

Chapter 5

Southwest Quadrant Notes

My Southwest Quadrant of the city begins at the southern city limit (see earlier description in Methods chapter) and extends northward to include all of West Seattle, Seattle's portion of the tidewater-influenced Duwamish River Bottom area, the former tide flats off the mouth of the river, and the west slope of Beacon Hill up to the crest of the ridge. The Quadrant's northern boundary cuts across Elliott Bay west-to-east to make landfall just below the lagoon and sand spit area where the original Seattle village was established in the neighborhood we now call Pioneer Square. It then extends eastward, following the path of the Indian trail that once crossed over from Elliott Bay to the Leschi neighborhood, to that trail's intersection with the ridge crest where the Beacon Hill saddle (long since sluiced down to accommodate S. Dearborn Street) rose up again to become First Hill (at the north end of today's José P. Rizal Bridge).

This Quadrant includes sections of land in T23N, R3E; T24N, R3E; and T24N, R4E. The sections in T24N, R4E were surveyed by the GLO during August and September, 1861, but those in T23N, R3E and T24N, R3E were not surveyed until a year later, in September, 1862. Whatever the reason for this, the late summer-early fall dates of their field work in this quadrant means the GLO surveyors saw its streams and other water features at or very close to their seasonal low flows and water levels. Bear this in mind as you contemplate the stream size measurements they recorded for those that they did see, and the occasional omission of some they should have encountered but didn't record. The latter simply may have been dry when they passed.

Seola Creek

The southernmost watershed in Seattle is that of Seola Creek, a small stream whose catchment heads up in an extensive south-to-north trending wetland area—or rather, an area that used to be wetland—on the western edge of the White Center neighborhood immediately south of SW Roxbury Street. From the lower end of that wetland, the course of the stream is south-southwest to the Sound through a steep-sided ravine forested with madrone and Douglas-fir. West of the ravine, the catchment includes part of Seattle's Arroyo Heights neighborhood, and

on the east, bluffs in unincorporated King County and the City of Burien. Actually, less than half of this small watershed lies within the Seattle city limits; the remainder, generally that portion lying east of the stream's main water course, lies in unincorporated King County. So too do those headwater wetlands.

In its survey of meanders along the Puget Sound shoreline, the GLO party recorded Seola Creek as "a brook 4 links wide [about 2.6 feet] entering from the northeast." However, perennial flow at the time of the survey was evidently limited to less than one-half mile upstream, because the surveyors did not record perennial or even ephemeral or intermittent stream features at either of two points about a half-mile above the mouth where the main channel and a short, northwesterly trending tributary ravine crossed their east-west survey line.

[Historical conditions at the top of the gully? Wetlands/peat bog...from which peat was mined...part of the same aquifer system that feeds Longfellow Creek?]

Salmon Creek

The south boundary of Seattle east along SW Roxbury Street also takes in a portion of the upper watershed of Salmon Creek. As measured along the Puget Sound shoreline, Salmon Creek is the next stream south of Seola Creek. However, the shoreline trends northwest-to-southeast down here, and Salmon Creek flows into the Sound from the north, so most of its watershed lies east of the Seola Creek watershed and south of the city line in unincorporated King County and the City of Burien. It is only the uppermost portion of the present-day catchment that is north of the line, with the very top occurring in the vicinity of 21st Ave. SW and SW Henderson Street in Seattle's piece of the White Center neighborhood.¹

I use the words "present-day catchment" here because the historical condition of the upper Salmon Creek watershed may have given Seattle an even bigger chunk of the drainage. Indeed, that chunk may not have been a natural part of the Salmon Creek watershed at all, but rather, an upper tributary of Longfellow Creek. This is based on three reports, two from the City of Burien and the other from King County, each saying that a natural drainage divide existed between Mallard Lake and Lake Garrett, both in today's Burien maybe two-thirds of a mile south of the

Seattle city line. Drainage north of this divide fed northerly into that upper Longfellow Creek tributary, and drainage south of the divide fed either into Salmon Creek or into Lake Garrett, formerly known as Hick's Lake, a closed basin that only rarely overflowed into Salmon Creek.² That upper tributary of Longfellow Creek was seen by the GLO surveyors in 1862, but not as an open-channel stream feature. Rather, they recorded it as "a hardhack swamp bearing north-south" where it crossed their survey line. It was also mapped on a large-scale Seattle Quadrangle map published by the U.S. Geological Survey (USGS) in 1894 (reissued at least once, without change, in 1903), and I have included it as shown there in my own historical map of Longfellow Creek. At some point later in White Center's history, perhaps as recently as the late 1950s or early 1960s according to the three reports I mentioned above, pipes were laid that rerouted the drainage pattern north of the Mallard Lake-Lake Garrett divide, carrying that water south into Lake Garrett and establishing the Salmon Creek drainage pattern that exists today, with its headwaters now up near 21st Ave. SW and SW Henderson Street in Seattle.

Lost Fork of Hamm Creek aka Durham Creek

The next drainage east from Salmon Creek along the south city limit of Seattle is the Hamm Creek watershed, named for Dietrich Hamm, a Seattle restaurant and real estate entrepreneur and, in his time, one of the largest property owners in the watershed. Perhaps Hamm should best be known for his contribution to the effort to straighten the Duwamish River. As the largest property owner in his district, when it came to paying for the project he was assessed (and agreed to pay) the most money! Like Salmon Creek, most of the Hamm Creek watershed lies south of the present Seattle city line with, in this case, only one fork of the creek, referred to in contemporary accounts as the Lost Fork or Durham Creek, actually originating in Seattle territory. And even for this fork, there is a question if it really was part of the Hamm Creek drainage historically, or part of another stream that flowed north through the South Park neighborhood.

This is based on a stream shown on that same 1894 USGS Quadrangle map that I mentioned above in connection with the Salmon Creek watershed. This particular stream is shown heading up near the top of the long ridge that forms the west side of the Duwamish River Bottom, only a few blocks east of today's White Center neighborhood but

south of the present Seattle city limit. This stream is shown flowing east initially as it dropped down off the ridge. But then, once down in the bottom land, it is shown curving around to the north-northwest, then continuing on that same general course tracking close to the base of the ridge, for a run of more than two miles through today's South Park neighborhood to its confluence with the Duwamish about where today's Highland Park Way, West Marginal Way, and SW Michigan Street converge on the present landscape. The 1894 map also showed seven short tributaries, each originating at springs or seeps up on the ridge on the Seattle side of the present city line, flowing down to join this South Park stream at various places along its length. Lost Fork's location just north of the present city line would make it the southernmost of the tributaries shown on the 1894 map—in other words, a tributary of the South Park stream, not Hamm Creek. What the 1894 map depicted as Hamm Creek was shown as the next independent drainage south. Thus, by this 1894 reckoning, none of Hamm Creek would have originated within or even flowed within the present City of Seattle.

But the GLO surveyors 33 years earlier presented a much different picture of the drainage pattern in this area. If their portrayal rather than the 1894 mapping is correct, then an even larger chunk of the Hamm Creek drainage may have fallen within what is now Seattle territory. The GLO field notes for its survey along the north-south section line that approximates the line of today's 1st Ave. S. in this area recorded three brooks, each 3 links (about 2 feet) wide, flowing east across the line on the north or Seattle side of the present city limit: one a half-mile north, the second four-tenths of a mile north, and the third only about 260 feet north. They also recorded a fourth east-flowing brook, also 3 links (about 2 feet) wide, that crossed about 800 feet south of the Seattle city line. These match up pretty well with the mainstem (the fourth or southernmost of these crossings) and the southernmost three of the seven tributaries of the South Park stream as mapped in 1894. However, in 1861, rather than turning north-northwest when they reached the Duwamish Bottom as the 1894 map showed, all of these brooks turned southeast instead and angled off in that direction as part of the Hamm Creek drainage. In other words, not only did Lost Fork belong to Hamm Creek in 1861, but so too did the next two spring creeks to the north... and all three of these brooks originated in what is now the City of Seattle.

For my own map of streams and water features in the Southwest Quadrant of the city, which tries to depict the landscape as the first white settlers would have seen it, I accept the 1861 GLO survey as the most accurate view. By 1894, many changes had occurred in the South Park neighborhood that could and likely did have a profound effect on the drainage pattern of this portion of the Hamm Creek drainage. I will discuss these in more detail later in this chapter in a further elaboration of the South Park stream.

There is one more small stream system that lies partially within Seattle territory along the south city limit, but I think it more expedient to detail that one later in this chapter as well, when I discuss the streams and water features on the east side of the Duwamish River that flow into the river off the west-facing slopes of the Beacon Hill ridge.

What I want to do now is get back to the GLO survey of Puget Sound shoreline meanders, and work my way north from Seola Creek, even though the survey itself may have proceeded in the opposite direction.

Fauntleroy Creek

North of Seola Creek, the surveyors came to no streams entering the Sound that were large enough to be worth their recording until they had worked their way into Fauntleroy Cove, between Brace Point (known to the indigenous people as *bas7ayahoos*, meaning “it changes its face”) to the south and Point Williams (known to the indigenous people as *CHuXáydoos*, meaning “tight bluff”) to the north.³ The existence of this cove had been known to Euro-Americans since 1841 when the Charles Wilkes-led U.S. Exploratory Expedition had sailed in. Both Brace Point and Point Williams were named by Wilkes, but the name of the cove itself was supplied later, in 1857, by Lt. George Davidson of the U.S. Coast Survey, who anchored there and named the cove for his fiancé’s family.⁴ But neither expedition had taken note of the creek. That was left to the GLO surveyors, who recorded it as “a brook 5 links wide [about 3.3 feet] entering from the southeast.”

Fauntleroy Creek originates at springs on the slopes of a wooded ravine, now preserved in 32-acre Fauntleroy Park, in the hills east of the cove at about the 300-foot elevation. Six short springbrooks—five if you count the one that originates the farthest east as the mainstem—join

within the ravine to form a channel that then flows generally west-northwest to empty into the cove under the present ferry dock. The springs that feed into Fauntleroy Creek emerge only a few blocks west of the headwaters of Longfellow and Seola creeks, leading some to speculate that the same ground water source that supplies Longfellow and Seola also supplies the Fauntleroy drainage.⁵ I have seen two figures for the size of the overall Fauntleroy watershed in various City reports; an earlier figure of 98 acres seems lately to have given way to 149 acres, so that's the figure I go with in this book.

The creek loses all of its 300 feet of elevation in a run to the cove of just 0.8 mile, which translates into an overall stream gradient of 7 percent. That puts it in the steep-stream category. However, its steepest segments are near its springbrook sources on the slopes of the Fauntleroy Park ravine, and at two or three additional short segments farther downstream, including a thin, sheet-flow segment of about 15 percent gradient near the mouth of the ravine where the stream exits the park behind the Community Church and YMCA building at California Ave. SW, and another steep drop near 45th Ave. SW. The Washington Department of Fisheries identified an impassable cascade at that latter location in its 1975 publication, "Catalog of Washington Streams and Salmon Utilization."⁶ The remainder of the stream course is lower in gradient and well within the fish-friendly range. Early residents recall that the creek flowed out onto the beach through a ravine (later filled) where Fauntleroy Way now crosses, but evidently the stream channel through this reach was low enough in gradient that it was not a barrier to fish movements.⁷

As I noted above, Fauntleroy Cove, where the creek discharges into Puget Sound, was surveyed and named by the U. S. Coast Survey in 1857. Between then and the mid to late 1880s, loggers worked up the slopes above the cove, as well as in other parts of the West Seattle peninsula, to harvest the virgin stands of Douglas fir and cedar that grew there. Evidently no sawmills operated in the Fauntleroy area; rather, logs were transported to other mills that had sprung up around the Sound. But logging in and around the Fauntleroy Creek watershed had just about run its course by the early 1880s. This ushered in a period of subsistence farming, with the first homestead in the area being filed in 1881 on low-lying Brace Point. However, aside

from the few subsistence farms that followed, agriculture never became an important land use in this watershed. Local histories do mention a dairy farm located in the Arbor Heights area, and Japanese-owned truck farms that operated during the 1930s near the source area of Longfellow and Seola creeks to the east, but nothing to speak of in the Fauntleroy watershed itself. Even so, at least one of Fauntleroy's tributaries, referred to in local history accounts as the South Fork, was dammed during this brief agricultural period to provide water for livestock.⁸

