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Entering the American Continent: The Chehalis River Hypothesis

Dale R. Croes and Vic J. Kucera

Abstract *We start with a vignette describing the movement of Pacific Rim, continental shelf peoples along the glaciated Northwest Coast, probably for generations, never seeing to the east anything but towering sheets of ice. Moving along the Olympic Peninsula ice fields, all of a sudden, no ice to the southeast. We reflect on what might have happened next, as a new species, human beings, first enter and begin to occupy the Second Earth—the American Continent. Our specific entry hypothesis is relatively new, following author Croes’ remembering Northwest Archaeologist Alan Bryan, who suggested we look to the Chehalis River for evidence of first peoples. We also look at the still meager evidence of Clovis peoples movements into the Southern Salish Sea.*

Introduction

The history of the Chehalis River and the south Puget Sound area is deep, stretching back millennia. The current Native peoples, who are the original inhabitants of the area, know that their ancestors have lived here since time immemorial as a part of the lands and waters. Western science, however, seeks explanations of “when” and “how,” and presents history as a timeline of events to be laid out, debated, and discussed in turn.

As we all know, many theories have been thoughtfully voiced as to how, when, and where the first entry of humans into the North American continent took place. No matter the number of strongly-held theories, the single thing we can all agree on is that on an unknown day, long ago, entry did take place . . . somewhere . . . somehow.

This article entertains the idea of how the Chehalis River drainage and the southern Puget Sound area may have been first inhabited. Our story here adds to the developing ideas concerning the settling of the Americas, specifically along the coast (Figure 1). Using the modern tool of post-processual archaeology, we offer a description of what that day might have been like, at the most logical location of entry: today’s Chehalis River. This river mouth, now covered by seawater, was the first attractive inward path available to southward-traveling, marine-dependent migrants. For the first time in their lives, eastward travel was no longer blocked by ice walls and glaciers.

“Where’s the evidence?” That of course is the difficult part. Geologic and archaeological information, where available, is presented, as are gaps in the evidentiary record. Before presenting the scientific perspective, we begin with a “post-processual archaeology” vignette describing how a small band of people found their way to the Chehalis River mouth and discovered an entrance to an uninhabited continent. Join us on a skin boat ride during a windy afternoon, 15,000 to 16,000+ years ago, and consider the possibilities.

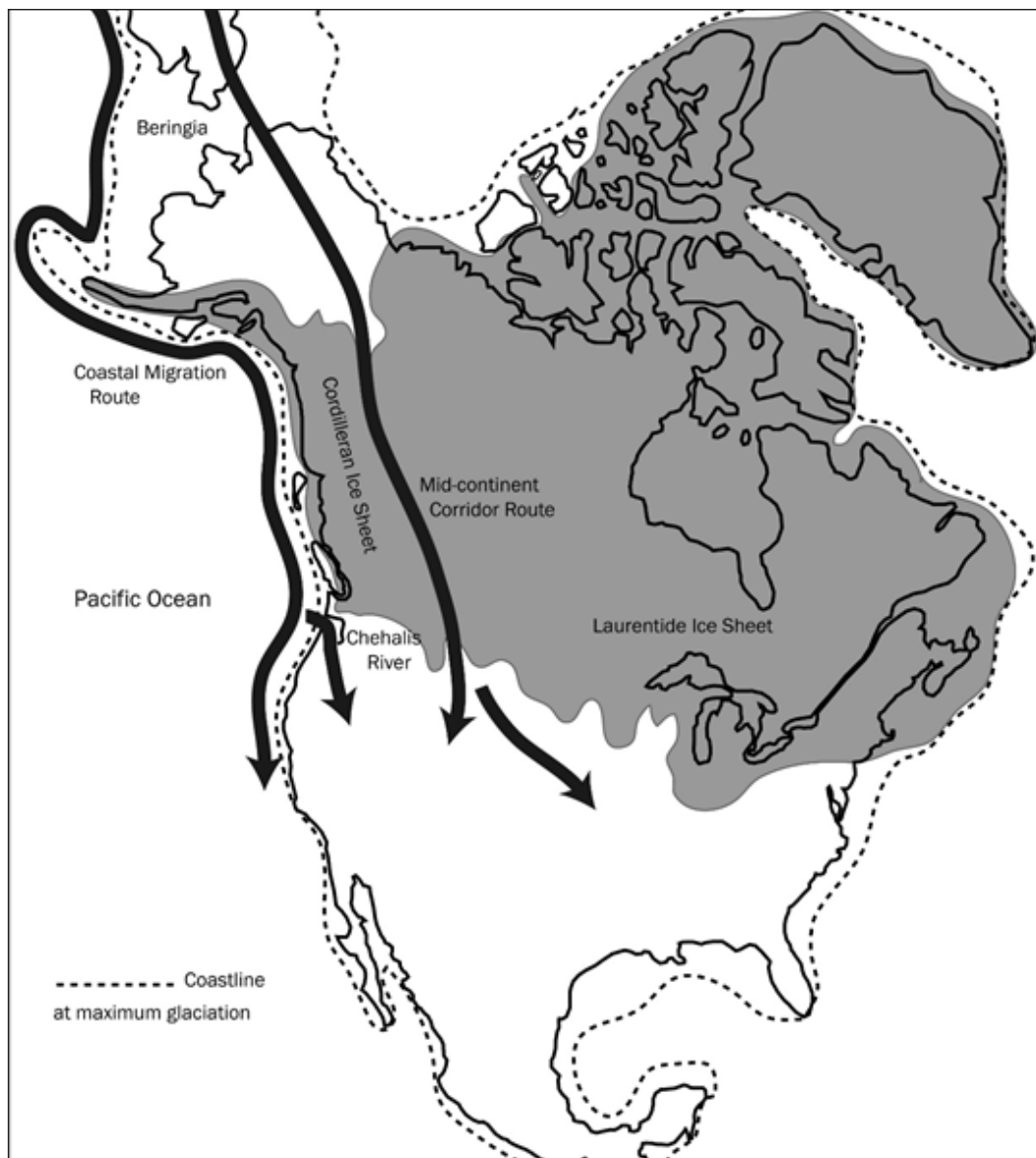


Figure 1. Coastal Migration Route, as discussed here, with an eventual and secondary mid-Continent Corridor Route opening up as the continental Cordilleran and Laurentide Ice Sheets slowly melted and receded.

