

STANWOOD AREA ECHOES

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The Flats by Grace Ryan Cornwell

They were never referred to as a flood plain before these late 1900's - those flat, soggy lands that stretched from the base of the highlands at their eastern border toward the waterways of the "Sound."

They were the "flats" - the most heavily populated part of the early Stanwood area. True, a few folks chose to live on the river bank while some bachelors, like Jim Dennison and Captain Drake, lived aboard their boats and some "newcomers" even were settling on the "burns" (the highland); but the flats was the prime place to reside.

Here one had his drinking water from the Stillaguamish River near at hand and clearing the land wasn't as difficult as on the high wooded areas. The soil was deep and rich for fine gardens and the river with its many sloughs was a convenience for local transportation.

In the early 1870's Stanwood had become a real trading point with growth of settlement due to logging and agriculture.

An important part of the agricultural development of the flats was the building of dikes. The men of Stanwood kept a watchful eye for the change in weather that might bring "high water" since there was no radio or television to warn of this emergency. Quite often this flat land flooded in the spring or the fall, so the hardy farmers constructed dikes around the settlement to hold back the high water of the "Stilly" or the Skagit River to the north. As a further precaution, most homes had a rowboat moored to the back porch during the flood season. If such dangers were imminent, the sound of pounding could be heard far into the night as the volunteer townsmen staked down the wooden sidewalks and secured the white picket fences so they wouldn't be swept away by the turbulent waters.

One of the settlers attracted to the area was Bengt Johnson, an immigrant from Sweden who had worked his way across the country on various projects, with the high hopes of gaining farmland of his own. While he and a partner were building dikes at Hatt's Slough, he learned of a Sam Hancock living a little farther north, who had a big area to be "diked in." The pair came to the Stanwood flats and signed a contract with Mr. Hancock to build the dikes. This they did with a team of horses and a "slide

scraper." These early dikes had a nine-foot base, were three feet high and three feet wide. They finished that work in 1877. It was so well done they didn't lack work from then on.

The dike bordering the Douglas Slough on the west end of town was about four feet wide and stretched north as far as Milltown where it joined the Skagit County dikes which continued on to the town of Mount Vernon.

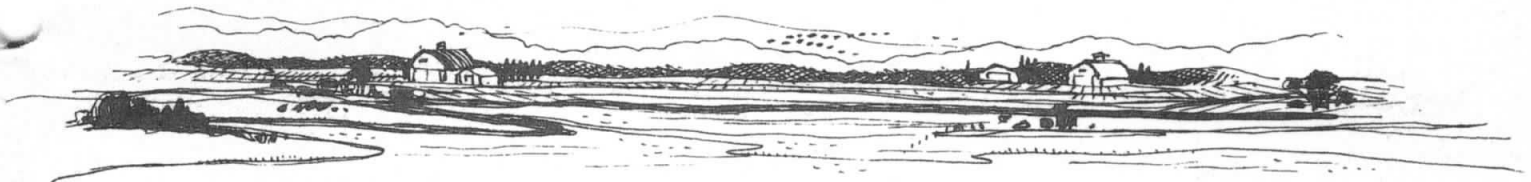
Town leaders recognized the further need of dikes north of the settlement when in 1892 the dike on the Skagit River to the north broke and Stanwood and the surrounding area were deluged with four feet of water. No diking district could be agreed on so the city council raised \$500 by public subscription and by this project all land north of the town was protected from such flood - by more dikes.

In cooperation with O.B. Iverson (see next article) and N.P. Leque, neighboring owners, Nils Eide diked his land on Leque Island and cleared it for farming. Most of the island was salt marsh with spruce, juniper and alders growing on the higher ground along slough banks. Within the dikes, hay and oats were the main crops to help maintain the dairy herd. A very large orchard was also planted and maintained. This diked land continues to be a natural wildlife habitat and stayed in the continuous ownership of the Eide family until sold to the State Wildlife Commission in 1996 as part of the Skagit Wildlife Area.

