# HISTORICAL FLOODS OF THE SKAGIT RIVER SKAGIT COUNTY, WASHINGTON 1892 THROUGH 1951

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This paper is the first of a series of papers that will be prepared regarding issues concerning the history of the Skagit River floods and other issues as well. Ninety eight percent of the verbiage contained herein comes directly from historical newspaper articles gleaned from a project that began in July 2004, when Skagit County Public Information Officer, Dan Berentson, contacted me and asked if I would like to help him review all the old articles of the Skagit Argus. I and my son Josef, jumped at the opportunity. We had barely began the project when we all realized that this was an opportunity to preserve the past for use in the present and future generations of our valley and we expanded the project to include not only the Argus, but the Burlington Journal, the Courier Times and the Skagit Valley Herald.

It was originally planned to just concentrate on flood events themselves, however we quickly realized that this was an opportunity to preserve the written record of the history of our valley on many issues. Three hard copy books have been published and are available in local libraries and from the Skagit County Public Works Department containing the hard copy articles mentioned herein. The individual articles are also accessible by clicking on the PDF versions in this paper as well as the following two web sites: <a href="www.skagitriverhistory.com">www.skagitriverhistory.com</a> and <a href="http://www.skagitcounty.net/Common/Asp/Default.asp?d=PublicWorksSalmonRestoration&c=General&p=HistoricIndex.htm#\_ftnref1">http://www.skagitcounty.net/Common/Asp/Default.asp?d=PublicWorksSalmonRestoration&c=General&p=HistoricIndex.htm#\_ftnref1</a>. Neither Dan nor I benefit in any monetary gain for this project.

I would like to take this opportunity to publicly thank Stedem Wood, publisher of the Skagit Valley Herald for his cooperation on this project as well as Tony Flynn of the Argus and Ruth Richardson of the Courier Times. Local newspapers do not just bring us the day to day news. They are the recorders of history in the making and are without a doubt one of the most important elements in our society. Without them the past could so easily be forgotten.

I would also like to thank the members of my immediate family, my wife Linda of 25 years, and my two sons, Josef (my webmaster) and Jeffery (my PDF master). Having your family's support and understanding on any endeavor you set out on is priceless.





The first white person to see the shores of Skagit County is believed to have been Lt. Salvador Fidalgo of the Spanish Navy in 1790 on one of Spain's claiming expeditions which had begun 20 years previously. The English reached our county two years later in 1792 when Capt. George Vancouver made such a thorough exploration of the whole Sound area and contributed so many lasting names such as Puget, Baker, Rainier, Townsend, Bellingham and Whidbey. (Source: 2/29/56 SVH) Mount Vernon had the distinction of being the first permanent inland town started in Skagit County (June 1870 settled by farmers, 1877 businesses and hotels, incorporated June 1890). The first farmers were Samuel Calhoun and Michael J. Sullivan. Ignoring the scoffings of pessimist who said such tide swamps could never be conquered, the settlers persisted and thereby laid the first foundation for Mt. Vernon. Guemes, "a land of many deer, wildlife, and a thousand wolves," was the first Skagit territory to be occupied and Anacortes was the first community to be founded. Early pioneers landed in the Fidalgo and Guemes country between 1853 and 1860; and it was in 1867 that the second Skagit settlement, LaConner, was started by Alonzo Low. Edison was first settled in 1869 while Skagit City, a flourishing village destined to an early extinction, was also established in that year. Following Mt. Vernon were the founding of Fir in 1876; (the first settlement at Conway was made in 1873 but the founding of the actual town was not until 1891); Mountain View (or Clear Lake as it is called now) and Hamilton in 1877; Sedro-Woolley and Sterling in 1878; Burlington, Bay View, Avon and Padilla-Whitney in 1882. Lyman, Montborne and Sauk City in 1884; Baker (Concrete) in 1888; Rockport in 1900 and Bow in 1901 although it was first homesteaded in 1869. (Source: 2/20/41 Argus)

#### Log Jams



The early days were not without major obstacles and one of those major obstacles were two "monstrous" log jams pictured above.

The two huge log jams in the Skagit, one centuries old, proved major obstacles in the community's development. The Indians reported that the log jams had been "always existent". But the hearty pioneers with brain, brawn and perseverance, finally were victorious and following the opening of the river the community grew rapidly. (Source: 2/20/41 Argus)

The huge log barriers from time immemorial had blocked the river and affected early fortunes of the valley after the white man's arrival. Had it not been for the initiative and perseverance of pioneer settlers, who bent to the almost insurmountable task of eliminating the jams, the demise of Skagit City, then the area's principal town, would have been postponed, and

Mount Vernon might not have become the sizable city it is today. The perilous and heartbreakingly slow removal of two great log jams in the river marked the turning point of the town's fortunes, as well as those of the entire region. One jam lay a mile north of Mount Vernon and the other about half a mile below, presenting an obstacle to further settlement upstream. (Source: 2/2/56 SVH)

The log jam which was a solid mass of logs completely across the river, thus extended two miles beyond Mt. Vernon. His father was the man who broke the Skagit's famed log jam, coming here from Cedar Rapids, Iowa, on March 9, 1874 when Charlie was only two years old. The jam was one of the worst in the history of the Pacific Northwest, extending for a distance of four miles up the river from what is now known as "Storr's Bar." This is a bend in the river about two miles below Mt. Vernon famous for its steelhead and salmon fishing. It took the elder Stoors and his crew of timber workers 4½ years to clear the channel. "They worked by hand," Storrs said. "They had no dynamite, no cables, nothing. The project ranks as one of the epic accomplishments of the west and is still a topic of conversation whenever old-timers gather. (Source: 11/23/59 SVH)<sup>1</sup>

## Skagit River Historical Floods

Skagit County Washington is rich in history and much of that history is centered around the flooding of the Skagit River. While the log jam was a formidable obstacle that the early settlers eventually could overcome, the most serious obstacle, the flooding from the Skagit River was one that they could not. In fact, that obstacle still persists today.

# Indian Legend Flood

In the year 1878 Joseph Hart, our well known fellow citizen, came to Puget Sound and two years latter came to the Skagit valley, just prior to the great flood of 1880. Since the flood of that year there have been three freshets that have equaled it in height, and the one we chronicle this week surpassed it by eighteen inches.

In speaking of the floods and their causes, Mr. Hart said: "At the time of my coming to the valley there had been no freshets of note for many years, and the one that came in 1880 was a damper to the enthusiasm of the dwellers on the marsh lands; but, as several years rolled by without a repetition of the catastrophe and a system of dikes was inaugurated, contentment banished fear. Shortly after the memorable high water of that year, I had a talk with an old Indian and his squaw, who used to live on Skiyou Island but have since died of small-pox. These worthies took me to a tree near by and directed my attention to a water mark at least six feet higher than the highest point reached by the recent freshet and said that when they were children the great flood swept down the valley carrying death and destruction everywhere. He said: 'The lodges of my people were carried with their canoes and winters food out to the great waters, and they were left to suffer the horrors of starvation and death from exposure to the inclement

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<sup>&</sup>lt;sup>1</sup> At the time of this article Charlie Stoor was 87 years old, a true Skagit County pioneer.

elements. The snows of winter fell to an unusual depth and the animals upon which we were wont to subsist, greatly reduced in numbers by drowning and driven into the mountain fastnesses by the raging torrent, were hard to get and very poor. The fish we had prepared for winter use were destroyed by the angry waters and we were made to suffer the wrath of the Great Spirit.'"

Continuing Mr. Hart said: "Judging from the apparent age of the Indians at that time I should place the time of that greatest of the great freshets at about the beginning of the present century,<sup>2</sup> and was caused according to the story of these Indians, by heavy snows coming early in the fall, which were immediately succeeded by a very warm Chinook wind which blew for many days. As to this being the only and real cause of the unprecedented high water, however, I have my doubts. Our fellow townsman, Mr. H.L. Devin, was some years ago engaged in surveying in the upper valley in the vicinity of Baker Lake. Being detained over night in an Indian camp, he was told the history of a great flood. They said that about 60 years ago a great slide had choked up the narrow outlet of the Baker Valley and that the water accumulated in the basin thus formed until the whole valley was an immense lake, full 80 feet deep. By this time the imprisoned waters had burst through the dam and in a few hours this great volume of water was precipitated into the Skagit flooding the whole valley. The water marks still plainly visible high up the sides of the Baker Valley and the great variation in those upon the trees as you come down the Skagit would indicate that this was the real cause of that terrible disaster. (Source: 11/19/1896 SCT)

# 1892 through 1895 Flood Events

One of the earliest writings about the flooding issue was published in 1895 on the front page of The Skagit News, forerunner to the Skagit Valley Herald and Skagit County's first newspaper, in the form of a "Memorial" to Congress.

A system of dikes extends on both sides of the River from its mouth to and above the village of Avon, about fifteen miles; and connecting with the main system, are other dikes, running across the level country toward LaConner and other points to the North and South of the River. This diking system has been rendered necessary by the filling in of the bed and mouths of the River, from causes which will be explained, and ought to be remedied. The system, already constructed and maintained, embraces one hundred and fifty-eight miles of dikes, and has cost in money and labor expended in construction, the large sum of three hundred and thirty-five thousand dollars. All of this has been expended by owners of land in the Skagit valley, including the residents of towns liable to inundation.

Before the mouth of the river began to be obstructed, the accumulating waters of the greatest freshets did not overflow the banks. A channel varying in depth from twelve to twenty feet was a sufficient outlet for all the water that passed in swift torrents from the mountains and

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<sup>&</sup>lt;sup>2</sup> This would have been the 1815 flood James E. Stewart, USGS later wrote about. Stewart later recanted this by saying "The old Indian who told Hart and others at Sedro Woolley in 1879 that the flood was when he was a boy either referred to another flood or they did not understand him." (Source: Transcription of Stewart "flood notes" on 9/16/22 by USGS 6/30/23 re Reflector Bar near Marblemount) USGS in 2004 now says the landslide never happened because they can't find any evidence of it.

highlands of the North and East. Resolute and industrious settlers reduced to cultivation the fertile lands of the Skagit valley, and made subservient to man, the thousands of acres that were a few years since inhabited by the beaver, and other animals whose pelts excited the cupidity of the hunter or the Indian. We do not believe that the famous lands of the Nile, or any other in the world are more fertile and productive. For years, these lands without fertilizers have yielded an average of one hundred bushels of oats to the acre, and the hay crop on the higher lands will average four tons. Fruits and vegetables grow in profusion, and their flavor and richness are unsurpassed. But all of this has involved a large expenditure of money and unremitting toil and patience on the part of our people.

We call your attention to the fact that since November, 1892, the floods in the Skagit have four times swept over the banks, broken the dikes and inundated the surrounding country. The destruction of property by the overflow in November, 1892, and January, 1895, was not very great, but the overflow in May, 1894, and June of that year entailed a direct loss on the people of the Skagit Valley as shown by estimates attached hereto, approximating one-half million of dollars.

The town of Mount Vernon was entirely flooded, small boats and rafts navigated the streets and the people were driven from their homes for safety to the hills. The damage to public and private property was great, and the suffering from exposure and sickness was distressing. All of these overflows have been caused by the ponding of the water in the river, resulting from the obstruction and closing the channels of the North and South Forks, above mentioned. There is comparatively little danger of loss from the overflow in the Winter, but in May and June, when the crops are most promising, the genial weather and hot suns melt the snow in the mountains, and the creeks and small rivers and mountain streams empty their waters into the Skagit which sweeps down with terrible fury completing its destructive mission. (Source: 10/21/1895 The Skagit News)

#### November 16, 1896 Flood<sup>3</sup>

The highest water in the Skagit River known to white men occurred last night. On last Thursday a Chinook wind commenced to blow which was accompanied by a warm rain. This rapidly cut away the snow which for several weeks had been creeping down the mountain sides. The wind continued over Friday when the river commenced to rise rapidly. By Saturday afternoon the river was booming and many thought it had reached its highest stage. This however, was not the case as it continued to creep upward during yesterday, and until last night. As the water gradually rose on the levees it became apparent that unless strenuous efforts were made to raise them, the town would be flooded. The experience of former occasion was enough to induce all parties to lend a hand, so that when the fire bell rang out the alarm, not for fire gut water, an army of men turned out with shovels and commended to build a dike on top of the levee, commending at the hill and working clear down through the city. This work saved the town, and but for it, from ten to eighteen inches of water would have swept over the levees and

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<sup>&</sup>lt;sup>3</sup> According to COE reports there were 3 floods in 1896. January, June & November. The COE Taylor Report 12/11/1897 stated that "River reportedly was 24 ft on Great Northern Railroad Bridge 6 miles above Mt. Vernon.", which was 2 ft and 4 ft above the January and June floods respectively.

through the city. Too much credit cannot be given the willing hands which worked all day yesterday and part of the night. The Mt. Vernon bridge stood the test nobly. It is a grand structure. Mortimer Cook's store at Old Sedro was twisted off its foundation and turned completely around. The brick building at Hamilton, that was formerly occupied by the Star, was undermined and fell into the river. P. Gibbons lost over a million feet of logs, a portion of which may be saved by the boom company at the mouth of the river. The protection pier at the Great Northern bridge was knocked out and that structure was in great danger of being washed away. Two big breaks in the levee on the west side occurred. One near F.C. Ward's place, the other at D. Storr's place. The whole west side including West Mt. Vernon, is a lake. Six hundred feet of the Great Northern railroad track between the bridge and Burlington were washed out, while over a mile south of the city and between Conway and Stanwood was turned upside down in the adjoining field.<sup>4</sup> (Source: 11/16/1896 TSN)

On Wednesday of last week, the wind began to blow from southeast and, before evening had developed into a Chinook gale. Unfortunately for the river bottom settlers of the Skagit valley, the warm wind continued until about 4 p.m. Sunday. On Friday the Skagit began to rise quite rapidly and continued rising at an average rate of three inches an hour<sup>5</sup> until Sunday morning when it began to abate. In the afternoon of that day, the river had risen until all previous highwater marks at Sedro was one foot seven inches under water. The whole valley east of Sedro was a floating wilderness. Hamilton was totally inundated; one brick building having caved in and several frame ones torn from their foundations. The county bridges recently constructed wee destroyed and the improved roads that had become the pride of the upper valley became an easy prey to the devastating waters. Lower Sedro suffered heavily. A large number of cattle and small stock perished and buildings ruthlessly torn from their foundations were cast hap-hazard amid the heaps of debris. Mortimer Cook's store that has weathered the floods and storms of fifteen years, rose with the eddying waters and turned half way round before lodging against some trees and stumps.

