

Stop #3: Tuxwiəqa'lə "Place of strong wind where trees rub together and squeak" (Restoration Point): A Chronicle Etched in Stone and Sea

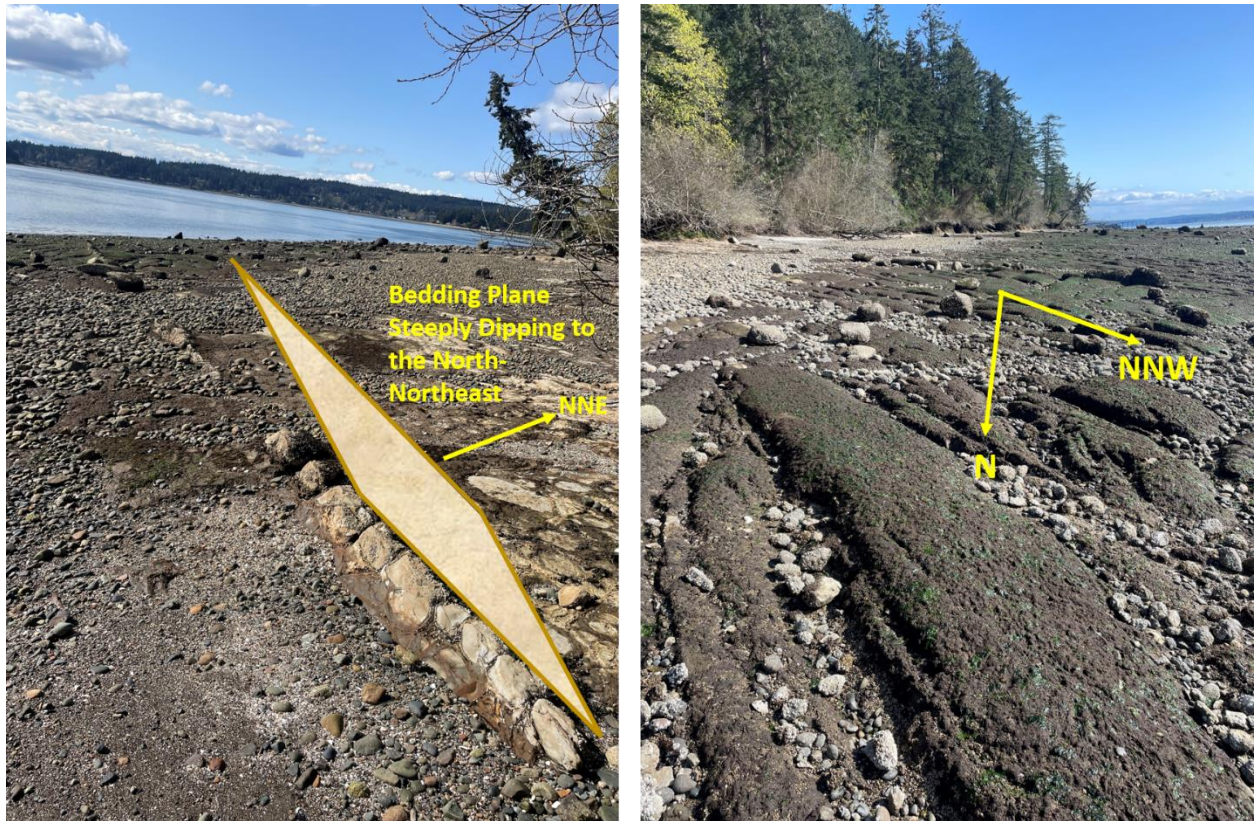


Aerial view of Bainbridge Island, showing Restoration Point on southeast corner (Google 2025. Satellite view of Restoration Point Area, Washington. Google Earth. <https://earth.google.com/web/@47.588146,-122.506575,13304a,5491d,42y,0h,0t,0r>)

As our kayaks glide towards the shore, the air carries a palpable sense of history, a feeling that this place holds secrets whispered by the wind and waves. We've arrived at Restoration Point, a name bestowed by European explorers, yet the $dx^wsəq^wəbš$, "People of the Clear Salt Water" (Suquamish), who have called this land home for millennia, knew it as Tuxwiəqa'lə, "Place of strong wind where trees rub together and squeak", a name that resonates with the natural symphony of the wind, a "place of squeaking." This very disparity in naming encapsulates the profound shift in perspective that occurred when European settlers arrived, a shift from an intimate understanding of the land to a more detached, resource-oriented view.

