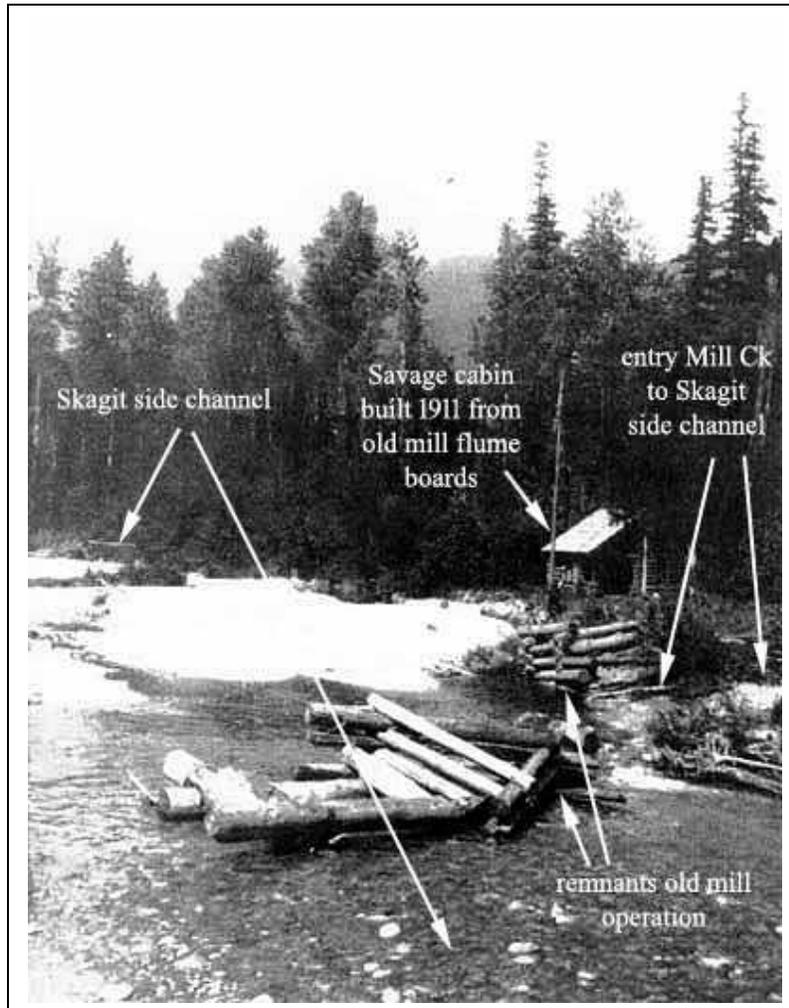


# Mill and Savage Creeks History, and Salmon and Steelhead Use

Bill McMillan, February 2, 2024

## Part I. Earliest Available History Found for Mill and Savage Creeks & to the Present Time



Location of Mill Creek in relation to the former Skagit River channel it was built along. [Probable orientation: the left side of the photo north, the right side south, the top east, the bottom west]

In the above photo, taken about 1924, the former sawmill at Mill Creek was already gone with but remnants as shown by the remaining log structures (maybe used for loading lumber picked up by steamship). The story of the photo and the mill was provided to The Stump Ranch (<http://www.stumpranchonline.com/Birdsview/MinklerSavageMill.html> although the website is not now considered secure, I can provide a copy made a number of years ago), an online journal of Skagit River history by the Boyd family. The photo was provided to the Stump Ranch by Jack Wells of Lynnwood, WA, son of Washington Senator W.V. Wells and former neighbor of Bert Savage, son of George Savage who Savage Creek is named after. It is indicated that B.D. Minkler (known as Birdsey) built the mill, the first upriver in 1877. When George Savage landed there one day while freighting things upriver Minkler showed him a nearby land claim,

which Savage took (the Savage property conservation area today) and the offer to work at the mill. The mill was further described by W.V. Wells:

*"...The mill was operated by water power for a number of years. In 1911, the timbers remaining on the flume were used to build a summer home on a little bench land near the mouth of Mill Creek. In 1923, a logging railroad was built running close to the old mill sight. At that time the penstock which had stood through the years was demolished. The turbine was never removed, it is still lying beneath the ruins of the old mill."*

Stump Ranch further indicates:

*"Birdsey Minkler was done with Birdsvew by 1886 and wanted to try his hand further down-river just west of Lyman, worked up a deal with George Savage to take over the mill. Savage was said to have the mill paid in full by 1888-1889 ... The mill [at the mouth of what we now call Mill Creek] was a success from the start. We had no trouble in running it, but it being run by water power we could only run 4 or 5 months in the year."*

In the photo, Mill Creek makes entry to what was historically the Skagit River channel on the far lower right of the photo. The snowfield in the background and the wider expanse of water in the foreground are part of that former channel. However, by 1924 the channel was apparently already shifting toward being a smaller side channel of the main river. The railroad, that became the South Skagit Highway today, would later be located probably somewhere just behind the tree-line behind the cabin.



Painting of Mill Creek sawmill as remembered by John Savage (a son of George) showing the flume whose water powered the mill. It perhaps included a dam of some sort upstream on Mill Creek to divert water to the flume.

The Boyd family came to later operate the Mill, with its power further described [<http://www.skagitriverjournal.com/Upriver/Uto-Conc/Birdsvew/Boyd/BoydLA2-Mabel1.html>], also indicated to no longer be secure, but I can otherwise provide]:

*“This little mill was run by water power; the water from the creek fell over a huge paddle wheel, turning the saws in the mill with great power.”*

The accuracy of the John Savage painting and its date are not known, but the location of the cabin and the mill are similar to that in the 1924 era photograph. However, the creek channel has been greatly simplified, as is the arrangement of the flume. The background on the painting is from, “Birdsey Minkler, a Man Astride the Skagit”, Chapter 1 (by Noel V. Bourasaw, Skagit River Journal 2002 and updated in 2008 at <https://www.skagitriverjournal.com/upriver/uto-conc/lyman/minkler/minkler01-bio1.html> , also indicated not to be secure but which I can provide a copy).

