hazardous conditions are found within a dam, the Corps is required to report them to the Governor of the state in which the dam is located.

After the flood, the breached Canyon Lake structure remained unaltered for about two years while the recovery effort focused on getting the urban renewal plan and its green-way started. However, rebuilding the dam was

always part of the city's plan. The city initially planned to rebuild the dam the way it

was before the flood. The Corps convinced the Mountain Plains Federal Regional Council (FRG) that the dam had to be reconstructed according to hydraulic and hydro-logic criteria acceptable to the Corps. Because the recovery plans relied mostly on Federal funds, the city complied. The dam was redesigned by the city and reconstructed to allow passage of a flood larger than that of 1972.

Flood control and other water resources problems in the Cheyenne River basin had been previously evaluated. In 1971, a Corps review concluded that no structural measures could be economically justified in the basin. That report was under review by the Missouri River Division when the June 1972 flood occurred. The Division Engineer returned the report and asked that the Omaha District reevaluate the findings considering the effects of the June 1972 flood.

The devastation made painfully clear the need for positive action by all levels of government. The Mountain Plains FRC quickly moved into action as the coordinating body for the Federal agencies. With the Governor of South Dakota, it quickly established that the strategy for redevelopment would be fashioned by local officials and that Federal and State programs would be tailored as a response to local priorities. The Corps was invited to join the FRC. An assessment of needs was developed by local, regional, and State planning officials. From this listing of priorities, a Federal disaster response plan ultimately developed.

The Corps played a very critical role in determining the direction of major redevelopment plans. The Corps was given 60 days to totally reevaluate the findings of the 1971 study and to specifically determine if structural measures could be justified. Other Federal agencies agreed to make no major moves on redevelopment programs before the Corps' decision. On August 2 and 3, the District held public meetings in Rapid City and presented its findings.

The Corps concluded that a flood-way with some minor structural improvements was the most viable course of action for the city. Furthermore, a channel improvement project on Deadman Gulch at Sturgis would be feasible, and flood proofing or flood insurance appeared to be the best solutions at Keystone and Box Elder, South Dakota. While the Corps evaluation was underway, the Department of Housing and Urban Development prepared preliminary urban renewal plans for Rapid City and Sturgis. Immediately after the Corps' public meetings in August 1972, both cities applied for urban renewal funds for greenbelts that would serve as floodways for the 100-year flood areas.

In Rapid City, the urban renewal plan called for the Corps to construct levees and channel improvements for the Baken Park Shopping Center, Clarkson Mountain View Guest Home, Bennett-Clarkson Hospital, and the municipal water treatment plant as integral parts of the plan. These facilities were considered too costly to relocate from the floodway.

The land for Rapid City's six-mile floodway was acquired through the purchase of 1,100 parcels of land containing 3,100 acres and costing \$48 million. The city, with the help of the Department of Housing and Urban Development, purchased the

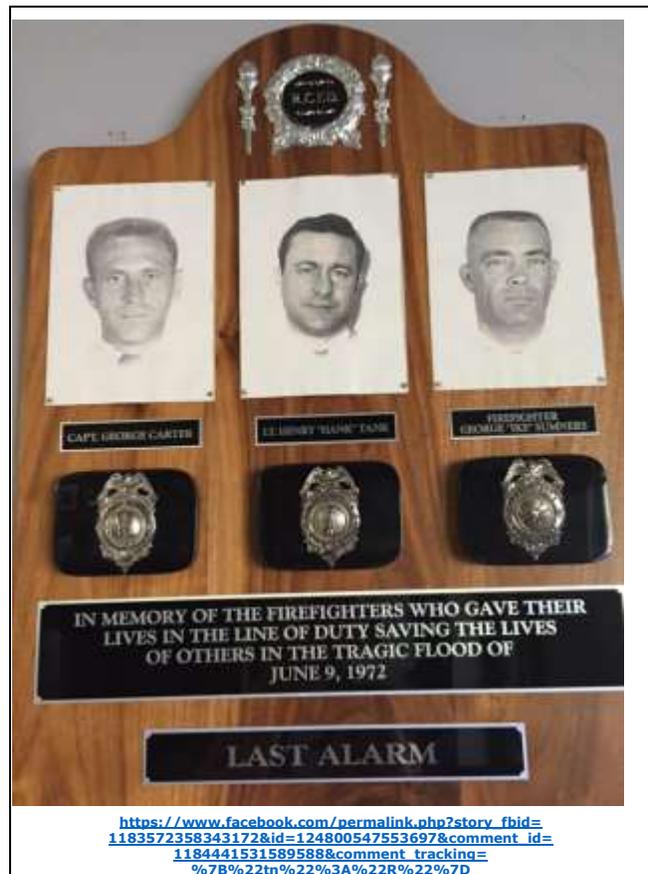
floodway to establish nature areas and trails, layout a golf course, grade ballfields, and create a memorial path. The Levee Design Section of the District's Engineering Division designed and built a 4,000-foot levee to protect the west-end shopping area. Any future flood will sweep over only grass and recreational equipment. The contoured levees and channel improvements on Rapid Creek were completed in 1979 for \$1.35 million.