South Burlington sustained great damage. Houses and barns were undermined and toppled to the ground and the winter's supply which they contained scattered on the tide. The fencing of years yielded to the flood and the clearings that represented the toil of a decade were covered with the debris of the surrounding forest. At Avon the dikes gave way in three places and the unrestrained torrent rushed pell-mell through street and meadow, orchard and garden, tearing and washing until the oldest inhabitants would have to summons imagination to aid him in recognizing some of the old land marks. West Mount Vernon is next in line of progress and received no favor from the impartial flood. The water, rising from one to two feet above the first floor of the dwellings, swept fences and everything movable before it. Among the miracles of the age was the ability of the residents of Mount Vernon proper to keep the dikes in shape to restrain the freshet from sweeping through the streets of the city. By heroic effort all day Saturday and the following night the main dike was strongly re-enforced by three temporary ones, which action alone saved the city as the old one repeatedly gave way. (Source: 11/19/1896 SCT)

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<sup>&</sup>lt;sup>4</sup> USGS (Stewart) estimate says 185,000 cfs at Sedro-Woolley. No figure for Concrete

<sup>&</sup>lt;sup>5</sup> 3 inches an hour for approximately 48 hours would be 144 inches or only 12 feet. This would not be a very large flood by today's standards even if we assume the river was at 20 feet when it started to rise. This could explain why the COE stated the BNSF RR bridge only reached 24 feet.

# November 18, 1897 Flood<sup>6</sup>

On Wednesday morning a very warm Chinook wind commended to blow which increased in force until evening, when it was almost a gale. This hot wind blowing directly on the snow which had been creeping down the hills for the last few weeks, cut it away with the rapidity of fire, and resulted in a raging torrent rushing down the valley of the Skagit on its way to the sea. The rise did not commence until Wednesday evening, as it usually takes from twelve to fourteen hours for the effects of a Chinook to make their appearance, and the same time to cease. By Thursday the river was still raising but still within the banks. During the night, however the water came with increased force, and early on Friday morning the alarm was whistled from the electric light plant which called for help only to find the water pouring over the levees in all directions. Some efforts were made to raise the levees and keep ahead of the water, but it came so fast that they were useless.

In the southern part of the city, the very lowest quarter, a great break occurred in the levee, caused by the water pouring over the top,<sup>7</sup> which swept everything before it with irresistible force. The house owned by T.F. Costello, and occupied by Mr. Winkler was turned around during Friday night broken into, Mr. Winkler being nearly drowned. He was in the house when the break occurred directly in front of the building and had not time even to get outside but crawled up and stood on the door knob with the icy water up to his chin. While in this position, the knob broke off, and Winkler swam to the window, and broke in the top sash crawling up and sitting astride the lower sash. In this position he remained for hours with water to his waist, until a boat could be snubbed down through the crevasses with a long line, and he was rescued from his perilous position, almost dead from exposure.

All the business houses of the city which were built level with the sidewalks were flooded, and there was a hasty scramble to get goods above the danger line. All the sidewalks and crossings were washed out, and many of them swept away to southern part of the city. After the flood Kincaid Street presented a sight that was dismal in the extreme, being washed out and lined with debris from one end to the other. All other parts of the city were in nearly as bad condition.

From Conway to salt water, **the flood poured over the top of the levee** the entire distance on the east side of the river. On the west side of the river several small breaks occurred letting through large volumes of water. But little damage was caused however. Quite a loss of hay and oats was caused in several sections where they were not placed high enough to be above the water, but nothing nearly so great as occurred a year ago.

At the mouth of the river, steamboat slough, the only channel that can be used by steamboats, is completely blockaded. In coming up the last time the Champaign had to use a

<sup>6</sup> USGS (Stewart) estimate says 275,000 cfs at Concrete, 190,000 cfs Sedro-Woolley.

<sup>&</sup>lt;sup>7</sup> This is the first evidence that levees along the Skagit River have indeed been overtopped. Previous to the discovery of this article the Corps of Engineers had always stated that levees failed only by "blowing out" or "undermined" by river currents.

small draw in which there was scarcely enough water at the present high stage, in order to get around the jam. Prompt work will be required here in order to keep the river open to navigation. The Great Northern coast line was overflowed as usual, but not so badly damaged as it was last year. The first train from the south came in today. A jam formed against the bridge at the Davis place, and came near taking it out. As it was the protection piers were knocked out, and the rails on the bridge were sprung fully 18 inches. (Source: 11/22/1897 The Skagit News Herald "TSNH")

#### November 16, 1906 Flood<sup>8</sup>

On Thursday evening the Skagit river was the highest known for years. Some damage was done at various points on the river. West Mt, Vernon was flooded, but with very light damage. The west span of the bridge at that place was swept away. The draw on the railroad bridge was slightly damaged by a heavy drift but will soon be repaired. No water came within the corporate limits of Burlington except in the slough in the east part of town, and no damage was done. (Source: 11/16/06 The Journal "TJ")

While no great amount of damage resulted, it is never the less a fact that the old timer does not remember when the Skagit river contained as much water as it did Thursday night and Friday, and only prompt action on the part of the city officials and citizens saved the town from being inundated. The dikes here were very secure and did not break but the torrents of water poured over them<sup>9</sup> and it was only by prompt action on the part of the citizens, who labored like Trojans filling sacks of sand and placing them in the low places, that saved the city from another baptism worse than that of 1897, as the water was at least eight inches higher than it was during that memorable freshet. Above and below the city the dikes gave way, but as the water will give benefit rather than damage to the lands that were flooded, there will not great amount of damage result.

The Great Northern railway bridge was saved but the drift struck the draw and turned it around so displacing things that it will take eight or ten days work before trains will be able to cross. The bridge at this place will never lament with safety, one span carried away, the others injured. A ferry will be established and sustained here until such time as a new bridge can be constructed. Any reports about great loss of life can be branded as false. One man, Mr. H. Peterson, of this place, was injured on the bridge by running against a crank which turns the draw, injuring himself internally and later dying from his injuries. This is the only loss of life known at any point for which the flood was indirectly responsible. These floods are fraught with no great danger and throughout the country where the dikes gave way there has been no loss of life and but little damage to property and the farmers are not at all discouraged or alarmed about the future. The dikes in the main remained secure and when the damaged dikes are repaired they will be made sufficiently strong to withstand all future floods. Any home seeker or investor when contemplating coming to Skagit Valley should not hesitate to do so for in truth these floods are of no great consequence except what damage is done to bridges. They really benefit the

<sup>&</sup>lt;sup>8</sup> USGS (Stewart) says 180,000 cfs at Sedro-Woolley. No figure for Concrete.

<sup>&</sup>lt;sup>9</sup> Again, water "pouring" over the dikes (levees).

land<sup>10</sup>, but there is no doubt but in future years the dikes will be so strengthen as to withstand these floods and the country back of them will always remain dry. (Source: 11/19/06 TSN-H)

So far as can be learned the recent flare-up of the Skagit river and its tributaries concentrated its damaging effects against bridges and railroads. No loss of Human life, except that of Mr. H. Peterson at Mt. Vernon, was caused by it. The case of Mr. Peterson was the result of a self inflicted accident caused by coming in contact with the iron crank used in opening and closing the draw on the county bridge at Mt. Vernon. A blast to loosen a jam of debris in the river was about to be fired, and in running in the darkness to a place of safety the unfortunate man collided with the iron and injured himself internally, from which he died the day after. . . . At Mr. Vernon, while the water over-flowed low places on the dike, by vigilance and hard work the citizens prevented the water making dangerous inroads. West Mt. Vernon was less fortunate and the town was flooded to a considerable extent but without serious loss. The dikes both above and below Mt. Vernon broke, but the overflow is, in most cases, looked upon as a benefit rather than an injury to the land covered. . . . The railroad bridge between Burlington and Mt. Vernon was put out of commission for several days by drift striking and throwing the draw out of line. . . . The water in Big Lake, it is said, was backed up into the basements of several houses. North of the river the water backs in west of the railroad tracks for a considerable distance toward town, while the water in the slough between the town and river made things look serious for a time, and a rise of a few more inches would have put Sedro-Woolley into the flooded district. . . . The rapid succession of rises and overflows is the subject of much conjecture and comparison with old time occurrences of a like nature. High water marks of former days are contrasted with those being made, and imagination lures the possibilities of the future. In this relation it should be remembered that, with the obstruction made by the dense forests and under-growths of years ago, the water which has recently ran out of the mountains and hills would have been backed up to the highest marks made by the flood anywhere in the past. Whatever may happen in the future it has been fairly demonstrated that Skagit County is not in danger of a widely disastrous overflow. The greatest danger that threatens is to those who might be affected by a change of the river's course, which even now is demonstrated to be not unlikely. The removal of timber quite likely has something to do with climatic changes that are said to be notable in this country. The same thing lessens resistance to any change of base crowding water will cause the river to make. It is possible that an extreme was reached in the last rise and that the worst that can occur has been demonstrated and has passed. If that is true the lesson taught should prepare everyone for any future occurrence.<sup>11</sup> (Source: <u>11/22/06 SCT</u>)

The Skagit River has again risen in her majesty, and outdone its previous efforts for some years back. Everybody at Sterling south of the railroad track was compelled to move, some not getting their household goods high enough, as the water kept raising were obliged to move again. The people of the boarding house lived in the upper story. The mill firm were drying the last of their shingles but had to let the fire out because of the water about the Dry Kilns and mill. The

<sup>10</sup> It should be noted that in 1906 Skagit County (mostly the Mt. Vernon Commercial Club) was trying desperately to develop the County thus the spin that floods "are fraught with no great danger" and "benefit the land" although there is probably some truth to the latter statement. Three years later they will regret making those statements.

<sup>&</sup>lt;sup>11</sup> As will be subsequently demonstrated the extreme was not reached in the 1906 flood event as the 1909, 1917, 1921 and apparently the 1924 floods were all more serious events.

slough reached such proportions as to be a veritable river, carrying all kinds of riff raff and logs over people's ranches. John Peterson thought himself secure from high water but the slough backed to his barn. The river flooded the greater part of Mr. Doughty's land running nearly across the county road, but did not reach his house. Buzz Jewell suffered the greatest financial loss of anyone, as the river raised so that it covered most of his forty acres, and poured over the county roads in such volumes as to cut a chasm thirty feet wide and fifteen feet deep, the roaring of which could be heard half a mile away. The water came in on the ranch of J.L. Stearns along the rail road track past the house, being on a raise of ground the water lacked about four feet of reaching it. The slough also overflowed the back of the ranch but not enough to float any logs off. The bridge over the slough by Wm. Miller's place is impassable, having been built on logs, which were jarred loose lifting the bridge about three feet into space at one end. (Source: 11/23/06 The Journal)

#### November 30, 1909 Flood 12

Some among the oldest settlers of Skagit County are found to make the statement that never before have they seen the river rise to the marks reached during the flood, which came during the first part of the present week. . . . At about 10 o'clock Monday night, W.H. Joyce who lives just east of town, gave the alarm by phone, announcing that the water had broken over the county road east of the Jewell place and was running down the big slough towards the east part of town which is quite timely settled. . . . Down at the east end of Fairhaven avenue the current was very swift and the bridge went out . . . leaving some forty people shut out in this lowest land and in a swift current of water. . . . Thursday was a great day in Burlington and many talked of camping on the heights Tuesday night, but the change came about noon, the water went down rapidly and Burlington has perhaps received less damage then any other town on the Skagit. . . . While the East Mt. Vernon dyke held good, a snapshot from the auction building on the hill at Mt. Vernon shows a sea of water from Mt. Vernon to LaConner. Much damage was done in West Mt. Vernon and the hundreds shut in. LaConner was underwater as well as the entire flats from LaConner to Bayview and Mt. Vernon. (Source: 12/3/09 The Journal) 13

(Dead in flood Skagit waters collect their toll of human life.) The above headlines, printed in red, were the attractive features of the front page of Wednesday morning Reveille, and is perhaps of the most disgraceful lies that that paper ever published. Following those headlines the reporter says that no dead have been reported. He also says that Burlington is buried under from five to ten feet of water. This is also untrue. They also say that Burlington is sadly in need of relief and mercy work. We hope that the Reveille will be generous enough to correct these false statements. In the first place there is no dead in the flood, so far we have not received the

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<sup>&</sup>lt;sup>12</sup> USGS (Stewart) estimate says flood 260,000 cfs at Concrete, 220,000 at Sedro-Woolley.