The logging of the trees to supply the mill was described by Paul von Pressentin, son of early Birdsvie pioneer Karl von Pressentin, in a newspaper article (“Homesteading on Upper Skagit was rough but interesting life, especially for mother.” Charlotte D. Widrig, *Seattle Times*, Dec. 24, 1961; <http://www.skagitriverjournal.com/Upriver/Uto-Conc/Birdsvie/Pressentin/Press13-FamilyList.html> is the source, now indicated to be insecure, but I can provide a copy):

*“We cleared some land, with the help of oxen we rented from the Minklers (who used the oxen in skidding and hauling logs to their sawmill) and raised wonderful potatoes and vegetables.”*

#### Historical Locations of Mill and Savage Creeks Prior-To and After the South Skagit Highway



1937 aerial photo of the Mill and Savage Creek crossing areas of the likely logging railroad at that time

The 1937 aerial photo shows the Mill and Savage Creek probable location areas crossing the logging railroad the South Skagit Highway was later built upon, or next to. However, the lack of definition in the early photo makes details difficult to positively determine.



1969 aerial photo showing South Skagit Highway crossings of Mill and Savage Creek at that time

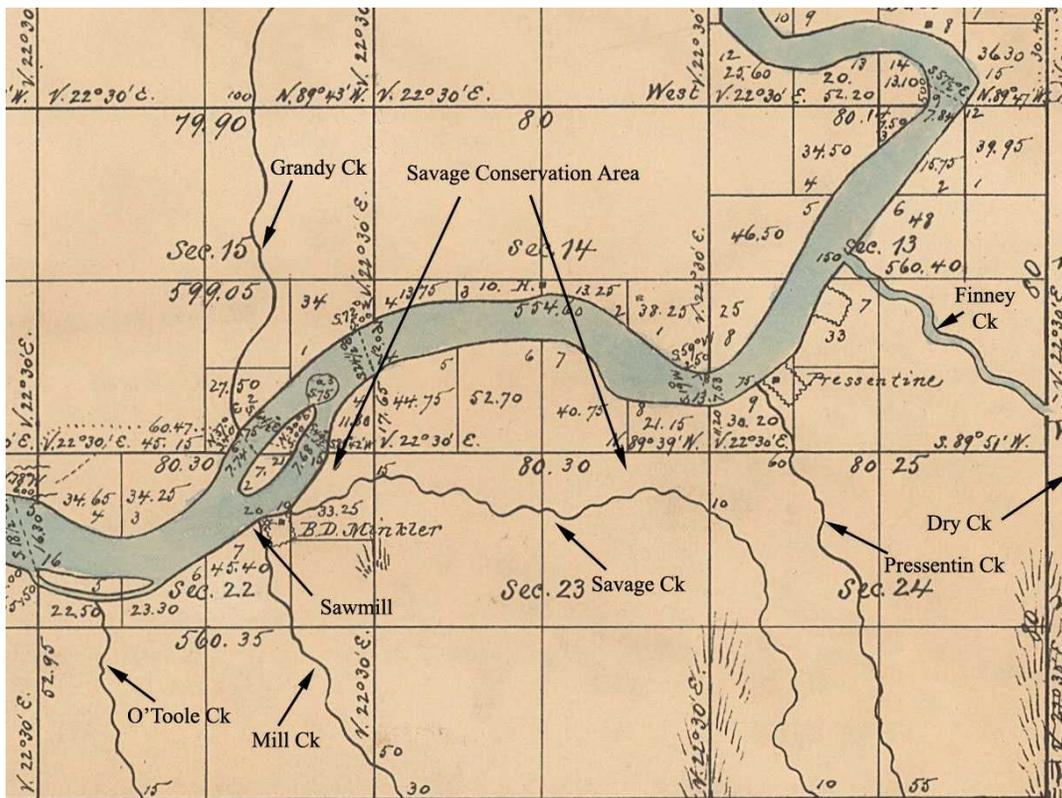
The 1969 aerial photo of Mill and Savage Creek crossings of what was by then the South Skagit Highway appears to show the new cement bridge that likely replaced a former wooden bridge over Mill Creek. The Skagit County 2017 Bridge Report indicates the cement bridge that remains today was built in 1969. The bridge at Savage Creek looks to differ with darker color and may have still been a wooden bridge. Although the photo resolution is much better than that in 1937, it remains that clear determinations about the bridges can't be made.



1969 aerial view of Savage Property area & probable Savage Creek channel locations & old river channel lines

The above 1937 and 1969 aerial survey photographs are available from Skagit County at the following link: [https://www.skagitcounty.net/Maps/iMap/?mapjs=buildamap\\_aerial](https://www.skagitcounty.net/Maps/iMap/?mapjs=buildamap_aerial) . A related Skagit County website at <https://www.skagitcounty.net/Departments/GIS/aerialmain.htm> indicates: The historical paper print aerial photos owned by the County have been scanned and archived and can now be viewed by contacting the [Public Works Department](#). These photos include flights from 1937, 1956, 1966, 1978 and 1993. These scans are not georeferenced and are available by sections. The contact for these was Rachel Vaughan [rvaughan@co.skagit.wa.us](mailto:rvaughan@co.skagit.wa.us) . On December 18, 2024 I sent an email to Rachel Vaughan as indicated above but I received no answer. It would be of considerable interest to compare a 1956 aerial photo of the Mill and Savage Creek crossings, if there are comparable views. Those photos might have better resolution than those by cameras used in 1937.