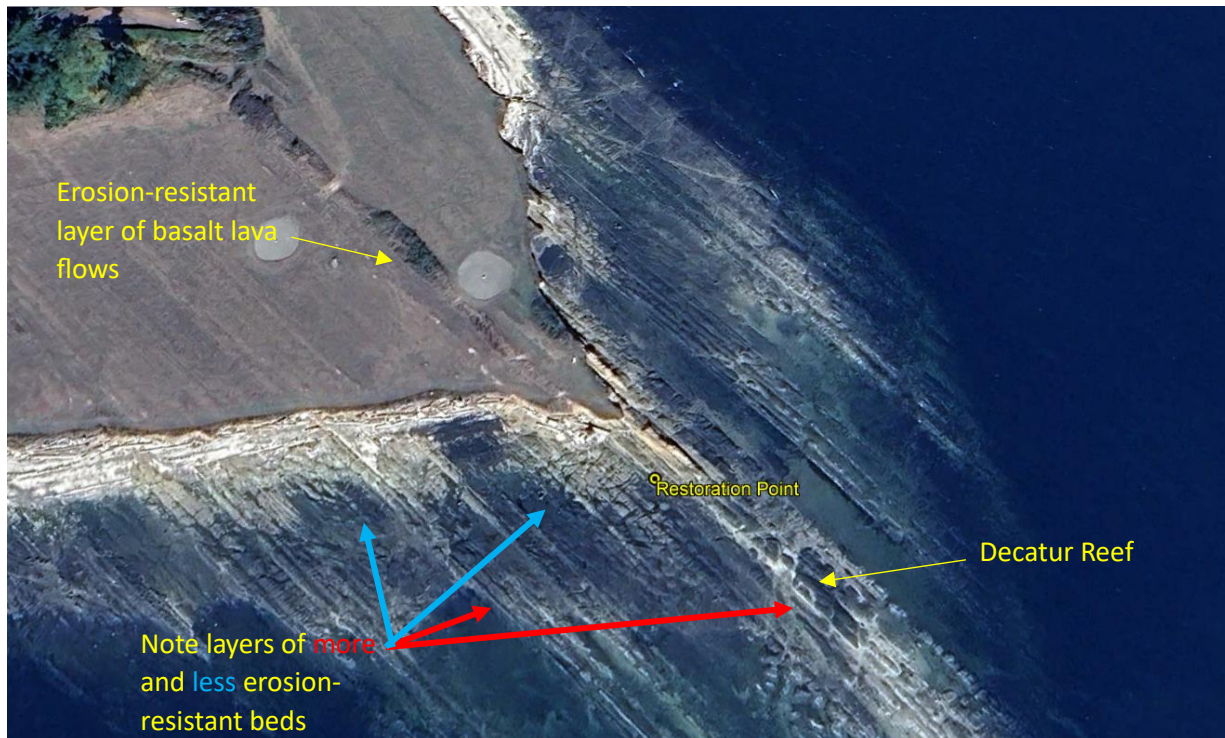
If the tides are benevolent, we'll gently beach our vessels on the western flank of the point, where the shoreline invites exploration. As we step onto the rocky terrain, we're immediately confronted with the tangible evidence of Earth's ancient history. The rocks beneath our feet are not mere stones; they're a geological archive, a testament to forces that have shaped this land over millions of years.

If you land at tides that are low enough to expose the rock below the bluffs, you will see that the rock layers are tilted upwards at a significant angle. Some are darker and more resistant to erosion, while others are lighter in color and have eroded more.



