

The Johnstown Flood



Background Information

On May 31, 1889, a storm brought heavy rain to Johnstown, Pennsylvania. Because of the rain, the water in nearby Lake Conemaugh rose, breaking the South Fork Dam and releasing a wall of water that destroyed the town of Johnstown.

The Johnstown Flood was one of the most devastating disasters in American history and it was an important historical event on many levels. First and foremost, it was one of the greatest single disasters in American history, resulting in terrible loss of life. The fact that the tragedy was caused by a poorly maintained dam owned by a group of arrogant millionaires helped to spur social reform throughout the 1890s and beyond. Finally, the Johnstown Flood was one of the first major events covered by the growing news media.

Use the six reproducible student pages to tell the tragic story of the Johnstown Flood to your students. Following are suggested projects and activities linked to the pages.

The Situation

May, 1889

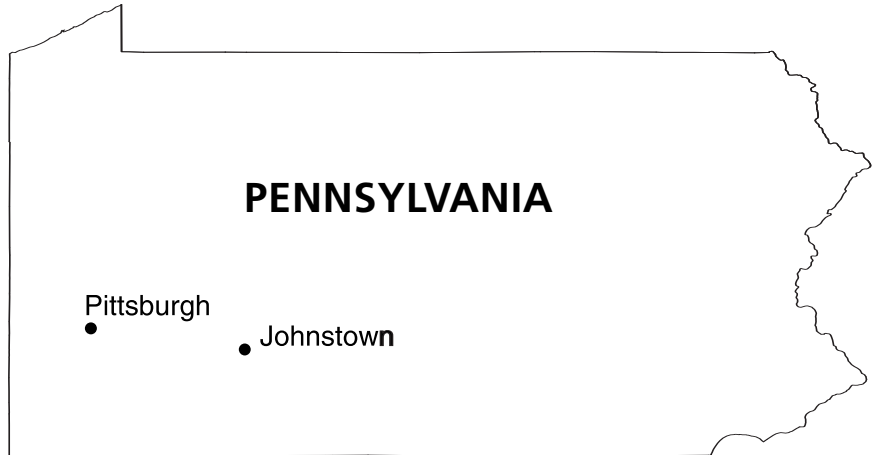
JOHNSTOWN

Founded: 1804

Population: 30,000 people

Location: The Allegheny Mountains in western Pennsylvania.

Facts: Johnstown is nestled in a valley among mountains. The surrounding mountains are so high that a visitor once said, "In Johnstown, the sun rises at ten and sets at two." In 1889, Johnstown is a booming town. The town has tripled in size in less than 20 years.



SOUTH FORK FISHING AND HUNTING CLUB

Founded: 1879

Members: 66 of the richest men in America

Location: Lake Conemaugh, in the mountains above Johnstown

Facts: Lake Conemaugh is a man-made lake 14 miles from Johnstown. It was formed by a dam built on the Little Conemaugh River. The dam was originally built by the state of Pennsylvania. The club repaired the dam when they bought the lake and the land surrounding it in 1879. The dam is 72 feet high and 900 feet wide. The lake behind it is two miles long, a mile wide, and 60 feet deep. The lake is used by the 66 club members as a private place to fish.

IS THE DAM SAFE?

From the *Johnstown Tribune*:

"We do not consider there is much cause for alarm, as even in the event of the [dam] breaking there is plenty of room for the water to spread out before reaching here, and no damage...would result."

From a report by structural engineers, commissioned by Dan Morrell, the head of the Cambria Iron Company:

"There appear to me two serious elements of danger in the dam: First the want of a discharge pipe to reduce or take the water out of the dam for needed repairs. Second, the unsubstantial method of repair, leaving a large leak, which appears to be cutting the new embankment. ... Should this break [in the dam] be made during a season of flood, it is evident that considerable damage would ensue along the line of the Conemaugh. "

Memorial Day, 1889

WEATHER REPORT

On Tuesday, May 28, a huge storm forms over Kansas and Nebraska. Hard rain falls from Michigan to Tennessee. Tornado-like winds kill several people in Kansas. The storm moves into Pennsylvania.

IN JOHNSTOWN....