Entering the Chehalis: A Post-Processual Vignette

It had been almost six months since the small band had left the southwest coast of today's "Vancouver Island" . . . at the ocean entrance of the present "Strait of Juan de Fuca." That entrance, a large glacial fjord at the time, was blocked by a high wall of calving ice at its eastern end, about where "Port Angeles" is now located. Watching huge blocks of ice fall into the sea was a sight to be enjoyed and never forgotten—but cautioned against by Elders who knew the danger of being too close when the tsunami-like waves sprang forward, more than able to roll an unsuspecting skin hulled-boat over on its side.

The band had stayed at a spacious harbor on the northwestern side of the fjord for five years, hunting the local game—bison, bear, and the rare mammoth or mastodon—and enjoying

catches, probably mostly through deep sea fishing with kelp tape fish lines. Fishing opportunities would have included salmon, cod, lingcod, halibut, and sea bass, supplemented by gathered shellfish, sea mammal hunting, and even salvage of the occasional beached whale. It had been a pleasant interlude, long enough for seven children to be born, an amazing four who survived, and three Elders to die. The discomfort of another, larger band of arriving travelers had finally influenced them to depart . . . the hunting and fishing territory now had to be shared. This was not a good idea. Too many hunters, too many hungry mouths to feed.

Now they were following a treeless coastline southward, along what is today Washington's Olympic Peninsula, looking for another large harbor, but instead finding bare cape after bare ocean cape. Sometimes they stayed several weeks in small protected coves, having good luck at hunting land animals (few animals had any idea how dangerous humans could be), while also taking time to air-dry halibut and other flounder, full of energy and vitamin D, critical for survival during the winter still to come.

On this bright day, not all of the band was riding in the boats. Some of the travelers were young men who no longer looked with complete favor on the skin boats of their parents and ancestors . . . maybe the boats made sense farther north on inside waters, in harbors where ocean swells and high waves were absent. Out here along the wide-open coast of what someday would be called the Olympic Peninsula, the young men had no desire to get soaked launching a boat over curling waves at the shoreline, nor did they relish the crowded and confining ride, not to mention unneeded advice from Elders. These young men would instead walk with freedom a mile and more from the ocean waves and enjoy exploration, the hunt, and comradeship. The transition from skin boats to interior habitats was already stirring in the minds of the young.

Far out in the water, well beyond the breakers, where the ocean swells were less steep, two paddlers in the lead boat suddenly had surprise written on their faces, as each stopped paddling, to stare at what lay before them. The water had instantly changed from a deep green to a very coarse, muddy brown. A small child wrapped in fur blankets, tucked securely into the middle of the boat's stores, stopped playing with her small ivory-carved toy seal as she heard her mother and the three men fall silent. Was there danger? A big, snorting whale? If so, she could not smell its putrid spray. Too bad. She would have enjoyed wrinkling her nose in a show of maximum displeasure.

The experienced boatmen knew they were not looking at just another stream runoff, spilling its dirt into the ocean. These brown waters were deep, far from shore, and stretched outward as far as they could see. Expert in the ways of boats and oceans, the men were instantly aware that this was the strong drainage from a large river, its current already quickly pushing the bluntly-shaped bow of their boat sideways. In front of them, nearly out of sight on the southern horizon, a prominent headland was in the distance. It loomed in the afternoon's surface haze at least three miles out into the ocean. To their left was a large inlet, which seemed to curve back a few miles to the east. Could this be the new harbor they were seeking?

The end of the inlet would probably offer good shelter from both northwest and southeast winds, which alternately had become so common in the warming climate. There was to be no crossing these current-filled waters, that was sure. Too dangerous in the afternoon winds. They would instead have to hug the shore to avoid the main river current, and paddle to the mouth of the river itself. A few hours later, the entire band arrived to stand next to the river's mouth, busily and noisily dumping its brown water into the ocean from a source they all knew—from years of experience—without doubt was a large glacier to the east. But where? For the first time in their lives a raging current of water was at their feet, with no glacier in sight. This was odd, to say the least.

These First People had discovered the mouth of a river which someday would be named "Chehalis."

It was the first ice-free corridor into the interior of the North American continent that had appeared during a two-thousand-mile-long coastal journey southward. None in the band could have told you that the journey had consumed twelve generations. They had always been mobile, their only goal to find food and good shelter. That was just how they lived. Their lives—and those of their ancestors—had more to do with moving toward the next good food opportunity than it did with "going on a journey." Why take a journey? Food and shelter was what was important.

The Chehalis River's mouth on that day was located some forty miles west of its modern mouth near the busy streets of present Aberdeen and Grays Harbor. Where the First People stood some 15,000 years ago is now covered by almost five hundred feet of salt water.

When the travelers reached the raging river's mouth, did they rest for a day or two? Did the young men excitedly and expectantly begin walking up the banks of this new, big river . . . to make an important discovery? After all, it was the largest river some may ever have seen. Surely they must have wondered if at the river's headwaters there could be a gateway to vast unknown, un-hunted lands. In this new land they were a new species, a truly formidable new predator, that none of the animals or plants had time to adapt to. Probably they were in a predator's paradise where animals, at first, would have no natural tendency to avoid the new species in their world. A world of easy pickings for some time . . .

The travelers had no idea a whole new "Second Earth"—the humanly uninhabited American Continent—unfolded to the east. The band's Elders would have blanched at the thought of having to march inland for several hundred miles. There were animals to be fearful of, not the least of which was the short-faced bear, which in that era stood at the shoulder taller than a moose . . . and whose cheetah-like legs could run much faster than any man. No thanks.

These were marine- and coastal-hunting-dependent people, whose technical tool kit did not include a completely freshwater- or dry-interior adaptation. Round holes, square pegs.