Immediately after the Rapid City flood, the citizens of Sturgis contacted the Omaha District to ascertain what could be done to protect their town from a similar occurrence. The South Dakotans had seen the dam at Fort Meade threaten them and had sustained almost \$3 million in damages during the 1972 flood. Another flood struck Sturgis in 1976 and caused \$2 million in damages. There was no question then that the town needed flood protection on Deadman Gulch, that economically feasible protection could be provided, or that the town wanted such protection.

The District prepared a flood protection project plan that became an integral part of Sturgis' urban renewal plan. On 1 June 1976, the Chief of Engineers allotted \$3 million to the \$4.1 million project which included training levees above the town, channelization of the stream through a concrete canal, and construction of a debris basin upstream and a stilling basin where Deadman Gulch empties into Bear Butte Creek.

The Sturgis project was dedicated in September 1979. In November 1979, District Engineer Colonel Vito D. Stipo and his deputy, Lieutenant Colonel Thomas R. Hicklin, inspected the project. They found that close cooperation between the District's project engineer, B.J. Burt; the town of Sturgis; and the COP Construction Company had been responsible for the virtual completion of the project a year ahead of schedule. Both Stipo and Hicklin were pleased with the contractor's performance and with the results.

The newly created channel follows the local topography and drops 190 feet in elevation along its 6,600-foot course. Without training works, such a steep slope would allow destructively rapid runoff. After the planting of grass seed along the channel, the project was formally turned over to Sturgis on 26 June 1980.



Deadwood

MAGAZINE

BLACK HILLS, SOUTH DAKOTA

May/June 1996

<http://www.deadwoodmagazine.com/archivedsite/Archives/Flood72.htm>

FLOOD!

238 People Victims of Flood Rapid City remembers 1972 disaster

Rapid Citians who went to bed early that June night in 1972 awoke to a world gone mad. During the dark, rainy night, a normally placid little creek meandering through the heart of town became a raging torrent, ripping homes from foundations, leaving death and destruction in its wake. Entire neighborhoods were swept away, mud-covered thoroughfares were clogged with houses, cars and boats, furniture and household appliances.

Flash floods that rampaged through the Black Hills on June 9, 1972, killed 238 people, including five missing, and injured more than 3,000 others.

Total damages finally tallied out at \$165 million; \$66 million in Rapid City alone. More than 1,300 homes and 36 businesses were destroyed; 2,800 homes and 236 business were damaged, and 5,000 vehicles piled up under bridges or were tossed across streets and yards like Matchbox toys.

Nearly a quarter of a century later, survivors still relive the traumatic memories of that June night.

Climbing to second floors or attics while flood waters swirled through lower levels.

Hearing screams out of the darkness while precariously clinging to trees, roofs and mounds of debris through an endless, horror-filled night.

Fleeing from their homes, carrying a few meager possessions. Returning the next day to find nothing but foundations or parts of walls.

Although forecasters predicted isolated thunderstorms for western South Dakota as early as 9 a.m. that Friday, thunderstorms are a common June occurrence. There was no warning that these storms would kick off the worst flood disaster in Black Hills history.

The freak series of storms collided, then stalled over the Black Hills, dumping more than a billion tons of water, in excess of 10 inches of rain, over the 60-square-mile area.

Swollen by runoff from canyons, feeder creeks and drainage basins in the higher hills, water overwhelmed quiet little Rapid Creek.

Although damage had already occurred elsewhere, the major path of destruction was an eight-mile wide swath cutting west to east through the heart of the town.

Earliest high water warnings came from Lawrence County's Sheriff Dick McGrath in a 6:45 p.m. phone call. He reported water running a foot deep over Boulder Canyon's Highway 14A between Sturgis and Deadwood.

National Weather Service flash flood warnings for the Northern Hills went out about 7 p.m. An hour later, warnings were revised to include Box Elder and Rapid Creek drainage areas.