The transition to urban development began in 1905 when affluent Seattleites began purchasing logged-off land for summer homes. More extensive residential development was spurred by the extension of the trolley line south from West Seattle to Endolyne in 1907. The trolley tracks crossed Fauntleroy Creek where 45th Ave. SW crosses today, likely on a trestle above the creek. In the 1920s, when local streets were graded and paved for automobile traffic, the trolley trestles were torn down and fill was added to bring the crossings up to grade. The creek went into a culvert pipe. This happened as well at the crossing of California Ave, SW. Additional fill evidently was used at this location to level the area occupied by the Community Church and YMCA building. A 1914 trolley-era photo of the Community Church clearly shows the "before" scene, with the church built into a steep hillside that slopes down toward the creek on the side where the parking lot is now located. Another location where the creek was piped and filled over was at Fauntleroy Way, just up the beach from the stream mouth. In this case the fill was added for trolley tracks. The year the ferry dock went into operation, a branch line was built on new fill along the route of Fauntleroy Way to serve the ferry passengers. But that gave way to the street itself when the era of the auto arrived.⁹

As more and more houses and roads were built, creekside property owners increasingly began channelization and beautification projects, and more and more culverts and pipes were installed. It is not clear in local histories just when notice was first taken of the increased flashiness of the creek and the advent of multiple flooding events within the same year that impacted the homeowners in its lower reaches, but these changes in the stream's behavior had become serious enough by the 1950s to finally justify diversion of hillside springs and runoff rills into a combined stormwater and

sewer system that emptied into Fauntleroy Cove. In 1972, the City purchased 28 acres of the steep-sided ravine along upper Fauntleroy Creek and its branches for Fauntleroy Park. Later, other parcels were added to bring much of the upper stream corridor into public ownership. Presently, except for the acreage preserved as public park, the watershed is fully developed, primarily with single family homes.

There is no direct evidence—at least none that I’ve been able to find to date—that Fauntleroy Creek was a salmon bearing stream historically. None of the long-time Fauntleroy residents interviewed by earlier local history researchers could recall any fishing for salmon in the creek, or indeed any salmon spawning in the creek at least as far back as the 1920s,¹⁰ and when the Washington Department of Fisheries published its “Catalog of Washington Streams and Salmon Utilization” in 1975, Fauntleroy Creek was not among those listed as having a salmon run. It is not that a few salmon, coho salmon in particular,¹¹ couldn’t have found their way into the creek and spawned there historically, at least as far upstream as that impassable cascade the Department of Fisheries identified near today’s 45th Ave. SW, it’s just that there is no historical record that they did so.

What is clear from the historical record is that this lowermost reach of Fauntleroy Creek did support runs of sea-run cutthroat trout. Although none of the local historians’ informants could recall any fishing for salmon in the creek, or indeed any salmon spawning there, they did speak of angling for sea-run cutthroat trout in the 1920s and 1930s, including one account, dating to the late 1930s, of two boys who would catch sea-run cutthroat in Fauntleroy Creek then bring them home alive to release in their father’s backyard trout pond. The beach near the mouth of Fauntleroy Creek was another popular destination for sea-run cutthroat anglers in those early years.¹²

Other stories spoke of angling in the creek for resident trout as a commonplace activity in the 1920s and 1930s. “Fishing for trout in Fauntleroy Creek behind the house was always inviting,” is a typical quote from one book on early Fauntleroy history.¹³ Adventurous local boys would often head for “the ravine” to fish for trout back in the 1920s, or to the stream reach above that old dam on the South Fork. Its attraction, according to these stories, was that the trout there ran consistently two to three inches larger than the average for the rest of the creek.

In 1989, residents of the Fauntleroy watershed, along with local school children participating in a “Salmon in the Classroom” program teamed with Seattle Public Utilities and the Washington Department of Fish and Wildlife to begin a serious effort to improve habitat and introduce (or reintroduce?) salmon to the stream. The State had actually begun releasing hatchery reared coho salmon into the stream in 1985, and releases continued through 1995, with an additional release from the “Salmon in the Classroom” program in 2000 according to a report released in 2001.¹⁴ These releases kick-started a small but significant return of adult coho salmon, beginning with a single pair that entered the creek in 1994. But spawning habitat for these first returnees, and rearing habitat for their progeny, was limited for the next few seasons to just the short reach below Fauntleroy Way SW. A blocking culvert at that location was replaced with a new culvert and fish ladder in 1998, just in time for the return of a record 200 adult coho that spawned in the creek that fall. Although numbers of returning adults have never been as high again as in 1998, adult coho have returned to spawn in the creek each year, and now utilize all of the available mainstem up to 45th Ave. SW where passage remains blocked by another impassable culvert, one evidently difficult and thus prohibitively costly to replace. To my knowledge, sea-run cutthroat trout have not returned to the creek, nor were any resident trout found in its waters during a survey conducted by the U.S. Fish and Wildlife Service in 2005-2006.¹⁵

[Mention the “big burn” noted by the GLO surveyors and also David Lilivand near the headwaters.]

Pelly Creek, aka Lowman’s Creek, aka Gatewood Creek, aka Eddy Creek

Pelly Creek, Lowman’s Creek, and Gatewood Creek are three names I’ve seen used recently by different City of Seattle departments for the same stream, one that the GLO surveyors recorded simply as “a brook 6 links wide [about 4 feet] entering from the northeast” where it discharged into Puget Sound at what is now Lowman Beach Park. Eddy Creek is a name used by local residents for what those original surveyors took to be the main branch of this stream where it once flowed in an open channel through the Morgan Junction neighborhood. Mssrs Pelly, Gatewood, and possibly Eddy were early real estate promoters in the watershed; Lowman was a former Parks Commissioner and was president of the Yesler Logging Company in 1909, the year that company donated the land to the City for Lowman Beach Park (the original name was Lincoln Beach Park, but that was changed in 1925 to avoid confusion with the new and larger

Lincoln Park that encompassed nearby Point Williams).¹⁶ Gatewood's name is perpetuated as the name assigned by the Seattle City Clerk's Neighborhood Map and Atlas to the entire neighborhood drained by the stream and its many tributaries. But long before any of these names were conferred, the Indians who traveled on Puget Sound in their dugout canoes had their own designation for this landmark. They called it *gWul*, meaning "to capsize" or "capsized," perhaps in reference to tricky currents in the waters off the creek mouth that could dump the canoe of any inattentive paddler.

The map of T24N, R3E prepared from the 1862 GLO survey results showed this creek as a single open channel extending northeasterly for more than a mile to a source area up near the present-day Fairmount Playground between Fauntleroy Way SW and 37th Ave SW. However, if the present topography is any gauge, the true source area may have been about three blocks south of there, at what may have been a seep or small wetland just south of SW Juneau Street.

Two observations recorded early in West Seattle history allow us to pinpoint the rest of this mainstem channel's stream course. First, the GLO surveyors themselves encountered this stream again, now a tiny but still perennial 2 links wide [1.3 feet] at the point where it crossed their east-west survey line just a few yards west of today's intersection of SW Graham Street and Fauntleroy Way SW. Second, in 1907, when the tracks for the Fauntleroy trolley line were extended south from the West Seattle Junction on the line now followed by California Ave. SW, they crossed the upper part of a ravine containing this creek on a trestle located between today's SW Morgan and SW Eddy streets. That part of the ravine was filled in and graded when California Ave. was pushed through some 20 years later, but it remains a ravine and is still a prominent feature on the modern landscape from 44th Ave. SW southwestward to the Sound. To find the top of the ravine today, turn west off California Ave. onto SW Graham St., then south on 44th Ave. SW. Drive to the end of the street and you're there. A short stub of SW Eddy St. also leads west off California Ave. to the head of the ravine. The early city fathers had once planned to extend SW Eddy Street on down this ravine, but that never came to pass. I'm given to understand that the legal right-of-way still exists, however, thus providing the name Eddy Street Ravine for this landscape feature.

Nearer to the creek mouth, where this Eddy Street Ravine stream carved its way down through the bluff overlooking the Sound, the topography reveals a more complex pattern of tributary drainages that the GLO surveyors would not have seen and therefore did not record on their map. Here the bluff is cut by three additional ravines that connect with the Eddy Street Ravine and may have carried their own tributary flows into the creek. The uppermost of these, together with whatever perennial, ephemeral, or intermittent stream it might have carried, cuts down and in from the north. Today, 48th Ave. SW climbs up and out of this gully then bends around to the northeast on a gentler gradient to an intersection with SW Graham Street, following what I take to be the original course of this tributary stream (SW Graham Street is the east-west section line, but the GLO surveyors saw no stream feature here). From that point, 48th Ave. SW turns north again while the lay of the land suggests a drainage pattern that converges on this point from the northeast, from a source area somewhere up near SW Raymond Street.

The second tributary ravine comes in from the east. At the mouth of this ravine, the neighborhood and City Parks Department have set aside the 1-acre Pelly Place Natural Area where volunteers continue to work to tear out invasives and restore native vegetation. One rainy day in March, I walked up the floor of this ravine where its stream channel would have been. About halfway up, I came to a manhole cover. I could hear the sound of briskly flowing water, not in an open channel anymore, but deep beneath my feet in a stormwater conveyance pipe.

The third and lowermost of the tributary ravines comes in from the southeast, joining the mainstem just below the Pelly Place ravine and just above Lowman Beach Park. This one was an impressive gully indeed. Broad, deep (40 feet or more in depth), and extending upstream to a point near Fauntleroy Way SW where several secondary ravines carrying spring-fed streamlets down from the High Point uplands to the east merged into it, this ravine may have carried as much water as the Eddy Street branch, and perhaps even more. The 1907 Fauntleroy trolley line, having turned west from the line of California Ave. at today's SW Myrtle Street then

south again where 47th Ave. SW runs today, crossed this deep gully on a high trestle that extended south across SW Myrtle to the far side of the SW Othello Street right-of-way.

"We used to fish in that crick," recalled Bob Christy, who had resided in the area since 1909, in an interview with the compilers of "West Side Story," a history of West Seattle published in 1987.¹⁷ "We'd get trout," he told them, then added, "we'd even get salmon out of there." Another who fished this creek in the early 1900s was David Lillevand, who wrote about it in his own memoir of the early days in West Seattle. "Our first stream fishing for trout was experienced at the Lincoln Beach [now Lowman Beach] creek located a little south of Peavey's lumber mill where the Alki Avenue [today's Beach Drive SW] turned to go up past the old Kenney Home," he wrote. "We hiked along the single lane dirt road winding through the woods beyond the mill to the creek and up through the brush to find the good pools where the keepers were hiding."¹⁸ But in 1927, the trout and salmon fishing as well as the fish populations that provided it came to an end. That year, the high trestle that had carried the trolley tracks across the ravine was torn down and the ravine itself was filled to provide a base for construction of Lincoln Park Way, thus burying the creek and obliterating its junction with the Eddy Street branch.

Upslope to the east of both the Lincoln Park Way and Pelly Place ravines, the terrain continues to rise, all the way up to the highest point in Seattle, elevation 520 feet, near the intersection of 35th Ave. SW and SW Myrtle Street. I already mentioned that a series of tributary ravines cut down from these uplands to merge with the Lincoln Park Way ravine, and a couple more may have fed into the Pelly Place ravine. Paved city streets now follow up the floors of these ravines, but historical accounts indicate that the first individuals and families who took up homesteads and residences in this neighborhood followed foot trails alongside the spring-fed streamlets that drained these highlands.¹⁹ From north to south, ravines along SW Willow and SW Mills streets may have carried water down to the Pelly Place ravine. The SW Frontenac, SW Myrtle, SW Orchard, SW Gatewood, and SW Glenridge ravines carried their waters into the deep Lincoln Park Way ravine. An example of what these upland ravines might have looked like in their historical condition has been preserved by the neighborhood and Seattle Parks

Department in the Orchard Street Ravine Natural Area, located near the upper end of SW Orchard Street east of California Ave. SW, at the very top of this collective watershed.

