

Warner Blake, a friend and historian from Snohomish, recently contacted me saying that he was working on an article about how Snohomish's city water system improved over the years, due in large part to a dam they built on the Pilchuck River, upstream from Granite Falls. He was hoping to find the site of the original dam, and thought we might be able to offer some pointers.

Many of you may not realize that there is still a dam on the Pilchuck, and that it diverts water into the Snohomish city system. It is clearly labeled Dam #2, however, and gives no particular hint where Dam #1 may have been located. Warner found a great description of the system improvement provided by the dam in 1911 – the Snohomish system prior to that time took its water from Blackman's Lake, near the northwest corner of the city. Warner sent the article, titled **"PURE MOUNTAIN WATER NEXT WEEK"**:

## PURE MOUNTAIN WATER NEXT WEEK

Pipes Will be Connected and Everything Will be in Readiness  
to Turn the Water into the Mains by Saturday Night

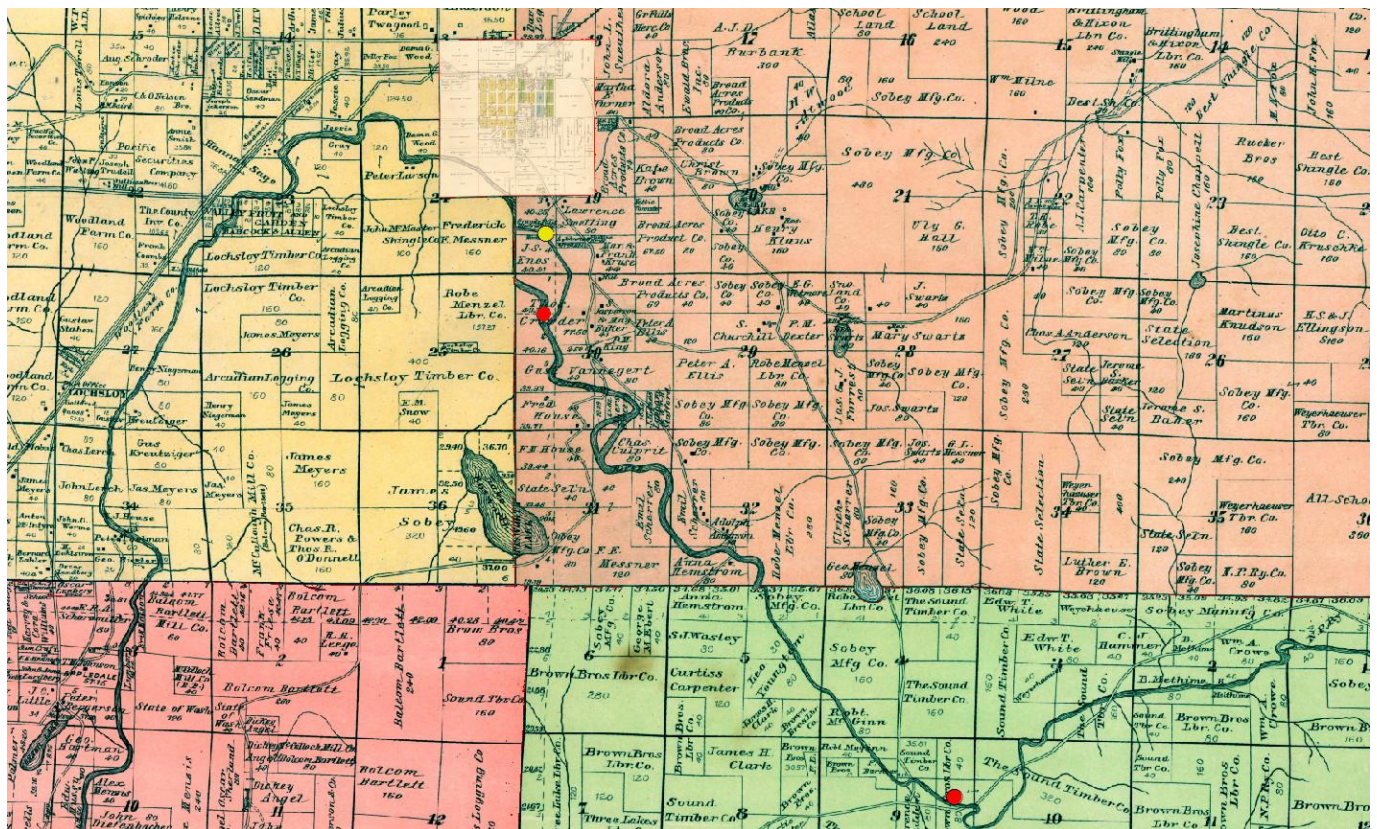
Snohomish people will be using located about three quarters of a mile the other side of Macbias cutting through a hill enclosed in a loop of the county road. The complete pipe line is 16 miles long. Commencing from a canyon in the southeast of Granite Falls the line is built southwest down the valley past the O. K. mill and following the low lands into Macbias from there the line follows the county road into Snohomish. The pipe on the line is 42 inches in diameter for the first fifteen miles adjoining Snohomish, on the remaining mile fourteen inch-

The article went on to say "Snohomish people will be using mountain water next week if nothing happens to hinder the plans of the engineer. Everything necessary will then be completed and the last thing will be to apply the water. The surplus will be run into the Pilchuck for the present. If an available use can be found for it in the future the city will have plenty of power at their disposal. Mayor Wood and the present city council are the main factors in the securing of the coming system and too much praise cannot be bestowed upon them.