In fact, the first travelers to discover the Chehalis River could just as easily have decided the river was much too fast, much, much too full of glacial dirt and sand, and held nothing of interest for them . . . especially not fat salmon . . . and continued the next day on their slow journey southward.

*Coastal People: These First Peoples' preferred home was the coast, its quiet harbors and its wide and spacious lowlands, filled with plants, animals, and sometimes even megafauna. Huge *Bison antiquus* bison and mastodons were favorite meats, even if the latter were seldom found. The oil and blubber of beached whales and speared seals was a delicacy. Salmon, halibut, and clams were staples.*

When small fires were set on the nearly flat fields of large barnacles attached to intertidal rock beds, well, the cooked barnacles were eaten like candy. When eaten raw, the suction-like feet of certain chitons (mollusks collected from the lower portions of the inter-tidal zone) produced a pleasant, relaxed feeling, not unlike what Euro-Americans would someday experience after three glasses of good German beer.

Why leave this food cornucopia?

Who cared what was up this unknown, dirty river? Pass another chiton.

The Chehalis River Hypothesis

Whether an arrival south of the Puget Lobe happened as described above, or in some entirely different way, a traveling group would eventually have arrived at this river's ever-changing mouth, much further west of today's Pacific coastline, before melting glaciers caused sea levels to rise (Figure 2). These immigrants would have remained long enough that some band members—in a process perhaps taking as long as a generation or more—would have begun to split off from the band, gradually drifting inward along the someday Chehalis River. By about 13,200 years ago, the river would have carried substantially less sediment. Although several species of salmon survive very well in silt-filled waters, the clearing water would have boosted other salmon populations.

Long before a water entrance to Puget Sound began to intrude, when glaciers occupied that same space, it is highly unlikely first peoples would have traveled over and across expanses of glaciers. Doing so would have been difficult, even dangerous work—with nearly zero prospects of available foods. First peoples did not need to do that. There was a much easier entrance available.

The new arrivals were experienced in all manner of technical lifestyle skills. Principal among these was the personal attitude of human adaptation and survival, something never experienced by New World plants and animals. They would have

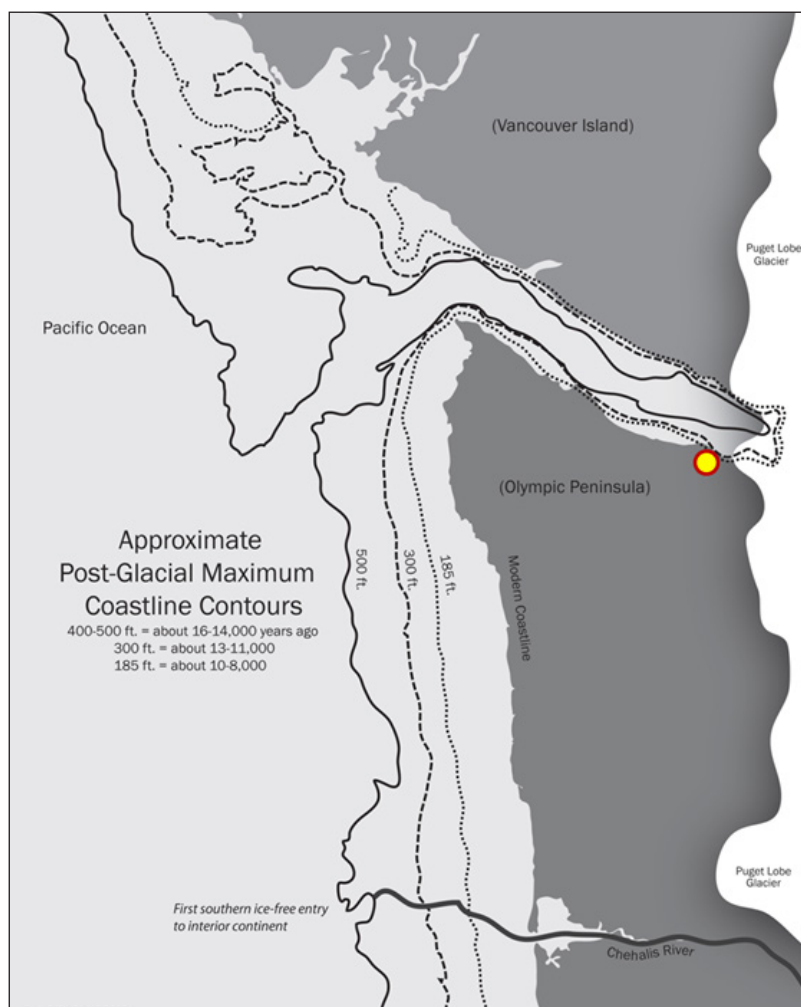


Figure 2. Post-glacial maximum coastlines showing the Chehalis River mouth, draining the melting Puget Lobe Glacier forming interior Lake Russell. The dot shows the location of the Manis mastodon site, dating the hunting of mastodons to 13,800 years ago. Contour locations are based on NOAA Chart 501, "West Coast North America, Mexican Border to Dixon Entrance." (13th Ed., Jun. 2009)

soon learned which hunting, fishing, and gathering techniques worked in the interior, and which did not. As the new colonists made the transition to an interior way of life along the upper reaches of the Chehalis River, they would find a hunter's and gatherer's paradise on immense unoccupied grasslands, with animals un-adapted to them as a truly alien species predator; truly a cornucopia never experienced by their Old World ancestors where they originally evolved with all other plants and animals. A find just as amazing would be that of an extensive glacier-fed freshwater lake covering today's Puget Sound—Lake Russell—which dumped enormous amounts of water through the Black Lake Spillway, into the Chehalis River (Figure 3).