Photos of steeply dipping rock layers ("beds") on the shore between Ft. Ward and Restoration Point. Photo on left shows a line of more erosion-resistant beds. The shaded parallelogram indicates the orientation of these beds, which dip steeply to the north-northeast. Photo on right shows dipping beds alternating between more and less erosion-resistant layers. The depressions and ridges show the horizontal orientation of these beds, which is west-northwest. If you land anywhere at lower tides on the south apron of Bainbridge Island. You will find steeply dipping rock layers oriented west-northwest and dipping to the north.

Dominating the seascape is Decatur Reef, a rugged promontory that extends defiantly into the water. Its foundation is primarily basalt, a dark, fine-grained volcanic rock that speaks of a time when this region was a crucible of volcanic activity. This basalt is a remnant of the Columbia River Basalt Group, a colossal outpouring of lava that occurred during the Miocene Epoch, roughly 15 to 17 million years ago. Imagine fissures in the Earth's crust, releasing torrents of molten rock that spread across the landscape, solidifying into the durable layers we see today. The basalt's resilience is a result of its composition, rich in iron and magnesium, and its characteristic columnar jointing, the vertical fractures that formed as the lava cooled and contracted, tells a story of the Earth's thermal processes.



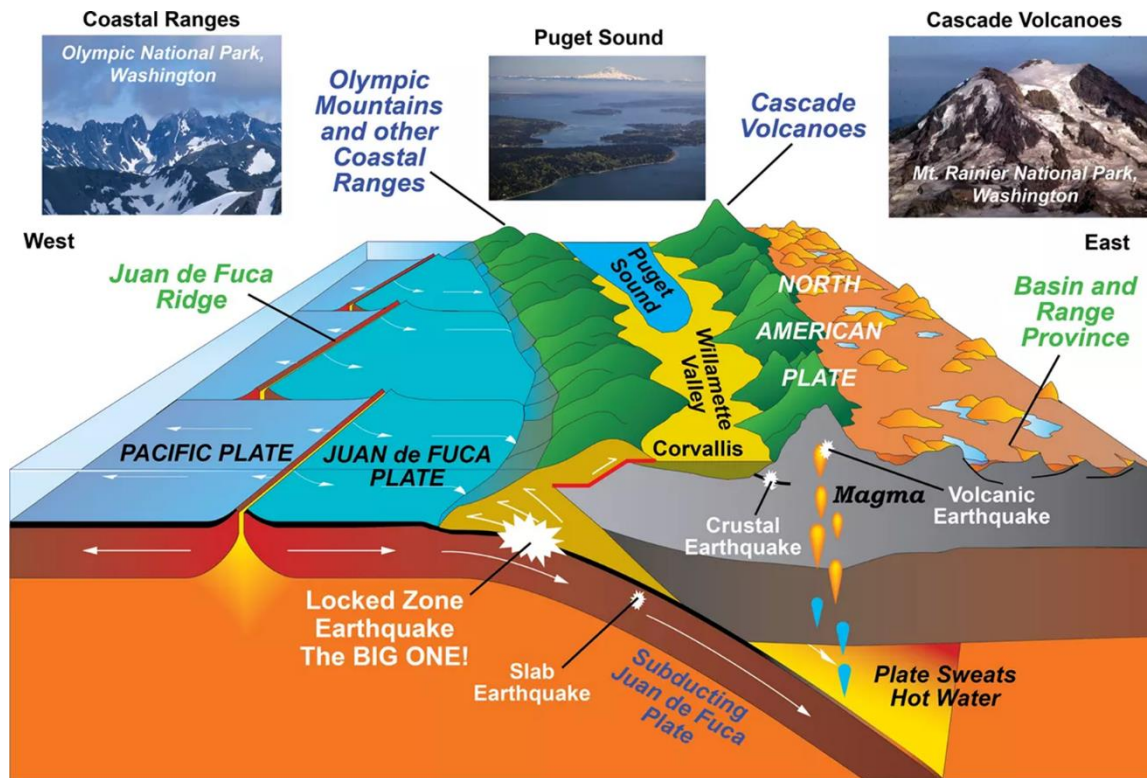
Aerial photo of Restoration Point [need attribution to Google Earth here]

Yet, this volcanic narrative is interwoven with tales of ancient seas. Interspersed among the basalt layers are sedimentary rocks, including sandstone and shale. These rocks, formed from the slow accumulation of sediments like sand and clay, speak of a time when this land was submerged beneath the waves. The softer nature of these sedimentary layers, compared to the robust basalt, has made them more susceptible to erosion, creating a striking contrast in the landscape.

