



Larry Kunzler transcribed the following handwritten notes on January 23, 2004 from Mr. James E. Stewart's field journal he used while working in Skagit County in 1922. The field journal consisted mostly of Mr. Stewart's flood elevation measurements taken with a handheld level in the winter of 1922. Mr. Stewart used the notes contained in the journal in preparation of his report delivered to the Skagit County Commissioners in October 1923. The notes transcribed are verbatim the way Mr. Stewart wrote them.

JAMES E. STEWART FIELD JOURNAL

Beginning date November 24, 1922

- Page 23 Leonard Everett says 1897 flood about 9 inches lower than 1909. Says that **log jam in the Dalles** raised water 10 feet in 2 hours. Considerable distance and slope between 1897 and 1909 and 1921 marks. 1897 1.4 feet higher.
- Page 24 At Presentine Ferry December 23, 1922. Presentine says Finney Creek had enormous flood in 1897 and changed its course.
- Page 62 Measuring the lengths of rope in Dalles. **Found first 100 feet only 95 feet due to shrinkage in rope.** Rope probably about okay for the two Dalles sections, as it was graduated while dry but not stretched, while it was used wet and stretched.
- Page 69 Checks on rope graduation were made while rope was still stretched across river. It is not certain that these checks are applicable to the lower cross sections also but **probably will have to be assumed so.**
- Page 96 **1896 Flood – Mt. Vernon Herald.** Chinook wind started Thursday, November 12, and continued through Friday November 13. Water highest at Mt. Vernon Sunday night November 15. Highest water in the memory of the white man. Many cattle and horses drowned. P.G. Gibbons lost over a million feet of logs. W.A. Sparks lost 100 cord's of bolts. Two big breaks in levees on the west side. One near F.C. Wards place. The other at D. Storrs place. The whole Westside including West Mt. Vernon is a lake. 600 feet of the GNR track between Burlington and the bridge washed out. One mile of track between Conway and Stanwood turned upside down. Mt. Vernon is not flooded. Dikes raised and kept above flood water.
- Page 97 **1897 Flood – Mt. Vernon Herald.** Wednesday morning, November 17 a very warm Chinook wind started, almost a gale by evening. Still in banks Thursday. Early Friday morning alarm was whistled but water was over



levees already. Mt. Vernon flooded. Paper states not as much damage as 1896 flood.

1906 Floods – Mt. Vernon Herald. Flood reached 21½ feet, **October 20th p.m.** at Mt. Vernon gage. **November 15th and 16th big flood.** Paper states it was at least 8 inches higher than 1897 (probably due to dikes). GNRR bridge greatly damaged one span at highway bridge carried away. H. Peterson killed running against draw bar.

1909 Floods – Mt. Vernon Herald. **Wednesday November 25th** Chinook started. Baker River higher than ever known. Railway bridge at Concrete carried away. Paper speaks as though crest were reached about November 25th. Friday, 10 p.m. prior to **December 2nd another Chinook started** and blew with increasing vigor until Monday – 66 hours. Water still rising at Sedro Tuesday p.m.

Page 98 Hamilton Record says 1909 flood 4 inches higher than 1897 at Hamilton. More damage in 1897 however.

1917 Flood. Slightly over 21 feet, Mt. Vernon gage December 19.

1921 Flood. Stated that 1909 flood 26.4 Mt. Vernon gage and that 1921 flood 1.5 inches lower. Estimate that Puget Sound and Baker River companies lost \$50,000, 20 sections of logs.

Page 100 Ed Presentine says 1897 flood 6 inches higher than 1909 at Rockport. Says Indians claim 1897 flood highest on Sauk of all times.

Page 101 Rockport. Bark and moss point. Possibility 1897 likely wind blown sand. 1.1 feet below this 1921 mark? 1.23 feet below this is 1897 mark. NOTE: Assume 1921 same as 1909. Probably 1909 nail. Ed Presentine says 1897 .5 feet higher than 1909.

January 28, 1923. Old Johnny Towne (Indian) said during 1909 flood that when he was a boy he saw river even higher. He is considered to be 70 years old or more so flood would be that of 1856.

Page 106 At Sedro Woolley. 1921 High-water 54.38. 1917 High-water 54.2.

Page 107 Ed Woods brother says 1909 flood highest about 2 a.m. Had fallen some by morning. This does not check with statement by Hart and others.



Page 116-117 December 13, 1922 at Avon. 1921 high-water mark on underside of root¹. Same mark shows the crest of the waves while the sand in the moss 100.00 shows crest of standing water. As all of other marks practically are sand in moss we will use that $100.00 - 85.60 = 14.40$ for 1921 flood.

Page 122 December 12th & 13th, 1922. Assessor says 1897 flood about 1.1 feet higher than 1896.

Mt. Vernon Argus says water began to recede at 8 a.m., Tuesday, November 30, 1909. Attributed this to breaks in dikes above. Unverified report that water was 2 or 3 feet deep in Olympic Marsh.

1906 flood reached crest at 4 a.m. November 16th 25 feet above low water mark and 1 foot below dikes.

1921 flood 24 feet 10 inches. 2 inches below 1909 at Mt. Vernon late Monday night.

Page 123 Old timers stated that **1897 only time waters reached downtown streets at Mt. Vernon.**

Page 127 December 16, 1922 at Sedro Woolley. Hart says 1896 flood at GN embankment across Gages Slough² and water at Sedro Woolley dropped nearly 2 feet suddenly during middle of afternoon although it had been rising 8 inches per hour. Was up again by 1 p.m. and finally raised higher than before. 1896 nearly same height as 1917 and not over 2 inches below 1897. 1909 flood 16 inches approximately above 1917 mark in stump. 1921 .075 feet below 1917.

Page 129 **Highest upstream dike on Skagit is just above Burlington** except the one at Gages Slough. Should see Hart and get more data on big spring flood.

Hart says a temperature of 50° at Sedro Woolley makes a good raise. **A temperature of 54° for 48 hours makes a big flood.**

Page 131 At Skiyou Ferry, Andersons and Ringhouse barn. 1917 and 1921 high-water practically the same.

¹ It could not be determined if this word was root or roof. If he indeed was at Avon as the field notebook suggest I've got to think that the word was roof as the water in Avon would have been very deep although I admittedly don't understand his computations.

² Unsure whether he is talking about RR crossing in Burlington or along Highway 20. Given the fact that the "Sterling Dam" was placed along the old dollar road (Highway 20) in 1899 and was higher than the Burlington levees and this was adjacent to Hart's property, I think the Highway 20 location is more accurate. This would explain why he observed the 2 foot drop.



At the 3rd and 2nd to last pages from the end of Mr. Stewarts journal there were sort of a list of “things to do”. Included in the list were the following:

- Get dredge data
- Study Baker Lake Storage
- Get soundings from USGS
- Determine cost of dikes to protect old channel.
- Get flows of tributaries at time of floods.
- Determine cost of moving people.
- Find out the earliest settlement in Valley.

The last item on the list was the notation “Channel Sterling Bend to Padilla Bay.” Mr. Stewarts journal was located in a red well file folder with a cover letter from Mr. Stewarts wife stating, “Here are all my husbands papers on the Skagit Report.” Contained in the folder was a carbon copy of the 1922 Robert E. Herzog GNRR report recommending the “Diversion Channel” to Padilla Bay.