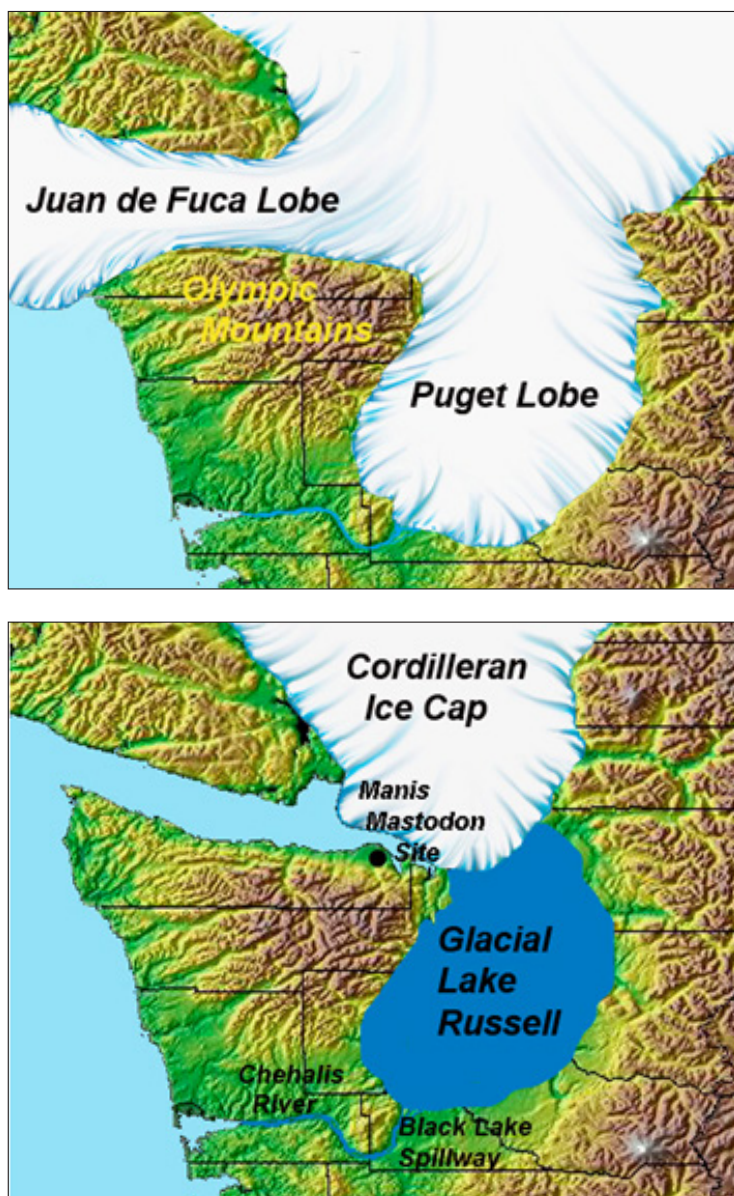


Figure 3. Generalized view of glacial maximum (upper; approximately 18,000-16,000 BP) and maximum extent of Lake Russell (lower; approximately 13,000 BP) showing the Black Lake Spillway into the Chehalis River drainage to the Pacific (Illustration from Figge 2009:282, 284). Manis mastodon site, dated to 13,800 BP, is shown on the eastern edge of a Pacific Ocean Inlet, now the Strait of Juan de Fuca.

The first human beings had arrived to populate what is today southwest Washington and beyond.

From places outside Washington, people entered the New World at least 15,000 years ago, traveling from northeast Asia and following the coast, the continental shelf of the Pacific Basin, with its rich natural resources. The earliest known archaeological site in Washington dates to 13,800 calendar years ago: the Manis mastodon site near Sequim, Washington, a wetland lying a relatively small distance west of the high glaciers that covered Puget Sound at the end of today's Strait of Juan de Fuca (Figures 2 and 3). At this site a hunter's bone spear point was found lodged in the rib of a mastodon skeleton (Waters et al. 2011). As first peoples edged southward along the coast, a huge inland freshwater lake had already formed beyond the tall glaciers to the east, where today is located the marine waters of Puget Sound. The lake had been created by melting water from gigantic surrounding glaciers atop the Cascade and Olympic Mountains, which also had dammed with ice the natural geologic channel of today's Strait of Juan de Fuca. Lake Russell was about 120 feet higher than sea level in today's Puget Sound. It drained to the Pacific Ocean through a spillway channel very near today's Olympia, exiting at the south end of Black Lake in Thurston County, then down a much larger Chehalis River to the Pacific Ocean (Figge 2009; Figures 3 and 4).

Within a thousand years after people hunted mastodons in Sequim, an amazing event was seen by those living near today's Port Townsend. First, the glacier that had dammed the Strait of Juan de Fuca had retreated, and melted and melted, enough that Lake Russell (and associated smaller lakes) finally burst through the final ice dam. The final break was very likely sudden but impressive, producing a flood much smaller than the huge Missoula floods which scoured to bare rock much of today's eastern Washington, and no doubt "cleaned the slate" of any earlier archaeological evidence. At least in our area the earliest archaeological evidence of first people should still be preserved in the high terraces of the Chehalis River, Black Lake Spillway, Lake Russell, and the northeast corner of the Olympic Peninsula.

After the major breaks, more melting took place, lowering the elevation of the former Lake Russell lakebed. Saltwater now entered from today's Strait of Juan de Fuca. "Puget Sound" had begun its existence, and people would have to adapt to these major drawdowns and tidal ocean waters. More and more melting of residual glaciers. More and more seawater. Finally, this truly big change—which could have taken considerable time to complete—shaped the edges and shores of what we see today.

We believe first peoples reached what is now the Chehalis River drainage and Lake Russell region long before the melting of glaciers had become substantial. They did so by working their way down the coast as a maritime-adapted culture, until they came to the mouth of the Chehalis River (Figures 1 and 2). There, the vast quantity of fresh water draining out of Lake Russell, as described in the reconstructed scenario above, would have created a river mouth unlike anything they had ever seen. They had arrived at the end of the vast continental glacier to the east and the north. The Chehalis River would have beckoned as a possibly easy highway. And that was so very unusual. Any exploration of the continental interior had previously been blocked by nearly impenetrable ice and mountains.