Up to six inches of rain fall by noon on May 31. The town is flooded, as nearby rivers overflow their banks. The water in town ranges from two feet to ten feet deep.

From the *Johnstown Tribune*, May 31, 1889

"As we write at noon, Johnstown is again under water, and all about us the tide is rising. Wagons for hours have been passing along the streets carrying people from submerged points to places of safety....At three o'clock, the town sat down with its hands in its pockets to make the best of a dreary situation."

ON LAKE CONEMAUGH:

The rain falls even harder on Lake Conemaugh. The level of the lake rises at the rate of one inch every ten minutes. Soon the surface of the water is near the top of the dam.

At 2:30 p.m., the engineer at the dam sends a telegraph to Johnstown, located 14 miles down the winding valley:

"THE DAM IS BECOMING DANGEROUS AND MAY POSSIBLY GO."

3:10 p.m., Friday, May 31, 1889

A group of men watch nervously as water begins to pour over the top of the dam holding back Lake Conemaugh. Their eyewitness reports:

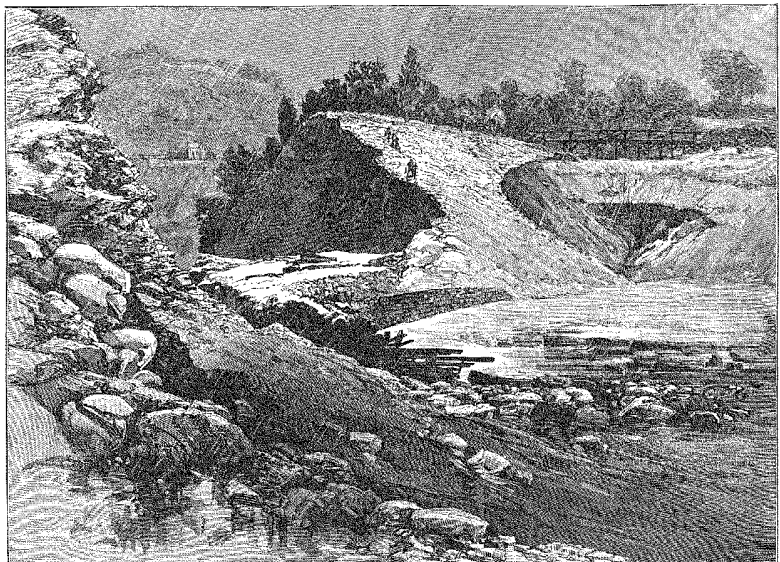
"It ran over a short spell...and then it just cut through like a knife."

"It ran over the top until it cut a channel, and then it ran out as fast as it could get out. It went out very fast, but it didn't burst out...."

"Water worked its way down little by little, until it got a little headway, and when it got cut through it just went like a flash."