***Túsbud*, the Shore Place Mystery Stream**

Further up the Puget Sound shoreline about a mile north of the creek at Lowman Beach, at the junction of SW Shore Place and Beach Drive SW, another ravine cuts down through the line of bluffs overlooking the Sound. Here the GLO surveyors encountered another stream flowing across the beach which they recorded as “a brook 5 links wide [about 3.3 feet] entering from the northeast.” As it happened, this same stream also crossed their north-south survey line about 700 feet inland from the beach where the surveyors recorded it again as “a brook 4 links wide [about 2.6 feet] running west, high steep banks.” The Indians had a name for this landmark as well. They called it *Túsbud*, meaning either “rids the cold” or “a winter house” depending on which authority you consult.²⁰ But, other than the GLO field book notations and the Native American place name, I have found no mention whatsoever of this creek in any City record or in any written or oral history, not even in David Lillevand’s two-volume memoir of early West Seattle. Lillevand, who lived just north of this creek from 1903 onward, would have had to cross it on his way to fish the creek at Lowman Beach, but made no mention of it. There is no free-flowing creek at this location today, making it one of Seattle’s true mystery streams.

Adding to the mystery is the map the GLO surveyors prepared from their field notes, which shows this stream as a single open channel coming down from the northeast from a source that my scaling places well to the east of today’s West Seattle Junction and north of Fauntleroy Way, possibly at one of the many springs that issued (they still do in fact) from the hill slope above the latter street. The surveyors had indeed seen a small stream flowing down from this area, which they recorded as “a brook 2 links wide [1.3 feet] running south 30° west” where it crossed their east-west section line. Taking it to be the same stream they had encountered back at the *Túsbud* beach, presumably because it was flowing in the right direction, the survey’s mapmaker drew in a stream course that connected the two. But in this case I’m convinced he got it wrong.

The first problem with the mapmaker's layout is with that upper section line crossing. If the surveyors were still on their proper line of march at that point, that crossing would have been about where 38th Ave. SW crosses SW Alaska Street today, SW Alaska being the east-west section line. The trouble is, a stream crossing at that location meets immediate uphill climbs both to the south and to the west that would have blocked the brook from flowing in the direction it would have had to travel to make the map correct. On the other hand, there is lower ground to the east. In fact, just three blocks east and another block north from there, at the intersection of today's SW Oregon Street and 35th Ave. SW, a small gully once sloped downward to the east into the Longfellow Creek drainage. 35th Ave. SW crossed this gully on a wooden bridge in West Seattle's early years, but the bridge was torn down and the gully filled in the mid-1920s when 35th Ave. SW was paved.²¹ Had the surveyors been off their proper line of march by just a block or so to the north, what they may have recorded was a brook that then turned east into this gully and eventually emptied into Longfellow Creek. On the other hand, 35th Ave. SW lies along the surveyors' north-south section line, and they did not record a stream crossing their line anywhere in this vicinity, possibly because it was only seasonal flow and was dry when they passed, or it had gone underground.

The second problem crops up when the GLO mapmaker's placement of the remainder of his upper stream course is scaled onto a modern map. That shows the channel as roughly tracking along today's Erskine Way SW on its way down to the *Túsbud* beach. The problem here is that Erskine Way SW runs atop the southeastern rim of a depression in the landscape, shaped sort of like an upside-down teardrop, that slumps downward to the south-southwest, wider and rounder at the top, then necking in at the bottom as it bends westward around the southern base of the Spring Hill upland. The impression I'm left with when I view this slump from the bottom—looking up, say, from the corner of 50th Ave. SW and SW Dawson Street toward the top near the West Seattle Junction area—is of an ancient, massive, deep-seated landslide, one triggered perhaps by a long-ago quake on the Seattle fault.

The east slope of the Spring Hill upland forms the western rim of this depression, where 50th Ave. SW runs today, and, even though the land continues to rise on a gentler gradient to the

north, topping out about midway between SW Genesee and SW Dakota streets, the northern rim of the slump lies in the vicinity of SW Oregon Street in the area roughly bounded by 50th Ave. SW and 44th Ave. SW, just west of the West Seattle Junction. The true stream course likely headed up somewhere near the top of this slump, perhaps at what historical accounts describe as an extensive wetland that occupied much of the land where the businesses and homes of the West Seattle Junction now stand. One historical account describes that area as “a swamp, with water three to five feet deep;” another as “a boggy woodland” locally known as “the swamp” or “Spring Hill Pond.” In 1907, two trolley lines met here at the junction of today’s SW Alaska and California Ave. SW (thus the name, “West Seattle Junction”). The West Seattle trolley came down from the north, from up near SW Admiral Way. The Fauntleroy trolley came in from the east along the line of SW Alaska and turned south along the line of California Ave. SW, although California Ave. itself wouldn’t be built for another 20 years or so. Even though clearing and draining were well under way when the trolley lines met, in anticipation of the real estate boom that soon followed, the Fauntleroy trolley still had to pass over this wetland on a trestle.²²

I imagine, too, that the entire bowl and wetland area was ringed by springs that fed their waters into this drainage (thus the name “Spring Hill” that seems to be loosely attached to all of the surrounding uplands to the west and north). But I have yet to ascertain the exact location and extent of the wetland and the true location and course of the stream and its feeder springs across this landscape.

Mee-Kwa-Mooks, Was There a Creek Here?

Some West Seattle historical accounts say yes, there was a creek issuing into Puget Sound here at today’s Mee-Kwa-Mooks Park and Overlook²³ and indeed, a small stream does show on a contemporary map of the park.²⁴ But the GLO surveyors did not record a stream emptying into the Sound anywhere along this stretch of beach in 1862. In fact, from the point they left *Túsbud*, the Shore Drive creek, until they had rounded Alki Point and come to Schmitz Creek, they recorded no streams of any size flowing across the beach. That doesn’t mean there weren’t seeps, springs, and springbrooks galore issuing from the highlands overlooking the

Sound (thus the names Spring Hill and Spring Hill Villa for the uplands in this area), but if their transits across the beach were more in the nature of trickles or thin, braided flows rather than defined channels, they may have been deemed too insignificant to be recorded.

The land bounded by Beach Drive on the west and SW Genesee and SW Alaska streets on the north and south respectively, now Mee-Kwa Mooks Park, was owned in the early 1900s by Ferdinand Schmitz, another Seattle business and real estate entrepreneur, and was the site of his “Sans Souci” estate. David Lillevand’s family were near neighbors to the south, in the Spring Hill Villa tract, and Lillevand included a description and sketch map of the Schmitz estate in Volume 1 of his two-volume memoir of early West Seattle. No stream or spring is shown on Lillevand’s sketch map, but he did note in his written account that a spring further up on the hillside supplied sufficient water for drinking and for watering lawns, gardens, an orchard, and—of greater significance to young Lillevand, who, as we have seen, was a trout fisherman—two ponds that Schmitz kept stocked with rainbow trout. One pond was located close to the main Schmitz house and was off-limits to young Lillevand, but the other pond, with an island reached by a footbridge, was located in a lawn area down the slope and evidently out of full view of the house, near Beach Drive (then known as Alki Avenue). Whether with permission or on the sly, his memoir is not clear on this point, Lillevand fished that pond for trout up to 18 inches in length, and regarded it as one of his best “secret” boyhood spots.²⁵

But getting back to the stream, I have chosen to map this at least in part as it is shown on the contemporary map of Mee-Kwa-Mooks Park, i.e., as a perennial but small springbrook heading up on the hill slope at about the 125-foot level and running down through the estate about on a line with today’s SW Oregon Street. However, on my map I also include a second perennial branch, one that heads up a little farther north and higher up on the hill slope at about the 175-foot level. This one courses down the slope to the southwest to join the branch shown on the Park map just above the junction of SW Oregon Street and 56th Ave. SW, the present boundary of the park.

Why the GLO surveyors did not record a stream emptying into the Sound at this location is not so much of a mystery, as I explained above. One possibility, if the historical stream was the

same size or near the same size as the stream of today, is that its flow out onto the beach was so braided and spread out by the large rocks, cobbles, gravels, and accumulated woody debris it encountered that only ill-defined trickles flowed across the beach. Or the stream may have simply gone underground at some point above the beach and discharged into the Sound as groundwater.

Another change in the landscape along this segment of the Puget Sound shoreline was pointed out by David Lillevand in his memoir. His description of early Alki Avenue (today's Beach Drive SW) was of a dirt track that was lower in elevation and much closer to the beach level than the paved street is today. That's because the right-of-way was elevated with dirt dug from the adjacent hill slopes, then graded prior to paving. The Mee-Kwa-Mooks stream flowing out of the property today passes under the graded road bed of Beach Drive SW in a pipe that discharges out beyond the beach into Puget Sound.

Schmitz Creek

Schmitz Creek, at 94 acres the smallest of the six Legacy Creek watersheds we studied back in 2002, has received short shrift in written historical accounts, even though it flowed into Puget Sound practically through the heart of the original Alki settlement. There is no mention of it in any of the treatises on the history of that settlement written by members of the Denny party who originally landed there or their descendents,²⁶ but I did find it in accounts from later years, for example, in David Lillevand's two-volume memoir of early West Seattle, and then again in a Seattle Parks Commission report from 1909 on improvements being made in the then-new Schmitz Park.²⁷ The GLO surveyors crossed it twice, first where it intersected their east-west survey line within what is now Schmitz Park, and next in their meander survey where it flowed across the beach into the Sound. They recorded it as a "brook 3 links wide [about 2 feet] running north" at that first crossing and as a "brook 4 links wide [about 2.6 feet] entering from the south" in their meander survey along Alki Beach.

Although the original Alki settlers did not mention Schmitz Creek, one thing that's clear from their writings is that the uplands behind the settlement, where the creek has its origin, were heavily timbered. Indeed, the settlers' very first source of capital was cutting logs for ships, including the

one that brought them, that were already in the business of supplying the booming San Francisco log and lumber market.²⁸ One could even make the case that the logging era effectively began in the West Seattle vicinity immediately following the Denny party's landing at Alki. Henry Yesler's first steam-powered sawmill in 1853 and others that soon followed spurred logging and lumbering. Between 1868 and 1880 the Puget Mill Company, located at Port Gamble, acquired much of West Seattle's timberlands, and logging of the uplands accelerated. Although Denny and others had moved across Elliott Bay to establish the village of Seattle at the site of a better deep-water port, the Alki settlement endured. By the end of the 1880s it had grown to encompass logged-off plats on the uplands of Duwamish Head. Then followed incorporation as its own Town of West Seattle, and finally, in 1907, annexation by the faster growing City of Seattle.

It was also in 1907 that Ferdinand Schmitz gave the city 30 acres of still-forested ravine (eventually expanded to 50.4 acres) "to be used in perpetuity...for park purposes...in order that certain natural features be preserved..." The park was intended to serve as a reminder of the magnificent forest in which the Alki pioneers had homesteaded. Although some trees had been selectively removed during the ensuing logging period, the cutters had largely bypassed the Schmitz Creek ravine because of its wetness and the steepness of its terrain that made getting logs out difficult.²⁹ The Park donation, as expanded to include all of the springs and seeps that feed the stream, still comprises the heart of the Schmitz Creek drainage, although it is much too small to be a good representation of the original old-growth forest as Ferdinand Schmitz had envisioned. The unprotected portions of the catchment appear to be at or near complete urban built-out.

Today Schmitz Creek reaches Puget Sound through a long, buried pipe, beginning at a grated drop-box structure at 56th Ave. SW and passing under the densely developed and popular Alki Beach neighborhood, to extend well out into the water beyond the intertidal zone. But in the days before the Denny party landed, you would have found it channeled across the beach itself after flowing down off an uplifted terrace that sloped gently upward to the southeast to meet the steep, gullied terrain now occupied by Schmitz Park.³⁰ On that terrace, not far back from the beach, the creek flowed into, then out of, a narrow wetland that extended roughly parallel to the beach for some distance, which you would have had to work your way around or across if you followed the creek

upstream. This was *dxWqWóotoob*, the “place that becomes wet” or “place of reeds” to the Native Americans. This place was rich with highbush cranberries and cattails. The Indians gathered the cattail stalks to weave into mats.

After traversing the terrace, your climb would have steepened somewhat as you entered the creek’s canyon. A short distance further on, you would have come to an immense woody debris jam that completely blocked the channel, forcing the water to flow through and over it.³¹ If Schmitz Creek ever supported a salmon run, the fish likely never ascended beyond this point.

