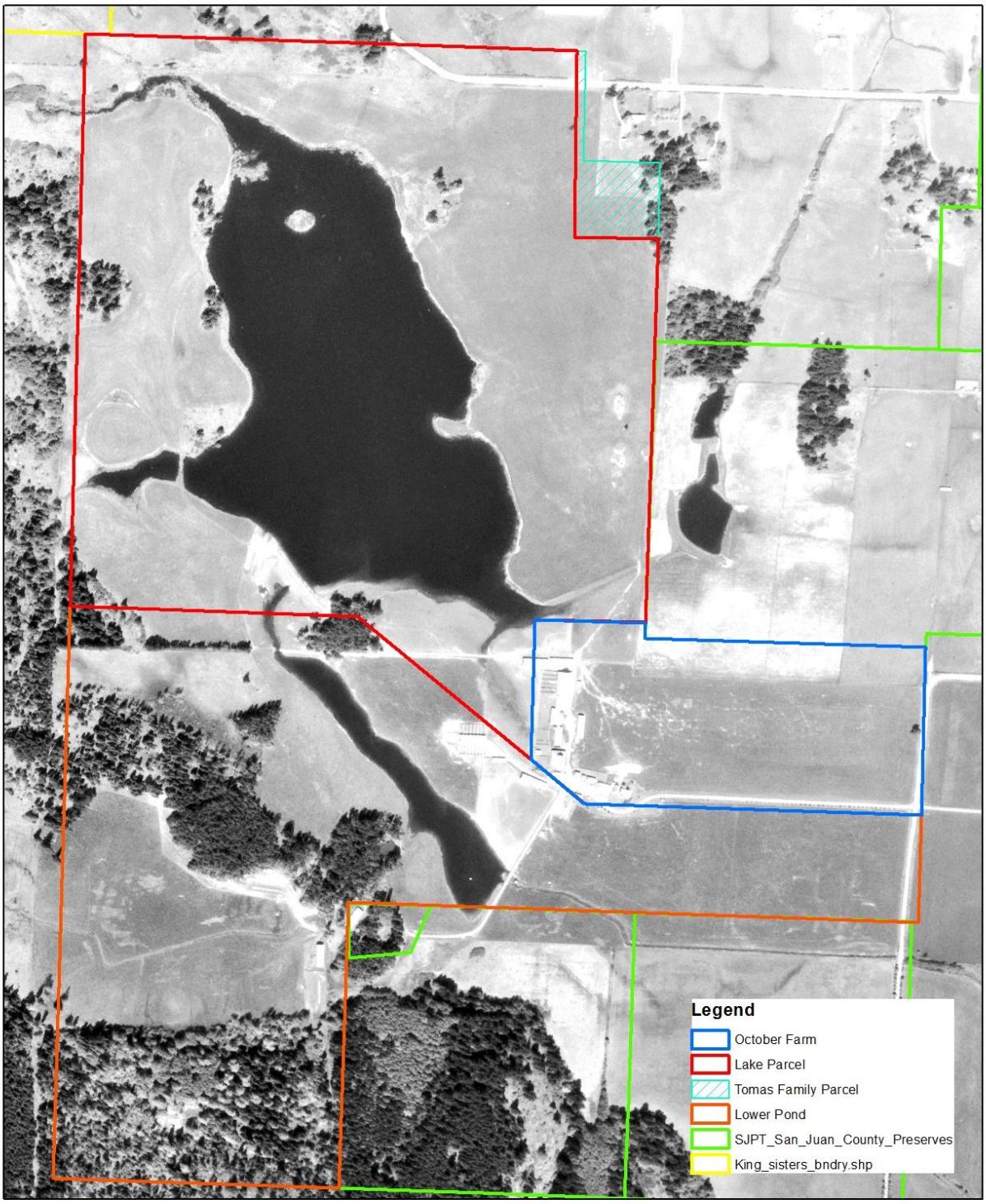
ZYLSTRA LAKE HISTORY

Introduction

The San Juan County Land Bank has contracted for research of the history of the Zylstra Lake area to determine the state of the land prior to Euro-American habitation; to discover historic land use activities; and to identify possible artifacts, structures, and landscapes resulting from cultural activity in the project area. Research included examination of homestead and land ownership records, Township and Range Survey maps and survey notes for T35 R3W (1874), the US Coast and Geodetic Survey T-sheets (T-2301 [1897]), genealogical and archival research, and interviews with people associated with the Wooden Shoe Farm operation.

In many ways, the history of the Zylstra Lake area is a microhistory of pre-settlement and farming in San Juan Valley as a whole. San Juan Valley was fed by two streams: False Bay Creek and San Juan Valley Creek; accounts vary as to whether they were perennial or seasonal. Hunting and gathering by Native Americans eventually yielded to exploration and settlement by Euro-Americans, solidified through the United States public land process typified by homestead grants of 160 acres each. Early homesteaders used the rich bottom land along False Bay Creek for raising grains such as barley, oats, and wheat; planted orchards of fruit trees on the mid-slopes; and grazed their livestock of cows, hogs, and sheep on the upper, drier pastureland. Eventually smaller holdings consolidated into larger farms, a pattern that continued until World War II. After the War and a period of decline, several large farms tried mono-crops such as strawberries and green peas for canning. When Fred Zylstra bought the property in the early 1960s, he ran pure-bred Herefords and planted holly as cash crops, as well as expanding the irrigation potential of his land and the surrounding area with the construction of Zylstra Lake. It was claimed at the time (1963) that 48-acre Zylstra Lake was the largest man-made body of water built by a private individual in the State Of Washington. It is certainly one of the largest lakes used for irrigation purposes in the San Juan Islands.



Zylstra - 1972

0 600 1,200 1,800 2,400 3,000 Feet

Project Area Boundaries and Physical Description

Zylstra Lake is located within San Juan Valley on San Juan Island. The project area consists of portions of Sections 16, 17, 20, and 21 of Township 35 North Range 3 West (T35N R3W). This location fits into the larger False Bay Creek watershed, fed by two stream systems, False Bay Creek that runs through the project area and San Juan Creek to the east, and features the largest man-made body of water on the island, the 48-acre Zylstra Lake.

Geologically, the San Juan Islands consist of older base rock associated with the surrounding Cascade and Olympic ranges. During the Pleistocene Era, a series of three great glaciations occurred, with the ice reaching as far south as modern day Olympia, filling the depression known as the Puget trough and leaving only the surrounding mountain ranges uncovered. Upon their recession, the glaciers not only scraped the existing rocky areas, but also left behind glacial till, as well as the large boulders, called erratics, that can be seen standing unmoved in the middle of farm fields and pastures throughout the islands. After the release of the weight of the glacial ice, the islands gradually rose in a process called elastic rebound. During the same period, however, the melting of the receding glaciers also caused a gradual rise in sea level, so that the result of these forces led to a series of shorelines that have differed from the current one. In all probability, all or most of San Juan Valley was under the ocean at one time. This, together with the glacial action, resulted in the current general soil association of low-sloped, poorly-drained Coveland and Bow soils interspersed with small outcrops or 'islands' of Roche-Rock complex. The soils usually have a profile of 2-3 feet above relatively impermeable clay subsoil (gley) that is locally referred to as 'hardpan' (Schlots et al 1962:57-58,64-66).

Located in the rainshadow produced by the Cascades to the east and the Olympics to the south, the San Juans have an average rainfall of 29 inches per year (based on the record station at Olga on Orcas Island, 1890 to present). On San Juan Island itself, this ranges from a low of 19 at Cattle Point to the south to 29 at Roche Harbor to the north, with San Juan Valley averaging 25 inches per year. During the historic record, however, annual precipitation has varied from almost 38 in the wettest year, 1917 to 15 inches during the driest year of 1929. On average, the thirty-year period from 1891-1921 was wetter (31.04) than the succeeding twenty-four years, 1921-1945 (26.33). The period following World War II indicated a trend toward wetter and cooler years (Dietrich 1975:60-65).

The climate in the San Juans in general is mild, tempered by the surrounding sea waters and westerly winds. Due to the rainshadow, the number of days of sunshine is high compared to the surrounding region. Temperatures range from an average of 40° F in the winter to 59 in the summer. San Juan Island has an historic average of 226 frost-free days (the 'growing season'), although low-lying pockets have been known to experience freezing as late as July. Because the majority of precipitation occurs during the winter months (70% from October through March), Valley farms usually experience drought conditions during the summer, favoring either crops that need little water, farming in water-retentive soils, or irrigation. The salt breezes coming off False Bay to the south certainly contributed to the reputation of crops grown in the Valley—"Salt-Air Peas"—and may have added to the diet and care of livestock (cattle, for instance, require mineral salts as part of their diet).