Eventually traveling up the ancient Chehalis River, these first peoples could have quickly put boats to use on Lake Russell and the vast, rich inland area around it

(Figures 3 and 4). Did they travel up the Chehalis River *with* their skin boats? Or did they build new ones? That is unknowable. Certainly it was possible to either string their light boats along the river's shoreline or even carry them, just as later Natives and French Canadian voyageurs would do in the very same areas, many thousands of years later.

The possibilities described above rest upon two archaeological concepts: the *Coastal Migration Theory* and the *Chehalis River Hypothesis*.

The gradual emigration down the Pacific coast is known as the widely-accepted *Coastal Migration Theory* (Erlandson 2002, 2010, 2011; Erlandson and Braje 2011; Erlandson et al. 2007, 2008; Figure 1). It postulates, based on a reasonable amount of evidence, that early people with complex marine technologies, including advanced watercraft, traveled along unglaciated coastal areas (called "refugia"), which contained ample marine food resources, including mammals, fish, shellfish, kelp, and seaweed (Dixon 1999, 2011; Fedje and Josenhans 2000; Fedje 2005; McLaren et al. 2014, 2015). They also could have hunted large game in the coastal refugia, such as bear, caribou, bison, and mastodons, as seen at the Manis mastodon site. During the past two decades, the *Coastal Migration Theory* concept has been propelled forward by a proliferation of new research methods, the discovery of very old sites like Manis, and compelling new geologic and biometric data demonstrating that a mid-continent ice-free corridor was almost certainly not the path of the very earliest arrivals.

Despite the presence of nearby glaciers on lands and mountains to the east, an ice-free *coastal* route held plentiful food and was dotted with many ice-free and

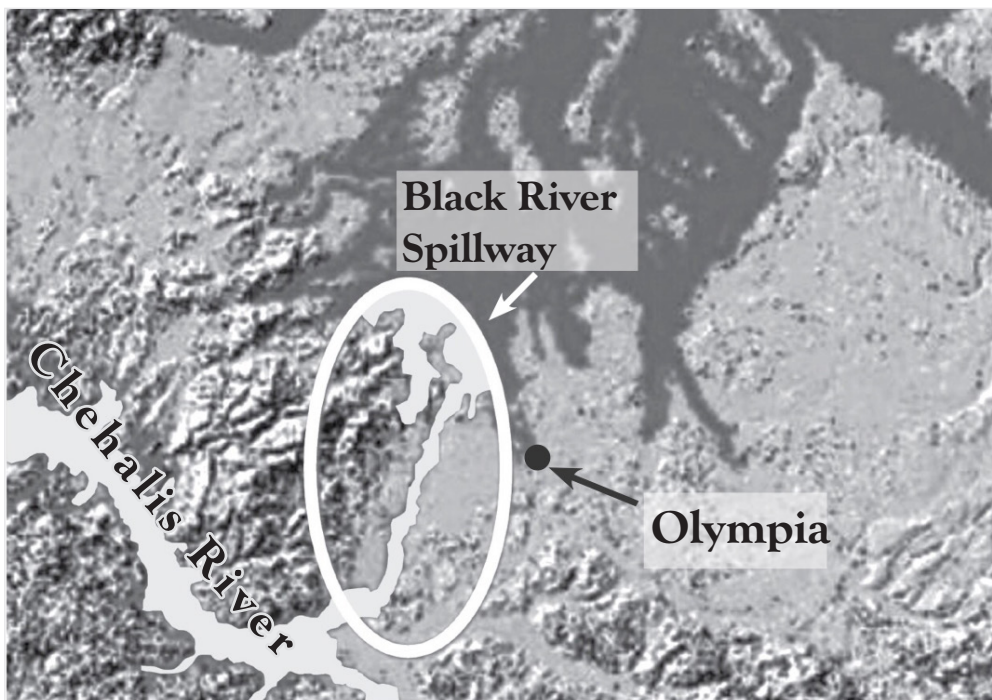


Figure 4. Lidar map showing the Black Lake Spillway, where Glacial Lake Russell drained to the Pacific Ocean down the Chehalis River. The first peoples to enter the American continent would likely make their way up these narrows and discover a rich fresh water lake, Lake Russell, which eventually broke through the northern Sound ice dams into the Straits of Juan de Fuca.

secure coves and harbors. The route would have been available to paddlers using skin boats as early as 16,000 years ago, who would have accessed a chain of islands that were never (or, in some cases, only partially) covered by ice. A second mainland-based route was later available for foot travelers as the ice cap further receded from the continental coastline.

It was not the majestic mountain journey you might see as a passenger on a cruise ship or ferry, plying the waters of today's Inside Passage. There was scarcely a tree to be seen even as late as 13,000 years ago. Instead, great expanses of dwarf shrubs and herbs stretched all the way from Alaska to today's Olympia Peninsula.

Scientists believe that a wide band of kelp was present along the coastline from today's Alaska all the way south, beyond today's California. This formed what is called by some archaeologists the "kelp highway" (Erlandson et al. 2007). Such a shoreline corridor was very important to the travelers' survival and acted as a convenient marine food and tackle store for deep sea fishing lines of kelp tapes. Kelp also was home to innumerable fish and aquatic mammals.

The coastal route is widely held to have been a major path of entry into the New World. At least during the extremes of the last ice age, it was probably the *only* path before the actual opening of the interior continental ice-free corridor, which did not occur until well after people had settled the New World (Figure 1).

Because the *Coastal Migration Theory* has such a strong claim to validity, the Chehalis River valley becomes a candidate to be one of the first—if not *the* first—paths of human entry into what was truly a Second Earth and New World—the American continents. The Chehalis River valley was the first ice-free corridor leading to the interior that coastal travelers would have found. At least for the earliest southward migrants, the still-extensive Puget Lobe glaciation would have completely blocked, or made very unattractive, any hope of entering the continent through today's Puget Sound regions. This theory is known as *The Chehalis River Hypothesis* (Croes et al. 1996; Croes et al. 2008; Croes 2015).