Farther upstream, above the debris jam, the creek split into two forks, as it still does today, one fork bearing east, the other southeast, between them a wet forest floor. The forks are becoming quite small now, but the southeastern fork appears to be the mainstem, so you follow this up to its head in a wet seep, then scramble on up to the top of the ravine. If you were making this scramble today, you would top out on about the same line as east-west running SW Spokane Street. You would soon notice that the land slumps down again in front of you, to a low point about where Spokane Street intersects 48th Ave. SW, then rises again to higher ground where the Madison Middle School is now located on the east side of 46th Ave. SW. This sump in the landscape was once a swale and cranberry bog known to the Native Americans as *tooh-KO-tub*, meaning “swampy place,”³² where they came to gather cranberries and other useful plants. Considerable draining, filling, and grading has occurred since they visited last, to accommodate the paved streets and residences one sees here today, but the sump is still quite evident as you look across it to the east. It is likely that the aquifer underlying this former bog, although diminished now owing to reduced groundwater recharge from the now-urbanized and more impervious landscape, still feeds the springs and seeps that in turn feed this portion of upper Schmitz Creek.

The written historical record is silent on whether or not Schmitz Creek ever had salmon, but there are 2nd- and 3rd-hand hints that it might have had, early-on in its history. For example, back in 2002, activist Ken Shaw of Friends of Schmitz Park told me in a telephone interview that he had heard neighborhood old-timers tell of even earlier old-timers who referred to the creek as “Salmon Creek.” Salmon aside, at least one written account, by David Lillevand, does testify to the fact that it once was inhabited by trout. Lillevand wrote, “...we discovered there were trout in the small

creek running out of Schmitz Park a little above and across the street from the 'New' Alki grade school which opened for classes...in 1912. This was our 'private' fishing spot, and as long as there were fish in the creek, we never told anyone, having found even at that early age, if you don't want to be lonesome when fishing, tell all your friends about the location of your fishing 'hot spots.' [We] would always release the trout hooked in the Schmitz Park creek and sometimes thought they should recognize me as an old friend."³³

The Alki elementary school referred to in Mr. Lillevand's account is still located on its original site at 59th Ave. SW, but now shares the land between SW Stevens and SW Lander with the Alki Recreation Center and Playfield. The creek now passes under this site in its pipe. My guess is Lillevand's "secret" trout spot must have been somewhere in the reach where the creek now drops into the grated drop-box structure, or perhaps just above. But, alas, the Schmitz Creek of today is without fish of any species.³⁴

Duwamish Head Springbrooks and the Creek in Fairmount Gulch

As the GLO surveyors worked their way around Duwamish Head on their survey of Elliott Bay and Puget Sound shoreline meanders between the mouths of Longfellow Creek and Schmitz Creek, they recorded no less than six streams flowing across the beach, ranging in size from 2 links (1.3 feet) to 6 links (4 feet) wide. Two of these came down on the west or Puget Sound side of the headland, and the other four on the east or Elliott Bay side. In terms of stream width, and possibly even in volume of water discharged, three of these streams equaled or exceeded Schmitz Creek and even Fauntleroy Creek in size. However, all but the largest issued from springs on the upper sides of the bluffs facing the water and dropped steeply and quickly down to the beach after only short runs. One of the Native American names for the bluffs on the Elliott Bay side reflected perfectly the steep nature of these springbrooks. They called the area *dxWtSútxood*, meaning "place of waterfalls." A second Native American name for this same general area was *asleeQW*, meaning "caved in," in reference to the frequent land- and mud slides that occurred along this line of bluffs, slides that plague property owners and City engineers even to this day.

The largest of the springbrooks on the Elliott Bay side of Duwamish Head was 6 links (4 feet) wide where it flowed across the beach, thus rivaling the Lowman Beach stream in size and perhaps also

in volume of water. This one originated farther back and higher up in the highlands above Elliott Bay and carved a longer, less steep, but still rather high-gradient course down to the beach. Today, a narrow, paved lane takes you down the entire length of this steep-sided ravine, now known as Fairmount Gulch.³⁵ You reach it from the top by turning north off SW Hanford Street onto Fairmount Ave. SW. You pass quickly down through about a two-block, unsigned segment that is now a city park, then under the high bridge that carries SW Admiral Way across the ravine, then on down to where the ravine opens out onto Harbor Ave. SW, the old beach line of Elliott Bay. Harking back to my notes on the ravines in the headwaters of the Lowman Beach stream and how foot trails followed some of them before they were eventually filled and paved over for vehicle access, I suspect the same thing happened here. Local lore tells of seasonal use by Native Americans who beached their canoes and camped near the creek mouth, and ventured up the ravine to pick berries. But, as development of the early municipality of West Seattle coalesced around the intersection of SW Admiral Way and California Ave. SW, the townspeople tapped a generous spring feeding into this creek north of today's Admiral Way for the municipal water supply,³⁶ and eventually the stream was piped and graded over, then paved for the auto lane that now traverses its course.

Longfellow Creek

About a mile and a quarter south of the Fairmount Gulch stream, the GLO surveyors came upon another creek mouth, this one a substantial 9 links (about 6 feet) wide, coming in from the south and issuing out into a shallow cove in the Elliott Bay tide flats bounded by the West Seattle bluffs on the west and Pigeon Point on the east. In the future, this cove would be known as Young's Cove, probably after the Youngstown neighborhood at its head where Seattle industrialist William Pigott opened a steel mill in 1905, but the creek itself was named for John E. Longfellow, who set up a logging camp and mill near its mouth and went to work logging that area of West Seattle in 1886.³⁷ However, long before either of these movers and shakers arrived on the scene, the creek was known as *t7áWee*, meaning "smelt," a place where these silvery fishes congregated each season to spawn and the Duwamish People came to catch them.³⁸ The stream originally flowed into Young's Cove about where SW Andover Street crosses today. All the land you see there now

and all the land you see north of SW Andover is fill, so Young's Cove exists today only in memory. The stream now flows beneath this fill in a pipe 3,275 feet long, at least part of which also serves as a stormwater conveyance system, that takes a 90-degree turn to the east and discharges into the lower end of the Duwamish West Waterway a bit north of the intersection of West Marginal Way and Chelan Ave. NW.

The size of Longfellow Creek's original catchment is somewhat uncertain (as I explain below), but a figure of 2,816 acres (4.4 square miles) is cited by the folks at Seattle Public Utilities for its present drainage area, making it the second largest watershed in Seattle (Thornton Creek in the Northeast Quadrant is the largest). The creek flows in a generally south-to-north direction in a valley that extends about three and a half miles, as the crow flies, from its top near SW Roxbury Street in White Center down to the original stream mouth. Basin relief is 520 feet, as measured from the highest point in Seattle near the intersection of 35th Ave. SW and SW Myrtle Street, but the extensive wetland where the stream originates sits at about the 280 foot level, making the overall stream gradient about 1.5 percent. One short, two-forked tributary flows down off the western ridge from the present Camp Long and West Seattle golf and recreation area, and another drops down (albeit in a pipe) off the western ridge from a recently restored pond in the High Point neighborhood just a few blocks to the south.³⁹ I show both of these tributaries as historical streams on my accompanying map of the southwest quadrant. Two additional, very short springbrook tributaries, which I also show, flow down off the western ridge from sources just below the Forest Lawn cemetery. Numerous other springs and seeps that I don't show because I couldn't find confirming evidence for their historical placement also feed into the Longfellow Creek valley from both the western and eastern ridges.

Prior to settlement, Longfellow Creek may have had another tributary that joined the upper mainstem from a source area southeast of the city line in what is now the City of Burien. Earlier in this chapter, in my notes pertaining to Salmon Creek and Seattle's southern city limit, I mentioned how, in its natural state before urban development ever got under way in the White Center area, a portion of what is Salmon Creek's uppermost catchment today actually discharged to the northwest into the Longfellow Creek drainage. Perhaps as recently as the late 1950s or early

1960s, pipes were laid that rerouted this portion of the drainage, eliminating the natural discharge into Longfellow Creek and instead directing those waters southward into Burien's Lake Garrett and thence into Salmon Creek.

To the west of this "lost tributary," the source area of the Longfellow Creek mainstem was occupied by a major spring-fed cranberry bog and wetland that, in its original state, extended from the low surface divide at SW Roxbury northward all the way to SW Trenton Street—a distance of about half a mile across land now largely filled and occupied by the Westwood Town Center and Roxhill Park. Immediately south of the Roxbury divide was another extensive wetland where Seola Creek originated. Because of their proximity and the matching north-south alignment of these wetlands on either side of the divide, many believe that the same underground water supply feeds both of these wetlands and their respective creeks, and maybe even the springs and seeps that comprise the headwaters of the Fauntleroy Creek drainage just a few blocks to the west as well. Curiously, no Native American place name was recorded for this wetland, although local historians insist that it was indeed a popular place for visits by both the Native People and the later-arriving white settlers particularly for its cranberries.⁴⁰ The cranberry bog itself was in the uppermost part of the wetland, according to these local historians, where Roxbury Park is located today and where a small portion of the original wetland has been restored.

Although the historical record leaves no doubt that the Longfellow Creek watershed was heavily forested prior to settlement, except perhaps in the very headwaters where the cranberry bog was located, serious logging didn't begin in this watershed until 1886 when John E. Longfellow set up his camp and sawmill at Humphrey's Settlement. Even then, most of the logging took place in the uplands owing to the intrinsic wetness of the ground near the stream which made removing logs difficult, leaving the stream corridor and the steeper side slopes well timbered until at least the 1920s. Even though Longfellow's mill burned down in 1892, logging and lumbering continued in the watershed well into the 1920s.

Puget Lowland streams flowing in undisturbed forested settings such as this typically exhibit well modulated hydrographs with reliable base flows. An intact riparian canopy provides ample shading for such streams, keeping their water temperatures cool and also well-modulated. That this was

indeed the case for Longfellow is evidenced by testimony that early streamside residents used the creek as a refrigerator to keep their milk, butter, and eggs cool.⁴¹

Fish communities of such streams, particularly those, like Longfellow, with open access to salt water, typically are dominated by coho salmon and coastal cutthroat trout (both resident and sea-run life histories of the latter) with proportions often favoring coho over cutthroat trout by as much as 4 or 5 to 1.⁴² According to local historians R.W. Morse and E.R. Brown, steelhead also returned to Longfellow Creek but probably not, I suspect, in large numbers since steelhead do not predominate in streams with watershed areas less than 5 square miles as a general rule. The same was probably true for chinook salmon relative to coho. Chinook numbers tend to be low in the smaller Puget Lowland streams if they use the streams at all, even in undisturbed systems, whereas coho predominate in such streams.⁴³ Chum salmon are not mentioned in the historical record, but may have spawned in the lower reaches of the stream near its mouth.

At the watershed scale, the usual sequence of major land use changes for Seattle area streams has been logging followed by agriculture followed by urbanization or industrialization. I've already touched on logging in the Longfellow Creek watershed. Agriculture had its time too, particularly in the 1920s and 1930s in areas near the headwaters where portions of the headwater wetlands were ditched and drained for truck farming, and several orchards were established on the slopes above the stream.⁴⁴ But agriculture never became a predominant land use in this watershed as it did, say, in the South Park neighborhood which I discuss later. Industrial land uses usually center in areas outside of urban residential and business neighborhoods, but in this case one heavy industry has been a presence in the lowest portion of the basin near Young's Cove since 1905 when Pigott's steel mill went into operation.

Urbanization initially clustered in the Youngstown area in proximity to the steel mill, but then, when trolley lines extended up the east and west sides of the valley, urbanization followed. Most of this phase of urban development took place on the uplands and slopes of the watershed, again because of the perennial wetness of the ground nearer the creek, leaving the stream corridor itself still relatively untouched. But gradually, development pushed onto the valley floor, stepping up

considerably during the World War II years when defense worker housing was so desperately needed, and then again in the 1960s.

