

## **The Great Potomac River Flood Of 1936**

### **Introduction**

Since 1829, when the National Weather Service started to keep records, there have been 144 floods on the Potomac River. The greatest of these, occurred on March 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> of 1936. When the rain began in Western Maryland on the 16<sup>th</sup>, there was an estimated 40 inches of snow on the ground in the mountains west of Cumberland. By 4 p.m. on the 17<sup>th</sup>, the banks of Wills Creek were starting to overflow into downtown Cumberland and upper Mechanic Street was flooded to a depth of 12 inches. By evening, it became obvious that a major flood was underway, and the alarm was sounded down the river.

### **An Overview**

I first became interested in the 1936 flood when I was volunteering at the C&O Canal Visitor's Center in Williamsport. A surprising number of people who visited the center had questions or comments about the flood. The east wall of the building has markers indicating the level of the water for the various floods, and many people had stories to tell about it. One told me that there was great resentment in Hagerstown after the flood, because the toll booth was on the Maryland side and it cost five cents to go out on the bridge to look at the flood, and another five cents to get off, while the people from West Virginia could get on and off the bridge FREE.

As I repeated that story to other visitors, I was told that no tolls were charged that day, or that it was closed and no one was permitted to go out on the bridge. How do you reconcile these divergent memories? I went down to the Western Maryland Room of the Hagerstown Library and inquired about books about the flood, but there were none, only copies of the newspapers of those days. That was my starting point. I went on and found microfilmed copies of newspapers of the day from Cumberland, Frederick, Shepherdstown, Martinsburg, and Washington D.C. There was a wealth of information, but you had to dig for it.

For those three days of March 1936, the flood forced all other stories off the front pages with only a few exceptions. On the 18<sup>th</sup>, the Washington Post had only one brief story about a flood in Cumberland while the entire front page of the Washington Star was about the flood. The Star had an advantage because it was an afternoon paper, while the Post, being a morning paper, ran a day behind. The Shepherdstown paper, while only a weekly, was slowed down by a loss of electrical power. Working by candlelight, the entire staff was pressed into service to set type by hand, using long discarded lead type. After setting the type, a bicycle was pressed into service to power the press and a crank was affixed to the folding machine and the staff took turns cranking in order to get the

paper out. In Cumberland, the pressroom of the Cumberland Times was under water. The paper was set and taken to another plant to be run, and although copies of papers for each of the three days are extant, they were all a day late.

In order to lend perspective to the flood, I started reading the papers from a week earlier. The major story in all of the papers at that time was about the attempts of the League of Nations to enter into negotiations with Germany about European borders, and Germany's refusal to meet unless they were accorded equal status, which France refused to concede. The other major story of the day was the upcoming execution of Bruno Hauptmann, the convicted kidnapper of the Lindbergh baby. Although it was scheduled for March 31<sup>st</sup>, Governor Hoffman of New Jersey was threatening to grant amnesty based upon information he had received indicating that the Attorney General had prosecuted the wrong man. Other stories concerned the suit for legal custody of Gloria Vanderbilt by her aunt Gertrude Whitney, and the Roosevelt's plans to celebrate their 31<sup>st</sup> Wedding anniversary on March 17<sup>th</sup>, and the presidents plans to leave on a fishing vacation in the Caribbean aboard the Presidential Yacht the following day. In the week preceding the flood, there were only two stories about a flood on the front pages of all the newspapers that I studied. The Martinsburg Journal reported on March 12<sup>th</sup> that "Eight States Are Facing Floods". On the same day, a headline on the front page of the Morning Herald read "No Flood Damage is Expected Here."

In addition to the newspapers, I also typed the words "1936 Flood" into GOOGLE and was surprised to get 58,000 hits. The flood covered a very large area. Although the official Corps of Engineers report refers to it as the New England flood of 1936, it actually encompassed an area of 14 states from Maine to Ohio to West Virginia and Virginia and all states between them. Every river basin in that area flooded, although the greatest devastation was in Pennsylvania where 80% of the casualties occurred. I might add that one report also included Georgia, because two people drowned in a flash flood as the original storm was heading north.

### **The Source of the Flood**

The official report of the Weather Bureau referred to it as "The Perfect Storm", and cited seven elements that caused the record flooding:

1. - *The storm started in Texas last Sunday.* That would be March 15<sup>th</sup>. Actually, unseasonably heavy rains had started on March 9<sup>th</sup>, resulting in heavier than normal river flow and ground saturation.
2. - *It moved northeasterly.* The normal course of a Noreaster is a quick sprint up along the coast and out into the North Atlantic.