The town dikes were maintained by a "town dike." A well-remembered one was "Big Peter" Arentzen. At the end of a work day, Pete could be seen trudging through town toward his home to the north - his high hip boots turned down, a spade held over his right shoulder, and always a black felt hat worn low on his forehead. That's how dikes were repaired in those early days - with a spade and manpower. As time progressed, slide scrapers for building dikes were activated by gas engines though they still needed several men to attend them.

Despite its dikes, the flats still experienced occasional floods. Nevertheless, the flats were the best place to live. No one had ever heard of the "hundred year's flood."

Perhaps it was just as well.



Diking the Stillaguamish Delta

Coming from Europe, or the older communities of the Eastern United States, settlers seemed undaunted by the fact that the river deltas were often swampy or marshy. They saw fertile, rich soils that, if they were free of tidal saltwater inundation, could be farmed profitably. They immediately diked their farm fields to protect them from tidal flooding and then all they needed to worry about was the seasonal river flooding. In the early days of settlement, the river flooding was not considered harmful and though there was maintenance, the floods were worth the fertilizer the silt provided.

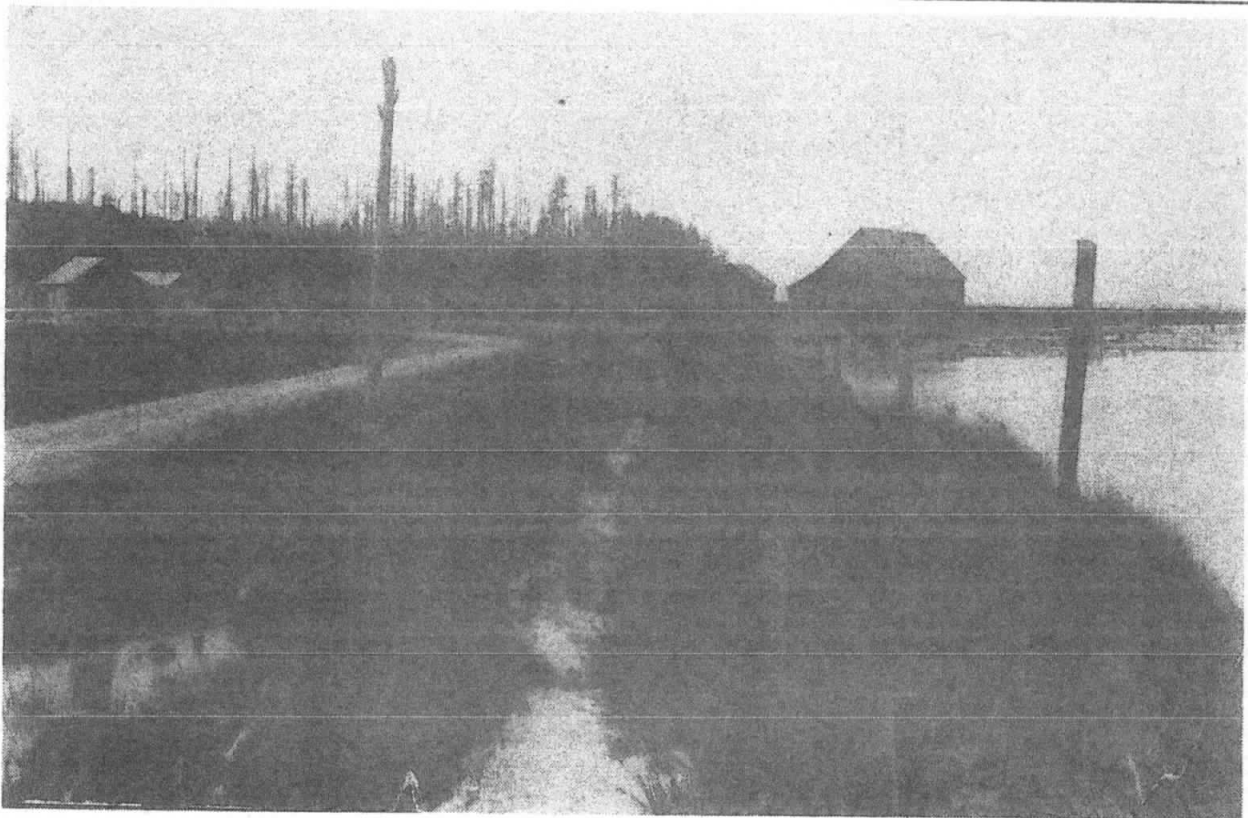
A government report* published in 1885 describes the early diking in Washington and the benefits of improving the lands through reclamation. The report gives some rather specific figures for those years of crop yields. Hay was the principle crop but oats, barley and wheat were also mentioned. According to this report, it was "Mr. Laque's (Leque's) opinion that newly diked land after a number of year makes wild grass hay quite as good as tame hay and that the improvement in the quality of the pasture is sufficient to pay the cost of diking for that use only." This report indicates wages for diking were about \$1.50 - \$2.00 per day and board and cost the farmer about \$2.75 per rod.