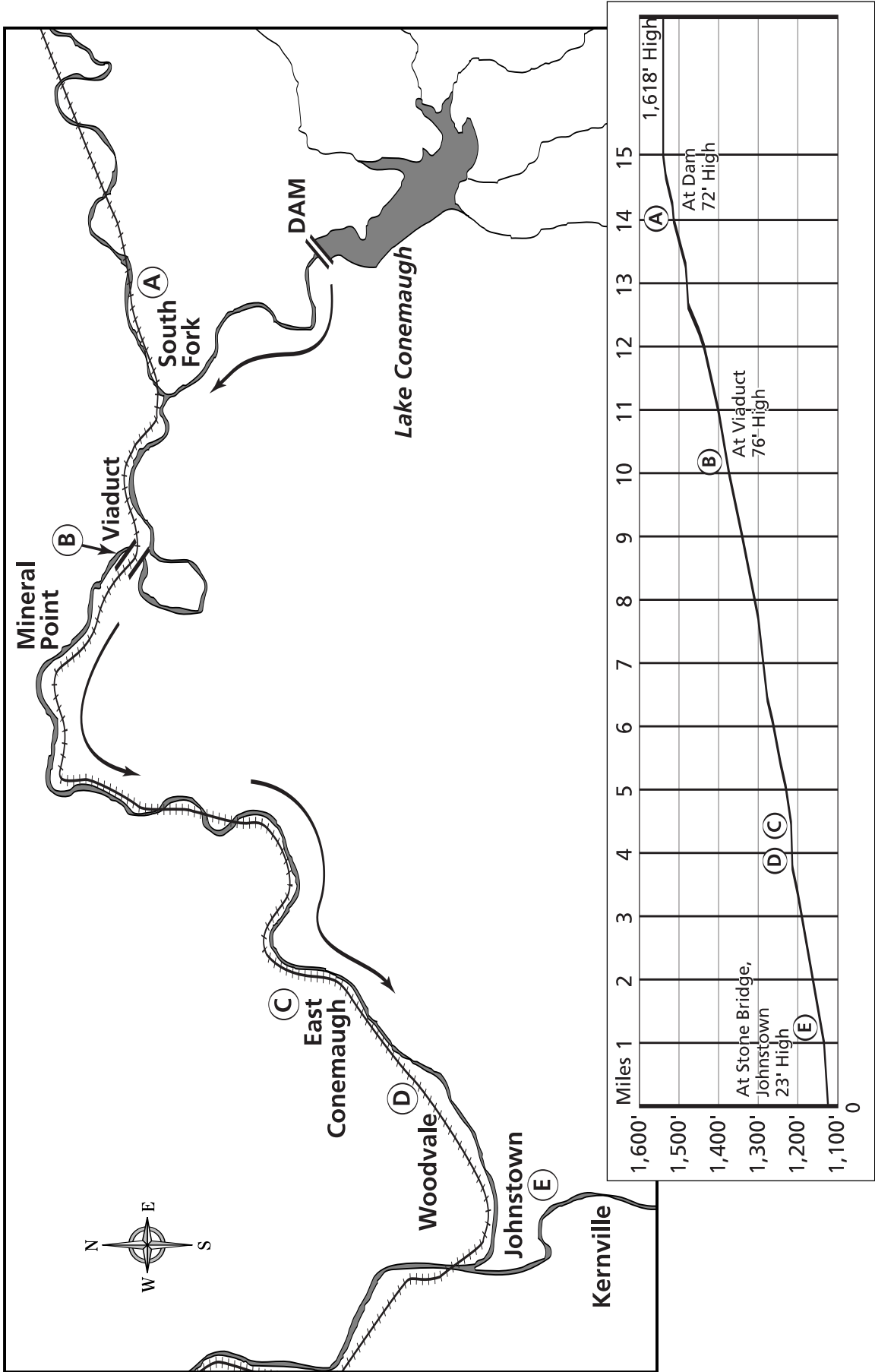
"The whole dam seemed to push out all at once. No, not a break, just one big push."

In a split second, the dam melts away. Twenty million tons of water surge down the valley. It is as if Niagara Falls has been suddenly unleashed on the valley. **The wall of water, 40 feet high, heads straight for Johnstown.**