<sup>&</sup>lt;sup>13</sup> Unfortunately this article is in extremely poor condition with portions being completely unreadable. Just as unfortunately, this is the only one of two articles located on the 1909 flood event as the Skagit Valley Herald, The Skagit Argus, and the Courier Times have all lost their copies of this flood event. According to USGS estimates by James E. Stewart (which are admittedly highly suspect – See Whitepaper at <a href="www.skagitriverhistory.com">www.skagitriverhistory.com</a>), this was the most serious flood event in Skagit County's history which allegedly carried 260,000 cfs at Concrete and 220,000 cfs at Sedro-Woolley. Again, these figures are highly suspect but are what the government is currently using.

report of one dead from any place along the Skagit. Burlington had about one foot of water in some of the streets, and there were many buildings over the town that were not even surrounded by water. Neither the railroad bridge south of town, or the steel bridge at Mt. Vernon is washed away. The account published in the Reveille on Wednesday was simply a piece of Yellow Journalism. (Source: 12/3/09 The Journal)

After all, it might have been far worse. No irretrievable damage has been done. The thing to be done now is to clean up, begin the work of repair, and **proceed as though nothing had happened.** Skagit County has a glorious future and not even extraordinary misfortune can set it back for any length of time. The weak-kneed brothers will move out; those made of sterner stuff will stay and reap the rewards of grit and energy. It is no time for calamity howlers, and they should not be tolerated. Let them go their way; their places will be filled by better men. No expense should be spared to put the roads and bridges in as good and better condition than they were in, before the freshet. If necessary, the taxpayers should not hesitate to bond the county for any needed sum, and no man who has the interests of his county at heart will balk at such a move. It is no time for hysterics or petty politics—calm judgment, definiteness of purpose and indefatigable and well directed energy must now be combined. (The above editorial appeared in the Dec. 4, 1909 issue of "The Herald-Recorder," Skagit county's official paper published at Hamilton, the week of the "big flood".) (Source: 12/1/149 CT)

#### December 20, 1917 Flood

The **heavy rains of the past two weeks** have caused considerable inconvenience to people living along the Skagit river. It seemed that the high point of the raging Skagit had been reached Sunday morning when the debris dam and the Mount Vernon bridge went out, carrying a portion of the temporary trestles away. Part of the trestle went out on Saturday, thus putting the bridge out of commission and causing those who wished to get to Mount Vernon to go around by the Avon road and come in from the north. . . . The river dropped Sunday and Monday, but the heavy rains of Monday night brought the river up again. Heavy rains in the hills kept the stream up to a dangerous point and in many places the water covered the low lands. . . . The heavy rains of Tuesday brought raging torrents of water down the old Skagit and for the first tie in nine years the danger line was reached on Wednesday morning when a little over twenty-one feet of water was registered. The dike broke south of town and considerable land was flooded. However, the standstill came about noon and by Thursday morning the water had fallen to the seventeen foot mark. (Source: 12/20/17 MVH)<sup>14</sup>

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<sup>&</sup>lt;sup>14</sup> This is one of five undocumented flood events located by using newspaper historical research. Clearly this flood contributed to the seriousness of the December 30, 1917 flood as most of the overbank storage would have been saturated from this flood event. It is the first time that we have documented that the infamous December 30, 1917 flood was a "double pump" flood event. Just like the 1990, 1995 and 2003 flood events.

#### December 30, 1917 Flood 15

The dear old Skagit Valley, the one green spot in the northwest, has been given a drenching which wrought much damage and caused considerable inconvenience to all persons, ranchers and townspeople alike. An almost **unprecedented rainfall** and a Chinook wind starting last Friday in the upper part of the county caused the old timers to open their weather eyes and soon the alarm was given that a "big river" was expected. The river began raising last Saturday morning and continued to raise all day. Saturday night the stream was nearing the danger point. **Dikes in all parts of the valley were being taxed to their capacity** and in many places efforts were being made to strengthen them. . . . LaConner received a full blow of the rushing waters, but aside from the loss of the bridge, some bad washouts, the little town stood up under the blow very strongly. Mount Vernon's business section and residence section was spared. . . . The Great Northern and the Interurban roads are badly hit. For miles and miles, both north and south, the Great Northern tracks are hanging here and there like a great trestle. In some places the road bed is washed out to a depth of six and seven feet. The interurban tracks are badly damaged and it is not believed that traffic will be resumed between Mount Vernon and Bellingham for a least a month. . . .

The first intimation of danger was when advices up river were received to the effect that the water was higher on Saturday morning than it had been during the flood of 1909<sup>16</sup> and people began to prepare for a wet season. By midnight it had reached the high point at the hospital and was still rising. A small dike was thrown across the street with the hope of holding it, but under the strenuous protest of the property owners who would be submerged at the expense of the north end of the town the idea of keeping it back was abandoned and it was allowed to run down the main street to the Great Northern railway tracks where a breach was made and the waters allowed to spill out over the Olympia Marsh. . . . The loss in stock also promises to be comparatively light for the reason that the valley is so flat that a sudden rise sufficient to endanger life is almost impossible. . . . The Howard Fredman place has suffered the most severely of any in the immediate neighborhood of the big break. Here the river ran mad, undermining the house and barns and plowing deep channels through the fields. Deep holes are to be seen everywhere and across the Varney road<sup>17</sup> where once were stumps there are now excavations that look like cellars. The little station at Varney<sup>18</sup> has been undermined and leans over on its sides in a decidedly disreputable manner. The damage in the Interurban lines at this point will take weeks in repair. . . . Sedro-Woolley has not suffered very severely except in the vicinity of the water plant. At Sterling the damage will be considerable from the cutting up of the farms and the J.H. Hutchins place is said to be pretty badly wrecked. Dr. Cleveland's new home <sup>19</sup> on which he has spent so much time and money is also much the worse for its experience as well as those of many others. (Source: 1/3/18 MVH)

<sup>&</sup>lt;sup>15</sup> USGS (Stewart) estimates that the flood carried 220,000 cfs at Concrete and 195,000 cfs at Sedro-Woolley.

<sup>&</sup>lt;sup>16</sup> This statement cast further dispersions on the accuracy of the USGS James E. Stewart estimates of the 1897, 1909, 1917 and 1921 flood events.

<sup>&</sup>lt;sup>17</sup> Burlington Blvd.

<sup>&</sup>lt;sup>18</sup> Gages Slough

<sup>&</sup>lt;sup>19</sup> Located behind Lafayette Road where it bends north towards Highway 20.

Clear Lake: At 1:30 the water started to come in the west part of town, and the people living in that part received the greater part of the water. The water entered the mill and also the engine room where the electric dynamo is and rose so high that the mills and town was put out of order and the town was submerged in darkness until Wednesday evening. The greatest damage done by the water in town was the washing away of sidewalks and fences. The flood was rather mild here compared to what it would have been had not the Sterling Bend dike broke. Although the citizens of Clear Lake sympathize with those of Burlington and vicinity they are thankful that it was not worse here. (Source: 1/3/18 MVH) Little John Gruber of Clear Lake, lost his life in the flood waters of the Skagit Wednesday evening when, in company with his brother, Joe Gruber, they attempted to make their way over the waters to the ranch. The accident happened about 6 o'clock in the evening. Little John had come down from Clear Lake and had waited near the Clear Lake yards, close to the broken dike for his brother, who was coming in a boat from the Loveless place, where he lived with his family. (Source: 1/3/18 MVH)

Four weeks of rains and Chinooks finally resulted in a freshet Saturday night that for a time threatened to inundate the entire valley. The warm winds from the south melted the snows, it is said, up to the 6000-foot level and brought the combined waters of the Upper Skagit, the Sauk, Baker and numerous tributary streams down to the lower valley in greater and more continuous volume than has ever been recorded in the history of the country. . . . The heaviest individual losers are those individuals that were in the path of the dike breaks. The break at Sterling Bend and that at Stevens slough immediately north of the Great Northern bridge wrought the greatest damage. At Stevens slough a home belonging to M. Freeman was tilted over into a hole. Dikes, county roads and railroads probably suffered the most from the recent freshet. . . . At Avon there was a sudden dramatic moment Sunday morning when a portion of the dike went out carrying into the swirl six men who were at work with dozens of others reinforcing the dike at this point. Hadn't been for an old secondary dike the Skagit would have gone through here and every foot of the flats would have been under water. . . . A break at Magnus Anderson's farm let the water in over a section of country about Conway. . . . Burlington and La Conner and Edison reported water in the streets; Sedro-Woolley reported water in the neighborhood of Jamison avenue, which is some distance from the business section. The Nookachamps low lands also were visited by the water. Mount Vernon, on both sides of the river, was dry throughout the freshet. The water from Sterling bend went over the Olympia marsh and the Samish. Edison also reported a couple of feet of water. (Source: 1/4/18 Argus)

One of the worst and doubtless most destructive floods known in the Skagit delta occurred last Saturday night, the river dikes giving way in eight or more places, the overflowing water covering the entire delta from Mt. Vernon to LaConner, and south from Mt. Vernon to Conway. The island delta west of Fir escaping flood waters (Fir Island). The McLean highway district west of Mt. Vernon was not flooded.

The tragical results were caused by the failure of a crude, imperfect, un-uniform diking system that never has nor never will retain the torrents of water when a Chinook zephyr

<sup>&</sup>lt;sup>20</sup> This article unequivocally shows the impacts the levees have had on the Clear Lake area. 1917 was one of if not the most damaging flood in the 20<sup>th</sup> century, yet Clear Lake suffered only "mild" damage unlike what they suffered in the 1990 and 1995 flood events.

<sup>&</sup>lt;sup>21</sup> This is the second death attributed to a Skagit River flooding event.

loosens the flood gates of the Cascades. From five o'clock Saturday night, when the river was bank full, it steadily rose a foot an hour until midnight. The water then had reached the top practically of all the dikes, and a break was inevitable somewhere or the mighty volume of water was certain to pour over the dikes, causing doubtless even greater damage in loss of property and loss of life than resulted through breaks in the dikes. At about midnight the expected break in the dike came. In fact there were at least ten serious washouts. Four occurred in the Riverside bend, three across the river in the Avon district, at North Riverside, one at Freeman's old place on the Baker River logging railway right-of-way, southeast of Burlington, one south of Mt. Vernon, and another at the Clear Lake wood yards, north of Mt. Vernon. These artificial spillways naturally afforded an immediate outlet for the surplus water to pour through, and the river immediately began to fall, and all danger from further flood damages was past.

Building a series of un-uniform dikes to protect districts here and there through the lowlands utterly fails as a solution, meaning only future disaster when the river runs riot during flood periods. During flood periods when the river reaches the point that dikes are not adequate to control it, it overflows its banks unless other artificial means are provided to carry off the surplus water. Government engineers, who have studied Skagit river flood problems with the view of affording relief to districts subject to overflow, declare that concrete spillways should be built to take care of the surplus water. Improvements of this character should be maintained by the government, state and county.

Because Mt. Vernon's big dikes kept it dry, or **Burlington is so fortunately situated that it does not require a system of dikes to protect it from floods** is mighty poor consolation to the people of the delta districts threatened with overflow and devastation every recurring flood. (Source: 1/4/18 B.J.)

The Howard Freeman farm at Varney station was quite seriously damaged by the overflow caused by the break in the river dike on the old Freeman farm east of Varney. Mr. Freeman's fine new home and barn were damaged in some-extent. The break in the river at the old Freeman farm, which was probably 800 feet in width, caused serious damage to the farms in the path of the overflow. The break occurred when the river was at the highest point, the water stretched over a territory of about 2500 feet in width, carrying away the Great Northern and interurban highways, undermining the dwelling and carrying away the barn on the old Freeman farm, and covering the land with piles of drift wood. The water found an outlet in the bay near Whitney.

During the height of the flood Sunday morning a foot of water from the overflow of the river from the east covered a small portion of the residence and business districts of Burlington, the water flowing out that night when the river fell. On account of poor drainage and inadequate sewerage, there is still some water in the low places in some of the districts, which will soon all pass into the drains. The loss of property on the Higginbottom farm south of Burlington (the old Freman place) was serious. When the dike broke the house was undermined, the barn and sheds carried away, and the land covered with large-quantities of logs. The owner had only one cow which was saved. The Mussor, Wakley and Lamphier farms were all in the path of the Higginbottom break and the owners were serious losers.