The vegetative cover of the Valley occurs in the several zones: various wetland species such as red alder (*Alnus rubra*), willow (*Salix spp.*), and hard-hack (*Spiraea douglasii*) in the bottom lands; prairies, such as those ringing San Juan Valley, with scattered Garry or White oak (*Quercus garryana*) and annual and perennial grasses and weeds such as Red fescue (*Festuca rubra*), ripgut grass (*Bromus rigidus*); soft chess (*B. mollis*); downy chess (*B. tectorum*); velvetgrass (*Holcus lanatus*); California oatgrass (*Danthonia californica*); filaree (*Erodium sp.*); and Junegrass (*Koeleria cristata*); and scattered stands of forest largely composed of Douglas fir (*Pseudotsuga menziesii*), mixed with western hemlock (*Tsuga heterophylla*), grand fir (*Abies grandis*), and western white pine (*Pinus monticola*) (Agee 1984; Atkinson and Sharpe 1993; Schlots et al. 1962:68).

When they plowed their fields out of the native sod, homesteaders introduced timothy (*Phleum pratense*) and clover (*Trifolium spp.*) as pasture plants. Introduced weeds include Canada thistle (*Cirsium arvense*) and hawthorn (*Crataegus monogyna*)—the latter introduced to the Valley as an ornamental by the Douglas family. Allegedly in the 1920s the Corps of Engineers, which worked on portions of the San Juan Valley Ditch (established ca. 1922) and the Cooperative Extension Agent advised farmers to plant reed canarygrass (*Phalaris arundinacea*); this is now abundant throughout the Valley in creek beds and wetland areas. Herbivores that impact agricultural crops include deer (*Odocoileus virginianus*)and rabbits (*Oryctolagus cuniculis*)—the latter introduced by breeders on Cady Mountain who let them loose upon the Valley in 1934. (Rabbits continued to be a problem from the 1930s to the 1970s, until a big 'die-off' in 1979 reduced the population.)

Pre-Euro-American Land Use

Not much is known about Native American land use in San Juan Valley. Several prehistoric archaeological sites have been recorded in the Valley, particularly along what is conjectured to have been the coastline during those times. By the time European and Euro-American explorers and settlers came to the island, all of the Indian habitations and occupations, recorded as villages and fishing camps, were located on the present shoreline. The interior of the island, such as San Juan Valley, was probably also used for hunting and gathering activities, and in particular portions may have been used for camas (*Camassia quamash* and *C. leichtlinii*) gathering. Camas bulbs are generally located in areas of well-drained loam, such as meadows and grassy bluffs, as well as rock outcroppings with pockets of soil; in San Juan Valley, these include pockets of the Roche-Rock outcrop complex and portions of the San Juan series gravelly and stony sandy loams.

Northwest Boundary Survey

In 1859, the United States surveyed the Northwest Boundary between the US and Great Britain. While the mainland portion of the boundary established by the 1846 Treaty of Oregon clearly ran along the 49th parallel, the segment through the San Juan Islands was specified as extending from the land "to the middle of the channel which separates the continent from Vancouver's island, and thence southerly through the middle of said channel, and of Fuca's Straits, to the Pacific Ocean." The ambiguity of this designation—which channel were they referring to, Haro, Rosario, or even Middle—led to a dispute over 'ownership' of the islands; hence the San Juans were referred to as "The Disputed Islands."

There were several members of the survey team, including geologists, surveyors, botanists, and ethnographers; their notes on San Juan Island shed light on the landscape of San Juan Valley in the early days of Euro-American settlement. George Gibbs stated that "What is called "Oak prairie", contains about 3½ square miles" and goes on to state that "The soil generally is excellent… Much of what is not available for the plough affords good pasturage. The timber is small and easily cleared." Fellow surveyor Henry Custer was more specific:

> The most extensive prairie is called Oak Prairie, and lies in the lowest part of the basin country. The hills in the vicinity are drained by a creek of quite considerable size, which flows through the prairie, and empties on the south west side of the island.

> According to information obtained from the guide, this is the only creek which has a permanent flow… In an agricultural point of view San Juan assumes a decidedly prominent place among the rest of the islands of the Sound. Its soil is almost thoroughly good and productive, and in low situated places even rich. In the lower portion of Oak prairie, where in Winter ponds of water collect, and render the ground sufficiently moist during the Summer season, the soil is very rich and productive, its depth being from 2½ to 3 feet (Custer, *Appendix D* 1859).

Custer went on to estimate that 50-60 claims of 160 acres each (a standard homestead) could be made on the good farm soil of the island. The situation that Gibbs and Custer describe indicates the early pattern of settlement and use of the Valley lands: the bottom lands for grain and other crops, the upper areas for pasture.

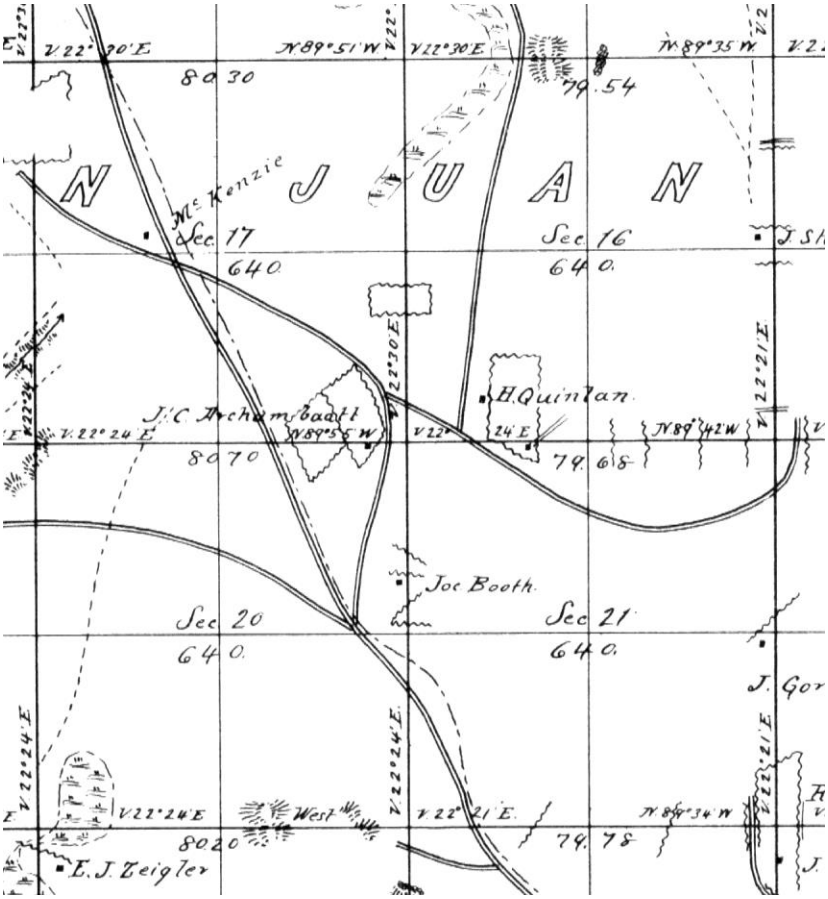
Township and Range Surveys

The United States Land Ordinance of 1785, which was first applied in the old "Northwest" of Ohio in that year, established the rectangular cadastral survey system used for most of the public lands in the central and western United States after that time. In the Pacific Northwest, the principal Willamette Meridian, running north-south, and an east-west base line were established near the confluence of the Columbia and Willamette rivers in Oregon. From these lines at six mile intervals were established east-west township lines and north-south range lines. All of San Juan County fell west of the principal meridian and north of the base line; hence the townships designated by the intersections of these lines consisted of Township x North and Range x West. These townships, or squares of one mile on each side, were in turn subdivided into 36 sections of 640 acres each. These sections could then be subdivided into half sections of 320 acres, quarter sections of 160 acres, etc. Because the principal lines ran north-south and east-west, subdivisions were designated as quarters of successively larger squares: for instance, the southeast quarter of the northwest quarter of the northeast quarter of Section 17 of Township 35 North Range 3 West (abbreviated as SE¼NW¼NE¼ Sec. 17 T35N R3W).

Because ownership of the land, in the Euro-American sense, was tied up in the boundary dispute until 1872, it was not until 1874 that the islands were surveyed and divided into townships and sections. The General Land Office hired three surveyors—Reed, Sheets, and Whitworth, who began work in the autumn of 1874. They surveyed Township 35 North, Range 3 West from August 31st to September 15th. They established each township and

monumented section corners. In their field notes, they also commented on prominent features (witness trees, rock formations, etc.) and at the end of each township discussed predominant natural features (vegetation, soil quality, etc) and potential use. Wherever there were signs of human habitation—roads, fields, fences, dwellings, etc.—these were also noted, with the location recorded in number of chains along the section line.

