

3. THE 1904 FLOOD (and more)

Most of what I heard of the 1904 flood I heard from Evan Roberts (1908 – 2002). I relay it here as I heard it. Some of what Evan told me was corroborated by Bill Tibbits (1928 – 2016), who grew up at our place.

Since neither Evan nor Bill was old enough to have seen the 1904 flood firsthand, they were retelling what they had been told. I learned a few things by looking at evidence on the ground, too.

Not unlike the 1976 Big Thompson flood, the 1904 flood emanated from an intense stationary storm cell that was part of an area-wide storm system. Following a day of rain, the night of May 20, 1904, a storm cell located over the headwaters of Stonewall Creek above Steamboat Rock dumped catastrophic precipitation for six hours or more. Evan said that the North Fork peaked at 20,000 CFS¹ at the Red Feather Road.

Although Stonewall Creek and the North Fork below the confluence at our house bore the brunt of the flood, Evan said that flooding took out almost every bridge on the Poudre River and its tributaries from Cameron Pass to Greeley.²

At our place, the flood knocked the Aldrich house off its foundation, which occasioned its subsequent removal to higher ground (opposite page).

Three quarters of a mile downstream, the flood waters rose so quickly that there was no time to salvage any possessions from the Roberts' house, but according to Evan the water, which rose to the second pane of glass on the windows, was so laden with silt that all the cracks in the siding and around the doors were sealed so the contents of the house escaped nearly unscathed.

At the confluence of Stonewall Creek and the North Fork, the flood erosion lowered the streambed by nine feet, and dramatically altered the course of the river (opposite page).

At that time, a public road came up the east side of the river from the Roberts, passed by the Aldrich house and crossed Stonewall Creek via a shallow ford. After the flood (and yet today) the drop is 10 feet and fording would be impossible without wings.

The diversions of irrigation ditches on the banks of area streams were severely impacted by streambed erosion caused by the scouring of the flood waters. Today one can trace some of the pre-flood ditches and see how much adjustment had to be made to the post-flood ditches and their diversions.³

It wasn't just 1904, either. Stonewall Creek has a bad rep among old-timers. You have to see a Stonewall flood to become a believer.

I have seen several Stonewall floods. The worst one was in May 1978. Jeanne and I came home after dark from our Wellington farm to a roar like a freight train and a torrent more than 100 yards wide racing over the county road nearly up to our driveway.

In the morning, we saw a canyon where the county road had been. The 5' diameter steel culvert (which seemed absurdly oversize for the trickle that is Stonewall's typical flow) had disappeared. It was found a half mile downstream in the North Fork. Big slabs of concrete from the Aldrich Ditch diversion nearly a mile upstream were piled up at the confluence in a tangle of trees, fence posts, barbed wire, mud and ice. Our corrals and lower barns were full of water and melting hail.

This was a hail flood.⁴ As the hail was washed down the creek, the stream channel became clogged with hailstones, creating a temporary dam. When that 'dam' and each successive 'dam' broke, the force of the flood was compounded geometrically. Some of the hail that piled up with the flood detritus at our place had still not melted by the 4th of July.

After that, I built a flood dike about 100' long and 6' high out of stone rubble that has kept flood waters out of our corrals for the last 40 years.

Flash floods pose a threat to fences. To mitigate this, loosely attached fence sections, called *water gaps*, are built to span the stream. The idea is that the force of the flood will snap the baling wire or twine holding the water gap and carry it away, leaving the real fence intact on either side.

The 1978 flood was so big that many water gaps were caught napping. Evan Roberts said he lost half a mile of fence a quarter mile either side of Stonewall Creek up at Tenmile. The flood waters were not a half mile wide, but the sudden force pulled the whole fence in – barbed wire, posts and all – before the water gap even had a chance to break away.

Pat Ferree (1920 - 1981) said the 1978 flood was the biggest he had ever seen on Stonewall.

¹ CFS = Cubic Feet per Second. The number Evan told me is corroborated by other accounts. Thanks to Zach Thode for providing several reference sources.

² Also, in line with other accounts. This flood and its 'twin', a devastating flood of the same date on Crow Creek west of Cheyenne were reported in the San Francisco Call on May 22, 1904. Contemporaneous reports from Fort Collins attributed the Stonewall event to a "*waterspout*".

³ Most of the big irrigation diversions and headgates on the Poudre River from Bellvue to Greeley were wrecked by the flood and damage in Fort Collins was extensive.

⁴ I don't think Livermore is more hail prone than any other northern Front Range location, but we did get a real humdinger one summer afternoon. Jeanne and I got a panicked call at our farm shop in Wellington from our oldest daughter, Meredith, who was at the ranch. She described huge hail stones that sent geysers, visible from our house, higher than the surrounding cottonwoods when they hit the river. I admonished her for exaggerating and assured her that everything would be OK. That night when we got home, an indignant Meredith greeted us with a grocery bag full of hailstones that she had stashed in the freezer. They were the size of grapefruit.