### Water to Be the Best in the County"

Of course, there were some who might not have agreed, since the Granite Falls Electric Company dam was also on the Pilchuck, a few miles downstream from the new Snohomish city dam. Diverting large quantities of water from the Pilchuck would unfortunately have adverse effects on Granite's supply of electricity, particularly during dry months. So a lawsuit was filed in Snohomish Civil court, but was ultimately dismissed.

Our historical mapping system actually pinpointed the location of the current dam (#2) and provided one description. The red dots mark the dam locations, the current (1930-ish) Snohomish city dam about 6 1/2 river miles southeast of Granite Falls and the electric dam about 1 1/4 miles south of town. The yellow dot marks the small Coon Creek dam and powerhouse (used the water diverted from the Pilchuck to augment the creek flow). The Snohomish city dam and the associated building are still in operation, and the property is owned by the City of Snohomish.



The pipeline from that dam takes a rather circuitous 9 mile route through the valleys from the dam to Machias, then essentially follows the county road (Machias Road) 5 miles to the reservoir location on Emerson hill in north Snohomish. That reservoir has been expanded several times since the original was built in 1911, but it is still in operation, as well. The drop in elevation from the dam to the reservoir is about 260 ft, and another 200 ft to the lower city elevations, providing lots of water pressure “back in the day”. Total pipeline length is about 14 miles, which gave rise to the question regarding the location of dam #1, since many early-day documents referred to a total length of 16 miles. Even the current system engineer believed dam #1 to be “upstream” somewhere. Was the earliest dam actually upstream a couple miles?

The historical mapping system provided a link to the Aug 2011 “City of Snohomish Comprehensive Water System Plan”. In that document, it indicated that the first dam and the second (current) dam were located in essentially the same spot:

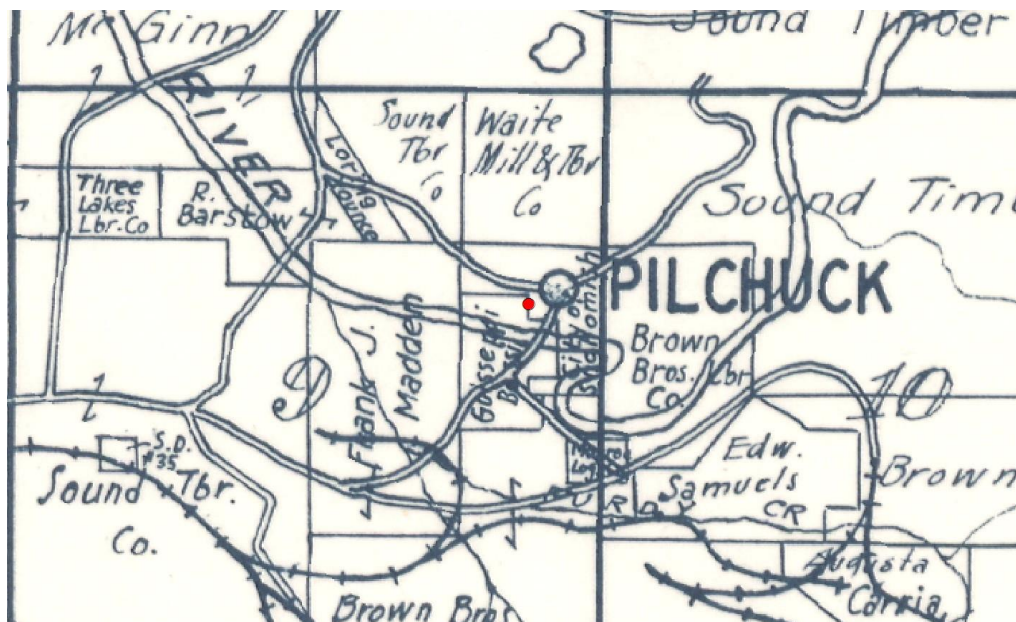
In 1912, the existing water supply facilities were replaced with a dam on the Pilchuck River, a 12-inch wood stave transmission main and an open ground-level reservoir, which have all been either abandoned or replaced. An additional reservoir was constructed in 1925 at the same site as the original reservoir. This reservoir, Reservoir No. 1, has an existing capacity of 1.0 million gallons (MG).

In the late 1920s and early 1930s the City replaced the wood stave pipe distribution system with cast iron pipe. At this time a diversion dam, which is still in operation today, was constructed on the Pilchuck River in nearly the same location as the original dam. Since the construction of the diversion dam was completed in 1934, a fish ladder and a continuous flow fingerling bypass were installed to keep the intake screen free of fingerlings.

Warner uncovered some cost information that seemed to be low enough that it was unlikely an entirely new dam structure was created during the 1930s upgrades. Searching our local newspapers for “Snohomish dam” uncovered another powerful clue. The Madden family owned the property just west of where the dam is today, and in 1923 Frank Madden ran a short ad in the local paper:

Came to my farm, 6 miles south of Granite Falls, near Snohomish dam on Pilchuck, black and white pig, about 2 months old. Owner please call, pay expenses and take animal. Frank Madden.—Adv.

We concluded that since Frank said he lived “near” the dam, and his property was almost adjacent to the current dam property, that all evidence supports the idea that the second dam was built in essentially the same spot as the first dam, and that accounts referring to a 16-mile pipeline were simply misleading. Dam #1 was not several miles upstream.



Notice that on many early maps, that location was labeled “Pilchuck”. This causes some confusion, because there was a significant mill and settlement about 5 miles north of Arlington on the Northern Pacific rail line that was called “Pilchuck”, too. It was truly a settlement, with school, Post Office, mill, rail station, hotel, etc.