The map of the 1874 survey of Township 35 North Range 3 West of San Juan Valley indicates several cultural features, including settlements by J.C. Archambault in sections 17 and 20 and H. Quinlan in sections 16 and 21, as well as a 'Joe Booth' to the south. There is also a informal network of roads, the main one of which seems to be the old "Military Road" that was originally built in 1854 by Hudson's Bay Company Chief Factor James Douglas and Cowichan Indians (Douglas called it the "Cowitchin Road") to connect the various sheep pastures of Belle Vue Sheep Farm and later used between English Camp on the north and American Camp to the south. This road follows the water course of False Bay Creek. Other roads interconnect the farms.



Detail of 1874 Township and Range Survey Map

The written descriptions of the survey along the section lines—north-south between 20 and 21; east west between 16 and 21; north-south between 16 and 17, and east-west between 17 and 20—add more detail. False Bay Creek was dry at the time (early September 1874), but it had a "dense thicket" of "thick brush" sometimes described as "hardhack." Trees and shrubs in the lower areas consisted of alder and willow; upland were fir, pine, and in some of the grassy areas, oak. The land was described as "1st & 2nd rate" and "generally good, mostly bottom land." Archambault's land is described as "good rich bottom land" with the "balance of soil 2nd rate." They plotted specific artifacts, including roads and trails and a telegraph line. In addition, there were field fences; the houses and barns of Archambault and Quinlan; and Joe Booth's house. Archambault had a field planted in oats, a typical bottom land crop for many of the early homesteaders. (All of these features can be located through measurements along section lines and bearings taken therefrom.)

Land Laws: Preemption and Homesteading

Public domain in the San Juan Islands was 'alienated'—moved into private ownership—through two principal land claim processes: Preemption and Homesteading. In 1841, Congress passed a revised ***Preemption Land Act***, which superseded the original legislation of 1820; it was extended to the Territory of Washington a year after its establishment (1854). This law permitted every white male squatter over 21 years of age to claim 160 acres. In order to do so, the claimant had to secure a certificate from the land office as a declaration to "prove up" with a dwelling and evidence of six months residence. In addition, he had to pay $1.25 per acre in cash in order to secure title to the land (Scott and De Lorme 1988:31). The ***Homestead Act of 1862*** allowed any head of household or single individual (including single, independent women) over twenty-one years of age to file for a quarter section (160 acres) of land. After filing a declaration of intent (an "entry"), the claimant had up to six months to occupy the land. If, after fourteen months of settlement and cultivation of the land, the claimant wished, they could purchase the property for a minimum price. However, if they chose the non-cash route, within seven years of the date of entry, the claimant had to submit certified proof of residence and cultivation for a minimum of five years after the date of entry (Scott and De Lorme 1988:31). Both these means of land conveyance yielded not only records of claims (i.e, title), but sometimes revealing descriptions of the land prior to settlement as well as the actual "improvements" such as houses and farm structures, furniture and tools, ditches, fences, and crops.

2015 Aerial with Public Land System designations
(San Juan County Polaris captured January 2016)

Because land in San Juan County was not surveyed until 1874, preemption and homestead claims were not processed until the late 1870s. Examination of all land claim records in the San Juan islands reveal that the number of yearly entrants rose in the 1880s to reach a peak in the 1890s, and then gradually declined through the 1920s (although the last homestead was claimed in the 1930s). Land claims in the project fit the early part of this pattern, with all of the claims occurring in the 1880s because of the early settlement of the prime farmland in San Juan Valley.

Early Settlers and Homesteaders

In the Zylstra Lake area, there were three principle homestead claims: in the north, J. C. Archambault; to the east, the Heirs of Henry Quinlan; and in the south, Catharine Vermouth. Each of these will be examined in turn.

On May 5th, 1883, ***J. C. Archambault*** received a patent (#1509) for a 160-acre homestead consisting of the S½SE¼ of Section 17 and N½NE¼ Section 20, T35N R3W. (Most of this land is currently under Zylstra Lake.) James Ciprien Archambault was born on November 28, 1826 at St. Jacques, Montcalm, Quebec. He arrived in the United States in 1849, and married Mary Delaunais (1850-1924), a Cowlitz Indian, on March 5th, 1863. The couple had 14 children. Archambault naturalized as an American citizen on February 24, 1879. He died on July 15, 1901 on San Juan Island.

On the homestead J. C. Archambault built a house and barn had a cultivated field of oats. According to his own testimony of proof for his homestead, as well as his two witnesses, Patrick Gorman (who met him in 1869) and John Crook (who met him in 1870), he established residence in there in 1862, and built a 'hewed log house'—20 by 25 feet, 5 rooms, 6 windows, 5 doors, with a brick chimney—in the following year. All mention a barn and other outbuildings, an orchard, and fencing and ditching. At the time—1882—he was cultivating around 35 acres. All of this was valued at $1,200.

The 1870 US Federal Census of "The Disputed Islands" lists him as "James Shambeau," a 44 year old farmer with a wife (Mary, age 26), four children, and an older brother, John (45). His real estate was valued at $1,000 and his personal property at $1,200. The Agricultural Schedule is more specific: "Shambeau" had 50 acres of improved land with 20 acres in wood lot and 30 acres in "other unimproved"; 2 horses, 14 milch cows, 2 working oxen, 15 "other cattle," and 4 hogs (his brother John's 15 hogs are listed separately) for

a total livestock value of $1000. Ten years later, the 1880 US Federal Census, which included an agricultural schedule conducted on June 18th and 19th, 1880, listed J.C. Archambeau as having 40 acres of tilled land, 5 acres of "permanent meadows, pastures, orchards" (no doubt the latter), and 120 acres of woodland and forest. This was valued at $2,000, plus $75 in equipment and $354 in livestock. The latter included 3 horses and two milch cows, which produced 60 lbs. of butter. He also had 30 sheep with 16 lambs—but noted that 30 were killed by dogs—and harvested 20 fleeces totaling 80 lbs. He also had 26 hogs and 126 chickens producing 200 dozen eggs. Archambault's crops included 2 acres of potatoes yielding 350 pounds and 1 acre of 150 fruit trees. Apparently he hired at least three hands to help with the harvest.

On April 29th, 1882, the "***Heirs of Henry Quinlan***" received patent #1329, consisting 160 acres in S½S¼ of Section 16 and the N½NW¼ of Section 21, T35N R3W. According to the testimonies presented in the proof of homestead, Henry Quinlan, a single man, had died intestate on March 13, 1880, so the homestead application was completed by his estate's administrator, Joseph Sweeney. Sweeney and the two witnesses—James C. Archambault and Fred Jones—testified to Quinlan's establishing residence there in 1859. (Quinlan himself said he had arrived on October 29, 1859; he had applied for the homestead on June 29, 1878 under the auspices of the Desert Land Act of March 3, 1877, which allowed for filing for a homestead without continual residency; and he was naturalized as an American citizen on September 13, 1877.) He had built a log dwelling house, barn, and fencing, valued at $900-1,000, and had cultivated from 30-50 acres. The homestead was deeded to Joseph, John, and Timothy O'Connell, of Union County Indiana, who had established themselves as the legitimate heirs of their half-brother Henry (Quinlan).

Quinlan was enumerated in the 1870 US Federal Census of "The Disputed Islands": age 38 [born ca. 1832], Farmer, originally from Ireland, with $1,000 worth of real estate and $800 of personal property. Again, the Agricultural Schedule is more specific: Quinlan had 100 acres of improved land with 50 acres in wood lot; 2 horses, 3 milch cows, 4 working oxen, 4 "other cattle," and 30 hogs for a total livestock value of $600; and he produced 150 bushels of winter wheat and 200 bushels of other grain.

On June 30th, 1882, Joseph, John, and Timothy O'Connell, of "Union County Indiana and half brothers of and heirs of Thomas and Henry Quinlen[sic]," sold the land to Joseph E. Tucker for $1,600. Then Tucker flipped it on October 20,

1883 to ***Peter Gorman*** (1859-1949) for $2,000. Peter Gorman was born in 1859 in California to Patrick and Ellen Gorman. He came with his family to the island in 1869, where his father eventually got a homestead (1883) in San Juan Valley to the east of Peter's farm. The *Supplement to the San Juan Islander* described the farm in 1901:

> The place consists of 160 acres, of which 120 acres are under cultivation. They [Peter and his brother Joseph] have seventy sheep, ten cattle and seven horses, and raise hay and grain.

This description fits in well with the farming operations on surrounding homesteads.