The Mt. Vernon Herald says the breaking of the dike at Higginbottom's saved Burlington. What an idiotic untruth. Why not Mt. Vernon? Burlington is protected by no diking system. It is so fortunately situated that it does not need dikes to protect it from river overflow.<sup>22</sup> The truth is, and why not be honest, that the diking system maintained on the Skagit river was inadequate to control the Skagit river, a break somewhere was inevitable, and shortly after midnight it came down at a dozen different places. Undoubtedly these breaks saved the dikes from giving away at other places. The water had reached the top of practically every dike in Skagit county when the breaks occurred. Flood damages were generally distributed throughout the lowlands. Unfortunately neither the districts directly to Mt. Vernon, Burlington nor any other Skagit County town escaped inconvenience or losses. Burlington had mail, daily newspapers, telegraph and telephone communications from the north and telephone communications from the south at all times. The editor of the Mt. Vernon Herald should confine himself to fact and truth. Why not give his readers the interesting story of the need of a gasoline engine to pump water out of the basement of the county courthouse. At least this is better than lying about a neighboring town. (Source: 1/4/18 B.J.)

The flood waters of the Skagit valley are gradually receding and in a short time, the rancher will be able to walk upon that which he calls ground and view the results of a vicious Skagit river. Individuals are now counting up their losses. Estimates of the aggregate loss to farmers, householders, the county and state in roads and bridges, and to the public service corporations are largely guesswork. The real loss will never be computed. **It is large, probably larger than that caused by the freshet of eight years ago.** . . . Reports from all points of the valley show that more or less water and damage was the result of the freshet. Roads everywhere are in bad shape and will require a good deal of money to put them all back in a passable condition. The county is badly hit and the commissioners in session this week decided to review the county roads and put them in shape at the earliest possible date. (**Source:** 1/10/18 MVH)

Are the dikes a failure? If so, what is the remedy? These two questions have agitated the minds of hundreds of ranchers in the Skagit Valley during the past week since the old Skagit river ran amuck again. In the end, when the enormous flood waters of the river come down upon the community, dikes are found to be weak, and the result is as shown by the flood of last week. What is the remedy? Much money has been spent in making dikes and in the end, practically nothing has been gained. . . . The remedy is believed to be found in the construction of spillways. Several plans and suggestions have been made during the week, but this matter, being of such enormous proportions, will require more than talk to get something started. . . . It has been nine years since a flood came. It may be nine years again and it may be next year. Don't wait until it comes again. There is too much valuable land in this valley to wait until a disastrous flood has overtaken it again and again. Now is the time to plan the remedy. (Source: 1/10/18 MVH)

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<sup>&</sup>lt;sup>22</sup> Important to note is that at the time this article was written the Burlington City limits were approximately 2 miles north of the Skagit River. Also important to note is that the levees during this time period were quite a bit smaller then they are today. In fact, in 1952 the levees "varied from 5 to 10 feet high". (Source: Corps of Engineers Report on Survey for Flood Control of Skagit River and Tributaries, February 21, 1952)

#### June 9, 1918 Flood

The warm wind last Sunday filled the river with melted snow from the mountains and caused it to overflow its banks in several places. The road between Sedro-Woolley and Hamilton was under water in several places, many autos getting stuck when trying to ford. The river was so high that the Lyman and Skiyou ferries have not been running for several days. A number of farms near Hamilton were flooded, and the creek along the road is bank-high and washing away its banks. It is thought that the main channel has been somewhat filled, and that unless something is done the creek will continue to carry more water. The water was not high enough to damage crops.<sup>23</sup> (Source: 6/13/18 CT)

# February 3, 1921 Flood

High water has broken the dike at Milltown and flooded the Pacific highway so that for some days automobiles have been unable to pass at high tide. At other times a Ford helps to pull the cars through.<sup>24</sup> (*Source:* 2/3/21 CT)

#### <u>December 12, 1921 Flood<sup>25</sup></u>

Skagit valley has been in the grip of a flood for the past week. Torrential rains and strong southerly winds, amounting to gales at times, preceded the onrush of waters from the melting snow of the Cascade mountains, that came pouring down the Skagit river in a volume that almost equaled that of the memorable flood of 1909, when the river rose to 26 feet 4 inches, just  $1\frac{1}{2}$  inches higher than the present flood measured. The first break occurred at McKay's place, Burlington. The low lying land was soon covered with water. On Tuesday morning the scene north of the city was one broad expanse of water, with dwelling houses, barns, hay stacks, fences and trees standing in it. From 3 to 6 feet of water was recorded in this section of the flood area, the lower floors of the houses being flooded, and the inhabitants taking to the second story. The flood waters reached as far west as Avon.

At the North Fork near Conway the next break was reported. This break caused the flooding of Conway, Milltown, Stanwood and the Skagit delta. The whole region from Mount Vernon to Sylvana is all under flood waters. The highway both north and south of the city is impassable for anything but boats. . . . A number of houses between here and Burlington were reported to have been lifted from their foundations and otherwise damaged by the flood. The most serious reported damage was to the home of Lee Davis whose home floated off its foundation and broke in two. . . . The Great Northern railway has been out of service since Monday evening, but the company expects to have trains running again in a day or so. . . . The

<sup>&</sup>lt;sup>23</sup> This is another previously undocumented flood event. First documentation of a summer flood. Based on the damage reported it appears to be in the neighborhood of the January 12, 1928 flood. Clearly a very small flood event by comparison to the 1917 flood but nonetheless a flood event that impacted residents of Skagit County.

<sup>&</sup>lt;sup>24</sup> Yet another undocumented flood event. Also a very small event but large enough to break a levy.

<sup>&</sup>lt;sup>25</sup> USGS (Stewart) estimates 240,000 cfs Concrete, 210,000 cfs Sedro-Woolley.

<sup>&</sup>lt;sup>26</sup> At Mt. Vernon 1½ inches lower than 1909. 26.4 feet would be 34.4 feet at current gage. 3 feet lower than 1990 and 1995.

Interurban weathered the storm and flood pretty well. While regular service was interrupted, they managed to get one or more cars through every day. By today (Thursday) they expect to be running all trains on time table schedule, and have stages to Everett running Friday. Travel was interrupted by the washing out of a bridge just out of the city limits and damage to the bridge over Varney slough. . . .

The dikes held fine and had not the water risen to such a high point, there would have been little or no damage. Below town, the dikes were patrolled by hundreds of men and it was only after the water had risen to an overflow, that the men deserted their posts and hastened to notify their neighbors that the water was coming. Burlington was the first place to get wet, a break in the dike causing the water to invade the "Hub City." An heroic effort was made to prevent the break. . . . While the losses are many, yet they are mostly small. The main losses are where lands were cut into, stored products damaged, and some losses of livestock. It is believed, however, that the total losses will aggregate around \$50,000, which with the lumber company losses, will approximate a hundred thousand or maybe more for this section of Skagit county. (Source: 12/15/21 MVH)

Once more after 4 years of somewhat peaceful action the Skagit River late Monday night and early Tuesday morning, broke its bounds and inundated a large part of its fertile valley, with a heavy loss to the farmers, an estimate of which is impossible at this time. No fatalities have been reported but some very narrow escapes from the flood waters occurred. . . . Three days of heavy rains and warm rains beginning their work Friday, melted the snows in the upper Skagit region and as a result, the Skagit River began its rise with startling rapidity, reaching a point Sunday night which caused alarm to be spread over the valley and the residents of the lower lands prepared to move. . . .

The river continued to rise until it reached a mark of 24 feet 10 inches, or two inches below that set in 1909. This was late Monday night. Then came reports of a break in the dike in Burlington and soon after the dike at Conway south of here broke. Both these town were flooded. About 4:30 Tuesday morning, the dike near Charles Wiles place, a short distance west from Riverside Bridge and on the south bank of the river went through. Within a few hours the flats between the bridge and Mt. Vernon were covered with several feet of water. Other breaks occurred at intervals south of Mt. Vernon at Pritchard's, two below the Sheriffs place and two on the north fork. With the breaking of the dikes the river began to drop slightly. . . . Pioneers recall that only once have the flood waters of the Skagit reached the downtown streets of Mt. Vernon and this was in 1897. Other floods have occurred in 1906, 1909, 1911, and January, 1918. (Source: 12/15/21 Argus)

The Skagit lowland region is passing through another memorable flood period. In consequence of which thousands of dollars of property have been destroyed in the path of the flood. Six weeks of excessive rains, followed last Sunday night till Monday noon by compelling Chinook breezes at the beginning of which the Skagit River was ban full, opened the flood gates in the foothills, and mountains of water poured out to the sea, inundating the greater portion of

<sup>&</sup>lt;sup>27</sup> The pioneers must have forgotten about the 1894 flood previously mentioned which clearly stated that downtown Mt. Vernon went underwater.

<sup>&</sup>lt;sup>28</sup> As previously noted, the flood actually happened in December 1917.

the valley of the Skagit. The last crushing flood disaster, which inundated the valley of the Skagit occurred January 1, 1918.<sup>29</sup> The widespread destruction wrought then, if estimated in dollar losses, doubtless greater than that caused by the flood of last Tuesday.<sup>30</sup>

The present diking system, so faultily constructed, useless and inadequate, never has nor could control flood waters when built on the banks of the river. . . . Doubtless a diked in basin a mile wide could function, safeguarding the delta region when flood waters pour to the sea.

Monday night, December 12, the dikes east and southeast of Burlington broke. Tuesday morning at six o'clock the flood water covered Fairhaven Avenue, and in part the residence districts of the city. At this time the entire lowlands lying east, west, south and in part northwest of Burlington were inundated. The depth of water is on relative, the lamentable fact being that the area of low lands covered with water was wide-spread. That certain spots escaped water, neither lessons the flood evil nor removes its threatening menace as the destruction wrought during the last three recurring flood periods of 1909, 1917 and 1921 encompass a wide area of lowlands, some districts suffering greater damages than others, the river in its flood course to the sea, evidently changing or seeking an outlet wherever river dikes could first be swept away. . . . While flood damages in Burlington have been large, the flood waters disappeared from the principal business and residence streets within 12 hours following the overflow.

The damage to the Great Northern and interurban right-of-ways was not nearly as great as that caused by the flood of 1918<sup>31</sup>, yet the main line of the Great Northern will not be repaired until late next week. The main line of the interurban and the Sedro-Woolley branch are in operation and the Great Northern Sedro-Woolley Rockport branch of the Great Northern will be in operation by Saturday. (Source: 12/16/21 B.J.)

No action has been taken yet by the various diking districts toward repairing the dikes, nor have any meetings been called to discuss future work. Many farmers are talking of calling mass meetings to talk over the question of proper protection from floods and many different theories as to what should be done are being talked about on the street corners. Many favor the building of a spillway from the Avon bend to salt water in Padilla bay, while others say that to straighten the river at the Avon bend by cutting a channel through from south of Burlington to a point at Mount Vernon. Others declare that the Skagit River must be dredged from its mouth up to a point above Burlington, and still others say that the Seattle dam at Ruby creek will offer much protection, although when this project will be completed is doubtful. Many declare that to secure prompt and efficient action regarding flood protection, all drainage and diking districts should be consolidated into one county-wide district with responsible men at the head of it. (Source: <u>12/22/21 Argus</u>)

While the loss to property in Skagit county, due to the flood, is estimated by the county commissioners at more than half a million dollars, only a small portion of this amount was

<sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> It has been alleged that the reason the 1917 flood "wrought more damages" was because the 1917 flood was of longer duration, and given the fact that the 1917 flood was a "double pump" event (two floods within 10 days) and the small levees would have been saturated which could have attributed to there being more levee breaks in 1917 then there were in 1921.

<sup>&</sup>lt;sup>31</sup> December 1917

incurred by the farmers of the county. In fact, most of the flooded land where the current was not swift, was benefited by the flooded land where the current was not swift, was benefited by the flooding and deposits of silt. . . .

Abe Young, who lives near Sauk, was a heavy loser. His house and a barn filled with hay and about fifteen acres of fine orchard land were washed down the river. For a mile at the lower end of the Sauk River, is a continuous jam of logs and debris. Above the White place, the whole mountain slid in, carrying road and all. Several Indians lost their houses and their little farms. The water was 52 inches high in the Sauk store and did some damage to the bottom layer of goods piled on benches and showcases. . . . Miles of the road up the Sauk river was washed out. Mr. Thompson is doubtful if the old route will ever be used again. At present a new trail is being cut. When a new road is built, it will probably be constructed along the hill, out of danger of the river. . . .