Today a modest, usually polite, Chehalis River flows through a very wide valley to its mouth at Grays Harbor. The reason the valley is so large is that it once was the drainage outlet for Lake Russell, an enormous inland freshwater glacial lake, which—circa 14,500–13,200 years ago—covered much of the present southern Puget Sound region (see Figures 3 and 4; Kruckeberg 1991:Table 3). Its waters, and those of tributaries such as today's Skookumchuck River, were created by the melting Puget Lobe glacier and runoffs from nearby mountain glaciers and snowfields. Geologists have determined that the lake drained primarily through today's Black Lake and Black River (called the Black Lake Spillway; Figures 3 and 4; Gendaszek 2011:8–9). When outflow volumes were high, a raging, boiling, scouring Chehalis River was the result. From time to time small ice dams blocked the outflow of the various lakes and spillways. When these dams burst, floods coursed rapidly through the Black and Chehalis River valleys, expanding their size. Today's Chehalis River is but a trickle in comparison to its predecessor's ancient floods and stream flows.

Those first humans who proceeded upriver would soon have discovered Lake Russell and the current, though flooded, land of today's southern Salish Sea. As the Puget Lobe continued to retreat northward, Lake Russell would grow about as far as Seattle, to become an exceedingly large freshwater lake covering the southern half of today's Puget Sound and its adjacent shores.

Generations of travelers may have remained in the vicinity of Lake Russell, islands therein, and on the expansive, easily-traveled plains of the Logan Hill Formation (and neighboring outwash formations and drifts), through which the Chehalis, Cowlitz, and Newaukum rivers flowed. There is every likelihood that the plains—now central Lewis County—would have been a hunter's and plant-gatherer's paradise. A full range of mammals, including mastodon and mammoth, was present, which had never experienced this highly capable new predator and alien species in their New World environments.

As discussed above, the freshwater in Lake Russell (and affiliated northern lakes) eventually burst through the last, melting ice dam, allowing sea water to invade what is today the marine Puget Sound. From that time onward, it is probable most immigrants to southwestern Washington traveled along the protected shores of Puget Sound, instead of along exposed ocean shores to the mouth of today's Chehalis River.

The Evidence

At its edges, the pursuit of the earliest Northwest archaeology has far more questions than answers. No archaeological sites in the Chehalis, Newaukum, and Cowlitz river valley systems have yet been discovered that support the *Chehalis River Hypothesis*, i.e., demonstrating that humans were present in southwest Washington 15,000 and more years ago.

This is partly due to the area's comparative remoteness. Unlike Puget Sound, whose ground has been more frequently disturbed and penetrated by a denser current human population, the watersheds of the Chehalis, Newaukum, and Cowlitz rivers still consist mostly of farms, suburban homes, and trees, dotted with much smaller communities than those in the megalopolis to the north. The successive scourings of the Chehalis and nearby rivers may have removed some evidence (but not as seriously as the Missoula Floods through the lower narrows of the Columbia River). As sea levels rose and the river valleys silted in, sites may have been buried under many tens of feet of silts and sands.

A formidable obstacle to the discovery of evidence is the flood-prone nature of the north and central Lewis County area. The laying down of Lake Russell sediments provided the first cloaking of the early Americans' activities. If since 15,000 years ago, only one flood took place annually involving the Chehalis, Newaukum, and Skookumchuck watersheds, some 15,000+ floods and their sediments have covered the land, creating a flat valley. Early archaeological sites would now be deeply buried under these flood deposits.

The Manis, Ayer Pond, and Paisley Sites

Food was the necessary ingredient for a southward migration and was often its main purpose. No food, no migration. Several kill sites of large animals, hunted by the earliest Americans have been found reasonably close to the Chehalis River.

The oldest and most convincing was found at the 13,800-year-old Manis mastodon site at Sequim, Washington, along the Straits of San Juan de Fuca, and about 75 miles north of the Chehalis River. Prior to 1979, numerous mastodon bones and skeletons had been found in various bogs near Sequim. In that year,

archaeologists unearthed a skeleton with a human-made bone projectile embedded in a mastodon's rib, demonstrating human involvement (Waters, et al. 2011). The coastal hunters of that day were not laid-back, retiring types . . . a mastodon was normally 9–10 feet tall, 16 feet in length, and weighed about eight tons—the equivalent of four Brahma bulls wrapped into one elephant skin. And angry.

At about the same time period—13,800 years ago—a bison was “boutique-butchered” (only its hindquarters were taken) by humans at Ayer Pond, on present San Juan Island (Schalk et al. 2007; Wilson et al. 2009; Wilson et al. 2010). Ayer Pond is about 45 miles northeast of the Manis site.

Bison antiquus was normally seven-foot tall, 15-foot long, and weighed 2,300 lbs. Truly jumbo-sized steaks. The discovery of its bones and tell-tale human cut marks in 2007 demonstrates humans and megafauna were present only 105 airline miles north of the Chehalis River. Clearly, both humans and food were present in the region at early dates, which would have supported human activity in the Chehalis River area.

Much farther away, some 325 miles, a cave at Paisley, Oregon, contained human feces (the polite term is “coprolites”) dated at 14,000+ years ago (Fagan 2005). Did the cave's occupants, or their ancestors, enter the continent through the Chehalis River, Puget Sound, the Columbia River . . . or?

Ancient Language Stocks

In addition to archaeological search and study of actual artifacts, similar efforts have been made to trace the migrations of coastal people through the study of language origins. In the many centuries following the first entry into the North American continent, a succession of different languages developed over time. At the time of European contact, some ten different major languages, in five major stocks, existed in western Washington alone (Thompson and Kinkade 1990:30–33). A great question for linguists: what do these languages have to say about past conditions or remote origins in Asia? Can they help define the time periods of arrival and local conditions encountered?

“Paleo-linguists” start their complicated research with one arm already tied behind their backs—many less-prevalent Native American dialects have completely disappeared. Even though a dialect has survived, and is believed to be ancient, it still cannot be placed under a microscope to be examined as if it were an artifact, nor does it have organic features, e.g., DNA, that can be chemically traced. The complicated study of Northwest linguistics instead focuses on both general features and minute markers within surviving dialects, then traces these back through associated other “daughter” dialects to a parent or “mother” language. Such comparisons can reveal what trees, plants, and animals lived in the region over time, as well as general features of kinship and community.