Skagit River and Mill and Savage Creeks in 1880 Compared to History Since



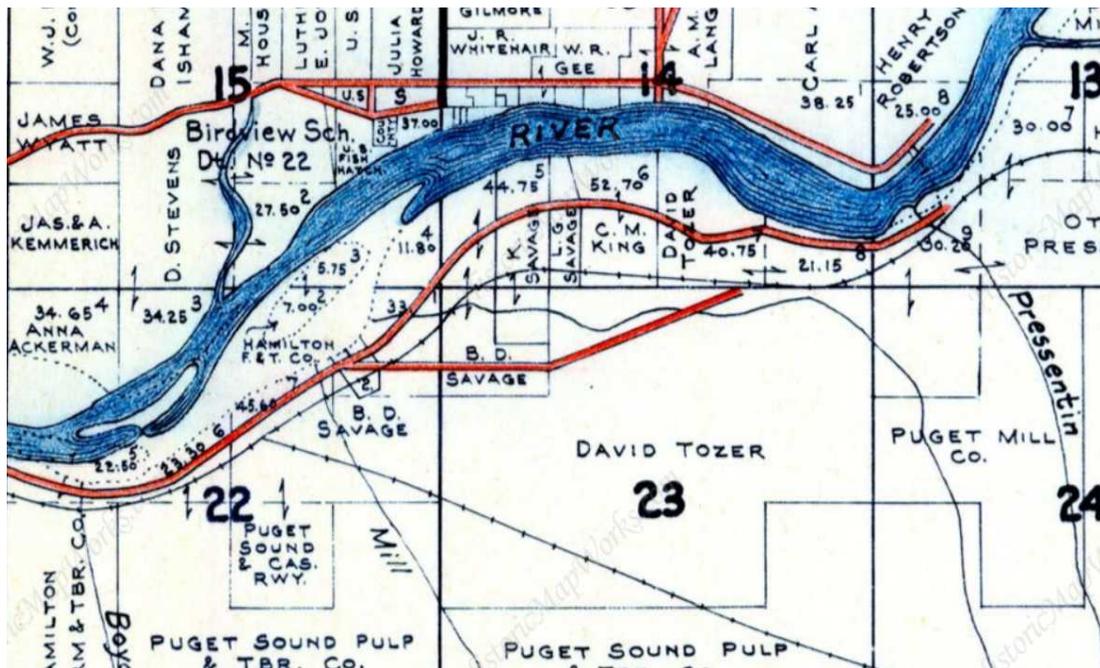
1880 map of O'Toole to Finney Creek of the Mid Skagit River with locations of interest added

The above map is from 1879 surveys as certified in 1880 and cropped from the following source: [https://www.blm.gov/or/landrecords/survey/yPlatView1\\_2.php?path=PWA&name=t350n070e\\_001.jpg](https://www.blm.gov/or/landrecords/survey/yPlatView1_2.php?path=PWA&name=t350n070e_001.jpg) . It is part of, Township: 035-0N, Range: 007-0E, (Willamette Meridian) at the time of earliest land claims along the Skagit River above Mount Vernon. I have added arrows and text to provide geographic reference points for the Mill and Savage creeks historical era, as well as today's Savage Slough Acquisition and Restoration project (shortened on the map to the Savage

Conservation Area). The Savage Slough project is described at <https://srp.rco.wa.gov/project/280/15202> :

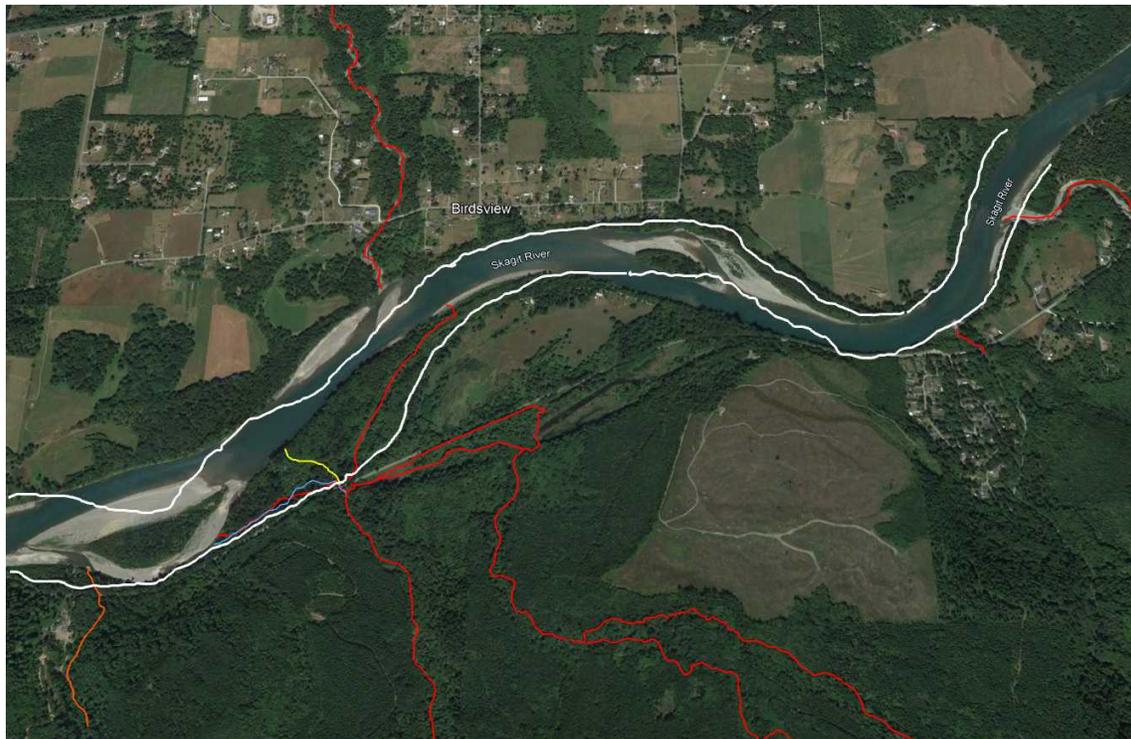
*“The original project scope included the acquisition of 188 acres along the Skagit River in the Savage Slough area, including 3,461 feet of Skagit River edge habitat, the lower portion of Savage Creek, Savage Slough and associated off-channel habitats. Near-term restoration included the demolition of two houses and related structures, removal of an access road and 450 feet of Savage Road, along with riparian planting of 39.4 acres of native species, and 22.3 acres of noxious weed control. The project also scoped the feasibility of the longer-term restoration of relocating the South Skagit Highway to restore floodplain function to the entire site.”*

The lead entity is the Skagit Watershed Council as sponsored by Seattle City Light with acquisition and initiation of the project in 2009 (but actual purchase 2010). The habitat recovery is based on the needs of ESA listed Puget Sound Chinook salmon, ESA listed Puget Sound steelhead, Puget Sound/Strait of Juan de Fuca coho as a species of concern, and with benefits for unlisted Puget Sound/Strait of Juan de Fuca chum salmon, and odd-year pink salmon.



1941 Metzger map of the Savage Property area Mill and Savage Creek and 1880 river channel in dotted lines

The 1941 Metzger map helps to further clarify the 1937 aerial photo of the Savage Property and its division of ownerships by 1941. It also provides the details of where roads were at the time, and that the logging railroad paralleled the South Skagit Highway as far as it went at the time and was along what remains today of Savage Road. Apparently today's South Skagit Highway location was beginning to be extended with its own route that would thereafter connect with Savage Road and beyond Presentin Creek to provide access to the town of Concrete via the 1952 Dalles bridge. Of particular interest, a spur of the logging railroad in its diagonal line from just west of Mill Creek on up toward Savage Creek follows a similar route as today's plans for an alternative South Skagit Highway route intended to alter the present high flow blockage of the Mill Creek bridge by moving the crossing upstream and reducing other present highway impacts.