3. - *Over the Appalachian highlands on Monday, a flow of warm, moist air rushing in from the Gulf and Atlantic because of the moving storm was "expanded and condensed" by collision with a wedge of cold air, flowing southward from central Canada.* I admit to being confused by this sentence.
4. - *Extremely low temperatures in Labrador sent out a frigid current which formed a second wedge of cold air over the Canadian maritime province.* That's self-explanatory.
5. - *The cold wedge helped to trap the storm and hold it over the watershed from Georgia to Vermont.*
6. - *The rear guard of the disturbance was formed by unseasonable warmth in far northwestern sections of Canada and Alaska.* The point is that there were three storms in competition for the northeast at the same time.
7. - *The rain came when heavy snows were melting in the highest ranges, and the soil had almost reached the saturation point.*

### **Measuring the Depth**

One of the confusing aspects of the news reports, was how deep the water was. At intervals along the river, there are gages, which measure the height of the water, but what do they mean? Those numbers were frequently reported as "so many feet above flood stage." In fact, that's not what the gages measure. In order to understand those numbers, we have to start in Washington. In 1929, the Corps of Engineers established a base number for determining the level of water in the river. At the foot of "F" Street" on the Potomac, they measured high and low tides and by computing the mean, they determined "Sea Level" at that point and time. All other measurements are in relationship to sea level, and are arbitrarily determined along the river by thrusting a surveyor's pole into the water at the bank and establishing a "datum". This is a very important word to remember. The numbers you see on the gages only measure the level above the datum. At Williamsport, the datum is 327.7 feet above sea level. At 6.5 feet above the datum, the Maryland Natural Resources Police characterize the water level as hazardous. Until the water reaches a level of 23 feet, it is officially characterized as a "freshet". Above 23 feet, it is a flood. So in 1936, when the water reached a level of 48.6 feet on the gage, it was 25.6 feet above flood stage.

Along the length of the Potomac, there are seven official gauging stations that measure the level and flow of the water. These readings are automatically transmitted to a central location where they are constantly monitored. The government has 7,000 such stations on rivers and streams around the nation. The flow of water at Williamsport on March 18<sup>th</sup>, was 484,000 cubic feet per second. No other flood has ever reached that level.

## **The Flood of 1889**

The second highest flood of the Potomac Basin occurred on May 31, 1889. That storm is best remembered for the devastation that it wrecked on Johnstown, PA. The deluge caused the Conemaugh to overflow into downtown Johnstown in mid-morning, but the real havoc was caused by the weakening of the earthen dam that formed the recreational lake of the Southport Fishing & Hunting Club. At 3:10 in the afternoon the water-soaked earthen dam broke and a wall of water and mud washed fourteen miles down the valley toward Johnstown. It hit the town at 3:20, and by 3:30 it was all over. 2200 lives were lost that day; and one third of those lost, were never found. Clara Barton of the American Red Cross personally moved into Johnstown, and lived there for five months to supervise the rebuilding of the town.

The devastation caused by that same storm in the Potomac Basin was more subtle. The flood prostrated the C&O Canal Co, forcing it into bankruptcy. The B&O Railroad reluctantly took over the company, not because it wanted to run the canal, but just to insure that a rival didn't get access to the route.

## **The Flood of 1924**

While we're about it, a brief mention of the 1924 flood might also be appropriate. The 1924 flood is best known as the flood that put the C&O Canal out of business, but there are no markers on the Cushwa Building indicating the height of the flood. In fact, the major source of the floodwater came down the Shenandoah River at Harper's Ferry with such velocity, that it scoured the north bank of the river down to bedrock and tore out two canal locks, forever ending the utility of the canal above that point.

## **The Bridges**

When I started this project, I kept reading about three or four bridges being washed away by the floodwaters. The more I read, the more confused I became and finally started listing the bridges in sequence so that I could accurately account for the full effect of the damages.

McCool – The bridge between McCool MD and Keyser WV on the North Branch of the Potomac was washed away.

Cumberland - A Maryland Mining Co. RR bridge along Wills Creek was washed away.

South Branch – Two bridges on the South Branch of the Potomac were destroyed.

Cacapon – The bridge over the Cacapon River where it enters the Potomac River washed away.