Today there is agreement that the Native American languages of North America can be traced to areas within Asia and suggest distinctly different major waves of migration by coastal peoples. There is considerable current interest by linguists in the languages that were brought to and developed in southwest Washington by migrants from the north. Today the current Wakashan, Salish, and Chemakuan language families cannot be easily associated with any of the languages in the rest of the Americas,

often their affiliation is considered “Undetermined” (Kopper 1986:58–59). Possibly these languages, all found in the Salish Sea, are just too ancient to relate to potentially later languages found throughout North (and South) America. Later language groups may have had to steer clear of these already well occupied and original peoples of the Americas.

Pre-4,000 B.P. Projectile Point Styles in the Puget Sound Region

Fluted and stemmed stone spear points, typical of early archaeological sites from the end of the last Ice Age in North America, are rare in the Puget Sound. Only eight fluted points are known from the region, four of which are from the area of south Puget Sound. None of these fluted points are from dated contexts. These points, along with those from the Manis mastodon site are the earliest evidence we have for the first peoples of the region and are briefly described below with their locations shown on Figure 5. Stemmed points are likewise not well-represented from dated sites in the Puget Sound, with the possible exception being the Bear Creek site (45-KI-839) in Redmond (Kopperl et al. 2015).

At the southern end of Puget Sound, a Clovis point was found “west of Olympia in the Chehalis River Valley” and another was found “in the Black Hills area west of Olympia” (Figure 5) by a man who was grubbing stumps (Osborne 1956:41–42). Avey (1992) reported two fluted point bases, one from a private collection in Pierce County that he believes was collected at either Hart’s Lake or Anderson Island, and another from a survey of the Pierce Community College campus (Figure 5; Avey and Starwich 1985; Avey 1992).

To the north, a Clovis point was found in a bog in 1983. That location (45-KI-215) was investigated by Meltzer and Dunnell (1987). Another Clovis point was found in a peat bog near Yukon Harbor; the location (45-KP-139) was investigated by the University of Washington (Figure 6). No other remains were found at either location. Farther north two Clovis points have been found, one in a garden on Whidbey Island (45-IS-112), and one of unknown provenience in the collections of Western Washington University (Avey 1992:13-16; Figure 5).

The cultural traditions that succeeded the fluted and stemmed technologies of the Paleoindian cultures in the Pacific Northwest are referred to by a variety of names depending on the researcher. Here, the term Olcott, which Carlson (1990:62) has noted is “conveniently vague” will be used for sites older than 4,000 years.

Sites from the Olcott period, with both large collections of projectile points and materials that can be directly dated, are not common in the Puget Sound area. Olcott tools are characterized by leaf-shaped bifaces that functioned as knives and spear points. These tools lack the flutes or stems of the earlier points, and are typically larger than the later smaller, stemmed and notched points meant for use on thrown darts and arrows. Due to the widespread acidic soils of the region, it is common to find sites containing limited numbers of lithic artifacts but few, if any, objects made from other materials. This severely limits the ability of archaeologists to understand much regarding the complex cultures that produced such sites and which certainly used a rich variety of bone, wood, and other organic materials. Such sites are often dated by means of stone tool types or their environmental context, such as when they occur on old river terraces. An example of this is a find near Olympia of a large, unusually