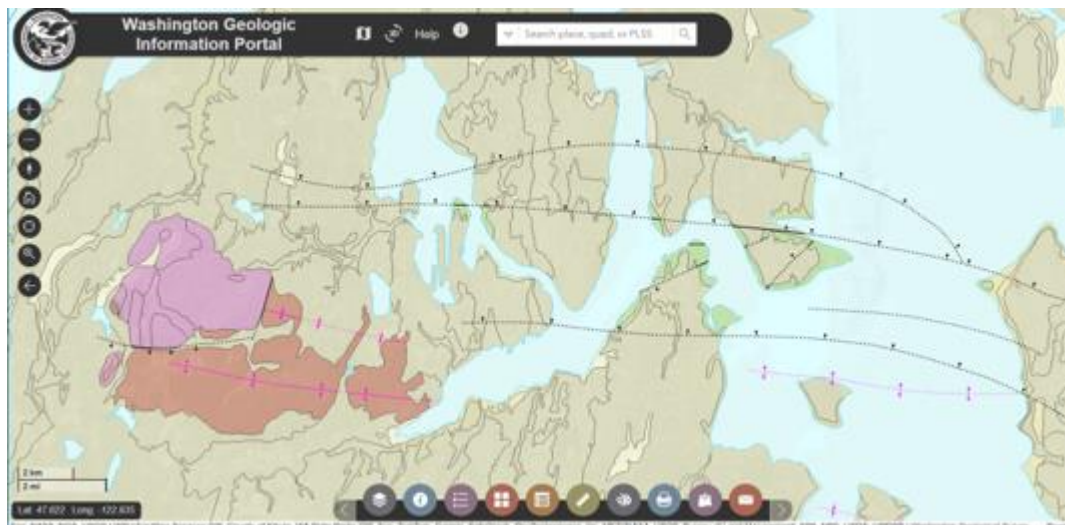
The tilted layers of rock, a defining feature of Restoration Point, are a direct result of the region's complex tectonic history. Millions of years ago, this area was a dynamic zone of plate tectonics, where the Farallon Plate, now largely subducted, was being forced beneath the North American Plate. This subduction created immense compressional forces, leading to the formation of the Cascade volcanic arc and the uplift of the Olympic Mountains. The Seattle Fault Zone (SFZ) a network of active faults, runs through this area, a testament to the ongoing movement of these tectonic plates. Approximately 1,100 years ago, a significant earthquake along the SFZ dramatically reshaped the landscape, uplifting the land by as much as 23 feet.



Illustration of tectonic plates and their relative movements. The oceanic Juan de Fuca Plate is moving (subducting) relatively northeastwards beneath under the much thicker North American Plate. Modified by National Park Service from "Oregon's Island in the Sky: Geology Road Guide to Marys Peak, by Robert J. Lillie, Wells Creek Publishers, 75 pp., 2017, www.amazon.com/dp/1540611965.



The subducting Juan de Fuca plate begins to heat up and melt as it is forced deeper into the earth. The rock begins to melt, and molten buoyant magmas begin to rise in the crust and produce the Cascades and their associated volcanoes. The collision between these two plates also forces rock on the western edge of the North American Plate northeastward that in turn produces fold and faults that are roughly oriented perpendicular to the north-northeasterly compression, such as the Seattle Fault. Modified by National Park Service from "Oregon's Island in the Sky: Geology Road Guide to Marys Peak, by Robert J. Lillie, Wells Creek Publishers, 75 pp., 2017, www.amazon.com/dp/1540611965.



The Seattle Fault Zone consists of the main Seattle Fault and several secondary faults, which are shown in the figure. During the last great earthquake on the Seattle Fault, these secondary faults moved in response, uplifting the roughly between eagle Harbor and the north end of Blake Island nearly 23 feet! https://geologyportal.dnr.wa.gov/2d-view#wigm?-13716533,-13599125,6019014,6075196?Surface_Geology,500k_Surface_Geology,Folds,Faults,Contacts,Map_Units

This uplift, a sudden and dramatic event, created the marine terraces we see today, transforming former seabed into dry land. Looking at the aerial photos, you can clearly see the uplifted marine terrace, and the former island, now a hill, that was created by this event.