Most residents weren't terribly concerned. They'd lived through high water before; knew what measures were necessary to protect possessions. They moved furniture off basement floors; stuffed towels and rugs under doors. For many, evacuation wasn't even considered until it was much too late.

By 10:30 p.m., TV and radio broadcasts were urging immediate evacuation of low-lying areas. Fifteen minutes later, Canyon Lake dam ruptured, sending a wall of water downstream. Shortly after midnight the flood crest reached downtown Rapid City.

Firemen, police officers, National Guardsmen and volunteers with boats spent the night on rescue missions and evacuation assistance.

But full realization of the extent of the catastrophe came only when daylight revealed incredible damages that had been concealed by darkness. A dense, eerie fog hung over the town, described by Mayor Don Barnett as "just like a cloud of death."

Most of the city was without power, water system and natural gas. The gruesome task of body recovery began as rescue teams walked both sides of the creek and scuba divers searched the debris-laden waters.

At times up to 2,000 names were on the missing list. And the death toll mounted, hour by hour.

"First it was 50 dead. Then it was 75 dead. Then it was 100," recalled Barnett.

The morning after the flood the greatest terror in our hearts were the missing ... the incredible fear when you're not sure where your mother, father, husband,

wife, son or daughter is ... I remember the terror in their eyes as they ran down the creek looking. That is indelible in my mind. I will never get those thoughts and faces out of my memory.

Eleven people died in Keystone, all campers caught in creekside sites, and hundreds of tourists were stranded by washed-out highways. In Black Hawk, where some bodies weren't found for nearly a month, 14 deaths were reported. Substantial public and private property losses were tallied in most communities, including Sturgis, Boulder Canyon, Spearfish, Box Elder, Hermosa. Although the Deadwood/Lead area escaped the 1972 flood, three years later one woman died in a flood and mudslide near the Deadwood rodeo grounds.

President Nixon issued his federal disaster-area declaration for four counties on Saturday afternoon. Federal funding, private donations and thousands of volunteers poured into the area as Black Hills communities began to dig out from the tragedy.

Federal aid totaled \$170 million, including a \$48 million HUD urban renewal grant that enabled the city to buy property in the flood plain and move owners to higher ground. A quickly-formed disaster foundation began administering \$1.4 million in private donations from all over the country. Flood victims were given immediate assistance, as well as one-percent SBA loans to repair or replace lost and damaged properties.

Within three months, flood clean up had been completed. Roads, bridges and utilities were replaced through the next two years. An eight-year recovery plan was completed in six years.

A more beautiful city emerged from the debris. Miles of greenway now wind through areas where flood waters rampaged. A bicycle path and pedestrian trail connects five parks, from Roosevelt Park on the east to Memorial, Sioux, Jackson and Canyon Lake parks on the west.

Rapid City has frequently been cited as a national model of disaster recovery, an example of city, state and federal government working together. Leonard Swanson, retired city public works director, has described the rebirth of Rapid City innumerable times for Washington, D.C. officials.

The flood recovery program made Rapid City one of the most beautiful cities in America," former mayor Barnett said on the 20th anniversary of the 1972 flood.

The price was astronomical in terms of the loss of life. ...(The flood plain) should always be a recreational area all the way through town. ... If we forget those lessons we should be ashamed of ourselves.

When they went to the polls in April, Rapid City voters clearly demonstrated they have not yet forgotten the tragic lessons learned 24 years ago.

In a heavy turnout, 57.4 percent of city voters rejected an initiative that would have permitted the sale of 15.5 acres of the protective greenway on the west side of town, where Nash Finch hoped to build a new Family Thrift grocery store.

Tuesday, June 9th marks 43 years since Flood of '72

<http://www.blackhillsfox.com/home/headlines/Tuesday-June-9th-marks-43-years-since-Flood-of-72-306432891.html>

Jun 07, 2015 By McKenzie Nelson



Rapid City, (KEVN-TV) Tuesday June 9th, marks 43 years since heavy rains fell over the eastern Black Hills producing record **floods** on Rapid Creek and other streams.

The 1972 flood that hit the Black Hills is being remembered by many this week as we approach its anniversary once again.

On June 9th and 10th back in 1972, rainfall totals ranged from 4 inches to more than a foot between Pactola Dam and Rapid City, and 15 inches in Nemo.

I sat down with one Rapid City resident who still remembers that day after firefighters came to rescue him from his car.