Hancock – the center span of the Church Street bridge washed away when the water level reached 47.6 feet, 7.9 feet above the 1889 level. After the flood, temporary service was provided by a ferry until a temporary wooden span could be erected, and the new higher bridge was completed in 1939.

Dam 5 – A mule crossover bridge over the canal washed away.

Millers Bend – The Nettle Bridge connecting Williamsport and Martinsburg, built in 1909 by the Williamsport, Nettle and Martinsburg Railroad was washed away and never replaced. The concrete piers are still standing in the river about a half-mile below Dam #5.

Snyders Landing - A foot bridge over the C&O canal which provided access for boatmen from the towpath to the berm side was washed away.

Falling Waters – The footbridge over the canal at Falling Waters was washed away.

Shepherdstown – The iron toll bridge built in 1890 washed away. The abandoned concrete piers are still evident in the river. The new bridge carrying Route 34 over the Potomac was opened on July 15, 1939.

A railroad bridge at Shepherdstown also washed away. The five stone piers of the Shenandoah Valley Railroad Bridge are still in place near the replacement higher span across the river.

Mr Pedersen later found this was inaccurate

In addition, the bridge over the canal at that location was carried downstream and lodged in the river lock.

Harpers Ferry – Two bridges were washed away at Harpers Ferry. The old highway bridge across the Potomac and also the road bridge across the Shenandoah River. Interestingly, an adjacent B&O railroad bridge survived because someone had the foresight to park a string of cars loaded with coal on the bridge to counteract the force of the flood water.

Brunswick - An iron toll bridge built in 1893 was washed away, in addition to the bridge across Lock 30 of the canal.

Point of Rocks – The Point of Rocks bridge was the last to go, crashing, span by span, early on the morning of March 19<sup>th</sup>.

Nolands Ferry – The bridge across the canal at Noland's Ferry was washed into the trunk.

Six Locks – A bridge built in 1880 from the south end of Lock 20 to Falls Island was washed away.

Chain Bridge – Since the first wooden bridge was built in 1797, there have been a total of eight bridges erected at this site. The seventh was built in 1870 of wrought iron and was 1350 feet long. The flood of 1936 reached a depth of 3 feet above the bed of the bridge, and although it did not wash the bridge away, it necessitated its replacement. The Eighth bridge was dedicated in 1939 and used the original 1870 piers.

If you haven't been counting, that's an astounding twenty-one bridges destroyed or so badly damaged that they had to be replaced. I make no claim that this list is complete. They are only the ones I found mentioned in my reading. In my opinion, they represent the major destructive effect of the flood.

### **Utilities**

Potomac Edison had eleven generating plants in the Potomac Basin. The flood disabled ten of those plants. The newest and largest plant in the system was the plant now called R. Paul Smith in Williamsport. The plant had been built in 1924 with invulnerability to flood three feet higher than the 1889 flood. Unfortunately, in 1936, the water was 7 feet 8 inches above 1889. Fifteen employees were stranded in the plant without telephone service or electricity. Working by candlelight, they managed to make radio contact with the outside world and helped coordinate the recovery of the system. A professional diver had to be brought in to go down the 72 foot condenser pit to remove drain plates so that the pit could be drained and the motors removed and cleaned and dried before they could be put back into operation.

On Mach 21<sup>st</sup>, the following Notice appeared on the front page of the Martinsburg Journal: I extend a sincere apology to a respected and honored business competitor, the Potomac Light and Power Co., for the advertisement which appeared over the Martinsburg Heat and Light Co.'s signature in Friday's Evening Journal. The advertisement was inserted by employees without my knowledge. I am deeply sympathetic toward the Potomac Light and Power Co. in their suffering and loss because of an act of Providence and deplore any attempt to take business advantage in a time like this. W. K. Eavenson, Manager, Martinsburg Heat & Light Co.

At the Water Plant, John Kirby, an employee was quoted in the morning of the 18<sup>th</sup> as indicating that the plant was safe, because it was surrounded by a 45-foot retaining wall, and water was forecasted to only reach a level of 42 feet. Unfortunately, the water reached a level of 47 feet. The water overflowed the wall and trapped ten people on the third floor of the plant. At least one horse and one cow which had been brought inside the walls, survived by climbing to the top

of the wall. Councilman Lee Elgin who had surveyed the area with pilot Richard Hensen provided first news that water had breached the wall.