Google Earth Skagit Map of 2019 at Mill-Savage Ck Area Showing Approximate 1880 Channel

The white lines above represent the approximate location of the 1879-1880 Skagit River channel; the red lines indicate from left to right the south-side tributary lengths surveyed for spawning since 2008-09: O'Toole, Mill, Savage, Pressentin, and Finney creeks, and Grandy Creek on the north side. The short yellow and blue lines are the past shifting outlets of Mill Creek below the bridge, now primarily a tributary of Savage Creek entering above the bridge.

The lower section of Mill Creek has come to be diverted in large part to Savage Creek in recent years as a result of the South Skagit Highway bridge over Mill Creek acting as a dam in high flow events trapping gravel, cobble, and woody debris above the bridge with the resulting diversion. This has become a significant limitation for habitat recovery as former ponds associated with Savage Creek for rearing young salmonids, as well as holding areas for anadromous adults, are increasingly filled with gravel and sediment from the diversion. This will be covered in more depth in Part II regarding salmon and steelhead use of these creeks and associated ponds. The scoping that has occurred, and continues to occur, for relocation of the South Skagit Highway is presumably intended to address the associated habitat problems for salmon and steelhead at present, as well as that of continual expenses for highway repair after high flow events with disruption of highway travel for the local community.

The historical background is important in order to understand the Skagit River as it once was as shown in the 1880 map, and compared to the later maps and aerial photos with associated changes in Savage and Mill creeks resulting as well. In those former times, the Skagit River was noted as a prolific producer of wild salmon and steelhead prior to the long noted "4-Hs" that have occurred in the basin (habitat alteration, and impacts through harvest, hatcheries, and hydro-power).

Notes taken of an October 31, 2009 discussion with John Thompson, a great-great grandson of George Savage who homesteaded the Savage Road area in 1878

1) The Savages initially logged the land to provide some agricultural opportunity as well as for lumber from the mill at Mill Creek. However, the only crop that did well was potatoes which the Savages traded, or sold, to the limited community of local settlers in the Birdsvew area at the time, distributing them along the river by canoe.

2) Birdsvew was platted to be a company town site to accommodate employees that were thought destined to come to mine the iron ore from Iron Mountain on the south side of the Skagit in what might become a steel manufacturing area. This included the platting of the Savage property into lots of one-acre and half-acre sizes. [I found a survey map of 1892 indicating that George Savage also had two mineral claims as part of the O'Toole iron mine.] However, these early visions for iron and coal mining between Hamilton and Birdsvew never came to be as the money from East Coast interests failed to follow. [I suggested to John this may have been during the great national economic panic of 1893-1897 – some indicate the worst in U.S. history.]

3) John remembered as a boy, in either 1969 or 1970, that the South Skagit Highway crossed Mill Creek and Savage Creek with two wooden bridges that were subsequently replaced with the cement bridge for Mill Creek and a culvert for Savage Creek. John indicated he remembered that the Mill Creek wooden bridge was longer than the cement bridge of today.

4) John remembered the finding of significant numbers of freshwater mussels [clams as he called them] in Savage Creek where he commonly fished as a boy. He also remembered that Savage Creek had greater numbers and diversity of salmon and steelhead entering it than did Mill Creek at the time of his boyhood – primarily 1970s. He particularly remembered the large coho, steelhead, and lamprey numbers, but all species returned in a distinct order one after the other in timing [pink, chum, coho, steelhead, and lamprey – and even a few Chinook, and a time or two what appeared to be sockeye he indicated].

5) Savage Creek came to unravel after logging occurred in the latter 1970s or so – maybe early 1980s. He believes that both Mill Creek and Savage Creek were especially impacted by logging of old growth trees that remained at the top of their drainages near the tops of the hills. Once they were gone it resulted in a domino effect of water running unimpeded downslope with resulting slides and debris flows through the second growth trees at lower elevations that was growing back from earlier logging. Since that time the channel widened and the flows became more dramatically fluctuating regarding both summer and winter flows.

6) The land on the South Skagit side historically extended much farther to the north from about opposite Grandy Creek continuing on down to the eddy at Rasar Park until one large flood in the early 1900s or so began the process of erosion resulting in where the channel is today. The original Savage Road continued on downstream along that land to near Rasar Park. [My read on this would be that the gravel island off Mill Creek today is likely a remnant of that land.] He believes the old sawmill site at Mill Creek was north of today's South Skagit Highway, although he was not positive of where the actual location was. Just below the mill [farther north] the Savages built a summer cabin on the east bank of the creek [this cabin is shown in the previous historical photo along with parts of the old mill operation].

Five Historical Savage Property Area Photos Provided by Richard Malsbary, Grandson of Bert & Kate Savage, to Bill McMillan on January 28, 2015



Photo 1: From north side of the Skagit looking at Grandparents home built 1908 on Savage Rd; photo likely ~1910 unlogged hills & dense forest right behind house. [Arrows showing Mill Ck canyon added by Bill McMillan]