Catherine Vermouth (formerly Catherine Emerling), received patent #1600 on August 13th, 1883, to 160 acres in S½NE¼ and NW¼SE¼ of Section 20 and SW¼NW¼ of Section 21, T35N R3W. Catherine was born on San Juan Island in 1852 or 1853, to John Bull (1823-ca. 1860), a Kanaka from the Sandwich Islands, and Fu-hue-wut Mary Skqulap (1830-1892), a Lummi/Clallam. John and Mary had married on August 29, 1849. Catherine was baptized on May 18, 1853(?) at St. Andrews Cathedral, Victoria. Catherine had several siblings, including Charles Bull (1849-); Jean Auguste Bull (1850-); Joseph (Jo) Bull (1851-1913); and Sophia Sophie Bull (1855-). Her father, John Bull (aka Stephano), was born in the Sandwich Islands (Hawaii) and signed on with the Hudson's Bay Company in 1838. He first worked as a laborer at Fort Nisqually; after returning to Hawaii in 1845, he came back to Victoria and settled on San Juan, where he was employed as a shepherd as of October 24, 1854 with the HBC's Belle Vue Sheep Farm. His contract expired April 3, 1859 and he was engaged for another year later that month (April 30). According to some records he died the following year. His wife, who was also called Marie Maria Hohema Hehowit Hoihosiuk Jefferson (her father was George Jefferson and her mother Meleltinaut) then married another Kanaka, John Kahana (aka John Hallum Kahano or Alum Kioni) in 1863; they had several children. She died on June 2, 1892 in Victoria.

When Charles Roblin interviewed Catherine (then Staff) on May 15, 1917, at Port Ludlow as part of her family's enrolment as Lummi Indians, he made the following notes:

> Father was a Hudson Bay employee and took care of sheep for Co. When he died the Co. put son in possession of property (Joseph Bull). When WA [USA?] took possession the judge (Warbass) notified all occupants to file. Mother was married Joseph was

> married and living on[?] wife's claim—Theresa was too young—so Catherine made homestead entry.

Catherine first appears in the 1870 US federal census as Catherine Emmerling [sic] (age 18), living in Whatcom with Joseph Emmerling (age 40), who also appears in the Agricultural Census as a farmer. Joseph must have died in 1874, for there is a probate case dated that year. In 1876, Catherine Emerling applied first for a Preemption claim on San Juan Island, which she soon changed to a Homestead application. (On legal documents, Catherine always made a mark, and a later [1920] census document records that she could neither read nor write; her brother Joseph signed and witnessed her homestead documents.) In a document filed as part of the homestead papers, she records her marriage on March 1, 1880 to John Vermouth (1851-?); they are both listed in the 1880 census, along with a stepdaughter Mary Vermouth (age 7), who may have been Catherine and Joseph Emmerling's child. Catherine's Homestead Proof testimony, along with those of two witnesses, Eric Erickson and Meade Wiley, bear witness to her residence beginning in October 1873, with improvements including a 15x24 log house (two rooms with doors, windows, and fireplace), fencing, barn, chicken house, and orchard, with about 40 acres in crops.

Catherine and her husband John Vermouth sold the land to Joseph Sweeney on February 17, 1886 for $1,800. Sweeney and his wife then flipped it to ***John P. Doyle*** (1825-1902) on March 5th of the same year. (Doyle's wife Mary, whose maiden name was Sweeney, may have been a relative.) John P. Doyle was born on June 24th, 1825 in Jacquet Rivier, Restigouche, New Brunswick, Canada. He married Mary Sweeney (1834-1928) in New Brunswick, and their growing family moved to San Juan Island, where he applied for citizenship the same year (1886) that he bought the land from Joseph Sweeney.

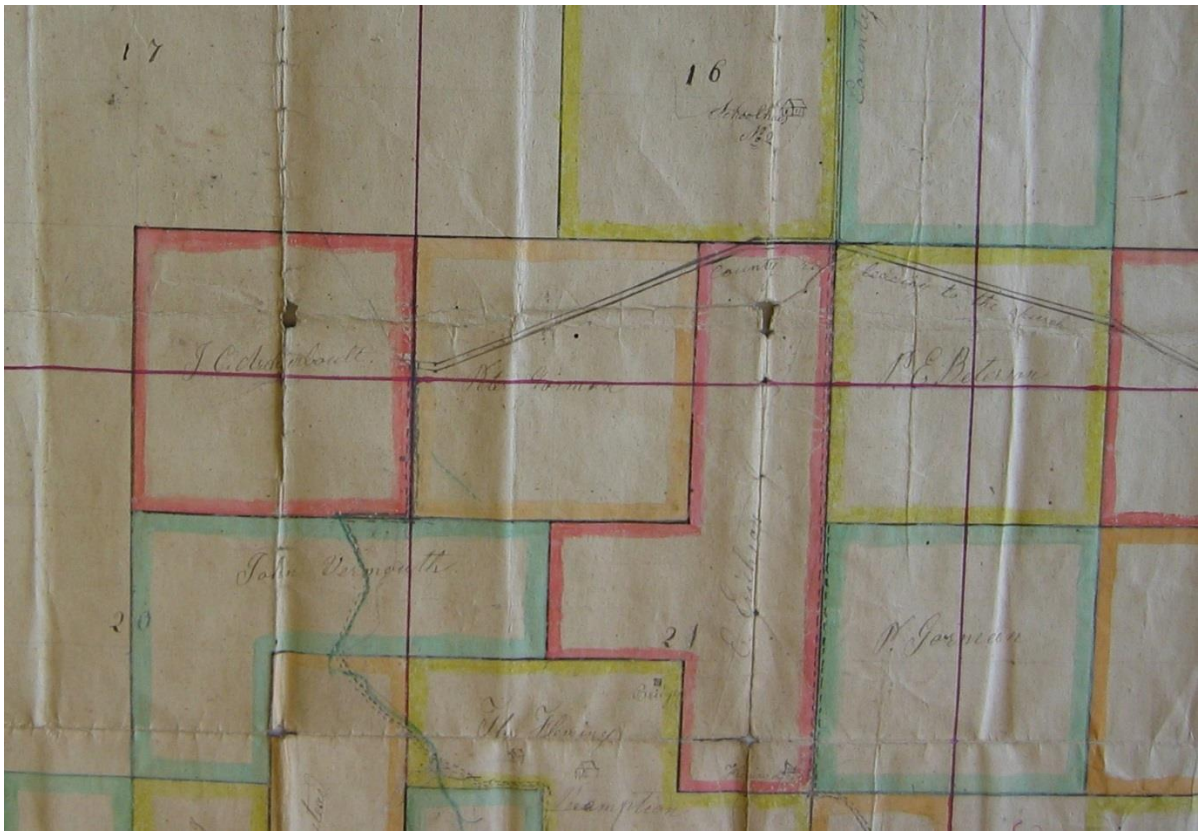
Archambault, Bull (Emerling/Vermouth), Gorman, and Doyle were part of a mix of French Canadian-Native American, Kanaka-Salish, and Irish immigrants that homesteaded San Juan Valley. Archambault was one of several families that the Hudson's Bay Company brought into the region, either through employment at their trading posts in the region or services, such as fur trapping or deer hunting, which they encouraged. Bull was the product of a Kanaka hired by the Hudson's Bay Company as a middleman, farmer, and shepherd who married a native Salish woman and settled in the San Juans. Both Gorman and Doyle were part of the larger Irish diaspora to the United States from their homeland in the 1840s. Several of their neighbors—the brothers John and Joseph Sweeney and the brothers Patrick and Daniel

Madden, who gave land for the Catholic church and cemetery on the east side of the Valley—were also Irish who came to the islands either through family connections or through their service in the US Army.

In 1886 several neighbors in San Juan Valley, including J.C. Archambault, John Vermouth, and Thomas Fleming petitioned the Board of County Commissioners for a road running south through their properties, to connect to the east-west road bisecting the southern portion of the Valley near E.P. Bailer's place (currently Bailer Hill Road). Their petition read:

> The undersigned Freeholders of San Juan Island residing in the vicinity of the proposed road hereinafter described petition for a county road 30 feet wide to be laid out and established as follows: Beginning near the "Quinlan Bridge" on the county road, thence following south one forty (40) on the line between James Archambault and Peter Gorman, the road to be all on the land of J. Archambault, thence one forty on the late Vermouth claims southerly, thence through part of the two forties of Thomas Fleming's land…[thence south through several more properties], joining the Lime Kiln Road opposite Jas Fleming's "old gate" all on the old survey made in Nov 1885. (Jefferson County Territorial District Court, Case File 2-986, Bailer V. San Juan County Commissioners)

On June 10, 1886 the Viewer, H. Penshaw, and the Viewer and Surveyor, E.C. Gillette, recommended construction of the road as well as a six-foot pass-under "opposite Mr. Bailer's ranch" so that livestock could be transferred from field to field without going over the road. This road is illustrated on a map that was made at the time, indicating the east-west road transecting the valley and connecting with the nearby north-south road past School House No. 2. It is interesting to note that the east-west road as depicted does not have the same configuration as the current San Juan Valley Road, which runs along the section lines. It appears to terminate on the west at what is described in the document as "Quinlan's Bridge," which apparently went over False Bay Creek about midway along that north-south section line.