Water company officials were uncertain of how to get the people out of the plant, because there was no way for the water inside the wall to recede until a section of the dike could be knocked out. With the plant out of operation, the city of Hagerstown was dependent upon the Edgemont and Smithburg reservoirs to provide water for the duration. It should also be noted, that after the flood, the walls around the plant were raised to a height of 60 feet over the datum

On March 20<sup>th</sup>, the following appeared in the Morning Herald: "A hen, victim of the flood waters at the pumping plant of the Hagerstown water department near Pinesburg, was rescued yesterday afternoon in the chlorination room of the plant by J. B. Hull, Mulberry Street, this city.

The chicken is believed to have roosted on a board which floated above eleven feet of water in the room during the flood and was found on a shelf after the waters had been pumped out. Beside the hen was a newly laid egg."

### **People Effected by the Flood**

The number of lives lost in the flood was variously reported at from 150 to 177. As a point of reference, the greatest number of lives lost to a flood in the United States, was 6,000. That occurred as a result of a storm surge in Galveston Texas in 1900. The second greatest loss of life 2,000-2,400 as a result of the Johnstown flood of 1889. No other recorded flood in the United States has claimed more than 500 lives. By comparison, in checking a list of the 100 worst natural disasters in the world, six floods are listed. All were in China, involved the Yellow River, and the worst in 1931 claimed 3,700,000 lives. (For your information, the number one item on that list was the Flu Epidemic of 1917, which claimed an estimated 20,000,000 lives.

The range in the number of deaths reported appears to result from whether you count just those who drowned, or if you include other deaths ancillary to the flood. A case in point would be the only death reported in Washington County. "Stricken with a heart attack while enroute to Williamsport to view the flood waters of the Potomac River, Mrs. Millie Virginia Beall of Waynesboro Pa, died Wednesday night in the home of S. W. George near Williamsport.

"Mrs. Beall was enroute to the flood area with members of her family when taken suddenly ill. She was taken into the George home where she died ten minutes later. The heart attack was said to have been induced by excitement." Among Mrs. Beall's survivors was a granddaughter, Mrs. Robert E. Lakin of Boonsboro.

John Kennedy, about 40, of Bellevue Avenue was found seriously injured along the Williamsport Pike where he had been struck by a hit-and-run automobile. He

was taken to the hospital where he was diagnosed with a mangled left arm, fractured ribs, injuries to the hips and cuts about the face. William Carter, age 60, of Madison Avenue sustained a broken arm and shoulder when struck by a local automobile salesman at the same location the following morning.

R. M. Mills, a watchman at the Pennsylvania Railroad crossing on Virginia Avenue, counted 1,020 motor cars from 1:05 to 1:50 on Wednesday afternoon. John Bower of Halfway reported 576 cars passing his home from 1:30 to 2:00 o'clock. When I inquired about this unusual practice of counting cars at the Williamsport Museum, I was assured that it was an old tradition going back to the beginning of the century when someone sent a postcard to the newspaper reporting that eight automobiles had passed that day. The newspaper printed that information and subsequently anyone who saw a larger number also reported it. It was, as they explained to me, similar to the current practice of the newspaper to report the names of people who grow large zucchinis.

From the front page of the Morning Herald: "The town of Williamsport resembled a small community on fair day. The community was literally packed and jammed with visitors. More than 4,000 people paid ten cents to view the surging waters from the big bridge. They saw a wide, muddy stream rolling headlong carrying with it debris of all kinds; they saw submerged houses, trees and boxcars. It was truly an awe-inspiring spectacle."

The Red Cross announced plans for a special drive to raise money for the victims of the flood. Every chapter in the 14-state area was given a quota. A special disaster relief committee was set up in Washington County, which included J. V. Jamison, Dr. V. D. Miller, Roy A. Leiter and C. L. Stine.

A visitor at the Visitor's Center told me that he had been on the bridge that day. When I asked what he remembered most, he told me that he watched as a chicken was coming down the river on top of a small structure. When the structure hit the bridge, the chicken, a Rhode Island Red, flew into the air and landed on the bridge. When he and several other boys tried to catch the chicken, it again flew into the air, over the other rail, and with nothing to float on, it quickly sank into the muddy waters.

A rescue crew took old man Knodle, who lived on an abandoned canalboat half way between Cushwa Basin and Lock 44, off the boat. An hour later, he was found back on the boat. He had gone back to get his 5 cats. One of the volunteers at the Williamsport Museum told me that after the flood, local citizens took it upon themselves to burn the remaining boats so that no one would try to move back. I have been unable to find corroboration for that information.