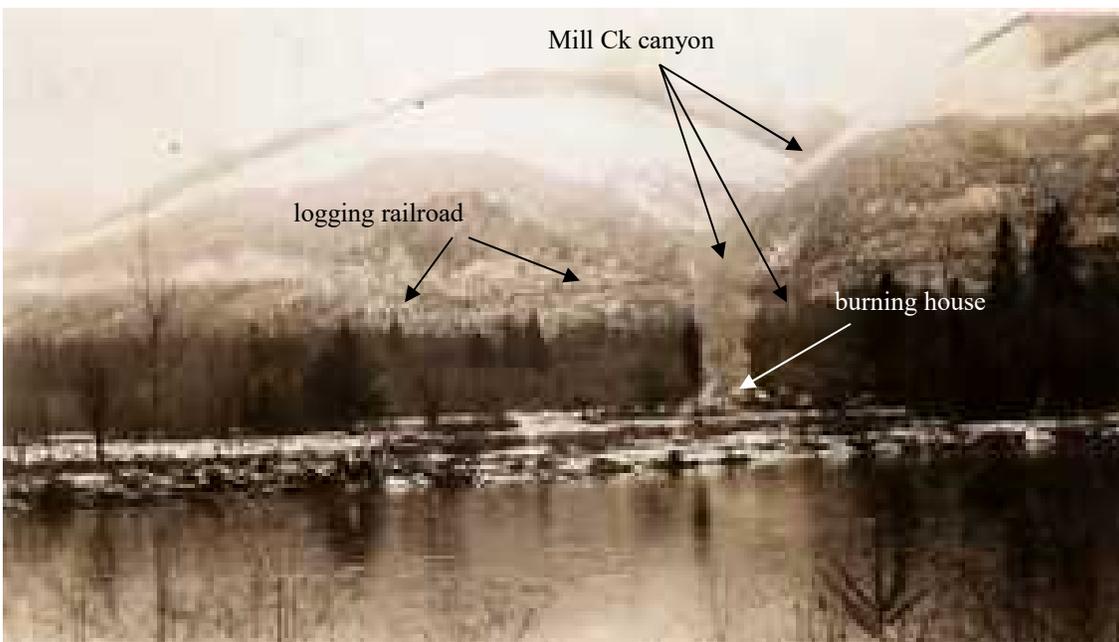


Photo 2. A similar view with Richard's grandparent's house burning Feb 2, 1947 or Feb 9, 1948 depending on source; logged off hills & conifer forest gone behind house; smoke from burning house in tree gap just right of center. [Arrows with descriptions added by Bill McMillan]



Photo 3. Savage ferry & rowboats from north side looking southwest & downstream, likely 1940s



Photo 4. Outboard motor on boat looking from south side to north side with ferry road gap in background late 1940s



Photo 5. From ferry road on north side looking southeast, upstream, at island at top of Savage Rd ... unknown date.

The first five historical photographs were taken near, or at, where the long-time Savage ferry crossed the Skagit. There was no road at the time of these photos on the south side of the Skagit River, and the Savage family members long used their ferry to cross to the north side with access to school, church, and what stores came to be. In earliest times a canoe was used before the ferry, and gradually over time rowboats replaced them (subsequently equipped with outboard motors) if wagons, tractors, cattle, horses, and etc. were not in need of crossing with the ferry.

The first photo shows the south side of the Skagit and its valley hills prior to extensive logging. The photo was estimated to be in ~1910. The second photo shows a similar view on the day Bert and Kate Savage's house burnt down in 1947 or 1948. By that time the Savage property had long been largely logged and cleared, and the hillsides were relatively freshly clearcut back when the logging railroad ran along the hillsides with trestles across the creeks.

The third, fourth, and fifth photos show different views of the Savage ferry crossing. The third photo is a downstream view taken from the north side toward Grandy Creek. The fourth is taken from the south side looking back at the road to the ferry crossing on the north side of the Skagit at a time when no houses were there but with half the land cleared. The fifth photo is an upstream view from the south side ferry crossing toward what was then a small island (now a much larger island today). The main flow at the island was then the river-right side, but is now on the river-left side (river-right, and river-left meaning as looking downstream in river navigation terminology).

In early August of 2010 the Savage Property purchase was finalized with Barbara Thompson by Seattle City Light for habitat recovery (2010 email from Denise Krownbell). Of the two houses that were torn down the furthest one west on the property was found to have been built on top of the old Savage ferry shown in the background of Photo 3. The large ferry timbers that were part of the base of the ferry were still sound after the house was taken down. That house was built in the 1950s as indicated by Mrs. Thompson. This was apparently shortly after the 1952 Dalles bridge provided access across the Skagit to Concrete. This included related connectivity with the extended South Skagit Highway, and it eliminated the need for the ferry.

### More Recent Views of Skagit Valley Hills South of the Savage Property & Old Savage Ferry

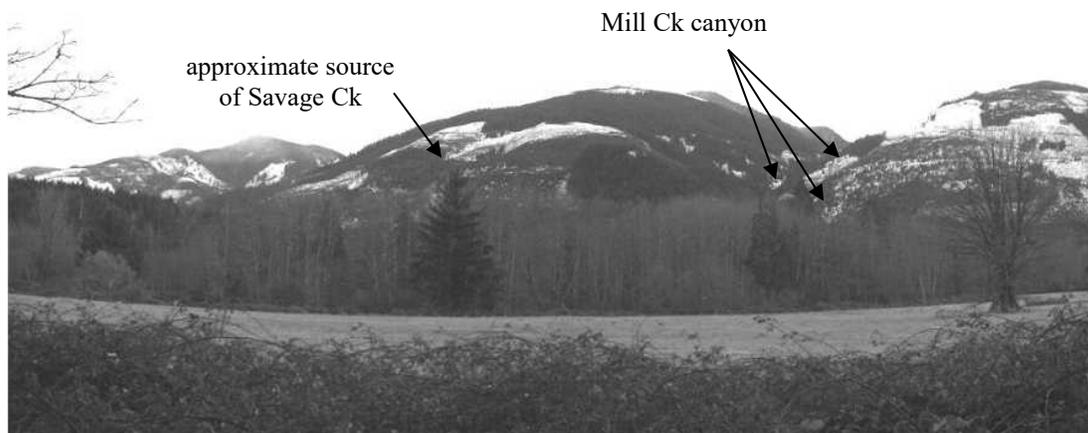


Photo 1: Savage Property view prior to restoration actions, and hills beyond managed for timber harvest (Feb. 2008)

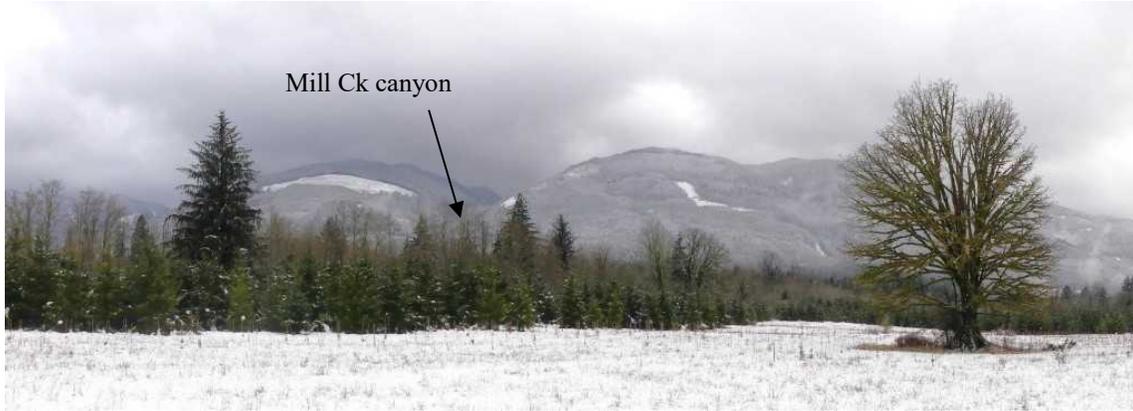


Photo 2: Savage Property view after 17 years of restoration actions, but continuing timber harvest beyond (Feb. 2, 2025)