Detail of 1886 Map of Proposed Road:
J.C. Archambault is in pink in the upper left; Peter Gorman in orange to the right of that; and John Vermouth in light blue below that

Personal property assessments from the early 1890s indicate that the three farmers—J.C. Archambault, John P. Doyle, and Peter Gorman—had relatively similar size farm operations:

	Horses	Cattle	Sheep	Hogs	Wagons
J.C. Archambault	2	6	10	4	1
John P. Doyle	2	5	31		
Peter Gorman	3	3	24	1	1

This seemed to be quite typical of farmers in San Juan County at the time, running small, diversified farms that included cultivated fields of grain crops, orchards of fruit trees, and livestock including cattle, sheep, and hogs.

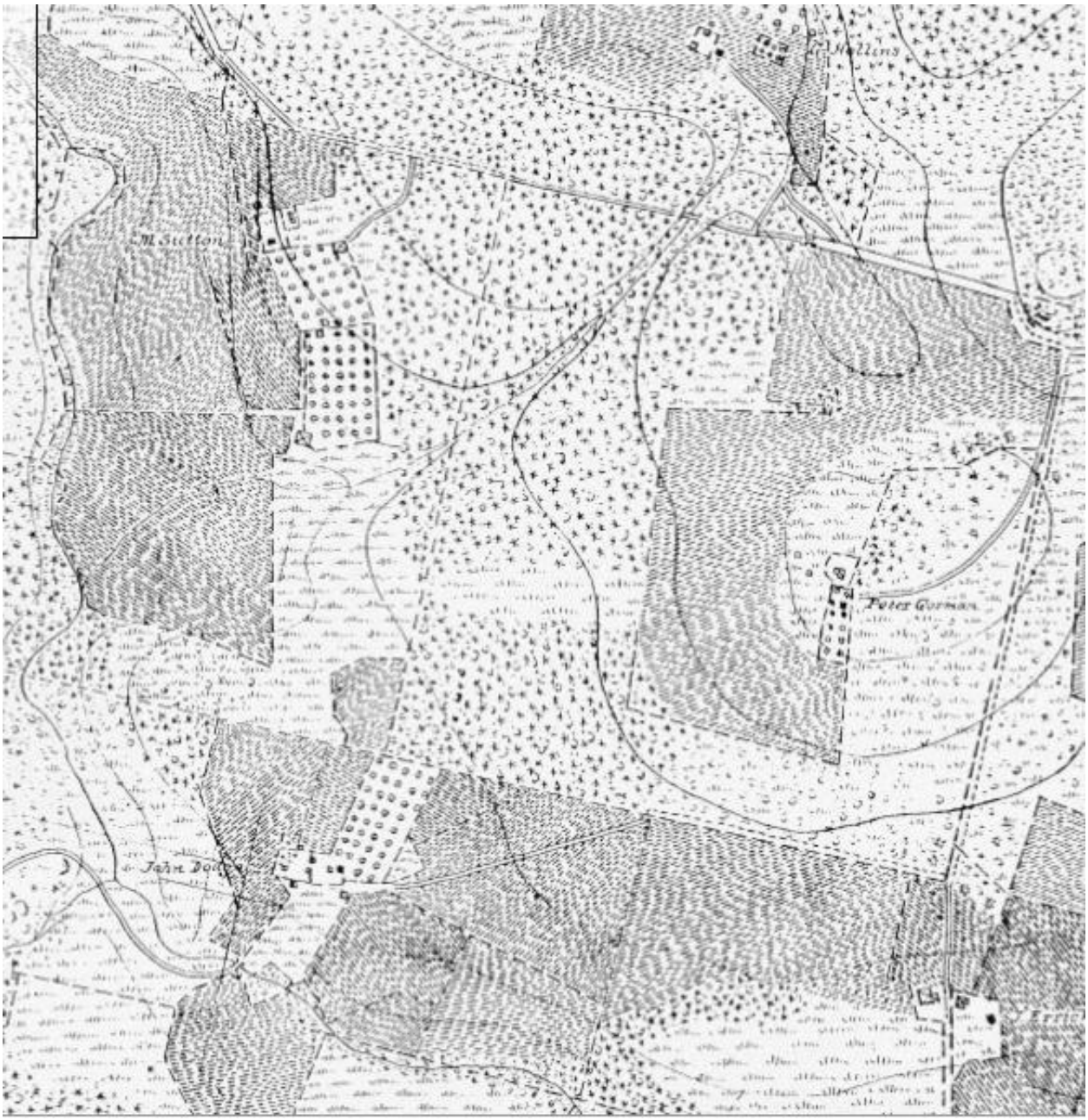
In 1892, ***Charles H. Sutton*** "of King County" bought the property from J.C. Archambault and his wife Mary. Sutton was born in Durham County, England on November 2, 1841. After coming to the United States he married Anna

Agnes Lutrick (Lotritz?) (1850-1933) in 1868 and they had nine children. They moved to Renton around 1878 and then came to San Juan Island in 1892 and bought the San Juan Valley farm from the Archambaults. Among the crops C.H. Sutton farmed was hops (along with neighbor to the south E.P. Bailer, who had a hop dryer); there are several accounts in 1894 of him spraying the vines for lice and harvesting the hops. The 1901 *Supplement to the San Juan Islander* noted that "He has ninety acres under a high state of cultivation on his place, and in addition to other farm builds he has a first-class hop house 24x24 feet in size. When he died in 1913 in addition to being described as a "very earnest Mason" he was "…a very quiet, unassuming man, the soul of honor in business transactions and very highly respected by all whose privilege it was to know him well" (*San Juan Islander* February 14, 1914 p.5).

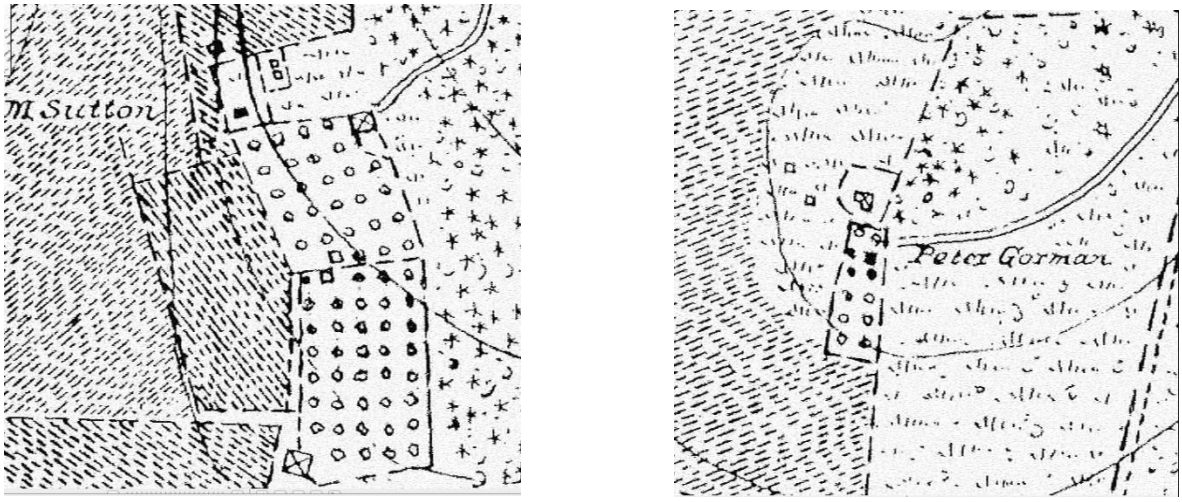
By the time (1897) the US Coast and Geodetic Survey mapped San Juan Valley, they encountered several mature farms, including Sutton's place (it seems to read "I.M. Sutton", but was clearly Charles H.'s) to the north, with extensive cultivated fields along the stream bottom and a large orchard (probably the one established by Archambault); a smaller orchard among cultivated fields, with several buildings, at John P. Doyle's to the south; and more cultivated fields and an orchard to the east at Peter Gorman's. There is also some marshy areas and meadow land as well as wooded areas, probably all used for pasture.