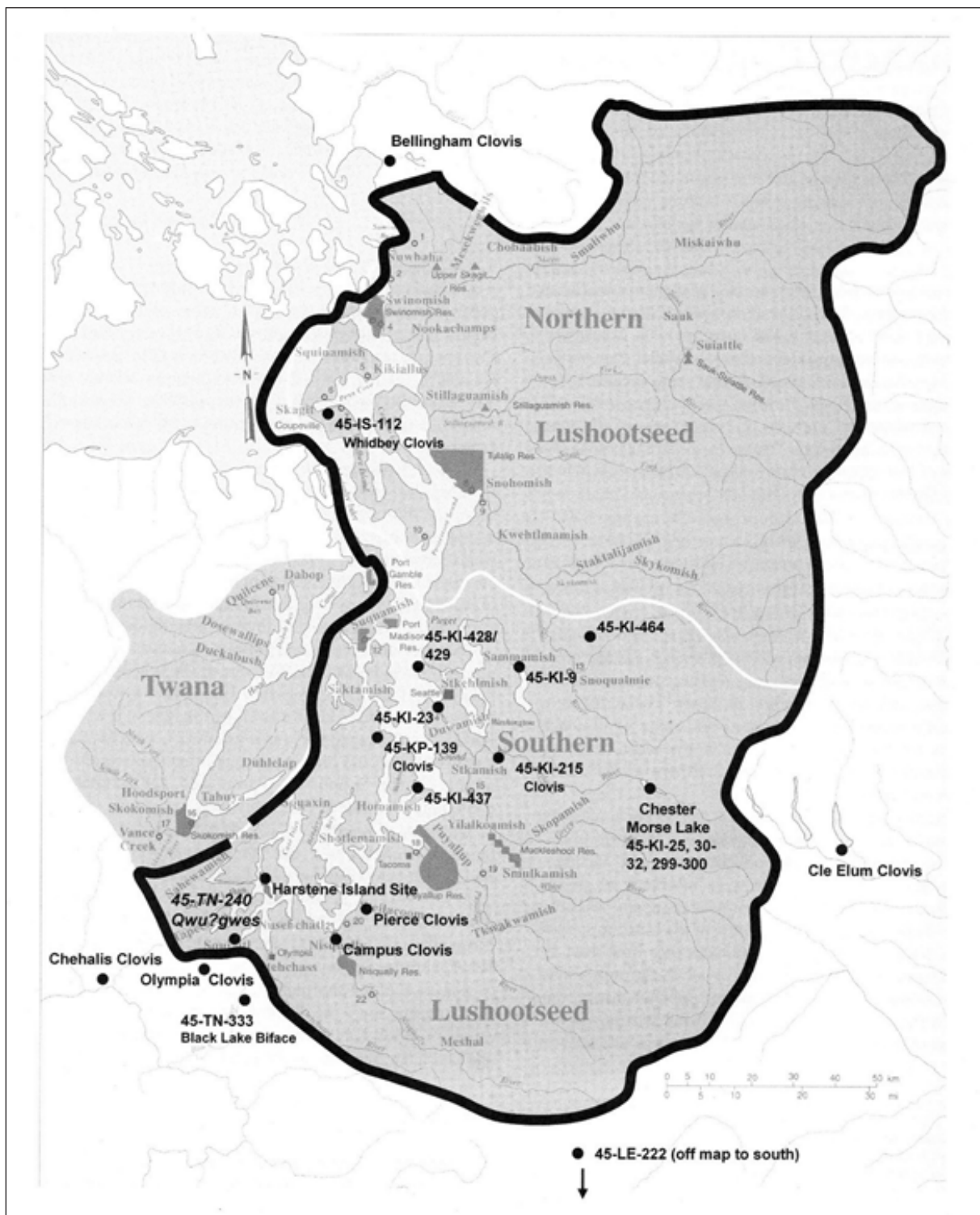


Figure 5. Early archaeological sites of the southern Salish Sea. The only major site excavation in southern Puget Sound, the archaeological wet and dry site of Qwu?gwes, only dates to about 700 B.P. (Croes et al. 2013).

notched biface (Figure 6). The find, designated 45-TN-333, consisted of a single large biface made of weathered igneous rock, found at a depth of one meter below the existing ground surface during landscaping work. Limited testing at the site revealed the deposit to be poorly sorted glacial till materials on the edge of the Pleistocene spillway of Lake Russell through the Black River. With its unusual notching style and large size, the artifact is unique to the area. Unfortunately, while its environmental context suggests it is old, its date of origin is uncertain.

The available evidence suggests that a wide variety of projectile point types were used in the Puget Sound area from the early Holocene to the contact period. Archaeological collections frequently contain a wide variety of stemmed, notched, and leaf-shaped points, which appear to reflect different functional classes (e.g., dart points, thrusting/dispatching points). The frequency of tools made from fine-grained volcanic or metamorphic rock appears higher in the early and mid-Holocene periods than in the late Holocene (Croes et al. 2008). However, this conclusion is not certain and may in fact be influenced by sample size. The only definite change appears to be the addition of arrow points in the last 2,000 years (Daugherty et al. 1987).

Conclusions

“A deep funk”—that’s sometimes what archaeologists laughingly say they have fallen into when they contemplate deep time.

So why the deep funk? Archaeologists know that in the future, new tools and methods will unlock many of the secrets of the earliest residents of what is now the southern Salish Sea. Archaeologists currently hard at work will not be privileged to live long enough to hear the future answers to their questions and hypotheses. Future



Figure 6. A typical Clovis point (above), found at Site 45-KP-139. The large stone tool (below) is from Site 45-TN-333.

discoveries will undoubtedly enable those who read these same words in 2117 to know so very much more about the Chehalis drainage and south Salish Sea first residents.

Even with our limited understanding of deep time in the region, by using models such as the *Coastal Migration Theory* and the *Chehalis River Hypothesis* combined with what we know of Lake Russell, the Black River Spillway, the once-huge Chehalis River, and the open and mostly level grasslands stretching to the Cowlitz River where mastodons once roamed, we are getting more and more pieces of the puzzle to view. Right now, that puzzle is imperfectly seen, but with more research and more data it becomes clearer every year. What we can see points to the conclusion that the Chehalis River drainage and the southern Salish Sea were squarely at the crossroads of early entry into the Northwest and probably the entire “Second Earth,” the American continents.

But, archaeologists do not yield to temptation. Instead, they rely on highly peer-reviewed scientific facts. And so, the daily search goes on. The remaining pieces of the puzzle, from the rich heritage of early and later Chehalis River drainage and southern Salish Sea—with its unique deep time—will indeed be found, one by one.

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ABOUT THE AUTHORS

Dale R. Croes received his B.A. in anthropology from the University of Washington (UW) and his M.A. and Ph.D. in anthropology at Washington State University. He did his Ph.D. dissertation research on basketry and cordage artifacts from the Ozette Village wet site; conducted post-doctoral research with the Makah Tribal Nation at the Hoko River wet site and Hoko Rockshelter shell midden; directed first-ever archaeological excavations at the National Historic Landmark wet site of Sunken Village with the Confederated Tribes of Siletz Indians, Confederated Tribes of Grand Ronde and the Confederated Tribes of the Warm Springs Indians; and co-directed excavations of the Qwu?gwes wet and dry site with the Squaxin Island Tribe. He is currently working with Ed Carriere, Suquamish Elder and Master Basketmaker in writing *Memoir 15* for JONA, highlighting their work to analyze and replicate 2,000 year old Biderbost wet site basketry housed at the UW Burke Museum. They call their work *Generational-ly-Linked Archaeology* and their memoirs should be out the first of 2018.

Adjunct Professor, Anthropology, Washington State University
Director, Pacific Northwest Archaeological Society and Services
Email: dcroes444@gmail.com

Vic Kucera received a B.S. in journalism and an M.B.A. in business administration from the University of Oregon. Following a 30-year career in public relations and government affairs, he became an historian and heritage enthusiast of the early Native American, fur trade and Euro-American settlements of southwest Washington, producing two books, *Onalaska* and *Alpha*. Kucera was a founding member with Dale Croes of the Pacific Northwest Archaeological Society. During his retirement, he spent some 13 years piloting a trawler annually between Washington and Alaska. The many miles traveled in coastal waters honed an interest in writing about how “first arrival” may have taken place. Kucera is currently researching and writing a book which traces the development of “theatre” in a frontier community, from Native American times to modern Internet presentations.

Email: vickucera@gmail.com