This phase of development did not treat the creek kindly. An area just upstream from the steel mill was used as a city garbage dump between 1911 and 1920, and was the source of a spectacular fire in 1927. Stormwater runoff that flowed directly into the creek increased with urban development, bringing with it increased inputs of oil and sediments from the High Point community and other non-point sources up and down the valley. Unchecked encroachment and the rampant dumping of garbage and refuse into the stream became so extensive that in 1949 the State declared the creek a health hazard. Between 1960 and 1965 what remained of the bog and headwater wetland at the source of the creek was filled and mostly paved over for construction of the Westwood Town Center shopping mall. Also in the mid 1960s, the entire upper segment of the stream channel down to SW Thistle Street, a distance of about 4,900 feet, was buried in a pipe to make way for even more development.⁴⁵

Although no hard historical data are available for comparison, urbanization of the Longfellow Creek watershed surely had adverse effects on its fish community. With much of its length confined to pipes and what remained of its open-channel habitat exposed to increasing amounts of surface runoff from rains and storm events that in turn reduced water quality, altered its hydraulic regime, and greatly simplified its instream habitat,⁴⁶ the fish community responded by decreasing in size and changing in species composition. Coho salmon runs dropped off to near-nothing. Returns of sea-run cutthroat trout ceased entirely, as did returns of steelhead to the stream. In other urbanized Puget Lowland streams, the loss of coho salmon has generally been followed by a rapid increase in the number of stream-resident cutthroat trout as this species is released from competition with juvenile coho for rearing space in the stream. But that never happened in Longfellow Creek. Two recent fish surveys conducted for the City, one by the US Fish and Wildlife Service in 2005 and 2006 and the other compiled over several years by the Wild Fish Conservancy, found only a single resident cutthroat trout residing in the creek.⁴⁷

The year 1972 saw the first real study of the feasibility of restoring Longfellow Creek—by students at Chief Sealth High School, funded by the Seattle City Council. By this time too, recurrent flooding

along the channel had local residents clamoring for relief. The City responded with engineering solutions to provide more detention and to increase the runoff capacity of the channel, including completion of the Webster Street detention basin in 1982, along with additional runoff controls near SW Findlay Street not far from the south boundary of the West Seattle golf and recreation center. In 1992, again funded by the City, a group of local citizens called the Longfellow Creek Watershed Management Committee completed an action plan for nonpoint source pollution control, and in 1999 a habitat restoration master plan was prepared by consultants for Seattle Public Utilities as part of the Urban Creek Legacy Project that I've mentioned earlier. In Longfellow Creek, this project focused on stream habitat restoration work with the goal of re-establishing at least some of the ecosystem services that the natural stream had provided as well as bringing back its severely diminished salmon runs.

In Longfellow, this program had considerable success in restoring instream habitat features in the remaining open-channel stream segments, and at least some members of the old fish community seem to have responded favorably. Spawner survey data have shown that adult coho salmon return to the stream in higher numbers, and continue to return despite having to swim through that 3,275 feet of stormwater conveyance pipe at the lowermost end of the stream, and despite the staggeringly high levels of pre-spawning mortality that they experience upon entering the stream. A few chum salmon adults, nowhere mentioned in the historical record, also have been observed spawning in the stream in recent years. However, sea-run cutthroat trout have not returned, nor have steelhead or Chinook salmon. Nor is it clear that the resident trout population has shown any sign of increasing. Rather, recent surveys have shown that at least two non-native warmwater fishes have taken up residence in Longfellow Creek, namely the common carp *Cyprinus carpio* and pumpkinseed sunfish *Lepomis gibbosus*.⁴⁸

Duwamish River

Flanking the east side of the Longfellow Creek valley, a long south-to-north-running ridge known as Puget Ridge, with Pigeon Point at its northern terminus, separates the Longfellow drainage from the Duwamish River bottom and delta area. Just around Pigeon Point to the east, at the base of the point on the original shore of the Duwamish tide flat about where SW Idaho Street intersects

with West Marginal Way today, stood *Tóó7ool7altxW*, meaning “Herring’s House,” an important Native American town whose occupation extended far back into antiquity. According to local historian David Buerge, this town drew its name from the silvery Pacific herring *Clupea harengus pallasii*, that crowded into the shallows along this shoreline season after season to spawn. Their roe was collected on fir boughs placed in the water by the Indians. The fishes themselves were harvested on spiked herring rakes that the Indians would sweep through the roiling water.⁴⁹

When the GLO surveyors rounded Pigeon Point, they took no notice of Herring’s House. What they did note was the mouth of the river and the several low islands that lay across its mouth and divided its flow into three channels that issued out onto and through the tide flats. A short segment of the westernmost of these old channels still exists where the west side of the modern Duwamish Waterway cuts around the south and west sides of Kellogg Island, itself a remnant of one of those old islands in the river mouth. The GLO surveyors measured the river’s width at each of their east-west and north-south section line crossings, and they also completed meander surveys of both the west and east banks of the river, mapping (I think for the first time) its original looping course across the bottom land. As they progressed, they recorded the mouths of the myriad sloughs and tributary streams they encountered, which I discuss below.

Without doubt, the major transformation that occurred on this portion of the historical landscape was the construction of the Duwamish Waterway. Although dredging didn’t get under way until October, 1913, the idea for it was floated twelve years earlier by former State governor Eugene Semple. Semple proposed an ambitious series of public works projects that included filling the tide flats, straightening the river, and digging a canal through Beacon Hill to Lake Washington. His crews actually started digging that canal through Beacon Hill with the dirt from the digging being sluiced into the tide flats, but slides and cave-ins soon overwhelmed the project and it was abandoned. Impetus for straightening the river so as to move water through as quickly as possible got a tremendous boost in 1906 when a great flood swept down the Duwamish, inundating the bottom land and all the new farming, industrial, and residential developments that had sprung up by then. In 1909, City Engineer R.H. Thompson, whose regrades in Seattle had continued to provide the dirt for filling the tide flats, picked up the ball on the Waterway project and four years

later dredging commenced in the Georgetown neighborhood. Gradually the river's meanders and its associated sloughs and wetlands disappeared under the dredge spoils as the river was straightened, reducing a sinuous 13.5 miles of its length at the start to a mere 4.5 miles upon completion in 1920.⁵⁰

Puget Creek

The first stream that the surveyors encountered in their meander survey upstream along the west bank of the Duwamish was the one we now call Puget Creek. They recorded it in their field notes as a "brook 5 links wide [3.3 feet] entering from the west." Actually, these surveyors first saw this creek when they passed through its ravine on their survey of the north-south section line followed by today's 16th Ave. SW, up on the east slope of Puget Ridge. There they recorded it as a "brook 2 links wide [about 1.3 feet], runs east." Back in the 1880s, the Puget Ridge area where the creek originates was logged off by the Puget Mill Company, a subsidiary of the Pope & Talbot logging and lumbering empire. In 1912, the Puget Mill Company donated a 17.6-acre parcel including most of this ravine to the City of Seattle for a public park.⁵¹ This park, later added to by the city, includes all that remains of what once was a free-flowing creek. The creek dropped steeply eastward to the Duwamish bottom, then flowed across the bottom land to its confluence with the river where the surveyors saw and recorded it again on their meander survey.

Up at the top of the ravine, the creek's source water comes in from the south, issuing into the ravine from a long, finger-like swale that extends south for many blocks, like a low, narrow crease along the top of Puget Ridge, about on a line with today's 19th Ave. SW. Several east-west city street grades now cut across it, and the playground of the Saniso Elementary School, located at 18th Ave. SW and SW Myrtle St., appears to have been built atop it, perhaps on fill. Local residents maintain that all of this swale comprised the historical headwaters of Puget Creek. They also tell of the existence of a pond at or near the site of the school playfield that was diverted down the slope to the east into Longfellow Creek,⁵² perhaps to accommodate construction of the playfield. About an 8-acre portion of this finger-like wetland up near 19th Ave. SW and SW Brandon St. has been set aside for restoration as the Puget Creek Natural Area.

Puget Creek entered the Duwamish at a point opposite the lower end of a large, low, marshy island that split the flow of the river as it discharged out across the Elliott Bay mud flats. When the Duwamish was channelized and straightened in 1913, this island was cut through to create the new waterway. But the old west channel of the river was left open, thus preserving the last original bend of the river's course through today's industrial area. Also left in place was the lower west chunk of the island opposite the mouth of Puget Creek, now known as Kellogg Island. The creek now reaches the Duwamish through a stormwater conveyance pipe, and now flows in an open channel only within Puget Park.

The Duwamish People had a place name for the land at the mouth of Puget Creek. They called it *XaXaboos*, meaning "crying face," most probably a reference to the springs on the face of the hill to the west "weeping" their waters into the creek (these also may have been the sources of the additional water the GLO surveyors noted in the creek once it had reached the bottom land). Duwamish elders have told ethnographers that three longhouses once stood on this site. The People also had a name for the river channel at the lower end of Kellogg Island. This they called *sqabqabap*, meaning "very still bottom" or "backwater."

Just about opposite *sqabqabap*, upstream from the mouth of Puget Creek on the west bank of the river, was another Native American site, *yulééqWad*, meaning "Basketry Hat." I'm not clear on just how that meaning related to the site, but archaeologists uncovered evidence that it had been occupied at least seasonally since A.D. 670 or so. There is also evidence that this site was lower originally, closer to the river level and wetter, but was uplifted to its now higher and drier level by the great earthquake that occurred on the Seattle Fault sometime around A.D. 900. After that, a major permanent settlement stood here.⁵³ The site is now Herring's House Park with a longhouse and cultural center, but is not the original site of the village known as Herring's House. That site, as we've already seen, was further north (downriver), not on the river at all as it originally existed, but on the Elliott Bay bank of the tide flats near the base of Pigeon Point.

The Duwamish People had another landmark just south (upstream) from Kellogg Island, also on the west shore of the river, opposite the upstream end of another smaller, sort of hotdog-shaped island out in midstream. This was *XubXubálee*, meaning "giant horsetail place," where horsetails

grew in profusion on a piece of level, wet meadow. The Duwamish would gather there in the early spring when the first green shoots appeared, cut and peel them, and eat them raw, like celery.

***Taleech*, the South Park Stream and Slough Complex**

About a mile south (upstream) from the mouth of Puget Creek, the hill slope marking the western edge of the Duwamish Bottom rose up only about 475 feet back from the river bank. Here the GLO surveyors came upon another small springbrook 3 links (about 2 feet) wide that flowed down from the encroaching hillside and crossed the narrow floodplain to the river. Another 500 feet south along the river bank, where the river turned north again after one of its major looping meanders, was a site known as *tuqbálee*, meaning “aerial duck net place,” where the area’s Native Americans erected a large aerial net, strung between tall poles along the river bend, to trap flying waterfowl during their spring and fall migrations. The Indians also had a name for the landmark presented by the river bend itself. This they called *poopii7álap*, meaning “little bend at the tail end.” Historian Coll Thrush and his co-author Nile Thompson have written that this name is actually a diminutive form of the Native American name for the Puyallup River near Tacoma, both names describing curves at the lower ends of their respective streams, i.e., the last natural turns before reaching the mouths of the rivers. As the GLO surveyors worked their way around to the very bottom of *poopii7álap*, they came to what they took to be one of the myriad sloughs they would encounter in their survey of the Duwamish Bottom, this one a channel about 1 chain (66 feet) wide flowing sluggishly into the river from the southeast. The Indians had a name for this site as well. They called it *Taleech*, meaning “fish-drying rack,” a place where they set up wooden racks to dry fish.⁵⁴

Now, here we come to a bit of a quandary. Earlier in these notes, where I wrote about the streams along the south city limits, specifically the Lost Fork of Hamm Creek, I mentioned that in 1894, the U.S. Geological Survey (USGS) published a large-scale map of the Seattle Quadrangle. That map showed a major creek entering the river at *Taleech*, exactly where the GLO surveyors thirty-three years earlier had recorded the large slough. According to that 1894 map, this creek headed up nearly two miles south of *Taleech*, up on the ridge above the Duwamish Bottom just a few blocks east of today’s White Center neighborhood but south of the present Seattle city limit. This stream was shown flowing east as it dropped down through

a ravine to the bottom land, then curving around to the north-northwest and continuing on that course through the western part of today's South Park neighborhood to discharge into the Duwamish at *Taleech*. Seven short tributaries, each originating at a side hill spring or seep on the north or Seattle side of the city line, also were shown flowing down to the east to join this creek.