The damage in the southern part of the county and on the flats cannot be estimated yet as the land is still under water. It is thought that salt water dikes on the flats have broken recently. When these are repaired, it is probably that the water will have to be pumped out. . . . The farm of Mr. and Mrs. A.H. Hamburg on the river bank south of town, was hard hit by the flood. Mr. and Mrs. Hamburg lived for two days in fear of their lives. The flood either washed out or covered with logs practically all of their five acres. They lost their horse and wagon, about 100 chickens, their ducks and geese, and their big garden patch was totally destroyed. The house is filled with mud. Where the chicken yard used to be is a hole 15 feet deep and the entire place is a mass of wreckage. Most of their fruit trees and berry bushes are ruined. (Source: 12/22/21 CT)

The flood of **1921** is the biggest flood in the history of the Skagit<sup>32</sup>, according to old timers, who recall the floods of 1879, 1888, 1897 and on up to the big flood of 1909 and the 1917 freshet. Mrs. Dreyer, who lives west of town, tells of the big flood of 1888, when in some places the river backed up higher than this year. She says that not so much damage was done then because there were practically no dikes and the water spread over the lowlands more gradually. Measurements at the Dalles, near Concrete, show that the flood water this year reached a point two feet higher than at any previous time in the memory of the oldest settler. Charley Moses says that it was the biggest flood, with the biggest volume of water ever carried in the Skagit. At Van Horn the water was 14½ inches higher than it had ever been. In 1909 the river in the upper valley was only about two-thirds as wide as it is now. Hundreds of acres of land are being washed away every year, by both Skagit and Sauk rivers. W. A. Ellison says he has been on the upper river for 21 years and this is the biggest flood he has seen or heard old timers tell about. (Source: 12/22/21 CT)

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<sup>&</sup>lt;sup>32</sup> This article, which was published just 10 days after the flood event, cast further dispersions on the USGS Stewart Report, as Mr. Stewart did not find his "mark" in The Dalles, until one year later. The flood of 2003, the flood of record, reached a gage height of 42.21 and carried 166,000 cfs. Mt. Vernon only registered 36.19 or 129,000 cfs. The Sauk River crested at 107,000 cfs 18.89, 100 yr flood per USGS 11/10/03 Skagit Flood Control Meeting.

## James E. Stewart Report on Previous Floods

James E. Stewart, government hydraulic engineer **employed about two years ago by** Skagit County<sup>33</sup> to investigate flood conditions along the Skagit valley, has just submitted a report on his findings of the "stage and volume of past floods in Skagit valley and advisable protective measures prior to the construction of permanent flood controlling works." The report is as comprehensive as possible going back to the floods told of by the Indians in 1815. It is too long to publish in detail, but this article will give some of the main ideas embodied in Mr. Stewarts findings.

"Since the arrival of the first white people about 1869," says Mr. Stewart, "there have been six Skagit river floods whose discharge has exceeded 175,000 second feet at Sedro-Woolley. All of these floods have occurred since Nov. 15, 1896. The number of floods that exceeded 175,000 second-feet at Sedro-Woolley prior to 1869 is unknown, but the occurrence of two great floods has been discovered. The exact dates of these early floods are not known, but their stages and volumes have been accurately determined. . . .

Then follows data on the floods, taken at various places along the river. The data shows that the floods of 1921 was the second largest since 1856, in Sedro-Woolley, the 1909 flood reaching 26.5 feet on the gage and 1921 flood, 24.3 feet. . . . In the light of knowledge of past floods it seems likely, says Mr. Stewart that floods like those of 1917 and 1921 may occur within the next five or six years. . . . The writer will make several suggestions as to inexpensive measures that should be carried out in the near future. They may be briefly outlined ass follows; install a flood warning system, delay diking off the Nookachamps district; protect certain danger zones removing drift from river channel below Hamilton and possibly near Lyman, and build protective dikes at Burlington and possibly Mt. Vernon; obtain additional hydrographic data; form a conservancy district." Mr. Stewart gives data showing that rainfall for the two largest floods since data has been kept is much the same. At the Skagit power camp in 1909 for Nov. 28 and 29, the rainfall for the two days was 7.85 inches. At the Davis ranch on Dec. 11 and 12, 1921, the rainfall was 7.62 inches, while the maximum temperature in both cases was about 52 degrees. . . . Mr. Stewart recommends a delay in diking the Nookachamps district, as at present it acts as a storage reservoir during floods and has prevented much damage. . . . Burlington, he says is in danger from any size flood, and should be encircled by a dike, as a correctly built dike around Burlington would protect it against all floods. . . . Mr. Stewarts report contains a mass of data collected at various places along the river, and urges that many more of these stations be established. He says the matter needs further study before any large flood prevention project is undertaken, but that there is always a danger of a repetition of floods. (Source: 12/20/23 CT)

One year later the following was stated about Mr. Stewarts report:

Because of the limited funds available in time past, such technical data as has been gathered in this vicinity<sup>34</sup>, has been very meager and calculations of stream flow are at best only an estimate and accurate to within only 10 to 20%. The

<sup>34</sup> The Dalles

<sup>&</sup>lt;sup>33</sup> Actually he was hired in November 1922 and worked under the supervision of the County Engineer. Skagit County paid him directly, not USGS. (*Source:Skagit County Commissioner Resolution #1331*)

technical data so far gathered, has been done entirely by the USGS Department of Water Resources, and they have had to rely upon intermittent gage readings, observations and recollections of residents, and more or less disconnected precipitation records." . . . "Consequently, in order to secure definite and accurate stream flow records, it is necessary to install good reliable equipment and take measurements in a systematic manner. For this purpose and acting upon the recommendation of Mr. Stewart, the Board of County Commissioners in the spring of 1924 instructed the county engineer to proceed with the construction of a suitable installation for the purpose of gathering accurate stream flow records. (Source: 11/26/24 Knapp Testimony)

"I would like to emphasize the point that Mr. Knapp brought out in his paper, that before any really scientific plan can be prepared for the protection of this valley from floods, it is necessary to have more authoritative information then we now have as to the amount of water carried by the river in time of floods. . . . The information that was collected by Mr. Stewart and given in his report to the committee was excellent so far as the data that he had to work upon permitted, but that data was necessarily more or less inaccurate. (Source: 11/26/24 Minutes)

Clearly, the newspaper articles contained herein support the above statements by Skagit County Engineer E. L. Knapp and Colonel Barden. (See also James E. Stewart, Skagit River Flood Reports and Assorted Documents, A Citizen Critical Review Whitepaper, at www.skagitriverhistory.com).

# February 12, 1924 Flood

After several days of rain and Chinooks, the river in all parts of the district, went over their banks in many places on Tuesday. A stretch of some 150 feet of the Great Northern near Hamilton was washed out, and the town of Hamilton was cut off from everything but telephone communication Tuesday morning. The bridge over the slough at Hamilton was washed out, and the bridge to the Lyman ferry at Lyman went down stream Tuesday. At the unprotected places on the river near the town of Hamilton and Lyman, big areas of land and trees were washed bodily into the river. In the Sterling district, families started moving out of danger Tuesday afternoon. The old road to Burlington was covered, and lowlands between Sedro-Woolley and the river were under water Tuesday afternoon. . . . Big areas of land in the Burlington and Sterling districts were under water Tuesday, and also in the upper valley. All sloughs along the Skagit river are covering the adjacent land, and the river is filled with drifting trees and debris. The river rose five feet Monday night. Tuesday night the river rose several feet more, covering the road between the trestle and the river bridge south of this city, and large areas of land. By Wednesday morning the flood had reached its crest and had receded from the road this side of

<sup>&</sup>lt;sup>35</sup> E. L. Knapp was the Skagit County Engineer who actually worked with Mr. Stewart.

<sup>&</sup>lt;sup>36</sup> Testimony of Colonel Barden, United States Army Corps of Engineers, 11/26/24.

the river. The Clear Lake Road near the Eldred place was under some four feet of water and impassable. (Source: 2/14/24 CT)<sup>37</sup>

As an aftermath of the high water of the last few days, the upper Skagit people are experiencing much anxiety from possible danger of landslides. This is particularly true of a small group of ten families, who are marooned on a small island across the river from Lyman, caused by the washing out of three bridges across the Skagit near Lyman, or their approaches. . . . The Lyman bridge extending from that city to Day Creek, was carried away Tuesday night, while the two bridges across Alder creek are rendered useless for the present, owing to their approaches having been swept away. . . . Several of the smaller homes within ten to twelve feet of the river have been moved. Men are hauling spruce trees and laying them along the river to prevent caving in of the land near the school building, and steps to prevent loss are being taken by residents of Lyman. (Source: 2/14/24 MVDH)

The stream nearly reached the flood stage of 23 feet in 1921. A break in the dike on Fisher's slough south of Conway caused the water to back up toward that town and over the Pacific highway. Traffic however, was not impeded. Another break at Dry Slough caused the water to start over Fir Island... but not to any depth. The outer dike near Burlington broke early yesterday morning and would have gone through the secondary dike but for the quick action of the residents in that neighborhood near Dr. Cleveland's farm. Reports from Hamilton state that 400 feet of the Sedro-Woolley–Rockport highway and the Great Northern railway right-of-way had been carried away into the Skagit river by a landslide west of Sauk. ... This is the first time, according to old residents of Mount Vernon that the flood stage has been reached by the Skagit in the month of February. (Source: 2/14/24 Argus)

#### December 12, 1924 Flood 38

Continued heavy rains and Chinook winds during the last twenty-four hours have caused the Skagit river to rise rapidly and today the high water conditions have assumed a serious aspect. Since yesterday noon the river here has risen about six feet and observers today claim that the water is rising about three inches an hour. At one o'clock the river was nearing the eighteen-foot mark. . . . Several of the old timers say the conditions are just about right for flood. Crest of the high waters has not been reached, they declare. . . . Telephone reports received by the Daily Herald this afternoon from Lyman were that the road between that place and Hamilton was under water. . . . Late reports received by the Daily Herald were that part of Hamilton is under water. School was dismissed and the desks and other equipment are being moved from the building, it was reported. (Source: 12/12/24 MVDH)

Seventy-five feet of diking were washed out near Skagit City this morning and as a result several hundred acres of lowlands are flooded. The break was in the same place as that of the last big flood. Late reports received here were that the water had not yet reached the road, but

<sup>&</sup>lt;sup>37</sup> The date of this flood is accurate however, unfortunately, the article was mislabeled January 14, 1924 when it was prepared to be placed in PDF format.

38 USGS and Corps reported flood carried 92,500 cfs and reached 32.44 feet at Concrete. No figures for Mt.

Vernon.

that unless the river goes down, the highway will be covered. Weak construction of the dike is believed to have caused the washout since the river was four feet from the top. . . . Hamilton reports the river dropping and it is said the water is now off the road between Hamilton and Concrete. (Source: 12/13/24 MVDH)

Heavy rains and warm winds caused the Skagit to rise rapidly Friday and Saturday, the stream reaching the 20-foot mark at the old gauge across the river from the Mission theatre. With the sudden drop in temperature however, the stream began to go down. Dry Slough southwest of Mount Vernon was unable to hold the flood and the water soon covered the farming district of Fir Island with from one to two feet of water. Water also backed across the pavement between Mount Vernon and Conway and south of Milltown. Traffic, however, was not interrupted. (Source: 12/18/24 Argus)

# <u>January 12, 1928 Flood</u><sup>39</sup>

Warm winds and rain Wednesday following several days of warmer weather caused the Skagit river and its tributary streams to overflow in several places east of this city, blocking the road west of Hamilton and undermining the Great Northern track between Lyman and Sedro-Woolley. Other damage all along the river between here and Marblemount was reported, but so far the main river had not flooded any territory. Backwater and high water in the creeks was responsible for most of the damage, together with slides along the road. . . . Grandy creek is a foot higher than it has been in years, and washed out the dam at the fish hatchery at Birdsview. (Source: 1/12/28 CT)

# October 9, 1928 Flood 40

The Skagit river which has been raising steadily the past week, reached almost flood stage Monday night. During the night the water rose eighteen inches which is almost unprecedented for early fall. The great wall of water at the Diablo dam site washed away three lengths of boom and did damage estimated at several thousand dollars to equipment. (Source: 10/11/28 Argus)

# February 22, 1932 Flood 41

Unable to withstand the pressure of the mighty Skagit, swelled by rains and melting snow, dikes broke at three widely different places during the week-end, allowing flood waters to inundate more than 12,000 acres of farm land in the lower valley, resulting in considerable damage to property. . . .sections where the water had previously been held at the very top of the

<sup>&</sup>lt;sup>39</sup> USGS 95,500 cfs at Concrete (32.9), no figure given for Mt. Vernon or Sedro-Woolley.

<sup>&</sup>lt;sup>40</sup> USGS says flood reached 74,300 cfs at Concrete at level 29.94

<sup>&</sup>lt;sup>41</sup> USGS 147,000 cfs Concrete (39.99), 157,000 cfs Sedro-Woolley, no figure for Mt. Vernon.

dike, were perilously near a break this time on account of a weakened condition of the dikes, which have been neglected somewhat because of confidence in present dams to hold back floods, it is said.

The first break occurred about eleven o'clock Saturday evening in front of Phil Iverson's farm, which is located on Skagit Island, between Fir and Skagit City. . . . This break, together with three others along Dry Slough, which runs across the island completely inundated the large Skagit delta, about 5,000 acres of farm country bordered by the two forks of the river and the bay. Two of the breaks occurred early Sunday morning at the Ed Good and I.R. Hallen farms; the other the same afternoon, at Mrs. Sadie Polstra's place. Water has been running out into the bay through the salt water dikes which broke several places near John Wylie's farm and were cut elsewhere. (Source: 3/3/32 Argus)

Bridges at several points were damaged or removed by the raging waters of the Skagit Saturday and Sunday when the breaking dikes and back water sent a yellow flood over nearly 20,000 acres of land and forced many residents to abandon their homes in search of safety on nearby high points of land. . . .