By 1900, hundreds of acres had been diked between Hatt Slough and the Tom Moore's Steamboat Slough. They have changed locations over the years to accommodate the river, roads, the railroad, and development in general. The farmers worked to maintain drainage systems that were often at odds with the new development.

In the 1930's there were W.P.A. Projects to improve the dikes. When they began to be constructed with machinery they were also built higher. The most recent dikes reclaimed about 50 acres north of Stanwood and about 180 acres just north of Hatt Slough. The latter included the seeding with spartina grass, a non-native species of grass that has since spread to other areas of tidal marsh and has accelerated the siltation of many other tidal flats in Port Susan, Camano Island and Skagit Bay.

The following article printed in the *Stanwood News* in 1920 was written by O.B. Iverson, (early Stanwood/Camano resident, surveyor and territorial legislator) continues our theme of describing old landmarks to compare with new and gives the best primary source description of diking that could be found so far.

*Nesbit, David Montgomery, *Tide marshes of the United States*, with contributions from U.S. Coast Survey, S.L. Boardmann, Eldridge Morse, and others. Washington, Govt. Printing Office., 1885 [U.S. Dept. of Agriculture. Miscellaneous Special Report no. 7] pp. 89-99, 211ff. Parts of this were reprinted in *An Illustrated History of Skagit and Snohomish Counties*: [Chicago] Interstate Publishing Company, 1906, pp. 267-269. Thanks also to Ole Eide, Francis Giard, and Stanley Matterand for remembering. More information is always welcome!



In the early years, no one apparently thought to take pictures of things as mundane as the dikes. This picture is the closest we could find. It shows a dike along the Davis Slough holding out the saltwater with the ditch alongside to help drain the field. Also in this image is part of the Becker Mill that was located at the bottom of Land's Hill. This small road still exists as a farm road and currently this same dike is under repair on the north side of S.R. 532.

Stillaguamish Flats by O.B. Iverson*

Stillaguamish flats, some six to seven square miles, are made by the Stillaguamish and partly by the Skagit River. Sometimes when the Skagit is in flood and the Stillaguamish is not, the Skagit will flow over the flats and borrow outlet from the Stillaguamish.

On the front for some distance back from the sea, only grass and scattering juniper grow. Farther back was a dense jungle of more varieties of brush than I can name. I will only name devil club and gooseberry, for the reason that I got better acquainted with them because of their clinging nature, also vine maple, crabapple, alder, willow, and others because they gave us exercise [note no mention of blackberries -Ed.]. Over and between grew about as thick as they could stand, immense big spruce, and cedar, and on the newer made land along the river, alder, maple and cottonwood. It was sometimes difficult to determine just where tide land ended and river bottom commenced.