Photo 1, taken in February 2008, shows the hills bordering the south side of the Skagit Valley as viewed from the Savage Property a year before purchase negotiations. Photo 2 is a similar view as Savage Property restoration has since advanced as of February 2, 2025 showing a new growing forest within the property itself. But there remains continual loss of forest in the upper drainages of the creeks from the hillsides. The views of the hills are similar to that in the first historical photo shown taken in 1947-48, and with continuing logging clearcuts, or initial reforestation of other past cuts in the hills that will be cut yet again. It is the history of this logging that has resulted in the ever increasing bank failures for over a quarter mile along Mill Creek beginning about a quarter mile above the bridge, likely even more continuing beyond.

The logging history has increased winter run-off with rain-on-snow events, or even just heavy rainfall, due to the large extents of acreage denuded. It results in great amounts of soil, wood, rock, and gravel deposition flowing downstream with each event which the South Skagit Highway bridge then blocks and then diverts the creek as the only option for its outlet. As climate change progresses, these high flow events will continue to occur with more frequency.

The logging history has also greatly impacted Savage Creek with an ever wandering stream channel in its mid-reach just beyond the highway on upstream about a half mile. Beaver dams may have been numerous once, and large old growth stumps remain to tell the forest story.



Photo 3: The remains of the old Savage ferry landing on the south side of the Skagit River (May 2024)

The old Savage ferry location on the south side of the Skagit River is now part of the Savage Property acquisition. Flood waters the past 20 years have exposed the old wooden framework, but the cement apron in front of the wooden frame was visible earlier. For a number of years it was a curiosity to me until the frame was exposed. On the Skagit north side there remains the excavated slope down to the river that led to the north-side ferry landing.

## Mill Creek Bridge and Savage Creek Culvert in More Modern History

### Background

My own personal history with Mill and Savage Creeks began when my wife and I moved to the land now surrounded by the Savage Slough Acquisition and Restoration project in 1998. At that time I was employed by Wild Fish Conservancy (then Washington Trout) as a field biologist doing habitat and spawning surveys, assessing culverts for fish passage, determining upstream extent of tributary fish distributions, discovering the impacts on salmon in urban streams, and determining near-shore juvenile salmon use along Whidbey Island. On initially moving here, Mill Creek was the first stream I came to voluntarily walk and sample for species distribution in 1998. After retirement in 2007 I shifted to more detailed spawning surveys at nine Mid Skagit tributaries (including Mill and Savage creeks) with 100-200 such surveys per year. As a result, I have come to observe and record what changes have occurred on Mid Skagit tributaries for 27 years. I similarly did so at Columbia River tributaries in 1979-1996. My observations at Mill Creek are broken out below in three time phases in this more recent history.

### Phase 1. Early 2000s



Photo 1. Upstream view of earlier Mill Creek bridge impacts after upstream bank failures (Feb. 2002)



Photo 2. Downstream view of earlier Mill Creek bridge impacts after upstream bank failures (Feb. 2002)

My first species sampling survey with recorded details by species at Mill Creek was in June of 1998 from just above the bridge on upstream to a particularly high gradient shift about one mile upstream. In 1998 Mill Creek below the high gradient reach occupied a very different stream channel of meanders, spaced intervals of low gradient gravel areas, large wood creating pools, and then increasing boulder-drop pools as gradient increased. Although it undoubtedly wasn't what it once was, significant bank failures were absent. As shown in photos 1 and 2, Mill Creek began to dramatically alter about the time of the 2002 event portrayed.

Phase 2. From the early 2000s to about 2015



Photo 3. First evidence that bridge diversion of Mill to Savage Creek may become permanent (Dec. 12, 2010)



Photo 4. Downstream view to Mill Ck bridge similar to what it historically was but awaiting problem (Apr. 21, 2011)



Photo 5. Downstream view from Mill Ck bridge as similar to what it was in the 1969 aerial photo (Apr. 21, 2011)

However, from 2002 to about 2015 (Photos 3-5), while annual changes increasingly occurred at Mill Creek beyond upstream view from the bridge, visually the channel from that point above the bridge to entry to the Skagit was relatively little changed, and likely reflected relative historical continuity back to 1937-1969 aerial views. Nevertheless, the bridge in high flow events continued to result in overflow diversion with evidence of future potential permanence in December 2010 (Photo 3) as the trees and rootwads that had been buried to try to prevent further diversions were dislodged with a deep diversion channel cut to Savage Creek.

Although permanence of the diversion channel did not immediately occur, in the winter/spring of 2011 (Photo 4) it was clear that with those former blocking trees and rootwads displaced by the 2010 flow event it would lead to an eventual complete shift of Mill Creek to that diversion. Deposition was increasing below the bridge as well, and an overflow channel turning 90° to the west to the Skagit River about 75 feet below the bridge began to enlarge in the winter of 2014 (Photo 5 shows that overflow channel location before it enlarged). This overflow channel, as with another below it leading west rather than north, followed the Skagit River channel depicted in the 1880 map, and with its remnants still visible in the 1937 and 1969 aerial photos. However, it would not be until about 2016 before this new westward channel below the bridge would come to dominate Mill Creek outflow to the Skagit River with its extended length from that of the northward former channel.