In truth, the GLO party would have seen but little of this creek system because, as mapped in 1894, it and its tributaries crossed section lines in only a few places. But at the places where it did cross section lines (or where it should have crossed them), the GLO records from 1861 paint a completely different picture of what was on the landscape when they saw it. As I've noted above, the GLO party did record the slough at *Taleech*, exactly where the stream mouth was mapped by the USGS in 1894. And, on their survey of the east-west section line now followed by today's SW Kenyon Street right-of-way about two-thirds of a mile south of *Taleech*, they crossed a tiny north-flowing brook, only 1 link (less than 1 foot) in width that could have been one of its side hill tributaries. Then, a little shy of a quarter-mile farther east along this line, just beyond an intersection with one of their north-south section lines,⁵⁵ they came to another slough, this one 50 links (33 ft) wide, that also was flowing north where it crossed their east-west line, but quickly curved around to the northwest to cross the north-south section line they had just passed.⁵⁶ Then it changed course again, back to the northeast and crossed the north-south line once more, from which point it continued northeast and disappeared into an expanse of wetland that extended to both the east and the northwest, all the way to the river. This could have been the South Park stream of 1894; it's in about the right place on the map. But in order to connect up with the stream mouth at *Taleech*, it should have turned back west again and crossed that north-south section line a third time. But this it did not do, at least not as an open-channel slough or stream. Nor did it cross the north-south line anywhere to the south, as again it would have had to do to connect up with the headwaters as mapped in 1894.

But there's more. When the GLO party continued their survey south along this north-south section line, it recorded three brooks, each 3 links (about 2 feet) wide, flowing east across the line on the north or Seattle side of the present city limit: one a half-mile north, the second four-tenths of a mile north, and the third only about 260 feet north. They also recorded a fourth east-flowing

brook, also 3 links (about 2 feet) wide, that crossed about 800 feet south of the Seattle city limit. These match up pretty well with the mainstem (the fourth or southernmost of these crossings) and the southernmost three of the seven tributaries of the South Park stream as mapped in 1894. However, in 1861, rather than turning north-northwest when they reached the Duwamish Bottom as the 1894 map showed, all of these brooks turned southeast instead and angled off in that direction as part of the Hamm Creek drainage.

So—not even the headwaters of this South Park stream system as mapped in 1894 conformed to what the GLO survey reported on the landscape in 1861. Which map got it right? I resolved this quandary for myself by accepting that both maps got it right for their respective periods. For my own map of streams and water features in the Southwest Quadrant of the city, which tries to depict the landscape as the first white settlers would have seen it, I accept the 1861 GLO survey as the most accurate view. But by 1894, many changes had occurred in the South Park neighborhood. By that date in Seattle's history, the area was already becoming a principal supplier of fresh produce and other agricultural products to the growing city. But this was wet bottom land. Ditching, draining, and diversion of streams to lower the water table somewhat and shunt excess water away from their fields was an early priority for the farmers who took up land here. I suspect that the South Park stream mapped in 1894, given its location on the western edge of the Duwamish Bottom near the base of the bluffs, away from the main farming areas, was largely a man-made result of this effort, including altering the course of the northernmost springbrooks of the Hamm Creek drainage, turning them instead to the north-northwest to become the new South Park stream's headwaters and upper tributaries. I believe that the daylighted segment of the Lost Fork of Hamm Creek, which flows north where it skirts the edge of the Marra Farm along 4th Ave. S. between S. Director and S. Barton streets, is a legacy of this early diversion.⁵⁷

The South Park Oxbow Lake

Another water feature observed by the GLO surveyors on the South Park landscape back in 1861 was a long, narrow oxbow lake that spread across a wide flat on the west side of the river. The surveyors encountered and measured this old, abandoned river channel twice, although they took it to be a slough each time. On their east-west section line at the northern end of the

oxbow, it measured 88 links (about 58 feet) wide; and on their next north-south section line to the east, near the southern end of the oxbow, it measured 92 links (about 61 feet) wide. The Native Americans understood that this was an old channel of the Duwamish River; they called it *hLuwáhLb*, meaning “abandoned.” It persisted on the landscape as an oxbow lake until sometime in the 1913-1917 period when it was dredged and became part of the Duwamish Waterway.

At the upstream (southern) end of the oxbow, the Duwamish people also had a place name for the flat that lay between it and the river. This was *xWáPeechHad*, meaning “lift it over,” likely a reference to portaging canoes. A portage here and another at the lower (downstream) end of the oxbow would have cut off a longer paddle around a meandering loop of the river. It also would have allowed Indian paddlers to avoid a “bad place” in the river known as *huCHsácHee* meaning “hand of ill will.” According to the story, this place was inhabited by an evil spirit that occasionally would rise up out of the water in the form of a hand missing its fingers. If the hand then slowly submerged again, those who saw it knew they were certain to die soon. As it happens, another small portion of the old river course was preserved here when the Duwamish Waterway was dredged. This remnant, located near the north end of Boeing Field about a block south of Ellis Ave., now forms a finger of water that extends northward off the Waterway up to East Marginal Way. Perhaps it was the dredging of the Waterway and filling of the river upstream of *huCHsácHee* that vanquished the evil spirit. ⁵⁸

Native American parties who did choose to portage and take the oxbow to shorten the paddling distance up- or downriver—or to avoid *huCHsácHee*’s lair—also were electing, by default or intent, to bypass a major village known as *dxWqWééTLtud*, meaning “place of the fish spear.” This was another large village, located on a marshy flat on the inside of a large, sweeping bend of the Duwamish, on its west bank about a mile north of the oxbow. It is said that this village was still occupied as recently as the 1920s. Maybe so, but the land here also became the site of the Georgetown race track sometime in that period. It now lies under the north end of Boeing Field.

The Dunlap Canyon Mystery Stream

Over on the east side of the Duwamish River, the east-west survey line that had more or less followed the present city line along S. Roxbury Street leaves Seattle territory and runs across land that is now either King County's or in the corporate limits of Tukwila. Down near the south end of Boeing Field, the Seattle city line turns south again and the section line once again enters the city. It continues east across the toe of the southernmost slope of Beacon Hill, then crosses the narrow little valley locally known as Dunlap Canyon, through which MLK Jr. Way South and the Sound Transit light rail tracks now run. Then it climbs again to intersect the Lake Washington drainage divide on the crest of the hill to the east.⁵⁹ About a third of a mile north of this section line, the Lake Washington drainage divide that had been tracking southeasterly along the crest of the Beacon Hill ridge, takes a turn to the east-southeast and slides down off the ridge to cross a low, barely perceptible rise in the landscape that forms the head of Dunlap Canyon. As I say, the drainage divide is perceptible here, but only if you look carefully as you drive south past S. Henderson Street. You see it as a gentle rise in the landscape, topping out where a short stub of Beacon Ave. S. intersects on your right. From that point south, the land on the valley floor slants ever so gently downward, opening out to the west to merge with the Duwamish Bottom at the southern end of Beacon Hill, and continuing all the way down to where MLK Jr. Way ends at its intersection with South Ryan Way, the Boeing Access Road, and the ramps leading to the I-5 freeway and SR 900 to Renton. This intersection also marks our Quadrant's southern boundary on this side of the Duwamish. Everything we see looking south from this intersection, and to our west, is outside the city limit which has also tracked south along MLK Jr. Way and then turned east up the South Ryan Way ravine.

In 1862, when the GLO party reached the narrow little valley of MLK Jr. Way South on their survey of the east-west section line, they found themselves in an alder thicket where they also found "a brook 2 links [1.3 feet] wide running southeast." What they didn't see, because it flowed off to the south and quickly left their line of march, was that this little stream continued down the gentle valley until it reached the vicinity of that major traffic intersection, and there it was joined by a second stream that spilled down through a ravine from the east, the very ravine now occupied by South Ryan Way. If you backtrack up that ravine to its top, you find that it has two branches. South Ryan Way continues up the northern branch and you don't see much

except houses and pavement. But at the top of the southern branch just south of S. 107th Street (you're outside the city limits again at this point), there's still an active spring and springbrook flowing steeply down an open channel to South Ryan Way where it goes into the pipe carrying the northern branch and the remainder of the stream.

What earns this little drainage its mystery stream label is the course it followed after the merger of the MKL Jr. Way fork with the two-pronged fork that came down the South Ryan Way ravine. Where was this little stream's confluence with the Duwamish? The GLO map and field books don't show it although they do show swamps at two or three places along the river's edge that could be confluences, and I've found nothing to date in any of the more recent historical record that would answer this question. My guess, based on the way the land slopes off to the south, is that the stream continued in that direction, and I show this on my map.

From where we stand at the traffic intersection, we are looking out over land that is in the corporate limits of Tukwila. Even so, there are several interesting features down here that are worth taking note of. This is an area of special cultural significance and deep reverence to the native Duwamish People. This is the place where their world began. Today you have to look with your imagination because the key landmarks have been so drastically altered. But back in their time, three hills—actually outcroppings of late to middle Eocene bedrock that resisted the scouring of the last ice age—rose up from the Duwamish Bottom along the banks of the river here. These were landmarks of the epic battles that made the Duwamish world what it is today and established our modern climate. The first battle occurred when North Wind, bringing with him ice and cold, came to the Duwamish Valley and vanquished South Wind and his people. The second battle occurred when South Wind's son, Storm Wind, ousted North Wind and drove him off to the North Country.

When North Wind (*stóóbul7oo* to the Indians) first arrived, he established his village on the hillside west of the river near where the Highway 99 and SR 599 interchange is located today. After the first battle, South Wind's mother held out on the southernmost and farthest upstream of the three Eocene outcroppings, named *sQWul7ads* (meaning "dirty face" or "burnt" or "blackened" owing to dark streaks that coated the river-side face of this west-bank

hill), but she was harassed mercilessly and even defecated on by Raven, North Wind's slave. Raven's excrement and the woman's tears account for the streaks, according to the stories. South Wind's wife, the daughter of *stuqáxW*, meaning "Beaver," also escaped to the home of her father on the second of these hills, on the east bank of the river, where she gave birth to Storm Wind, thus setting the stage for the second epic battle. The hill of Storm Wind's grandmother, *sQWul7ads*, has suffered mightily at the hands of developers over the years; it was once known locally as Quarry Hill, which pretty much says it all. There's now an office park where the north end of the hill used to be and a housing development covers the south end. The hill where Storm Wind's mother gave birth, *stuqáxW*, also known locally as Poverty Hill, was destined for the same fate but was rescued and much of it preserved as an interpretive site by neighborhood activists. It now goes by the name Duwamish Riverbend Hill. The third hill, located just north of *stuqáxW*, has the name *sXayáKW*, which also has been translated as "Beaver" but more recently as "meany" or "a mean person." I'm not clear on just how this hill or its indigenous name fits into the epic stories, but it too has been carved up by development, in this case the Boeing Access Road exit from I-5 which crosses over the eastern part of the hill, and the access roads to and from Airport Way that cut through its core.⁶⁰

A little less than a mile off to the southwest from our viewpoint, in the Duwamish River itself, is another feature, a shelf of rock that partially spans the river, that's also part of the epic battle story. This is North Wind's Weir, or *quláXad* (meaning "barrier" or "fence" or "stockade"), which, until breached by Storm Wind, kept the salmon from coming upriver to his people. It is visible at low tide from the footbridge that crosses at S. 112th Street.

The Georgetown Spring and Springbrook

The GLO meander survey of the east bank of the Duwamish north (downstream) of the North Wind's Weir site passed through one rather extensive swamp that extended northward up one of their north-south section lines just east of the *sXayáKW*, or "mean person" hill that could have masked a confluence of the MLK Jr. Way and South Ryan stream with the Duwamish had that stream taken a westerly course. But the survey party came to no other water features worthy of their recording until they reached today's Georgetown area. They did pass several

additional Native American sites worthy of our interest, however, including one a couple of bends of the river downstream from North Wind's Weir named *XoobXoobtay*, meaning "much paddle wood." This was a grove of trees, later identified as Oregon ash *Fraxinus latifolia*, that grew on a flat within one of the river bends. The wood of this ash was much favored among northwest Indian bands for crafting canoe paddles. This grove was directly across the river from *xWáPeechad*, or "lift it over," the southern portage across to the South Park oxbow lake that I talked about earlier. The flat to the east of the ash grove was meadow land, now covered by the southern end of the Boeing Field complex. About a mile and a quarter farther downstream was another Native American landmark on the east back of the river, namely *tuCH7was*, meaning "rafter support post." T.T. Waterman, the anthropologist, surmised that this site got its name from tilted trees that had slipped with a landslide, so that they looked like the braces used to support longhouse rafters. The landslide Waterman referred to here buried an old Indian trail that climbed Beacon Hill and crossed over to the Prichard Island area on Lake Washington.