In the valley proper no loss of life has been reported, and the accident claiming four lives at Diablo, just as the waters threatened, remains the major incident of the highest flood waters since 1921.... **Bridge Out** Knapp reported the Diobase creek bridge washed out, sixty feet of span and an equal amount of trestle, the forty foot truss over Hanson creek on the river road tipped over, slides on the Van Horn and Faber hills, damage of fifty feet of the west approach of the Jackman creek bridge, and a wash-out on the German Prairie road west of the Samish school, where the bridge over the Samish remained intact. . . .

Following the slide above Newhalem the Skagit began rising slowly, but the condition was not believed serious until late Friday night, when flood conditions were approached. Friday night and Saturday morning the water rose at an amazing rate, with lowlands along the river being flooded. **Fill Damaged --** . . . Constant rumors of danger to two dams in the Skagit and Baker river power projects resulted in an alarm that one of the dams had broken, and many residents of Hamilton, Lyman, Sedro-Woolley and Mt. Vernon removed to higher ground with emergency rations. It was reported a man coming down the river had given the false alarm, and Lyman was almost deserted by the exodus that followed. Responsible agencies spiked the rumor within an hour, and the bolting residents for the most part returned to their homes.

Dams Are Safe -- Consequent investigation disclosed that flood gates on the dams were not opened and that flood waters poured over the tops of the dams. At Baker River before the flood, water was 36 feet below the top, and at the peak of high water flowed nine feet deep over the top of the dam. At Diablo gates were left open until engineers were certain that a flood was imminent, and then closed the gates Friday afternoon. Early Saturday morning the water flowed over the Diablo spillways, when no more water could be retained. . . . The same authorities also explained the fact that while flood waters at Mt. Vernon reached within inches of an all-time record, the peak at Sedro-Woolley was from four to five feet under the record. This was due to the fact that previous floods had removed two curves below Sedro-Woolley and shortened the river's course nearly one half mile. This makes the river almost

straight from Burn's bar three miles west and the effect had been to lower the river bed here nearly four feet.

**Dikes Broken --** Shortly after noon Sunday the dike south of Burlington gave way and the Great Northern fill broke at 12:45 to release a yellow flood through Varney's slough and Gage's Lake to inundate the section between Burlington, Avon and the Bay View ridge. . . . Breaking of the dike at Conway relieved the pressure in this district late Sunday afternoon, and a large section in the lower end of the county was covered with water. **Alarm Is Given --** . . . Residents of the Nookachamps district were taken from their homes when back waters filled this section, and the two branches of the creek flowed back on their courses. **(Source: 3/3/32 CT)** 

While many parts of Skagit County and Western Washington suffered heavy damages from flood waters last Saturday, Sunday and Monday, Burlington, on three sides, emerged practically untouched and losses in the immediate adjacent country were comparatively light. West Conway, Skagit City and up-river communities suffered most from rising waters of the Skagit River, which flooded an extensive countryside for the first time in ten years. The great power dams in Baker river and the Upper Skagit and rather elaborate diking systems in the lower valley, proved only partial protection from a mighty river filled to overflowing, after two days of warm Chinook winds had melted snow in the mountains. . . . Anxiety was felt for a few hours following the break in the dike south of town Sunday noon, but was dispelled when the Great Northern railway fill gave way, allowing the water to sweep over the fields to the West and Southwest. Strong Chinook winds of Thursday and Friday filled the Skagit to the top of its banks, and Saturday water began overflowing and covering the land up to the dikes. Shortly after midnight Saturday water had risen to a height of less than two feet from the top of the dike east of Burlington.

Sunday morning, with water backed up from the Burlington dikes to Clear Lake, a distance of between six and seven miles, the situation became dangerous. The dike was becoming soft in many places and the water continued to rise gradually. **Old-timers expressed** the belief that there was more water back of the dikes than in any previous flood.

A screaming fire siren at 12:10 Sunday noon announced to Burlington that a dike had been broken. Water came crashing through in torrents at the LeMar place, nearly a mile south of Burlington. . . . The flood, temporarily checked by the railroad fill and quickly filling to a depth of three and four feet the fields near the break in the dike, rushed north, emptied into the sloughs, and backed up into Burlington. . . . A few minutes after the river broke through the dike, water began to seep through the base of the G. N. fill a mile south of the depot and by three o'clock broke through, lessening the flow into the Burlington sloughs, but sweeping the fields westward.

The water level at the dike east of Burlington was down 54 inches Monday morning, and by ten o'clock cars were getting through water on the blacktop road to Bay View. Traffic began making use of the highway between Burlington and Mount Vernon by three o'clock.. (Source: 3/4/32 B.J.)

Alleging the flood gates on Diablo dam were opened at the crest of the recent high water, thus releasing an additional torrent of water in the already bankful Skagit river, causing dikes to break in many places, four Skagit dike districts, and three individual farmers today filed claims

aggregating \$53,315 against the City of Seattle. The claims were rushed to Seattle today so they could be filed before the thirty-day limit expires. **List of Claims** Following is the list of claims filed against the City of Seattle, owner of Diablo Dam, which is a part of the city's power development on the upper Skagit. Dike district No. 2, located on the west side of the Skagit river and north of Fir – Claims damages in the amount of \$17,500. Dike district No. 13, located between Dry and Brown sloughs on Skagit delta, west of Fir – Demands \$4,000 damages. Dike district No. 186, located between Fresh Water and Dry sloughs on south side of pavement, west of fire – Demands \$6,500. Dike district No. 12, located south of Burlington – Demands \$10,000. Phillip Iverson, farmer living northwest of Fire, demands \$2,925. Iver Iverson, same locality, demands \$7,650. John Leander, same locality, demands \$4,000. **Water Held Back** On February 23<sup>rd</sup>, according to the complaint filed with the City of Seattle, the reservoir behind Diablo dam was approximately half full of water, the amount being between 35,000 and 40,000 acre feet of water. At that time, the flood gates of the dam were not opened, although the water was continuing to rise, the complaint states. (*Source: 3/26/32 MVDH*)

J.D. Ross, city light superintendent, today declared "ridiculous" claims for \$53,315 damages against the City of Seattle, filed with the city comptroller today by four Skagit county diking districts and three Skagit county farmers as a result of floods in the county late last month. . . . "The dam held back the first on-rush of water down the river," Ross said. "As soon as the lake back of the dam rose to the height of the flood gates, we began releasing the water gradually. Only a part of the gates were opened, just enough to prevent the water from overflowing the top of the dam. This controlled the flood, releasing it only as fast as the river could carry it away. The damage to the dikes down in the valley occurred after the crest of the flood had passed at Diablo. It was simply a case of where the river could not hold the water which poured into it from numerous streams below the dam, in addition to carrying the controlled flow through the flood gates. (Source: 3/26/32 MVDH)

#### November 13, 1932 Flood 42

After threatening another serious flood in Skagit county, swirling waters of the Skagit river began to recede this morning, and the dread menace of the last twenty-four hours began to disappear as rapidly as it had overtaken this community. Rising with unprecedented rapidity, the Skagit river had reached a height of 23 feet on the county's gauge last night, where it remained until this morning, when the drop started. . . . The Nookachamps community, which bore the brunt of the flood early this year, was partially under water again today, following the breaking of the newly built dike, the Herald was informed. The water was not high enough to enter any of the farm homes and little or no damage was done, it was declared. The new dikes south of Burlington and west of Fir were said to be holding up well under the new pressure, but seepage from the new dike in Dodge Valley had flooded the Art Anderson and F.X. Thein farms, it was declared. . . . County roads were flooded in the vicinity of Hamilton yesterday, but autoists were able to get through with difficulty. (Source: 11/14/32 MVDH)

<sup>&</sup>lt;sup>42</sup> USGS 116,000 cfs Concrete (approx 36 ft on gage), 125,000 cfs Sedro-Woolley. 23 feet in Mt. Vernon would be 31 feet at today's gage or a little less then 1975 flood event.

The heaviest rainfall in the history of Sedro-Woolley, fell here Wednesday night, according to H. L. Devin, official government weather man here for 36 years. Between 6 p.m. Wednesday night and 9 a.m. Thursday morning, there was a total of 2.25 inches of rainfall, which followed 1.83 inches Wednesday up to 6 p.m. . . . Heavy rainfall during the past few days brought the river almost to flood levels, closed the road between here and Concrete, and caused sloughs to overflow in many places. Many roads were closed Sunday, including the Pacific highway at Silvana, but cooler weather brought the water down. The river rose eleven feet Sunday, but at last reports, had gone down five or six feet, in spite of continued rain. According to statistics of H.L. Devin, local government weatherman, November is twice as wet as usual. October rainfall was 6.31 inches here as compared to the normal 4.8 inches and the November rainfall up to November 15, was 6.4 inches as compared to the normal of 6.74 inches for the entire month. (Source: 11/17/32 CT)

With high water threatening the Skagit valley, the people again turn their attention to the river and flood damages. If a bad flood occurs during the next few days, there will be meetings and resolutions concerning getting flood relief and loss of many thousands of dollars to property and business; the water will go down and interest in flood relief will subside until the next flood comes along. . . . We will think of flood control now, but when the danger is gone, we forget floods and turn to thoughts of more pleasant things, consoling ourselves with the idea that there probably will not be another one for many years. It may take a real catastrophe to get real flood relief for the Skagit. (Source: 11/17/32 CT)

Continued rise of the Skagit river during more than forty-eight hours came to a halt in Mount Vernon today, giving hope that the flood danger that has hovered over this community would soon pass. . . . The river had reached a height of nearly 23 feet on the gauge here this morning, two or three feet from the danger mark. . . . A log jam east of the Great Northern bridge at Riverside was causing some worry and a crew of men remained on guard throughout this morning. It was said blasting might be restored in an effort to break the jam. . . . The rise of the Skagit river was the most abrupt in the memory of old timers. Between Saturday afternoon at 2 o'clock, until this morning, the river had risen a total of fifteen feet, according to records kept by the county engineer's office. The rise was caused by a deluge of rain and melting snows in the Cascades. An inch and a fourth of rain fell between Saturday morning and this morning, the county records showed. (Source: 11/18/32 MVDH)

# <u>January 25, 1935 Flood</u><sup>43</sup>

Early this morning the river was said to be rising two inches an hour at Concrete. The flood gates were opened on the Baker river dam at Concrete yesterday, and huge quantities of water poured from that point and later reached the Skagit. The amount of water coming over the dam was said to have slowed down considerably this morning, indicating it had been colder in the upper stretches during the night. . . . Many acres of farm land in the northern part of the county were flooded by the Samish. It was said the Samish flood was the worst in years. Wednesday night the water rose to three inches deep over the floor in Joy's store at Allen and

<sup>43</sup> USGS 131,000 cfs Concrete (37.9), no figures for Mt. Vernon. More than 1975, less than 1979

was level with the floor yesterday. The Pacific highway was covered with water to within a mile north of the Triangle service station in that section of the county. At Sedro-Woolley serious flood damage to property was saved early Wednesday morning when a group of citizens in the north end of town gathered under the direction of E. C. Carr and cut a channel through the old grade road northwest of town. A four-foot culvert with which the county had recently replaced a bridge, proved inadequate for rapidly rising waters which soon flooded the homes in the surrounding districts, and but for the prompt action of the men in cutting the channel a serious flood menace would have threatened, putting the entire north end of the city under from three to six feet of water, with perhaps several feet in the business district. (Source: 1/25/35 MVDH)

Hundreds of residents in many sections of lower Skagit breathed a little easier this afternoon when it became apparent that the threat of the worst flood in years was gradually passing. . . . It was believed the high point in the river had been reached early this afternoon, and the Skagit was expected to start receding later today. At 2 o'clock, river watchers said the Skagit was no longer rising. The county gauge was out of sight, but it was estimated the river had reached a height of 28 feet, which is within a very few inches of the high in 1917 when sections of the county were visited by disastrous floods. The river was at least a foot higher than three years ago when dikes broke at various places causing the inundation of hundreds of acres of farm lands. All that saved a recurrence of the flood of late February in 1932 was the strengthening of the dikes under the CWA program, many declared. . . . There was only one actual dike break, which occurred on the south bank of Freshwater slough, south of Fir. . . . was flooding approximately 25 acres of land near the Island Gun club. (Source: 1/26/35 MVDH)

Tragedy brought indirectly by the high waters of the Skagit River took the lives of a young mother and her three-year-old son early Tuesday night when the automobile in which they were riding slowly vaulted over the edge of the broken dike-road between Burlington and Sedro-Woolley and buried itself in about fifteen feet of water. (Source: 1/31/35 Argus)

The present flood danger in Skagit County is now ended, but three cities, Mt. Vernon, Burlington and Sedro-Woolley, had some bad moments. Sedro-Woolley was not threatened so much by the river as by high water from the hills north of town, which for two days surrounded several hundred homes and would have flooded the city, but for blasting out the old grade road in the middle of the night. . . . Saturday night was the flood crisis in Burlington and Mt. Vernon. At Burlington Saturday afternoon, the siren sounded an alarm to bring more help on the dike northeast of town. This time the dike held and it was thought the danger was past. However, a real break occurred Saturday evening and Burlington citizens prepared to move out. . . . The flood reached the Burlington hospital, but the fact that the river was receding at the time, prevented any inundation. The creek just east of Burlington washed away part of the road. The big break on the dike near the old Cleveland place, took away a large stretch of highway. (Source: 1/31/35 CT)

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<sup>&</sup>lt;sup>44</sup> Mrs. Harry Dimmick, Small Son. The road was Lafayette Road. This is the third and fourth deaths related to Skagit River flood events.