San Juan Valley farmers continued in patterns that were established by the homesteaders: raising barley, oats, and wheat; pasturing their livestock on fields; and milking dairy cattle for cream as a market crop. Starting in 1922, a major crop in the Valley was green peas for canning. During the 1920s and 30s, the San Juan Islands Cannery, under the direction of John M. "Pea" Henry of Spokane, canned peas at its facility on Friday Harbor waterfront (near where the Port of Friday Harbor offices are today). Many Valley farmers planted peas, usually in a four year rotation for each field. Peas were not only a lucrative crop—$60 per ton, and a farmer could grow about two tons per acre—but the stripped pea vines could be used as fodder for dairy cattle. Peas were harvested and then taken to the twenty or so stationary "viners," machines fed by a crew of 5-6 men, and then the peas were hauled away to the cannery in town. During this time the Cannery bought up several large farms from the families of first settlers, such as Mary Gorman (the widow of Patrick Gorman). In 1939, the floor of the cannery collapsed, sending some 10,000 cases of canned peas onto the floor of the Harbor. While these were fished out and repackaged, the invasion of the pea leaf weevil the following year (1940)

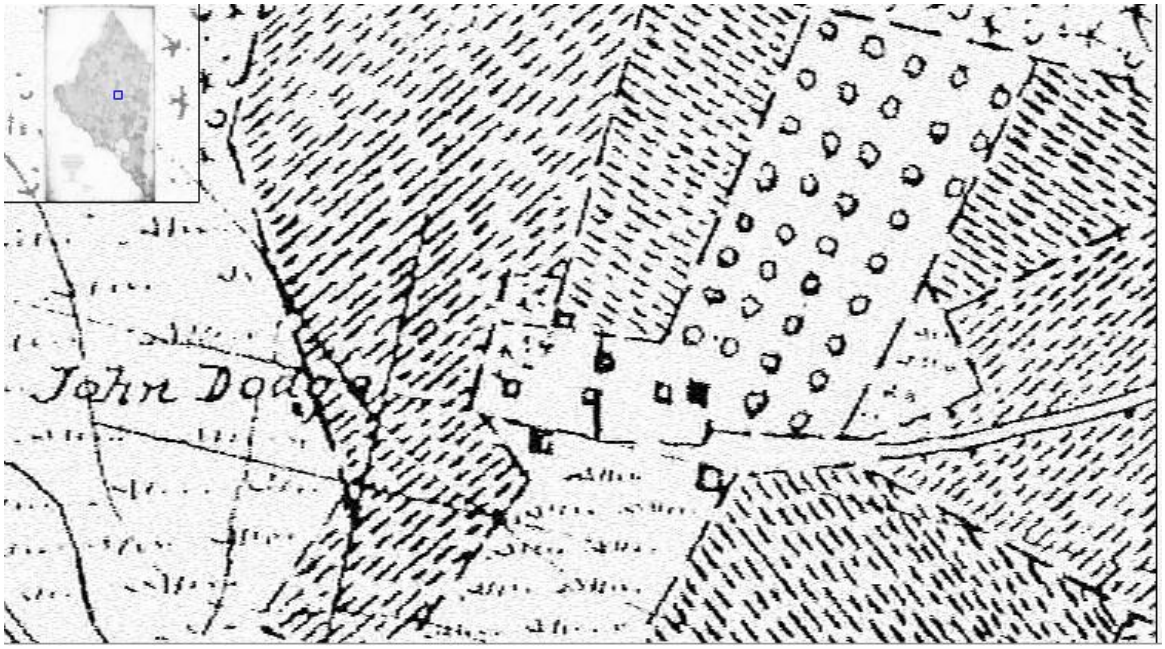
soon led to crop failure and the demise of the first phase of the pea industry. The cannery building was subsequently demolished during World War II ("Pea Harvest" *Friday Harbor Journal* 1964; Smith 1977; Surina 2001).



Detail of 1897 US C&GS T-sheet: Sutton, Gorman, and Doyle farms



Details of 1897 US C&GS T-sheet: Sutton (left) and Gorman (right)



Detail of 1897 US C&GS T-sheet: John Doyle

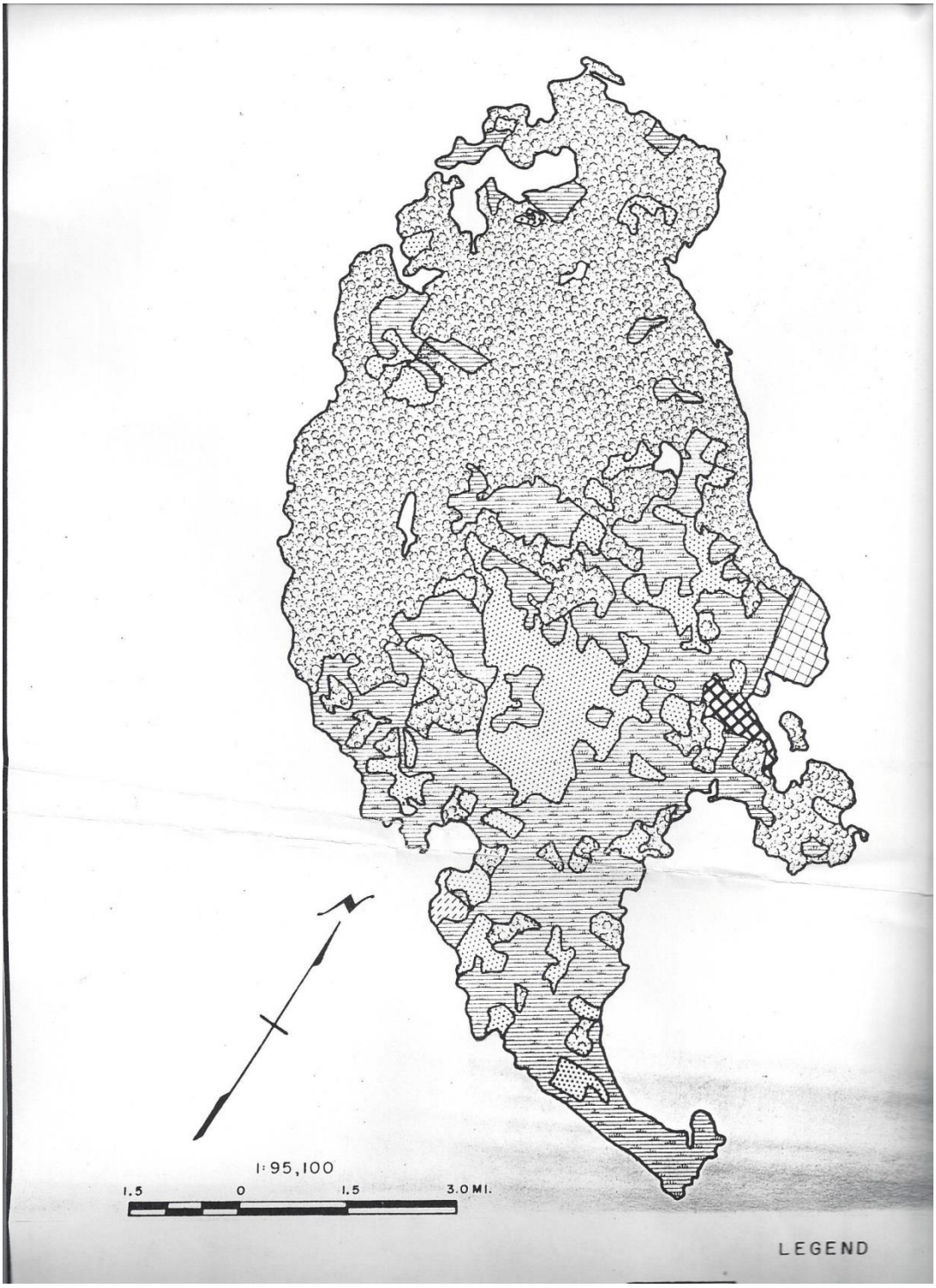
Post World War II Farming

San Juan County agriculture in general, and San Juan Valley farming in particular, began to decline around the time of World War II. The US Federal Agricultural Census, held every five years, tells the tale. The total number of farms in the county had reached a peak of 566 in 1925 and then begun to fall, finally reaching a nadir of 117 in 1974. By 1954, agricultural labor constituted only 28% of the county work force. The total number of acres farmed reached a peak of 68,017 in 1940, but then also began to decline. Several factors contributed to this. Transportation for export of crops from the islands became

more expensive, placing the San Juans in greater competition with the mainland.