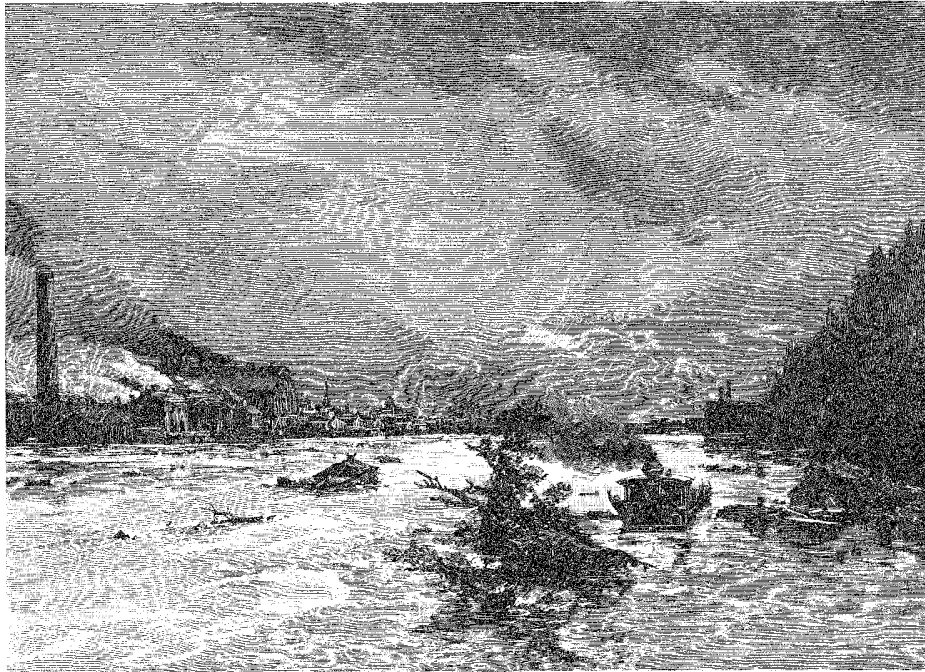


The Johnstown Flood, Part 1

Use the map below and the descriptions on The Johnstown Flood, Part 2 to follow the path of the flood.



The Johnstown Flood, Part 2



A. SOUTH FORK

"It looked like a mountain coming."
— Emma Ehrenfeld

First flood fatality: Michael Mann. His body is found ten days later, buried in mud a mile and a half downstream.

B. VIADUCT

The valley narrows here. The wall of water grows to 75 feet in height. It runs into a strong stone bridge, called a viaduct. For a few minutes, the water stops here. Pressure behind it grows and grows. Then, in a flash, the bridge collapses. The water surges down the valley with more force than ever.

C. EAST CONEMAUGH

Dozens of train cars wait out the storm in a train station. Then, at about quarter to four, people at the station see the thirty-foot tall wall of water. It washes through the town and station. Entire train cars were swept from their tracks.

"The trains looked like toys in the hands of a giant."
— Eyewitness

Forty houses are swept away. Thirty locomotives, each weighing as much as 80 tons, are also carried off. At least 50 people are killed.

D. WOODVALE

The entire town is wiped off the map. Not a house, not a store, not a tree is left standing.

A wire factory is destroyed. Miles of razor-sharp barbed wire is carried along with the other debris on the wall of water.

Three hundred and fourteen people die in Woodvale—one-third of its entire population.

**E. JOHNSTOWN**

At 4 p.m., the rain is slowing in Johnstown. The sky brightens. Most people think the worst is over.

Then, the wall of water hits the town. According to eyewitnesses:

"First, there was a roar like thunder."

"It was like a great fire, the dust it raised."

"It crushed houses like eggshells."

The wave sweeps through Johnstown, destroying everything in its path.

At the western end of town, the water slams into a stone bridge. The water, clogged with trees, houses, and bodies, stops there. Upstream, Johnstown is buried under 23 feet of water. More than 1,000 people drown or are crushed.

At the stone bridge, the pile of debris is soaked in train diesel fuel. Sparks from charcoal stoves start a fire. Soon, the debris burns out of control. Flames trap more than 80 people, who burn to death in the midst of a flood.

The Aftermath

NUMBER OF DEATHS IN THE JOHNSTOWN FLOOD

2,209 people killed
 99 entire families dead
 396 children under the age of ten die
 98 children lost both parents
 777 unidentified victims

PROPERTY DAMAGE

\$17 million in property destroyed
 1,600 homes destroyed
 280 businesses ruined



Quote:

"A rat caught in a trap and placed in a bucket would not be more helpless than we were."

—*Johnstown Tribune*

RELIEF EFFORTS

The world was shocked by the Johnstown Flood. People from all over sent money and goods to help the victims. Some sample contributions:

Money

\$1,136.93	<i>Nantucket, Massachusetts</i>
\$101	<i>Tombstone, Arizona</i>
\$20,000	<i>New York Stock Exchange</i>
\$300	<i>President William Henry Harrison</i>

Supplies

20,000 pounds of ham	<i>City of Cincinnati</i>
1,000 loaves of bread	<i>Prisoners of Western Penitentiary</i>
Train car full of nails	<i>Wheeling, West Virginia</i>
16 train cars of flour	<i>Minneapolis, Minnesota</i>
1,000 blankets	<i>South Fork Fishing and Hunting Club</i>

Total Donations: \$3,742,818.78

WHO WAS TO BLAME?

Many victims sued the South Fork Fishing and Hunting Club, claiming it was to blame for the disaster. In every case, juries found the Club not guilty. The verdict?

The Johnstown Flood was "an act of God."

What do you think?