Phase 3. About 2016 to the Present Time

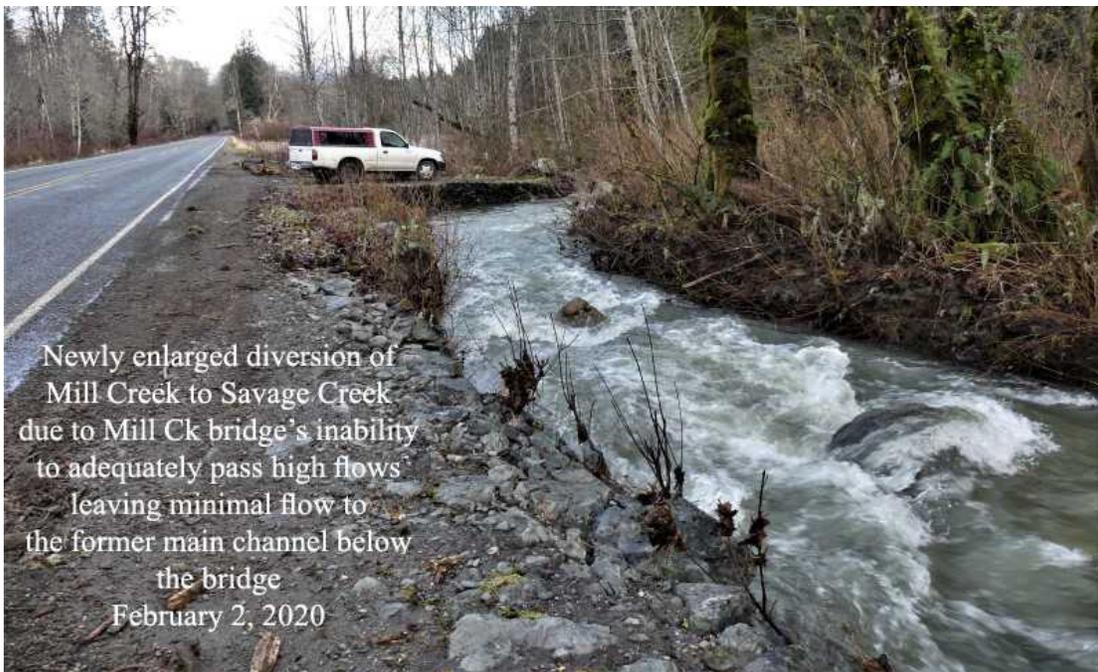


Photo 6. The text with the photo explains the situation and was sent out to Skagit interest parties (Feb. 2, 2020)



Photo 7. This shows the well intended fix that occurred in August of 2020 to try to prevent diversion of Mill Creek to Savage Creek and pond above the bridge; the raised bed was lowered, blocking wood removed, and trees with rootwads were again place at the entry to the diversion channel in hopes of minimizing flow to it; however, what little flow occurred at the time, as indicated in the text, led directly to that diversion channel.

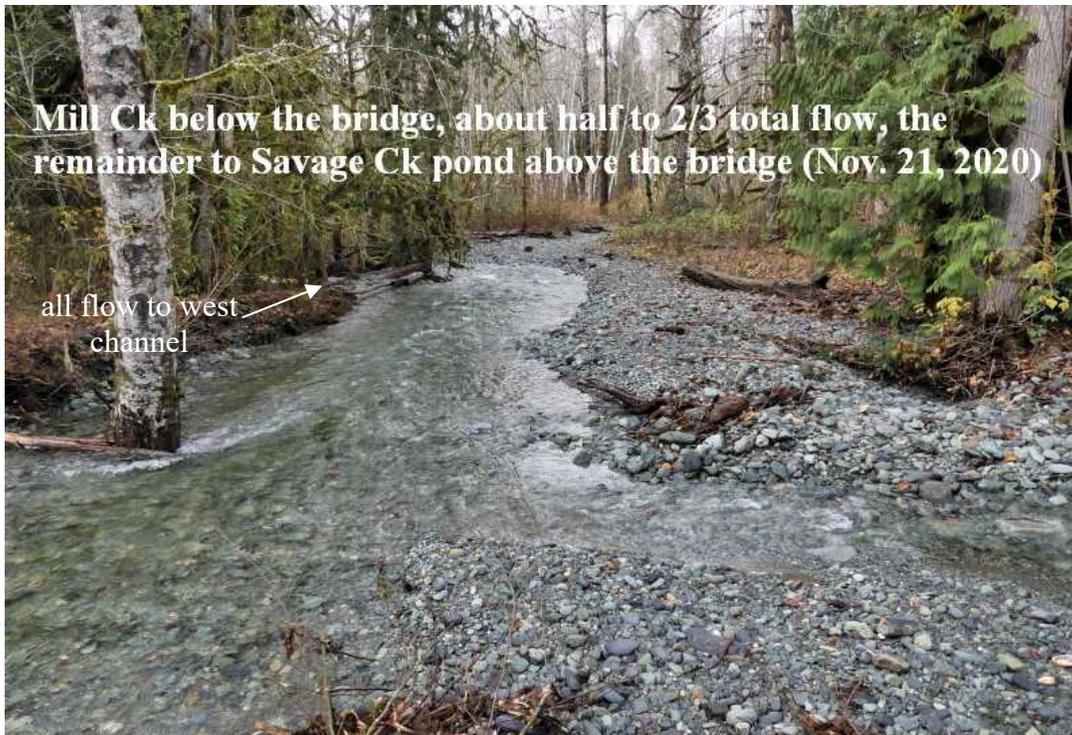


Photo 8. November 2020 freshets resulted in flow again below the bridge leading west to the Skagit (Nov. 21, 2020)