Dairying, an important component of the Valley economy, declined, and in its place beef cattle assumed a more prominent role. The demands for beef during World War II grew considerably, while labor for milk production was challenged by the growing requirements of manpower in the war effort. In 1949, the Washington State Legislature passed the "Fluid Milk Law" (Grade A Milk Ordinance), which required stricter rules for production. County-wide, dairy cattle, some 3,000 strong in 1954, declined to 372 just five years later, and the creamery in Friday Harbor closed in 1962. During the same period, beef cattle—less labor-intensive—rose from 400 in 1950 to over 2,000 five years later, and have fluctuated from 1,200 to 2,000 plus during the years since then.

Several studies in the mid-1950s draw a fairly comprehensive picture of farming in the San Juan Islands in general and San Juan Valley in particular. The first of these occurred in 1952-1953 when several students studied the agriculture of San Juan Valley as part of a field school in a geography course at University of Washington. They surveyed farmers and did research on historical trends in crops and farming methods. The students noted the preponderance of livestock farming, particularly as a source of market income, with the main emphasis on sheep raising but also dairying and the rise of beef cattle: at the time, 31 farms were selling dairy products, 22 were selling sheep or wool products, and 19 were selling beef. Grains—wheat, barley, and especially oats—were also important crops, but largely for internal consumption rather than the market: only 7 farms were selling hay or grain. A paper by Henry H. Davis, "Part Time Farming on San Juan Island" (August 1952) noted the changes in the economy of farming in the islands following World War II, noting the growing trend towards taking jobs off the farm. In terms of irrigation, the "Farm Water Supply Census," compiled by George H. Smart in the summer of 1953, noted 26 farm ponds, with 4 planned, and 7 irrigation systems: 4 sprinkler, 2 pipeline, and 1 ditch (and 4 planned). A summary Map of "Land Uses of San Juan Island" (July, 1953) indicates that the main area of crop lands on the island was centered in San Juan Valley, with outlying areas near American Camp, Beaverton Valley, and West Valley on the north end. A more detailed map of the Valley by Duilio Peruzzi, also compiled and drawn in the summer of 1953, indicates large areas of "Forage" or "Pasture" as well as some specific fields of "Grain" in the Zylstra Lake area.



Land Uses of San Juan Island: dotted areas are crop land
(San Juan Valley Study, July 1953)

Detail of 1953 San Juan Valley Study Map: horizontal orange stripes are grain; vertical green strips are forage; and green horizontal stripes are pasture (San Juan Valley Study, Duilio Peruzzi Summer 1953)

A second important study was the 1956 "San Juan County Agriculture," part of the County Agricultural Data Series. Based on the 1954 US Federal Agricultural Census, the study includes additional data on the history of farming in the county as well as comparison of past census information. In noting that Agriculture played a smaller role in the county's economy—28.2% of workers, still the largest group but followed by Manufacturing (18.4%) Miscellaneous Services (17.1%), Retail and Wholesale Stores (10.5%), and Construction (9.1%)—it noted that the value of crops mainly resided in livestock, particularly beef cattle. Of the total value of county farm products in 1954--$641,240—27.6% was in Cattle and Calves, compared to only 11.4% for Dairy Products, Milk and Cream, and 6.6% for Grain and Hay Crops. While the number of beef cattle in the county was less than dairy cattle in 1954 (1,900 vs. 2,000), the value of the stock was higher, making up 35.4% as opposed to 33.2% for Milk Cattle of the total value of livestock in 1954. Of particular interest is the section on "Irrigation Facilities," which noted that there were only 5 farms that irrigated their land in 1954 (down from 7 in 1950), with a total of 80 irrigated acres—44 in crops and 36 in pasture.

In 1962 the Soil Conservation Service of the US Department of Agriculture, in cooperation with the Washington Agricultural Experiment State, published the *Soil Survey [of] San Juan County, Washington*. The field work was done in 1956, and aerial photos were taken in 1960. The report not only identified soil groups, characteristics, and capabilities of farmland throughout the islands, but also offered general information about the county in terms of physical characteristics, history and development, and agriculture specifically, based largely on the 1954 US Federal Agricultural Census. A specific mention is made in the report about water supplies:

> Supplemental irrigation is used by a few farmers, primarily during July and August. The water for irrigation is taken from lakes and small reservoirs on the farm. Only a small part of the acreage used for agriculture is irrigated, but the size of irrigated acreage increases each year (*Soil Survey* p.68)

In the area that was to become Zylstra Lake it shows False Bay Creek meandering through soils of Coveland gravelly silt loam and Roche gravelly loam with outcrops of Roche-Rock.

In 1945, there was a brief foray at raising strawberries on about 40 acres in the Valley. The main effort at revitalization of crop farming in the Valley came in the mid-Fifties with a revival of pea growing. In 1945, San Juan Islands Cannery quit-claimed their holdings in the Valley to Warren Russell, former manager. In January of 1956 Russell and his wife Wilma sold the properties to San Juan Valley Farms, Inc., represented by George P. Jeffers of the Friday Harbor Packing Company, the other cannery located on the Friday Harbor waterfront (where Cannery Landing, near the ferry terminal, is today). Eventually some 450 acres of peas were planted in San Juan Valley. According to Tony Surina, who worked in the fields, peas were planted that year, after the land had been plowed and disked at several angles, fertilized, and disked again. The seed was planted with a drill, which could cover 10 acres per day; the soil was then smoothed with a float or drag. When the weeds emerged the plants were sprayed with "Pre-merge" and sometimes crop dusters flew the Valley. Harvest occurred around the 4th of July, when the pea vines were cut and winnowed with an Oliver tractor and the pea viners—this time mobile—separated the peas, which fell into boxes that were then hauled into town for canning. In 1958 and 59, the soil were planted in oats and barley to build the soil. George P. Jeffers built the Friday Harbor Canning Company, a freezer operation, in 1960. In 1961 and 1962 450 acres were planted, with the peas frozen in 50-lb totes at the plant which ran 18 hours a day. The year 485 acres were planted—1966—the yield was 700 tons. Grain was planted in 1965,

1960 Aerial, Section 17, T35N, R3W

1960 Aerial Photo, Section 20, T35N, R3W

and the next year proved to be the last of the peas, when 480 acres were planted on land leased to the Evergreen Factors (Dick Smith and Curtis Johnson of LaConner). Most of the San Juan Valley Farms land was then sold to Ernest Gann and Fred Zylstra ("Pea Harvest" *Friday Harbor Journal* 1964; Smith 1977; Surina 2001).

Fred Zylstra and Wooden Shoe Farm

Fred Zylstra was born on March 22, 1902 in Surhisdanfawn, Holland. He arrived at age 17 in the United States and moved to Seattle in 1922. A year later, on February 14th, he married Rena Dorris Hambley (1900-1995) in Whatcom County. They stayed in Washington State, but in several towns and cities: Bellingham (1920-1930s); Seattle (1935); Wapato (1940); Everett (1950); and Spokane (1958). In 1945 Fred Zylstra founded Northwest Kitchencraft, a direct sales firm for cookware products. He then started the Rena Ware Company, a firm specializing in stainless steel cookware; at the time of his death it was the largest direct distributor of that product in the world. Fred Zylstra died in Friday Harbor on August 14, 1968.

Zylstra began buying land in the Valley in 1960. On July 5th he (and Karen Straus) bought SE¼NE¼, SW¼NE¼' and NW¼SE¼ of Section 20 and SW¼NW¼ of Section 21, T35N R3W from Aileen and R. Smoots; the next year (March 20th) he bought the NW¼SE¼, the SE¼NW¼, and the SW¼NE¼ of Section 21 from Raymond Erickson and Shirley (Erickson) Moree. The next year, Karen Straus deeded the first purchase to Zylstra on March 22nd. Later in 1962, Fred's wife Rena quit-claimed the N½NE½ and the S½S½ of Section 17 to Fred on October 15th; that same day Bernice M. and Charles M. Wall sold it to him.

In the Spring of 1962 Fred Zylstra hired Doane Agricultural Service, Inc. of St. Louis , MO to prepare a study and report on his farm property. The result—*Report on Wooden Shoe Farm, Friday Harbor, Washington* (May 14, 1962)—reveals much about Zylstra's current and planned operation. He had already initiated several projects on the farm, including planting holly as a cash crop, preparing for a herd of purebred Hereford livestock, and repairing older buildings and building several new ones. Zylstra had also begun fencing the pastures with his distinctive concrete posts, woven wire fencing, stranded barbed wire on the top and a rabbit netting placed 10-12" along the ground and covered with soil. The report recommended continuing in that same direction by setting up a livestock operation for sale of breeding stock and supplementing the farm income with a cash crop of holly. The original order of

Herefords—10 cows, 10 one-year-old heifers, 10 calves, and 1 bull—would be expanded to 75 head (56 animal units), that would yield 25 salable stock per year. Holly plantings would be expanded from the initial planting of 12 acres to an additional 15, making a total of 27 acres—a long term crop, but one that could be quite profitable. Pastures were to be maintained with a mix of orchard grass (*Dactylis glomerata L.*), Alta fescue (*Festuca arundinacea*), New Zealand white clover (*Trifolium repens*), and birdsfoot trefoil (*Lotus corniculatus*), with a supplemental planting (about 15 acres) of brome and alfalfa. As for infrastructure, the report recommended a serious pit silage operation (29 feet wide, 74 feet long, and 7 feet deep) as well as construction of a rat-proof granary. Water for the livestock was to come from wells at the old farm house and Zylstra's residence across Valley Farms Road at the old Erickson place, with several water lines running to nearby pastures.