Mike DeMersseman, Rapid City Resident said, "He thought he saw a baby float by and he went off the fire truck and he was hit by a propane tank and I went in and got him. The water was not even waist deep, but it was moving so fast and there was so much stuff in it, big stuff, debris that it could hit you and rip you up."

When the heavy rains began, DeMersseman was driving down Omaha Street in Rapid City when his car began to float.

He said there was no time for emotion, only a reaction.

DeMersseman said, "Oh you're scared and you were concerned but there was so much going on I don't think you had time for really any reaction."

Total damage was estimated in excess of \$160,000,000 which included 1,335 homes and 5,000 vehicles that were destroyed. This was all in addition to the human tragedy.

According to the Red Cross, the 1972 flood left 238 people dead and over 3,000 injured.

DeMersseman said, "No, no immediate family."

While his family was lucky to be safe, some of his friends were not...

DeMersseman said, "Oh yeah, lots, and I think a lot of the death certificates indicated death by drowning but a lot of people were injured severely."

With all of the recent rainfall and flash flooding around the Black Hills area, people who experienced the 1972 flood want everyone to learn something from that horrible tragedy.

Suzanne Martley, Volunteer of Friends of Rapid City Parks said, "It's not enough to just be sad and to say it was a tragedy, we have to be vigilant, we have to understand, we have to be ready to do what is necessary."

The Friends of Rapid City Parks are hosting a memory walk to remember the flood of 1972 next Sunday at the Journey Museum at 11 a.m.

Rapid City officials remember flood deaths, city response

http://rapidcityjournal.com/flood/rapid-city-officials-remember-flood-deaths-city-response/article_1a008c7e-bb22-5392-be92-a1f97f7f9f46.html

Jun 10, 2012 Ruth Moon Journal staff

Hundreds of Rapid City residents gathered Saturday night to remember those who died during the 1972 flood.

Rapid City officials shared stories of people who died in the June 9 flood and ways the flood changed the city. At the end of the lengthy convocation ceremony, retired KOTA Radio announcer Verne Sheppard read the names of all 238 victims.

"I could tell you nightmarish stories of this night that would keep you awake for several nights, but I won't," said Don Barnett, who was the 29-year-old mayor of Rapid City when Rapid Creek flooded. "I've had 40 years of those evenings."

Barnett told the story of his experience the night of June 9, when he watched water rise higher and higher and tried to warn Rapid City residents through local radio stations. The stations broadcast a warning for about 30 minutes before they lost power, Barnett said.

"At least half of the victims that terrible night never had one word of warning," Barnett said.

Airmen from Ellsworth Air Force Base, South Dakota National Guard soldiers and airmen, fire fighters from the Rapid City Fire Department and police officers from the Rapid City Police Department helped rescue those stranded by the flood and recovered bodies after the flood. Officials from each organization shared stories of employees who died in their rescue and recovery efforts.

Three Rapid City firefighters died June 9, said Rapid City Fire Chief Mike Maltaverne.

"When we report for duty, we agree that everyone will work the day and go home safely," Maltaverne said. "We as a department stand here tonight before you and wish to pay our respects to those three firefighters who lost their lives."

Col. Mark Weatherington, wing commander at Ellsworth Air Force Base, told the stories of seven airmen who died in flood rescue efforts. More than 3,200 Ellsworth employees volunteered to help with rescue efforts and airmen saved at least 251 people, he said.



Don Barnett, former mayor of Rapid City, reacts as the Last Alarm Fire Bell rings honoring the Rapid City firefighters that died during the 1972 flood during the Evening Convocation for the 1972 flood at the Rushmore Plaza Civic Center in Rapid City on Saturday.

Photo: Aaron Rosenblatt, Rapid City Journal

"Airmen worked tirelessly," he said. "The accounts of their bravery rival those of any combat mission."

One police reserve officer died in flood rescue efforts, according to the Rapid City Public Library.

"Can you imagine that hell on earth that night?" asked Rapid City Police Chief Steve Allender, who was 11 when the flood occurred. "I can't, but I know several of you out here can."

South Dakota National Guard members were training in the Badlands and Rapid City June 9 and also helped with rescue and recovery. Three Guard members died. After the flood, Rapid City officials developed several policies to protect residents in case something similar happens again, said Larry Lytle, who was president of the Rapid City Council in 1972 and 1973.

"If there is another natural disaster or flood, God forbid — and it's going to come, it's just a matter of when — you will be awakened if you're asleep," he said. "That water should flow through Rapid City unobstructed. Yeah, there might be a building or two lost but there should be no lives lost."

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