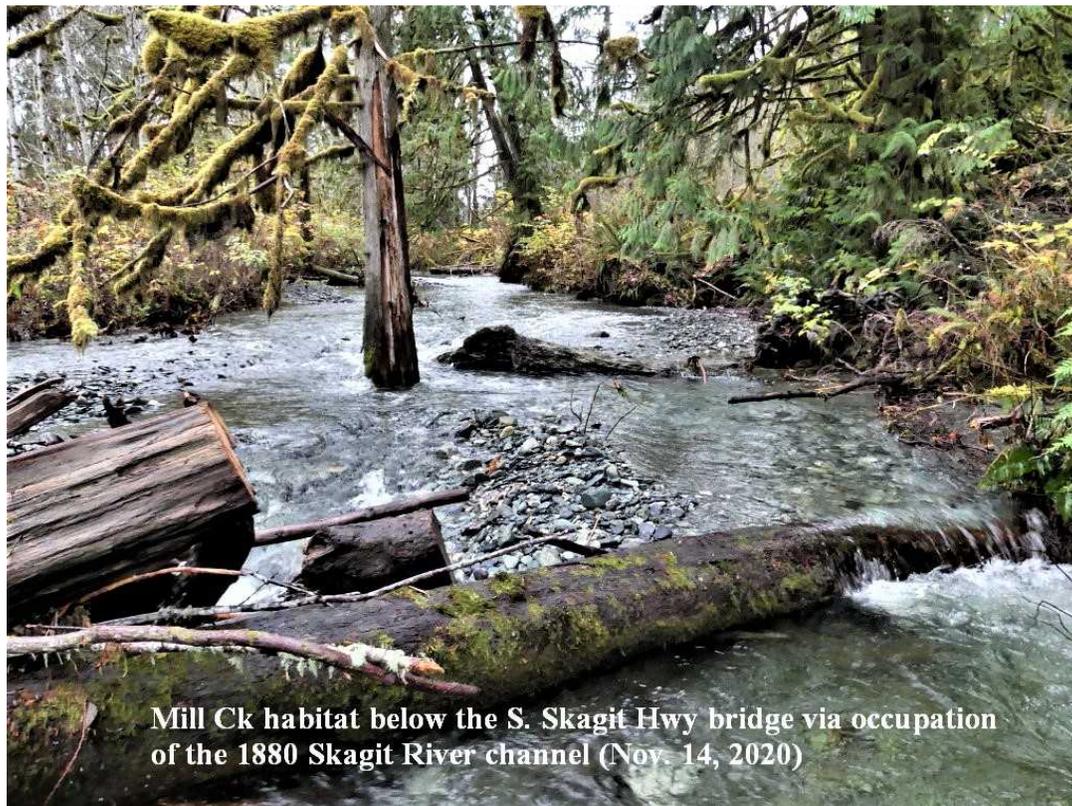


Photo 9. Mill Creek flow as reestablished to the extended length of the old 1880 Skagit channel (Nov. 14, 2020)



Photo 10. Results of high flow event at Mill Creek bridge with all flow to the diversion channel (Dec. 6, 2023)



Photo 11. About half Mill Creek flow restored below the bridge but not the west channel to the Skagit (Jan. 25, 2024)



Photo 12. Downstream view to Mill Ck bridge with complete diversion to Savage Ck to right (Jan. 17, 2025)



Photo 13. Downstream view from Mill Ck bridge, ribbons of dewatered salmon redds center left (Jan. 17, 2025)

Beginning in 2015-16 the deposition from increasing upstream bank failures and dramatic channel shifts continued to raise the streambed just above and below the Mill Creek bridge. As foretold by the December 2010 event (Photo 3), and the vulnerable future (Photo 4), on February 1<sup>st</sup> of 2020 the Mill Creek bridge blocked downstream movement of gravel, cobble, and wood raising the bed behind with a deeply downcut diversion of Mill Creek to Savage Creek as shown on February 2<sup>nd</sup> (Photo 6). A well intended fix occurred in early August 2020 (Photo 7) with positive results as hoped with the first November freshets resulting in most of the flow going beneath the Mill Creek bridge to re-water the west channel to the Skagit (Photos 8 and 9). However, with each freshet there was shifting dominance of flow between the diversion channel

and the flow beneath the bridge to the west channel to the Skagit. Then a large event occurred on December 5<sup>th</sup> of 2023 with particularly catastrophic results (as shown in Photo 10 taken December 6<sup>th</sup>). The Savage Creek culvert plugged with transport of woody debris backing up the pond of Savage Slough for a quarter mile upstream and eroding the road fill. Reconstructive repair took about a week. Although significant flow was resumed below the bridge, the large amounts of wood placed below the bridge to clear it resulted in wood blocking the west channel to the Skagit (Photo 11), and all the flow except in higher flow events went northward to the old former channel and then angled east to Savage Creek about 150 yards below the highway. This remained the case until sometime between January 8<sup>th</sup> and January 13<sup>th</sup> of 2025. A high flow event then occurred that diverted all flow to the diversion channel as found at normal flows on January 17<sup>th</sup> (Photo 12). The channel below the bridge was completely abandoned once again leaving a prior Chinook redd and seven coho redds dry (Photo 13).

### Mill Creek Bridge Diversion Impacts on Savage Slough Ponds and Savage Creek

The result of the Mill Creek bridge diversion has its own problematic results on Savage Creek, or more correctly what is now Savage/Mill Creek from the culvert on down northeast through what was formerly the old Skagit River channel as shown on the 1880 map. This former river channel at that time was also very near the north side of the Mill Creek bridge. Both creeks were historically well separated in entries to the Skagit River (as shown in the prior historical maps), and both creeks remain with very different flow, temperature, and channel characteristics from each other above the South Skagit Highway.



Photo 1. Lower Savage Pond that Savage Creek formerly entered and exited via the highway culvert (Apr. 21, 2011)



Photo 8. Great loss of lower Savage Pond above the highway as a result of Mill Ck diversion (Jan. 17, 2025)

Both above and below the highway, Savage Creek historically ran through ponds that were once part of differing old Skagit River channels, now called Savage Slough. The one that was about a quarter mile long beginning just above the Savage Creek culvert is shown as it was from at least 1998 (of my first knowledge) to about 2019 as shown in 2011 (Photo 1 of this section). These ponds are particularly important as an integral part of Savage Creek's own salmonid ecosystem with considerable differences from Mill Creek's. What the actual historical configuration of Savage Creek was prior to the logging railroad, and subsequent South Skagit Highway, is unknown. However, John Thompson's memory was that Savage Creek prior to the culvert crossed further upstream with a bridge. There are multiple ponds on both sides of the highway that once may have been related to Savage Creek at differing points in time before the railroad and highway roadbeds blocked natural connectivity. However, as shown in Photo 2 of this section, the pond directly above what is now the Savage/Mill Creek culvert has greatly filled in with the deposition of the Mill Creek diversion channel diversion. This is similarly the case with the former long pond that in the early 2000s was about 150 yd below the South Skagit Highway. A long length of its upper end has now filled in with a resulting creek channel rather than a pond due to Mill Creek's diversion with transport of gravel and sediment downstream.

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At this point in time, this is what has been found for portraying the past 148 year history from 1877 to 2025 of Euro-American occupation in the Mill and Savage Creek entry areas of the Mid Skagit River, initially with the Minkler sawmill at the mouth of Mill Creek. For thousands of years earlier Native American use of the Savage Property area likely occurred, potentially including houses at some point in that length of time near Mill Creek entry, or between Mill and Savage Creeks, with use of former salmon and steelhead abundance and related wildlife.