#### October 28, 1937 Flood 45

The brush mat revetments along the Skagit river bank had their first real test last week, when the river rose fourteen and one half feet in less than twenty-four hours, after a night and a day of hard rain and warm winds in the hills. Iner Nelson, U.S. Army engineer in charge of the river bank protection projects, reported that all completed jobs were undamaged. The river at the N.P. bridge here rose twelve feet in twelve hours during the night of October 26 and the day of October 27, rising to a point within six feet of the 1935 spring flood stage. At present the river is back to within four feet of extreme low. . . . Below Sterling and above Burlington, for the first time, there was no land washed away, due to the perfect protection afforded by the thousand of feet of brush and concrete pavements. . . . Engineers estimate that without the work already done, at least 200,000 cubic yards of Skagit county land would have been washed into the river, from the points now protected. (Source: 11/4/37 CT)

#### October 26, 1945 Flood 46

Although sunny skies averted threats of more serious storm damage in this area today, two deaths were attributed indirectly to the storm. Louis Betschart, 37, of route 1, Sedro-Woolley, died yesterday afternoon following a heart attack which occurred when he and a companion, Ed Selff, were attempting to rescue a skiff that had broken loose in the flood waters of the Skagit River. Betschart, while rowing a boat in the turbulent waters of the Skagit near his home at Utopia, collapsed apparently from over-exertion. Efforts to revise him with the aid of a resuscitator failed. The body was removed to the Lemley mortuary. Lyle McNeil of Auburn also was the victim of a fatal heart attack while he and a hunting companion B. H. Yenter, route 1, Sedro-Woolley, were rowing a boat near the Chester Leamer farm southwest of Mount Vernon. The two men saw another boat in difficulty and went to assist the occupants, Wilbur M. Snyder and R.E. Adams, both of Seattle. Whel McNeil attempted to reach for an oar in the other boat, he was stricken and died immediately.<sup>47</sup> . . . Nookachamps valley on route 4, Mount Vernon, is reported to be flooded with many houses surrounded. Telephone communications were out in that sector today. George Dynes' Riverview poultry farm was partly under water with chickens roosting on top of the chicken houses. A number of the poultry were reported lost in the flood, and attempts were being made to bring the others to safety. The Samish River flooded during the night, with only trucks moving over the Chuckanut highway in the Allen area. (Source: 10/26/45 MVDH)

Extraordinary rainfall – a total of approximately 11 inches – was recorded by the weather station at Diablo for the week ending October 27. Heaviest rainfall was recorded on October 24, with 6.49 inches of precipitation, and October 25, with 2.21 inches. . . . Residents of Marblemount, Newhalem, Diablo and Ross Dam were marooned for three days, while every

<sup>45</sup> USGS 89,600 cfs Concrete (32.16), no figures for lower river. This would have been comparable to the February 9, 1996 flood which produced 81,800 cfs at Mt. Vernon or 29.27 ft on the gage.

<sup>&</sup>lt;sup>46</sup> USGS 102,000 cfs Concrete (34.0), 94,300 cfs Mt. Vernon (30.25) Comparable to 1982 flood at Concrete and second flood of 1989 at Mt. Vernon

<sup>&</sup>lt;sup>47</sup> These represent the fifth and sixth flood related deaths that have been documented. Only three of the deaths have been attributed to actually being in the water.

available City Light man worked to get traffic lines open. . . . the water in back of Ross Dam was raised 18.5 feet, to the maximum possible with the present construction. This impounded 25,660 acre feet of water and took the peak off the flood which descended on the Skagit valley from the drainage area below the dam. Enough flood water was stopped by Ross Dam to cover 25,000 acres of land more than a foot deep, had it not been held back, said City Light officials. Completion of the second step of the dam, now under construction, will create an even more effective flood control, company officials pointed out. (Source: 11/2/45 MVDH)

#### October 25, 1946 Flood 48

A fortunate change in the weather was all that prevented a flood of major proportions in the upper Skagit valley the early part of this week. As it was, considerable damage resulted from high waters after four days of torrential rainfall. . . . Wiseman and Hansen creeks, which washed over the roadway between Sedro-Woolley and Lyman, further damaged the already cracked and broken concrete highway and left silt and debris piled high. Fortunately, the Skagit river reached only bank full and failed to leave its course expect in a few minor instances. (Source: 10/31/46 CT)

#### October 19, 1947 Flood 49

The swirling waters of the Skagit River, after having reached a flood crest of 21.6 feet here at 6 p.m. last night, are rapidly receding today, apparently eliminating for the time being at least, the threat of major flood in this area. . . . **Families Marooned** Several families in the Day Creek area today are marooned as the Gilligan Creek bridge washed out completely Saturday and the Lyman ferry, that provided the only other outlet for some 50 families, sunk after having been covered with debris from the rushing river. . . . All of the ferries crossing the Skagit River were grounded today and will not be operated during the high water period. School children residing on the south side of the river in the Day Creek, Lyman and Concrete districts are unable to attend school today. . . . **Trucks Overturn** . . . A total of 1.29 inches of rainfall fell in this area over the weekend, according to reports maintained at the county engineer's office. (**Source**: 10/20/47 MVDH)

A bridge was washed out, two trucks were wrecked by rushing flood waters, traffic was interrupted, rivers were swelled to flood levels and sewers backed up in the Sedro-Woolley area, as the skies opened up and dumped more than two inches of rainfall in 48 hours last weekend to bring the month's rainfall to 5.97 inches. This is an inch above the average for the entire month of October. . . . By Saturday night water was rushing across the Lyman road as Wiseman Creek emptied gravel in two high banks across the highway to hamper traffic and stall may a motorist. Flood waters reached a peak of 21.6 feet about 6:00 p.m. Sunday and began receding after that. Rising waters also chopped away more land from farm property near the Burlington bend.

<sup>48</sup> USGS 82,200 cfs Concrete (31.14), 64,900 cfs. Mt. Vernon (27.80). Didn't reach flood stage at Mt. Vernon.

<sup>&</sup>lt;sup>49</sup> USGS 95,200 cfs Concrete (32.9), 69,400 cfs Mt. Vernon (28.68). Comparable to first October flood in 2003.

(During the last rainstorm two weeks ago, the Austin Lytle place lost 11 feet of land in two days.

(Source: 10/23/47 CT)

#### November 28, 1949 Flood<sup>50</sup>

The Skagit River, a few days ago a peaceful stream, turned into a raging torrent last night, spilling over its banks in several spots, marooning many families and causing untold damage to property and loss to livestock. The flood, which reached its peak here at 4:40 a.m., this morning with a crest of 26.5 feet, was the worst in Skagit County for the past 27 years. . . . Yesterday afternoon and last night the entire community of Hamilton was cut off from the outside world and travel to the eastern end of the county is still at a standstill. Most of the families living in and around the community of around 200 persons, left their homes before the water spilled through the streets to a height of about two feet. Amphibious ducks, operated by private individuals and members of the state patrol, evacuated approximately 50 marooned persons there during the evening. This morning hundreds of acres of land in the Fir Island district near Conway are under water due to at least three breaks in river dikes. . . A trestle and 165 feet of the Great Northern's main line railroad track just south of Conway was washed out during the evening... . . . The main business district of Mount Vernon was seriously threatened during the night but flood crest stopped two feet short of the top of the dike. . . . Greatest flood damage in Skagit County was centered today in the Conway district where workers were unable to stop a dike breaking through at Fisher's slough and above Conway on the North Fork. (Source: <u>11/28/49 MVDH</u>)

Rapidly receding flood waters in the Skagit Valley today spelled an end to the emergency conditions that have existed since the Skagit River poured over its banks Sunday evening and broke through dikes south of here yesterday. There is still plenty of flood water covering valuable farmlands, particularly in the Conway-Fir Island region, but the threat of further damage is over. The river, which had risen to a height of 26.5 early Monday morning, was down to 19.8 feet at 10 o'clock today. . . . The break in the dike at Fisher's Slough which had threatened the town of Conway saw concerted action on the part of volunteer workers last night but the waters of the river have receded so rapidly that further damage in that area is not expected. . . . Most of the damage appeared to be to roadways, farm buildings and to winter crops, the latter mainly seed crops in the Fir Island district. . . . Skagit County Commissioner Lowell Hughes reported today that the county's Lyman ferry "completely disappeared" during the flood. . . . Travel between Marblemount and Newhalem is still blocked off. . . . Residents of Hamilton, who were perhaps the hardest hit by the flood waters, were busy today cleaning out their homes of the mud and debris that rode into the city on the crest of the flood waters, estimated from two to two and a half feet. (Source: 11/29/49 MVDH)

Seattle City Light's Ross Dam on the upper Skagit played a large part in keeping the serious flood from being even worse, E. R. Hoffman, Lighting Superintendent, said today. The valves in the big dam were closed Wednesday, November 23, and no water from the entire upper river was allowed to pass. From Thursday midnight until Sunday midnight enough water was held behind the dam to cover 116,000 acres of land to a depth of one foot. At the crest of the

<sup>50</sup> USGS 154,000 cfs Concrete (40.8), 149,000 cfs Sedro-Woolley, 114,000 cfs Mt. Vernon (34.21)

flood approximately 42,600 cubic feet of water were impounded every second. Elevation of Ross Lake, nearly 20 miles long, came up ten feet, and is now forty feet higher than anticipated for this time of year. On November 28 there was still enough storage space to impound another 200,000 acre feet of water behind Ross Dam. The valves were still closed and no water was getting past the dam. The flood crest at Concrete, first large town below Ross Dam, reached 149,000 cubic feet per second on Sunday, November 27. This would have been disastrously worse except for the water held behind Ross Dam. The crest passed Mt. Vernon early Monday morning, November 28, and the entire river was reported to be receding. "Ross Dam does a great deal to keep floods on the Skagit from being much worse", Hoffman said. "However, it cannot be expected that a dam so far up the river will prevent floods altogether. "Only about one-fourth of the river lies above Ross Dam, and the tributary streams feeding the upper fourth are a good deal smaller than the streams below the dam." (Source: 12/1/49 B.J.)

Emergency assistance today was being given flood victims of Hamilton and the up-river district whose homes and household belongings were damaged or destroyed in one of the worst floods in Skagit county history. Hamilton residents were shoveling silt, mud and sand from their homes and were trying to salvage damaged household goods and merchandise in their places of businesses. . . .

Ranked the worst since 1921 this week's flood caused an estimated \$2 million loss of property, land, homes, household goods, clothing and food, the highest loss of any flood in Skagit county history. Sedro-Woolley residents assert that the floods of 1932, 1921, 1909 and 1897 were worse for this city, but for upriver residents, this week ranked with the 1909 and 1921 disasters.

Hamilton, floodswept community of 290 residents, is now cleaning up. . . . Thirty-five houses sustained flood damage, the Red Cross said. . . . Hamilton, Rockport and farmers in the Utopia and Lyman-Hamilton district suffered most loss and damage from the floodwaters. . . . Estimates of damage in the community of Hamilton alone ran into the hundreds of thousands of dollars. . . . Hamilton school had more than three feet of water in the first floor rooms and cafeteria and six feet in the boiler room. . . . Most Sedro-Woolley residents were slow in learning that the flood was coming. . . . In the afternoon the water spread out in the low area north of the disposal grounds and by evening crossed the lower extension of what would be Township street. By nightfall water covered the southern extension of Third street halting traffic to Clear Lake.