Nearly all the tide lands were flooded more or less at extreme high tide if the river was high at the same time. At the extreme outer edge of the grass land, about six feet deep.

To fit this land for cultivation, dykes were built to exclude the high water. These dykes are mud walls of various size. Those on the Stillaguamish flats will average about four feet high. To build them a ditch was dug on each side of the dyke, twelve feet apart, the sod regular with a slant of 45 degrees and set along the ditch two feet from it, grass side out. The surplus sods were set to one side, and the space between the two rows of sod filled with the soil and well packed by tramping. When even with the top of the first row of sods it was leveled, and another row of sod set, breaking joints like a stone wall, and so on to the top, leaving the finished dyke eight feet wide on the base, four feet wide on the top, four feet high with 45 degree slope on the grassy sides and with ditches on each side six feet wide, and three or more feet deep. Of course these dimensions varied as did the material. Many dykes were built where there was no sod.

For the purpose of drainage sluice boxes were put in to drain into some channel. These boxes were usually put in before the dyke was built and were made of heavy plank 16 inches deep and 20 inches wide, was a common dimension. These sluice or drain boxes were placed in a ditch crosswise of the dyke, as deep as the bottom of the inner dyke ditch would be. The end of the box to reach into the ditch so as to drain it, and the outer end some ten feet outside the dyke. The outer end was cut with a slight slant, and a hinged lid with a heavy stone or iron weight put on top to keep the lid or gate as it was called, closed. This gate prevented water from the outside flowing in almost completely, but only slightly interfered with water flowing out. There was no dyke ditch on the outside for 8 or 10 feet each side of the sluice box. This describes the most common kind and size of sluice drain at that time. Many modifications, and improvements have been made since.

A piece of land with dyke all around it would also have a ditch six feet wide and three to four feet deep into which to

drain the land. Most of the land had to be drained. This was done by digging ditches at intervals, about 3 feet wide and 2 or more feet deep with level bottom. In the bottom of this ditch, in the middle of it was dug a ditch eight inches wide and deep. This little interior ditch was covered with split cedar slabs, and the big ditch filled with soil. This made a good under drain, and some of them are good after thirty years. Wood does not readily decay in that tide land soil. I found in the bottom of a four foot ditch a cottonwood limb with bark still perfectly sound. How many hundred years it had been there I don't know. If the professor had been there I could have found out I suppose. The tide land soil is mostly silt and very fine and heavy. It is much like clay, with little or not sand or gravel. When dry it bakes quite hard and shrinks, leaving cracks wide and deep enough to let a wagon wheel in to the hub. When covered with crops it does not bake or crack as much, but generally it is too hard to plow in the fall before the first rain.

For durable fertility I think this land is considerably better than any land I know anything about. There is land touching the town site of Stanwood, that has been cropped in oats for thirt years without fertilizers and produced more than a hundred bushels of oats each crop. Three tons of clover and timothy hay is not considered a very heavy crop.

The land mentioned has however, been flooded by the river several times and some new silt left. One of the river farmers said that he a good freshet worth at least a hundred dollars to him. Perhaps it was, most people consider flooding a nuisance.

But the Stillaguamish floods rarely do much damage; never to crops. They are all winter floods. On the Skagit that sometimes has summer flood, considerable damage results to crops but it leaves fertilizer.

Along the Skagit are now great levees to keep the river in its bed. There is none on the Stillaguamish, none are needed. The most serious offense which the Stillaguamish is guilty of, is stealing land by cutting its banks. That can be controlled but is somewhat expensive, but the land is now sufficiently valuable to justify the expense, perhaps. The Skagit flood damage was a community-built levee. The damage the Stillaguamish is doing is mostly individual concerns.

[*excerpted from "Experiences and Observations on Two Continents" Stanwood News. December 10, 1920, p. 1.]