Aerial photo of the southeast portion of Bainbridge Island. [need credits here].

As you walk on the rocks at low tide, or paddle near shore, think about what the Native peoples must have experienced when the land suddenly shot up 23 ft, generating tsunamis that have left their geological fingerprint all around the Salish Sea! Imagine that you were on the land at a camp like the one in Blakely Harbor (Stop #4), and the earth beneath you rose, or fishing in Rich Passage and powerful waves turned the sea treacherous!

The human history of Restoration Point is equally compelling. In 1792, Captain George Vancouver's expedition arrived, charting these waters and bestowing the name "Restoration Point" in honor of King Charles II's restoration to the English throne. This act of naming, a symbolic assertion of European presence, stands in stark contrast to the Suquamish people's deep, organic connection to the land.

However, it was the USS Decatur's grounding in 1855 that would weave this place into the fabric of regional history in a more dramatic way. The Decatur's mishap, striking the

hidden danger of Decatur Reef, forced it into repairs in Seattle. This seemingly unfortunate event inadvertently placed the ship at the center of the Battle of Seattle in 1856. The ship's cannons, a crucial element in the defense of the fledgling settlement, might never have been there if not for the reef and the repairs that followed.

The Battle of Seattle was a pivotal moment in the region's history, a clash between Native American resistance and European expansion. The Decatur's role in this conflict highlights the complex interplay of forces that shaped the Pacific Northwest. The ship's artillery, firing upon the attacking Native American forces, contributed significantly to the defense of the town. Without the Decatur's presence, the outcome of the battle might have been very different, potentially altering the course of regional history. The evidence of this conflict, in the form of cannonballs found decades later during construction projects, serves as a tangible reminder of the battle's intensity.



Monument commemorating the "Battle of Seattle", located at 3rd & Jefferson in City Hall Park. In early 2025, the monument was removed from City Hall Park during Park renovations. It will be relocated elsewhere in the future, possibly Pioneer Square. Note the cannonballs on top of the rock that symbolize the ordinance fired by the Decatur.



Cannon balls from the 1856 "Battle of Seattle" were found at various spots around downtown Seattle and now reside in the collection of the Museum of History & Industry. (MOHAI)

The mid-1850s also saw the signing of treaties between the U.S. government and various Native American tribes, including the Treaty of Medicine Creek and the Treaty of Point Elliott. These treaties, intended to define territories and rights, instead became a source of tension and strife, leading to conflicts like the Puget Sound War. Yet, out of this struggle emerged a recognition of the tribes' enduring rights. The Boldt Decision in 1974 affirmed the Suquamish and other tribes' treaty rights, granting them co-management of fisheries and a voice in the stewardship of their ancestral lands. This decision, a landmark legal victory, has had a profound impact on the region's fisheries management and tribal sovereignty.

Today, the Suquamish Tribe continues to play a vital role in the health of the Salish Sea. Their salmon hatchery programs, located at Grover's Creek, and shellfish operations are not just about resource management; they're about honoring a deep connection to the land and ensuring its sustainability for future generations. The tribe's efforts to restore

salmon populations, a critical component of the ecosystem, and to manage shellfish resources, reflect a commitment to ecological balance and cultural preservation. The Suquamish Department of Natural Resources works closely with state and federal agencies, ensuring that hatchery-raised salmon contribute to both tribal and non-tribal fisheries.

As we stand here, gazing out across the water, we're not just observing a landscape; we're witnessing a living testament to the interwoven stories of geology, history, and culture. Restoration Point, with its layers of rock and layers of time, invites us to reflect on our own place in this grand narrative, reminding us that every action, every moment, is part of a larger, interconnected whole. The wind's "squeaking" song, a constant presence here, serves as a reminder of the enduring power of nature and the enduring legacy of those who have called this place home.