Water retention for the purposes of irrigation on the Zylstra property seems to have occurred in two stages. The 1960 aerial photos used as the basis for the 1962 *Soil Survey* indicate that False Bay Creek takes an unobstructed, meandering course through the property. By the time of the Doane Report (1962), a smaller, lower lake is indicated, and the report itself offers suggestions for systematic irrigation of croplands. But they concluded that only 20-25 acre-feet were available, and counselled that if applied twice 3" at a time, 40-50 acres of land could be irrigated (Doane Agricultural Service Report pp. 19-21).

Zylstra began planning and constructing a dam for the lake in 1963. An August 15th article in the *Friday Harbor Journal*, "Construction Underway On Wooden Shoe Farm Dam," Mike O'Keefe of the Soil Conservation Service stated:

> Tentatively scheduled for completion by the first of September, the dam will flood 48½ acres of land and provide supplemental irrigation for 80 acres of cropland. The structure will be approximately 300 feet long, have an embankment fill of 8,254 cubic yards, a maximum height of 17 feet and store 288 acre feet of water.

Construction was made possible with technical engineering assistance through the Agricultural Conservation Program for wildlife conservation practices with soil and water benefits of the Soil Conservation Service (SCS), locally administered through the San Juan Soil and Water Conservation District No. 43. (SCS personnel noted that the design was based upon a ten-year old plan of a former landowner.) O'Keefe claimed that "when completed this earth structure will cause formation of the largest man made lake in the State of

Washington built by a private individual." A subsequent article on October 17, 1963, "Irrigation Dam Ready on Wooden Shoe Farm," noted several features for wildlife, including an island built as a nesting place for wildfowl and stocking with trout (Appendix A). There was also some speculation as to when the lake would actually fill and begin to run over the spillway (*Friday Harbor Journal*, October 17, 1963 p.1). On May 4th, 1964, Zylstra obtained water rights to an "unnamed stream" a tributary of False Bay, in the S½NW¼ and NW¼SE¼ of Section 20 and SE¼NE¼ of Section 20, T35N R3W. The amount of water withdrawn was not to exceed "0.39 of a cubic foot per second, 80 acre-feet per year, for irrigation of 40 acres, and 0.01 of a cubic foot per second for stockwater."

Construction of Zylstra Lake fits within a larger pattern of pond-building in the islands at the time. In the 1960s the *Friday Harbor Journal* featured stories on the construction of several ponds, including a 1966 article entitled "Man-Made Ponds Popular in San Juans," which stated that there are "approximately 200 man-made ponds" in the islands and concludes with "Landowners in San Juan County are encouraged by the local Soil and Water Conservation District to consider more water retention on their property" (*Friday Harbor Journal* March 3, 1966 p.3). Among the ponds and lakes built on San Juan Island with assistance from the SCS were those for Bud Wold (1963), Erik Erickson (1964), and Gordon and Lois Jorgenson (1966). It should be noted that the 1975 report on the *Geology and Water Resources of the San Juan Islands* emphasized that "Zylstra Lake, which on the average supplies about 300 acre-feet, is the most important irrigation water reservoir in San Juan County. About 400 acres of farmland in San Juan Valley are irrigated with this water" (*Geology and Water Resources* p.71).

Wooden Shoe Farm operated principally as a cattle farm, with an additional cash crop of holly. Zylstra raised pure-bred, registered poled Herefords, principally as breeding stock. He would have auctions at the farm, where bidders would come to buy his bulls. He had a foreman or farm manager, who lived at the house on the farm, to do the day-to-day operations. Through the years these included John Burton, Clyde Sundstrom, and Tom McClellan. In addition to his son Joe, Zylstra also hired local men and teens to do summer tasks such as moving irrigation pipes (usually twice a day) and cutting, baling, and storing hay. In addition, silage was swathed and transported to the pit silo. Guard Sundstrom recalled haying, moving irrigation equipment, putting up silage, and even cutting between the holly bushes with a sickle bar mower.

In addition to the agricultural fields and pastures, a large part of the improvements to the farm was infrastructure. The Doane Report had noted the older buildings on the place, dating them to 1900 (an arbitrary date); Zylstra built several new buildings. Guard Sundstrom worked on most of the concrete projects, including molding the concrete fence posts that became a hallmark of the place. He recalled that they mixed the concrete in a mixer on the back of a tractor, producing ¼ yard batches. Bill Funk, who was the skipper of Zylstra's yacht, did construction projects as well as miscellaneous repair work; it was he who built the new barn in 1963. Another defining trait of Wooden Shoe Farm was the color scheme—grey—which was used on all of the structures and even the Case tractors and other machinery (the buildings are currently painted red).

After Zylstra's death in 1968 Wooden Shoe Farm continued operations for a while, but eventually the property was purchased by Charles (Chuck) and Mary Tomas in the 1980s.

Sources

Surveys and Maps

Appendix C: Report of George Gibbs, Geologist, of an Examination of San Juan Island and of the Cowitchin Archipelago and Channel [Addressed to Archibald Campbell, Esq., U. S. Comm. N. W. Boundary Survey, April, 1859]

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Tony Surina, "The Strawberry Field," *San Juan Historical Museum Newsletter*, p.4

Tony Surina, "Pea Farming in San Juan Valley," *San Juan Historical Museum Newsletter*, Summer 2001, p. 2-3

Interviews

Interview with Guard Sundstrom, Boyd C. Pratt, January 27, 2016.

Interview with Gregg Black, Boyd C. Pratt, February 2, 2016.

APPENDIX A

Irrigation Dam Ready on Wooden Shoe Farm

Mike O'Keefe, Soil Conservation Service

The earth fill irrigation dam on the Wooden Shoe Farm on San Juan Island, constructed by Fred Zylstra, is now ready to perform its primary function. It's 17 foot height will impound 288 feet of water over a surface area of 48½ acres. The water will be used to provide supplemental irrigation for adjoining hay and pasture land. Plan and specifications for the dam were originally drawn up by the Soil Conservation Service ten years ago for a prior landowner.

To the casual observer the spillway site appears to be very large for a dam this size. Size is dictated by the amount of watershed area above a dam. The watershed area in this case comprises some 3,330 acres of land. Considerations such as amount and frequency of rains, watershed cover, type of vegetation and a safety allowance factor to provide for a maximum storm frequency over a period of 25 to 100 years determine the extent of any given spillway. The upstream face of the dam is protected by rock rip-rap of various size. This prevents wave action from eroding the earth fill. Wave action increased by wind will be vigorous due to the size of the lake. The land to be under water has been cleared of all brush and trees that might float and block the flow of water over the spillway.

An island built in the north shallow portion of the lake to be, will provide a safe nesting place for waterfowl. Around the island a moat has been constructed. It will retain water as cropland is irrigated and the lake recedes, providing continued nesting site protection. The lake is to be stocked with trout to provide an added source of revenue and recreation.

There is much speculation as to the exact date the area will first fill and water flow over the spillway. Registered dates range all the way from December of this year until March 1st of 1964. Others maintain the lake will not flow over until next fall. Anyone caring to file an estimated date may inquire locally and duly receive a certificate as to their excellence in watershed hydrological engineering.

The downstream side of the dam has been seeded to a sod forming grass mixture and fertilized to assure rapid growth. All disturbed borrow areas have also been treated to keep erosion losses to a minimum. The exposed slope planting on the dam is being covered with a chopped straw mulch of sufficient thickness to break up rain drop force. This will minimize rilling, fertilizer waste, soil loss and seed wash out.

Dams whether large or small benefit San Juan Island as a whole. The flow of streams to the sea is impeded thereby adding to the underground water supplies vital to well capacity for domestic and other use.

It was originally claimed and published that this man made lake is to be the largest of its kind ever caused to be formed by a private individual in the State of Washington. To date no one has come forth to refute this statement. The San Juan Island Soil and Water Conservation District has a notable first to include among its other accomplishments.

Friday Harbor Journal, October 17, 1963 p.1.