Another mile downstream along the east bank of the river brought the surveyors to today's Georgetown. Local historian June Peterson's book on the history of the short-lived City of Georgetown, 1904-1910, mentions two springs that provided water for the town's residents and businesses.⁶¹ One of these, perhaps the primary source of Georgetown's municipal water, bore the name Weir Spring after South Park property owner Martha Weir. This source was evidently over on the west side of the Duwamish River on a tributary of the South Park stream that I discussed earlier. According to co-authors Zahler, Marti, and Thompson, who published a pictorial history of the South Park neighborhood back in 2006, Ms Weir had a diversion dam on one of the South Park stream's tributaries and sold her water to the Town of Georgetown.⁶²

The second spring, and the one I focus on here, was located in a ravine on the west slope of Beacon Hill near what was then called Colvin Street. In 1910, following annexation by the City of Seattle, most of Georgetown's street names were changed to conform to Seattle's system and Colvin became S. Graham Street. I'm very familiar with this particular ravine since I live on Beacon Hill about three-quarters of a mile north of there, and S. Graham Street (by way of the

Swift-Albro exit and Swift Ave. S.) is my main route home off of I-5 when I'm returning from points south. The GLO surveyors became acquainted with it too, back in 1861, when they scrambled down into it then up its other side while surveying eastward along their east-west section line. They crossed the little brook in the bottom of this ravine maybe 400 feet south of what I reckon to be its spring source, then ascended along the south bank of the ravine which angled north 80 degrees east, while their own course was due east to the crest of the Beacon Hill ridge.

The springbrook itself wasn't much of a stream where the surveyors crossed it so close to its source; they recorded it as only 1 link (a little less than 8 inches) wide at that point, flowing south 88 degrees west, or almost due west. From the mouth of the ravine at the base of Beacon Hill, it was only about a quarter-mile run southwestward across the bottom land to the southernmost of two serpentine bends of the Duwamish River in this neighborhood. But being late summer, there may have been too little flow in this springbrook to make it all the way to the river. I say this because the GLO surveyors recorded no stream entering the river anywhere along that bend when they completed their meander survey of the east bank of the Duwamish. And even up at the top of the ravine there is no spring in evidence today. My guess is that it, like so many others in this quadrant, gave way to piping and grading when the street that was pushed up its ravine (in this case, S. Graham Street) was paved.

"Semple's Brook," Yet Another Seattle Mystery Stream

Moving on downstream (northward) on their meander survey, the GLO surveyors encountered plenty of wetland along the east bank of the Duwamish, plus the mouths of at least half a dozen sloughs that they recorded, but no further creeks or springbrooks. Not, that is, until they had passed the last of the large islands that lay in the Duwamish River mouth and were now surveying along the eastern shore of the open tide flats. Just past that last big island, they came to the mouth of a "brook 6 links [4 feet] wide, [entering] from NE." This stream issued out from a patch of swampy ground and was running almost parallel to the shoreline, which was also trending toward the northeast at this point.

Here we have another of Seattle's mystery streams. Despite its rather substantial size (it was larger at its mouth than Fauntleroy and Schmitz creeks and was equal in size to the Lowman Beach and Fairmount Gulch streams that I've already discussed), this brief note in the GLO field-book is the only reference to it that I've been able to find in the historical record. What's equally curious, again because of its substantial size, is that it did not cross the survey's north-south section line about a half-mile east of its mouth, nor did it cross either of two east-west section lines about a half-mile north and a half-mile south respectively from its mouth. Beacon Hill rears up steeply less than a half-mile inland to the east, so the most plausible explanation for the survey's failure to see the stream again at section line crossings is that its source was a heavily flowing spring somewhere up on the hill slope within that half-mile extent. If you were to track the stream's course backward to the northeast, you would find yourself right at the mouth of the gap where former Governor Eugene Semple tried to dig his canal through Beacon Hill. My guess is that he may have exploited this stream's ravine to get a jump on his own dig. One could also speculate that it was the wetness of the ravine's slopes near the spring's source that brought on the landslides that doomed Semple's project.⁶³

The Holgate Springbrook

About a mile and a quarter further north along the eastern shore of the tide flats, the GLO surveyors came to another, smaller brook, this one only 2 links (about 1.3 feet) wide entering the tide flat from the east. In 1861, the lay of the land was such that Beacon Hill sloped steeply down to the tide flats here, leaving only a narrow strip of beach. The source of this small stream was undoubtedly a spring not far up on the hill slope. The short westerly course of this brook where the GLO surveyors mapped it lines up almost perfectly with the alignment of today's S. Holgate Street (hence my name for the springbrook) where it climbs up a bridge over the I-5 freeway to join Beacon Ave. S. The spring, the springbrook, and the old shoreline now lie somewhere beneath all the pavement and fill beneath this bridge.

Chapter end-notes

1. Heller, R., L. Benda and A. Stonkus. 1987. Reconnaissance Report No. 23, Salmon Creek Basin. King County Natural Resources and Parks Division and Surface Water Management Division, Seattle, WA.
2. My sources for the information in this paragraph are two reports downloaded from official City of Burien websites. The first, titled simply "Preservation Efforts," is available at www.burienwa.gov/index.aspx?NID=517. The second is a longer but untitled and undated essay on the history of Burien and the Salmon Creek watershed available at www.burienwa.gov/DocumentView.aspx?DID=431. Both reports were accessed Apr. 25, 2011 and again Dec. 15, 2011. The third report, cited in Burien report number two, is titled "Historical Changes in the Salmon Creek Basin," King County Department of Natural Resources and Parks, Water and Land Resources Division. This report is no longer on King County's websites and I was not able to locate a paper copy.
3. My source for these and (almost) all other Native American place names used in this book is: Thrush, Coll and Nile Thompson. 2007. An Atlas of Indigenous Seattle. Pages 209-255 in Thrush, C. Native Seattle: Histories from the Crossing-Over Place. University of Washington Press, Seattle, WA and London, UK. Occasionally, where Thrush and Thompson did not record a place name but some other authority did, I use that other authority's name and notation. These occurrences will be highlighted with appropriate end-notes. [More re explanations given for these names and Brace Point landslides that may have wiped out a native settlement?]
4. It's an interesting fact that Lt. Davidson's brig was also named Fauntleroy, but I couldn't find anything in the historical record linking the brig's name to the fiance's family. For more on the 1857 U.S. Coast Survey work (name changed later to U.S. Coast and Geodetic Survey) in Puget Sound, see Bache (1857). The earlier Wilkes expedition is covered in Wilkes (1845), Meany (1926), Hasket (1974) and Barkan (1987).
5. Watershed Citizens, Seattle Public Utilities, and Seattle Parks and Recreation. 2001. Fauntleroy watershed action plan. Watershed Citizens, Seattle Public Utilities, and Seattle Parks and Recreation Department, Seattle, WA.

6. Williams, R.W., R.M. Laramie and J.J. Ames. 1975. A catalog of Washington streams and salmon utilization. Volume 1, Puget Sound Region. Washington Department of Fisheries, Olympia, WA.
7. This early description of the stream where it issued onto the beach is in: Sherwood, Donald N. 1980. Interpretive essays of the histories of Seattle's parks and playgrounds. Lincoln Park. Photocopies of the Sherwood files are available at the University of Washington Libraries Special Collections, Seattle, WA.
8. Morse, R.W. and E.R. Brown. 1989. Fauntleroy legacy. Privately published by the authors, Seattle, WA.
9. This brief summary was compiled from Morse and Brown (1989) and Donald Sherwood's narrative on nearby Lincoln Park, in which he described the ravine where Fauntleroy Creek issued onto the beach and its subsequent filling for the trolley extension. The 1914 trolley-era photo of the Fauntleroy Community Church was published on-line in a HistoryLink.org essay titled "Seattle Neighborhoods: Fauntleroy—Thumbnail History;" see Richardson (2002).
10. Morse and Brown (1989); Watershed Citizens et al. (2001).
11. End-note re why coho but not other salmon species or steelhead could utilize lower Fauntleroy, with refs as needed.
12. Morse and Brown (1989); Watershed Citizens et al. (2001).
13. Morse and Brown (1989).
14. Watershed Citizens et al. (2001).
15. Tabor, R.A., D.W. Lantz and S.T. Sanders. 2010. Distribution and habitat use of fish in Seattle's streams: final report 2005 and 2006. U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, Lacey, WA.
16. Sherwood, Donald N. 1980. Interpretive essays of the histories of Seattle's parks and playgrounds. Lowman Beach Park.

17. Eels, Clay, editor. 1987. West Side Story. West Seattle Herald/White Center News, Robinson Newspapers, Seattle, WA, page 44.
18. Lillevand, David N. 1985. South Alki Spring Hill Villa. Two volumes, comb-bound printed manuscripts on file at Log House Museum, Southwest Historical Society, Seattle, WA. Accessed March 20, 2011. The cited material is in Vol. 2 at page 81.
19. Kitloe, Gladys B. (no date). The hill in my life. Comb-bound copy of a ring-bound, typed original. Available from Vlad Oustimovitch and Kathryn Armstrong, Orchard Ravine Community Association, Seattle, WA.
20. Thrush and Thompson (2007) have the meaning as "rids the cold" or "implement for ridding the cold," whereas earlier, Waterman (1922) recorded it as "a winter house."
21. Eels (1987), pages 286-287.
22. Eels, (1987), page 44; see also: Tate, Cassandra. 2008. Seattle neighborhoods: West Seattle Junction—thumbnail history. HistoryLink.Org Essay 8725. On the internet at www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=8725. Accessed May 9, 2011.
23. Shay, Steve. 2007. Mee-Kwa-Mooks Park history revealed. West Seattle Herald and White Center News. October 16, 2007. This newspaper article cited Alex Schmitz, grandson of Ferdinand Schmitz whose estate once occupied the park grounds, as saying "there was a big stream used for drinking water and to raise crops." The article went on to say the stream is now mostly underground.
24. Sherwood (1980), Me-Kwa-Mooks Park, Schmitz Memorial Overlook.
25. Lillevand (1985), Vol. 2, page 81. There is still a nice lawn in Mee Kwa Mooks Park where families picnic in nice weather, but the part of the lawn where Lillevand's "secret" trout spot was located, at the north edge of the park near Beach Drive, is now overgrown with trees, shrubs, and brambles. The pond is still there, albeit dry now, just a few feet inside the tree line from the picnic area.

26. For accounts of the Alki settlement, see Bagley (1905, 1916); Bass (1937, 1947); Denny, A. (1888 [1908]), Denny, E.I. (1909); Newell (1977); and Watt (1934 [1959]).
27. Sherwood (1980), Schmitz Park; see also Johannsen (1959).
28. Watt (1931) [1959]; Nevell (1977).
29. Johannsen (1969).
30. Stoker and Perkins (2008).
31. This debris jam persisted up to the present day, or nearly so. Its location was near a parking lot at the foot of the old Park entrance road, which the creek passed under in a culvert. In 2002, the parking lot was decommissioned and the culvert and fill removed, as was the old log jam, thus daylighting the creek through this reach.
32. Eels (1987) attributed this place name and pronunciation to Seattle historian David Buerge, citing an unpublished manuscript by Buerge titled "Before Seattle." Thrush and Thompson (2007) did not include this location in their Atlas of Indigenous Seattle.
33. Lillevand (1985), Vol. 2, page 81.
34. Washington Trout (2000); Taylor Associates (2002).
35. Sherwood (1980), Fairmount Park. The name Fairmount derives from a real estate plat filed in 1907 by J. W. Clise and S. F. Rathbun's Washington Trust Company.
36. Eels, Clay, interviewer. 1991. Interview with Norman "Normie" Beers, West Seattle, December 17, 1986. Transcript on file at Southwest Seattle Historical Museum. Accessed 16 May, 2011.
37. The settlement here was known originally as Humphrey's Settlement. It seems to have sprung up in 1886, the same year Longfellow, the logger and lumberman, arrived and set up his camp and sawmill operation. When Pigott acquired the property for his steel mill, he renamed the settlement Hubbard after his home town in Ohio, but in 1910 he changed the

name to Youngstown after the larger and more famous Ohio steel city. The steel mill itself was constructed in 1904, partly on fill over the lower stream channel and the stream mouth portion of the tide flat. The stream itself was put in a pipe beneath the site for its now somewhat longer journey under the fill to the cove. You can read more about the history of this area and of the Longfellow Creek drainage as a whole in Eels (1987); LCWMC (1992); and Dubrow and Berlow (1994). Although focused primarily on the Fauntleroy neighborhood, the local history book by Morse and Brown (1989) also has information about Longfellow Creek history. Local historian Paul Dorpat published a thumbnail sketch of William Pigott and the history of his steel mill (still operating today by the way, but under Nucor Steel ownership) titled “Man of Steel” in his weekly “Now and Then” column for the Seattle Times. Look it up at the library in the January 13, 2002 issue.