The Nookachamps also backed up inundating all the flat, low country in its vicinity. By Sunday night many communities were isolated, including parts of the Sterling district. . . . The water rose along both sides of lower Third street (highway 1-A) and came to within a few feet of the Union Oil bulk station and drove farmers south of town from their homes. . . . Local residents, who have seen earlier floods, frequently commented that this one was not as bad as those of earlier days. . . . Sunday and Monday's flood had remarkable similarity to the 1909 disaster which occurred almost on exactly the same days, and in the same way. This weeks flood followed a heavy downpour of rain last weekend and a warm Chinook wind which melted snow in the hills and brought down a deluge into the mainstream of the Skagit river. The 1909 flood started after rains and a Chinook wind on Sunday and Monday, November 28 and 29, 1909

according to a copy of the Herald-Recorder, Skagit county's official newspaper of that day, which was printed at Hamilton. (Source: 12/1/49 CT)

Mrs. Albert Watson yesterday described a hectic night which she and her three-year-old son, David Allen spent floating on mattresses and finally hanging onto the rafters of their small frame house near Rockport in the raging flood of Saturday and Sunday. . . . "The baby and I were alone as my husband, A.L. Watson and our grown son had been away working and couldn't get back across the river, Mrs. Watson said. "When the water backed up in Mosquito Slough Saturday night and started to come in our house, I was scared," the woman continued. "I got up on a chair and then the baby and I stood on a dresser. Then I piled one mattress on top of the other and we floated on them." . . . Mr. And Mrs. George Moses and their children, also residents of Mosquito Flat, climbed into two dugout canoes, paddled into some trees where they tied up, and spent the night with blankets over their heads. (Source: 12/1/49 CT)

# February 11, 1951 Flood 51

At 1 p.m. the river was at the 25.1 level in Mt. Vernon, 1.4 feet above the 1949 crest. A shortage of sacks and workers in some districts hampered the job, but dike strengthening was going ahead at a rapid pace. . . . The county engineer's office predicted a 28.5 foot level in Mt. Vernon by 9 p.m. almost two feet above the a November 1949 crest . . . The river was up to 38.85 at Concrete this morning and continuing to rise. Rain was still falling upriver at noon, but a cool wave was reported coming in from the north, which might check the river rise later. . . . Water boiling through a 40-foot gap in the dike on the George Moore farm, on the south bank of the North Fork just below the bridge west of Conway, had covered over 1,000 acres of pastureland on the northwest side of the island west of Fir Island at noon and blocked all but very pressing traffic on the south approach highway to the bridge. . . . Although the river is still two feet short of the top of the dike in most places on the lower part of the river, sandbagging was needed in some spots and water continued to filter through and threaten another break farther down. . . . All traffic at the upper Skagit Valley was cut off at Lyman where the road is under water. Another stretch of road above Marblemount is flooded and the road to Newhalem is closed. (Source: 2/10/51 MVDH)

The worst Skagit river flood since 1921 inundated thousands of acres of rich Skagit valley farmlands over the weekend and left two county towns, Stanwood and Hamilton, standing in water ranging up to six feet deep. . . . Fir Island Flooded Water from the Conway break spread over an estimated 4,480 acres, to a depth ranging from a few inches to several feet. . . . Highway 99 was closed to traffic yesterday afternoon and was under water for four and a half miles today. . . . Crested At 28.2 The river reached a crest at 28.2 at 5 a.m. yesterday and held very near to that mark for several hours before feeling the effect of cooler weather on the upper Skagit. . . . Hamilton residents evacuated without incident but some chose to remain on the second flood of their homes. Eight families were taken out of the flooded Nookachamps valley

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<sup>&</sup>lt;sup>51</sup> Corps of Engineers 139,000 cfs Concrete (38.99), 150,000 cfs Sedro-Woolley, 144,000 cfs Mt. Vernon. USGS, 1951-02-11, 138000 cfs Mt. Vernon. 25.1 feet in Mt. Vernon would be 33.1 at current gage. 28.5 ft level would be 36.5 feet at current gage.

Saturday by civilian "ducks". . . . One of the most serous threats to the dike was in the river bend area west of the Riverside bridge where leaks and boils in the road which parallels the dike caused concern throughout Saturday night and Sunday. . . . Across the river, from the bridge to the Avon vicinity, the dike held but showed the same tendency toward seepage, with water bubbling up in the road and adjoining fields until stopped by the sandbag treatment. . . . A portion of the drawrest on the West Side bridge across the Skagit was swept away and there were times at the crest of the flood when the bridge was felt to sway noticeably, but held fast. The new rip rapping on the dike in downtown Mt. Vernon came through with flying colors and the higher level of the dike was credited with preventing serious flooding of business buildings along the riverfront. (Source: 2/12/51 MVDH)

The break in the dike a mile south of Conway, which started from a muskrat hole and inundated some 4,500 acres of farm land between dawn and early evening yesterday, was one of the most heartbreaking features of a thoroughly heartbreaking weekend for Skagit county. . . . Miller tried to cross the gap in his rowboat to the solid part of the dike running in the railroad trestle at Fisherman's slough, but the bottom fell out of the boat and he saved himself by grasping a fence post. Owen Tronsdale and another man saved him from the waters, taking him to the railroad. . . . Footsore, bleary-eyed and arm weary the 30 odd emergency workers thought they had won the battle against the rampaging Skagit, as they climbed the soggy dikes, carrying sandbags to over-floe points west of the town. . . . But still the river rose, necessitating a second or a third row of sandbags. . . . Dikes Like Jelly Greatest fear was held for the dike behind the fire station to which there was access from only one point below and from either end. Stumbling through ankle-deep mud, the men carried sacks to the top, tight-roping between the river and the side of the dike covered with blackberry vines. . . . Break Was Sandbagged The breaking point was one of the first spots on the Conway dike to receive attention Saturday evening, when a crew of eight or ten made an attempt to stop what was then a "rat-hole" leak, about eight feet below the top. Sacks were stuffed into the hole, after which others broke out and sandbags had to be piled all over the side of the dike – they held for about 10 hours. . . . By seven, water was coming in force down the streets of Conway and the coffee and sandwiches had been removed from the fire hall. (Source: 2/12/51 MVDH)

Bailing out after a record high water, Skagit County was finding late this week that its losses were not as great as the first frantic press and radio reports indicated. . . . Hamilton residents wee swamping out their homes and stores today in the first-flooded community but in the second, Conway, it was to be a matter of days before there could be hope of relief from overflow waters. The flood-breeding combination of a Chinook wind and heavy, warm rains last Thursday night set the Skagit River off on its 1951 rampage. By Sunday morning it had risen to what the county engineers office said was an all-time high of 28.2 feet in Mt. Vernon, as against the previous, November 1949, record of 26.05.

Worse At Conway In '21—Conway residents declared the 1951 flood was two feet, ten inches below the 1921 inundation in their community, due probably to the fact that this time the Fisher's slough dikes broke southward before the South Fork river dikes gave way.

"Close Call" In City—In Mt. Vernon Saturday night Main street was sandbagged when the water crept to with six inches of spilling over into the business district, 7000 sandbags were



piled on the dikes and bottoms around the sewage disposal plant, and overflowing waters were dammed off with sacks o the West Side.

**15,000** Acres Covered—A total of 10,000 acres south of Mt. Vernon and 500 in the Nookachamps and upriver were inundated, Harold Strombom flood-fighting coordinator for the county estimated. Fir Island between the South Fork and Dry Slough, however, escaped serous flooding, but waters from the Conway breaks flowed eastward to the foothills and northward to within two miles of Mt. Vernon.

Water Systems Hit—The PUD resorted to pumping and filtering river water when flood waters barred its 14-inch high pressure "mountain water" main on the Dollar road between Sedro Woolley and Burlington Sunday. The line burst, speeding the washout of one road lane for a distance of 1000 feet..

Major Breaks Listed—Major dike breaks were, in approximate order of happening: Fisher's slough, flooding Milltown, Friday night; North Fork, above bridge, pouring into area between Brown's and Dry slough; others on Brown's slough in Beesner district, sea dike near Von Moos farm and Brown's slough near Charles E Olson lands; two at and below Conway Sunday morning. One sea dike at least was dynamited to relieve part of the island area. Reports of other flooding ranged from small isolated incidents to the fantastic, such as the inundation of part of Burlington and the Riverside Bend area. Actually there was only one break in the Burlington bend, that quickly plugged, and none of consequence between Mt. Vernon and Burlington. Avon was bothered only by seepage.

**Fir Island Proper Escapes**—Fir Island between the South Fork and Dry slough escaped any serous flooding and access to the area remained open via the river road from Mt. Vernon. (**Source: 2/15/51 Argus**)

Flood Coordinator Harold Strombom of the County Engineer's office yesterday made public the entire operations of engineer units during last weekends flood. In daily reports, here is what happened:

**Friday**—8 a.m. Skagit at 19 feet, rose to 20 feet by 12 a.m. Hamilton flooded by evening.

**Saturday**—Steady rise all day with 38.35 feet reported at Concrete and 25.1 in Mt. Vernon. Engineer H.O. Walberg appointed coordinators at 12 a.m. . . . first dike break at Fir island west of the bridge on the North Fork, covering about 1000 acres ...the Samish flooded ...roads were closed at Conway, Clear Lake and up river...volunteers were called in the evening to strengthen dikes.

**Sunday**—Continued dike breaks near Conway flooded Fir Island and later Conway about 6:30 a.m. ...volunteers worked throughout the night evacuating families and placing sandbags on weakened dikes. Flood crest was 28.2 feet.

Tuesday—River down to 18 feet.

Wednesday—River at 15 feet, all schools open except Conway. (Source: 2/15/51 Argus)

As flood waters receded through-out the county this week many long-time county residents began comparing the incident with the one taking place in December of 1921. Old issues of the Argus give quite a few details about the matter and make it easier for those who did not witness both floods to compare the two. The flood began late Monday night, Dec. 12 when the dikes began breaking after three days of heavy rains and warm winds. The river soon reached a level of twenty-four feet in Mt. Vernon and both Burlington and Conway were completely flooded as dikes broke here. Early Tuesday morning the dikes burst near Riverside and the entire area was covered with several feet of water. One home in the area split in half by the water and the family hung on the roof as the better share of their dwelling was swept away. Over 2000 feet of railroad tracks were washed away near Riverside and no autos or trains reached Mt. Vernon from the south for several days. Several stores along the river front in Mt. Vernon had portions disappear when the raging waters tore away their pilings. Two days after the record water level the county had several days in which the temperature did not exceed twenty degrees. This froze all of the standing water to a depth of several inches and did much damage to livestock in the valley. (Source: 2/15/51 Argus)

What will the Skagit flood waters do to the farms? Not as much as many fear, says one pioneer of the flats beyond Fir Island. Recalling the 1921 flood that was followed by a freeze, pioneer John Wylie, PUD commissioner, said his lands were isolated, under sea water for 51 days. First year afterwards he got no crop, second year, 10 bushels to the acre. Then the lands began coming back. Brief immersion in sea water will not be seriously harmful, Wylie declared. Lands flooded and silted, rather than covered with sand or debris, will benefit. Wylie cited a number of farmers who, he said, were "made" by silt from floods—the resulting bumper crops. (Source: 2/15/51 Argus)

Reaching a near record crest of 28.2 feet at Mt. Vernon at 5 a.m. Sunday, the Skagit river's worst flood in several years, caused many thousands of dollars damage to highways and property, and left many families temporarily homeless. The Hamilton area was the worst hit, east of Sedro-Woolley and the Fir-Conway district south of Mt. Vernon. . . . Mt. Vernon and Burlington were spared from a bad flood. The county engineer reports that the Burlington road will be ready for use Saturday night. All roads upriver are passable and most of the roads in the Nookachamps area are again in use. . . . By Saturday all traffic to the upper Skagit valley was cut off at Lyman where the road was under water. Another stretch of road above Marblemount was flooded and the road to Newhalem closed. . . . Traffic on the Clear Lake road was closed at 11 a.m. Saturday as a log jam threatened destruction of the bridge. Later the road was covered with water. ... The river broke through the railroad embankment east of Burlington, which acts as a dike, and tore through the Dollar road, cutting the PUD 14 inch main serving Burlington. Hamilton was flooded for the second straight year, but fortunately many of the residents had more warning about the coming high water. About midnight Friday night the water began to come over the top of the dike and continued to rise until approximately 2,000 acres in the Birdsview-Hamilton area were covered with water. . . . It has been reported that many of the people in Hamilton were going to sell out and move, but nearly all of the for sale signs seen on homes now had been up before the flood. The oldtimers who had been going through floods for years take it in stride. (Source: 2/15/51 CT)

Agricultural damage from the Skagit County floods will total "at least half a million dollars" a Soil Conservation Service official said today. Based on a nearly completed SCS survey, which shows 28,776 acres of Skagit County land flooded. Austin Summers of the local soil conservative office placed the estimate on flood damage which does not include damage to houses, furnishings or personal property, or to roads and bridges. It does include damage to land and crops, dikes, ditches, farm buildings and equipment and livestock. Of the total acreage inundated, 8,320 acres were flooded by the Samish River in the northwestern corner of the county and the rest by the Skagit River. Approximately 117 acres of land were "destroyed" for agricultural purposes by erosion, the report shows, with 50 acres of that land on Fir Island and most of the rest around Lyman. . . . Included in the loss was an area of mature bearing filbert trees on the Loop place in the Nookachamps area. . . . One of the heaviest strawberry field losses was on the Noble Lee farm on Fir Island, washed over by the river when it broke a private dike. About 75 acres of bulbs were flooded, with almost no change of any salvage on most of them. . . . Diking districts have a monumental task of repairing flood damage. A total of 4,300 feet of dikes were washed out (200 feet on the Samish River), and the tide gate of District 13 was ruined. The district's tide box installed in 1937 at a cost of \$7,000, was wrecked by the flood and salt water had been coming in on the land at each high tide. (Source: 2/22/51 MVDH)