On the subject of canal boats, one of the most well known, was Captain Myers boat #73 which had fallen into the Conococheague in 1920 when it knocked off the north wall of the aqueduct. For sixteen years the boat had been in full view of



the community and had remained untouched. The flood lifted the boat. Some sources claim that it was lifted back into the canal and washed several miles down the canal. Hooper Wolfe, in his book, claimed that it was washed into the river. In any event, it was now out of sight and many oral reports indicate that it was quickly disassembled either by people who wanted a souvenir or needed a good piece of lumber. It was gone in a matter of months.

Walter Bowman of Finton Avenue evacuated 30 people from the area in his rowboat. He ferried all of the rescued people to the Byron Tannery which was above the water line.

In Washington, sandbags were placed around all the national monuments and the White House. Over 650 visitors climbed to the top of the Washington Monument to view the flood, compared to 200 on a normal day. The President delayed the start of his vacation

Amos Banzhoff decided to stay with his house to protect it. He moored a rowboat to the building and sat on the roof. The water current moved the house off its foundation, and when the house started to move, he was unable to get to his boat. The house moved two miles before it wedged between two trees.

Robert Shikes watched as the flood took his hog pen away. An hour later, another hog pen was deposited in almost the same spot. Later it was discovered that the replacement pen came from the farm of his brother-in-law, Sam Weller, who lived further up the river.

The Washington Post ran an extensive editorial detailing the work being done by the WPA to aid the rescue and clean-up operations. They were effusive in their praise of the government for having finally found some useful work for the WPA. Locally, 200 employees of the WPA under the supervision of William Hetzer were engaged in clearing the mud and debris left by the flood.

Company B of the Maryland National Guard in Hagerstown was activated and ordered to Cumberland to guard the town and prevent looting. They got as far as McConnellsburg PA when they had to turn back because they could find no way across flooded areas. They finally got to Hancock, and then had to leave their trucks and walk across a railroad bridge. They started to march toward Cumberland, but eventually did meet up with transportation and reach their destination. Their only complaint after the flood was that they had to eat ham sandwiches for breakfast, lunch and dinner for three days.

The Coast Guard rescued seventeen people living on islands on the Potomac River.

Lula Harsh lived in the Lockhouse at Lock 44. Her father was accustomed to dealing with floods, and as soon as he heard about the river rising in

Cumberland, he arranged to have all of their furniture moved to the second floor, and the family went to stay with his mother-in-law. When reports continued to come in with the news of record levels of water, he arranged for a large fishing boat to be moored to the front of the house, removed a window from it's casement on the second floor, and loaded all of the furniture onto the boat, including Lula's piano.

In Williamsport, 25 homes were severely damaged by the flood, but I could find only mention of one home which was destroyed. That was the home of Richard Obitts. Along the river above Williamsport, it was reported that four homes were destroyed in Sleepy Creek, two in Brosius, one in Cherry Run, three in Orleans, three in Magnolia, one in Sir John's Run, and 40 in Cumberland.

On Wednesday morning, the 18<sup>th</sup>, in Cumberland, the water was down 12 feet from the record level of the night before. That same morning, the Williamsport bridge was closed to vehicular traffic, but individuals were permitted to go out on the bridge to view the flood until 4:00 o'clock in the afternoon, when the bridge was closed entirely. On Thursday morning, the 19<sup>th</sup>, the Williamsport bridge was opened to vehicular traffic, and Washington braced for the wave of water coming down the river. The Washington National Airport was under water and closed, but the monuments were all safe. The Star reported that the highest level was reached at 1:00 p.m. and the Post reported it at 7:00 p.m. By Friday morning, Washington was back to normal.

On Monday the 23<sup>rd</sup>, the president, who was also honorary president of the Red Cross, announced expansion of the Fund Raising Drive to a national basis in order to "aid the victims of the flood". Before he left on vacation, the Corp. of Engineers inspected all bridges that the Presidential Train would be crossing.

Congress sprang into action, announcing hearings and studies. Among the villains were the privately owned toll bridges, which were all eventually replaced with public bridges. The Corp. of Engineers prepared a study, which indicated that the 1936 flood met the definition of a 100-Year Flood, and predicted that a 500-year flood would surpass it. We're still waiting for that one.

TORCH CLUB LECTURE  
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