38. Earlier, T.T. Waterman had interpreted *t7áWee* to mean “trout” (see Waterman 1922), but the tribal elders consulted by Thrush and Thompson (2007) insisted that Waterman misunderstood what he had been told and the word actually translates to “smelt,” very likely the species known as surf smelt, *Hypomesus pretiosus*. Surf smelt spawn intertidally on beaches where they find the right combination of shallow slope, coarse sand, fine gravel, and freshwater seepage. Evidently, the beach near the original mouth of Longfellow Creek had the right combination. Surf smelt have all but disappeared from Elliott Bay owing to the loss of such places to development.
39. According to architect Vlad Oustimovich (interview, May 12, 2011), who worked on the High Point Revitalization Project back in 2002, U.S. Army survey maps from early in World War II when the original government-financed High Point housing development was constructed for defense workers showed a natural pond at this location. That pond was filled in some years later but was re-established in the 2002 Revitalization Project as part of a new stormwater retention and drainage system. According to a 1972 report by the Seattle Housing Authority, drainage was always a problem in the High Point development owing to a high natural water table. Therefore, I show the area as historical wetland on my southwest quadrant map.

40. See Eels (1987) and Morse and Brown (1989).
41. Biteman, R., West Seattle, oral history interview, 2003.
42. Scott et al. (1986); May (1996); May et al. (1997); Serl (1999).
43. See Morse and Brown (1989) for the reference to steelhead in Longfellow Creek. Hartman and Gill (1968) have results of drainage-size preference studies which show that steelhead prefer larger, more robust drainages; and WDFW and WWTIT (1994), which is a salmon and steelhead stock inventory for south Puget Sound drainages, indicates that the same is true for Chinook salmon relative to coho salmon.
44. See Morse and Brown (1989).
45. The landfill that caught fire and burned so spectacularly near the original mouth of Longfellow Creek was purchased, along with adjacent property along the stream, for construction of the West Seattle golf course and recreation complex in 1935. Eels (1987), Morse and Brown (1989), Dubrow and Berlow (1994), and two reports by a City-sanctioned group of local citizens (see LCWMC 1992a and 1992b) detail the history of growth and development, as well as some of the negative effects it produced, in the Longfellow Creek drainage.
46. See Scott et al. (1986), May et al. (1997), and Serl (1999). As a general rule, when basin development increases and the hydrologic and accompanying physical changes to the channel occur as they have in Longfellow Creek, the fraction of stream area classified as pool habitat decreases and a shift occurs from a structurally diverse, balanced pool-riffle structure (as would have been the case in the undisturbed first-contact stream) to a simplified habitat structure dominated by glides. Glides have some similarities to both pools and riffles, but provide few of the functional benefits of either (May et al. 1997).
47. These two fish inventories are cited in the Bibliography under Wild Fish Conservancy (2008) and Tabor et al. (2010). Further on changes in the fish community, the usual result of urbanization of Puget Lowland streams is for community dominance to quickly shift from

juvenile coho to cutthroat trout as urbanization increases (although this didn't happen in Longfellow). There is also a shift to a more simplified community composition, one with fewer species. Coho, being the most specialized and most sensitive as stream-rearing juveniles to habitat alterations associated with urbanization, are usually the first to go. This is in addition to an extremely high rate of pre-spawning mortality in adult coho returning to the streams in the fall to spawn (Scholz et al. 2011; Spromberg and Scholz 2011). Total biomass of fish supported by the system may also decline, as it did in Longfellow, but this is not always the case (Scott et al. 1986).

48. Sources for the material in this paragraph include: McMillan (2007) for the spawner survey results; Wild Fish Conservancy (2008) and Tabor et al. (2010) for the results of recent fish inventories; and Feist et al. (2011) and Scholz et al. (2011) for the details and potential consequences of the very serious pre-spawning mortality syndrome, so-called by researchers trying for some years now to pinpoint the cause, experienced by adult coho salmon returning to spawn in Seattle's restored streams. This syndrome afflicts adult coho salmon, but not other species, returning to urbanized streams. Adult coho entering forested or agricultural streams are not affected; neither are stream-resident trout or juvenile coho that are rearing in these streams prior to migrating to sea. Symptoms of this affliction, observable within minutes or hours of the fish entering the stream, include lethargy, disorientation, loss of equilibrium, gaping, fin-splaying, swimming in erratic circles, skittering across the surface, and death of the afflicted individuals, also within minutes or hours of the symptoms' appearance. In some years in some Seattle's streams, every adult coho that entered the stream died of this syndrome. Over several years of monitoring in Longfellow Creek, 70 to 90 percent of the entering adults have died before spawning.
49. See Thrush (2007), pages 80-86; Thrush and Thompson (2007) page 234; and Buerge (1992b). An internet source (see Dailey [no date], accessed January 15, 2012), who refers to several of the same primary references that Thrush and Thrush and Thompson used, says Herring's House was actually a very early village that was abandoned and later replaced on the same site by another village called *hah AH poos*, meaning "Place of horse clams," but

that village too was abandoned before 1800. Maybe so, but a handful of Indian families continued to live at the Herring's House site (and called it that) until 1893, in a cluster of what newspaper reporters called "...ramshackle, moss-grown board shacks." In March, 1893, those dwellings were destroyed in a well-publicized arson fire and their Native occupants displaced, in order to make room for more development in a then-growing West Seattle. The arsonists' identities were known; a man named Watson was the leader, but he had the help of several other white residents of West Seattle. The story of the fire appeared in the Seattle Times on March 7, 1893. According to Duwamish oral tradition, the ringleader Watson was an agent of the West Seattle Land Improvement Company, but no proof of this ever surfaced.

50. Sources for the story of the Duwamish Waterway include Bagley (1916), Cleveland High School (1949), Phelps (1978), Dorpat and McCoy (1998), and a short HistoryLink essay on the subject by David Wilma (2001) at www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=2986. Some sense of the changes this project brought about in terms of both magnitude and consequences can be found in Bortleson et al. (1980), Blomberg et al. (1988), Sato (1997), and Collins (2008). Semple's old canal excavation into the side of Beacon Hill still remains, and is occupied today by Columbian Way as it threads down the hill to onramps for the I-5 freeway and West Seattle Bridge.
51. Sherwood (1980), Puget Park.
52. Puget Creek Watershed Alliance (2011). Essay on Puget Creek historical and present condition from their web page, www.pugetcreekwatershedalliance.org. Accessed October 19, 2011.
53. Although the Duwamish People use the "Basketry Hat" place name; archaeologists refer to the site more impersonally as Duwamish No. 1 Site, 45-KI-23. For details of the archaeological work performed there, see Lorenz (1976); Jermann et al. (1977); Campbell (1981); and URS and B.O.A.S. (1987). Or, go visit the Duwamish Tribe's Herring's House Cultural Center at 4460 West Marginal Way SW, across the street from the Basketry Hat

site. For those who might wish to learn more about the Seattle Fault earthquake and some of the other major landscape changes it produced around the Puget Sound, papers published in the journal "Science" in 1992 and 1993 are the primary sources. These are cited in the bibliography as Bucknam et al. (1992); Atwater and Moore (1992); Karlin and Abella (1992); Jacoby et al. (1992); and Thorson (1993). Bill Dietrich, science reporter for the Seattle Times, condensed this information into a newspaper article titled "How sleuths of science uncovered Seattle Fault," Seattle Times, Tuesday December 8, 1992. There is also a chapter on the Seattle Fault and its implications including an inspection of the uplift at the Basketry Hat site in David B. Williams' book, "The Street-Smart Naturalist: Field Notes From Seattle," published by WestWinds Press in 2005.

54. Along with the place names, short summaries of how these sites were utilized are in Thrush and Thompson (2007) at pages 237-238. *Taleech* and the mouth of the slough were located about where today's Highland Park Way, West Marginal Way, and SW Michigan Street converge on the present landscape. The builders of the Duwamish Waterway took advantage of the curvature of the river and the slough's mouth when they constructed slips 2 and 3, as well as a slip across the Waterway from slip 2 where the slough mouth angled off from the river. An old city street map in my possession, dated 1983, shows a developed slip here suitable perhaps for barges and small watercraft at the bottom of the *poopii7álap* river bend and slough mouth, but a more recent map shows this area as filled in and redeveloped.
55. In this neighborhood of Seattle, no city street aligns exactly with this particular north-south section line as do 16th Ave. S. and 35th Ave. S. with the next two north-south section lines to the west. If you could draw a line down 1st Ave. S. in Georgetown then extend it south through the South Park neighborhood, you would be close to the true line, but even up in Georgetown, 1st Ave. S. lies a few feet off the line to the west.
56. To orient you on today's landscape, the less than 1 foot wide tributary and the 33 feet wide slough recorded by the GLO surveyors along their east-west section line were located just south of the triangular convergence of the SR 509 freeway, West Marginal Way, and SR 99.

57. See Zahler, Marti and Thompson (2006). These authors referred to the South Park stream of 1894 as McAllister Creek, and called it one of the largest feeder creeks to the Duwamish River during its existence. This creek did not completely solve the problems of persistently wet lands and poor drainage in South Park but, ironically, it did help enough so that some farmers had to supply irrigation water to their crops. One of these was Joe Desimone, the turn of the twentieth century immigrant truck farmer who was so instrumental in founding Seattle's beloved Pike Place Market where the farmers could sell directly to the public. According to Zahler et al., Desimone built diversion dams on three of the South Park stream's tributaries for irrigation purposes. Another property owner, Martha Weir, also had a dam on another of its feeder streams, but sold her water to the Town of Georgetown across the river from South Park.
58. In 1922, T. T. Waterman recorded another Duwamish story about bad spirits at *huCHsácHee*, this time two bad spirits. In this story, when The Changer passed through this country in the long-ago time, he came across two men engaged in a bitter fight at this place. He transformed one of the men into a cottonwood tree that stood rooted on the west bank of the river, and the other into a white fir rooted on the east bank. But the ill will and malevolent feelings between the two were not diminished. Bright sparks continued to fly between the two enemies, even up to Waterman's informant's time. Thrush and Thompson (2007, page 239) point out that the "bad hand" of the first Duwamish story appears also in the stories of other Coast Salish bands; for example, the Twana of Hood Canal whose "bad hand" inhabited Maggie Lake, and the Steilacoom People south of Tacoma whose "bad hand" lurked in American Lake.
59. Joseph Dunlap, who took up a homestead on land in the southern end of the Rainier Valley in 1869, is said to have discovered this canyon offering an easy route from the Rainier Valley over to the Duwamish River Valley while on a deer hunt off to the west and south of his farm. The original Dunlap family cabin was located on what is now the northeast corner of 50th Ave. South and South Henderson Street in the Rainier Beach neighborhood. For more on Dunlap and the Rainier Beach neighborhood, see Wilma (2001b).

60. There are many versions of this epic story, and some of its landmarks also figure into other Duwamish tales. For more, see Ballard (1929), Miller and Blukis Onat (2004), and Thrush and Thompson (2007).
61. Peterson, J. 1979. The Georgetown story: that was a town 1904-1910. Georgetown Design, Seattle, WA.
62. See Zahler et al. (2006).
63. Somewhere near the mouth of this creek there once was a small island that hugged the Elliott Bay shoreline. A promontory jutted out into the flat from its northern end. This was *tutúhLaqs*, meaning "Little-bit-straight point." Tribal informants told early anthropologists that a village once stood there with several longhouses and a defensive stockade. The GLO surveyors found no such island there in 1861, however.