

# COLUMBIA

A man with a mustache, wearing a bright orange jacket, blue jeans, and yellow gloves, is sitting on a rocky mountain slope. He is holding a silver climbing tool (possibly a piton or ice screw) vertically in front of him. The background shows a steep, rocky mountain face with patches of snow under a clear blue sky.

THE MAGAZINE OF NORTHWEST HISTORY ■ SPRING 2020

## INSIDE THE RED ZONE

Jeff Renner remembers  
the eruption of  
Mount St. Helens

ALSO INSIDE:

The Tragedy of the *Clallam* ■ Tahoma and Its People

A quarterly publication of the Washington State Historical Society



# INSIDE THE RED ZONE

## REMEMBERING THE ERUPTION OF MOUNT ST. HELENS

by Jeff Renner

**“VANCOUVER! VANCOUVER!  
THIS IS IT!”**

Those were the last five words that I or anyone would hear my friend and volcanologist David Johnston speak. It was his radio call alerting his United States Geological Survey colleagues that Mount St. Helens was erupting. Explosively.

At 8:32 a.m. on Sunday, May 18, 1980, a magnitude 5.1 earthquake shattered the north face of the volcano. It had been fractured by seven weeks of previous earthquakes, the result of magma rising from a subterranean chamber several miles below. Approximately 1,300 vertical feet of rock—twice the height of the Space Needle—collapsed in the largest debris avalanche ever recorded. That essentially ‘popped the cork.’ The rising magma, now unrestrained, exploded horizontally. The blast leveled and then incinerated 234 square miles of land, or three times the area of the city of Seattle.

The intense heat melted centuries-old glaciers, generating mudflows the consistency of wet cement. Nothing in their path was left standing. Just eighteen minutes after the initial earthquake, the massive plume of ash had risen to 80,000 feet, capped by a mushroom cloud larger than the one marking the Hiroshima atomic blast in 1945. It was my job and that of my KING Television colleagues, photographer Mark Anderson and pilot Bob Wright, to fly beneath the lowest part of that ash cloud, to get as close to the volcano as possible, and to document the eruptions that would continue for hours. The once-serene alpine wilderness, a luminous blend of sparkling white glaciers, iridescent blue waters and intense green of old growth forests, was gone. It seemed as though we were conducting low level surveillance over an alien planet. The monochrome landscape of what came to be called the blast zone offered no evidence of life—no plants, no animals and no humans. It was clear there had to be casualties, and this belief was confirmed later that afternoon when we established a broadcast site to the northwest of the still-erupting volcano.

OPPOSITE TOP: A distant view of an eruption of Mount St. Helens on July 22, 1980. Courtesy Jeff Renner.

OPPOSITE BOTTOM: David Johnston was a volcanologist who worked for the U.S. Geological Survey. He died in the eruption; his final radio transmission from his mountain outpost to the USGS office in nearby Clark County lives on: “Vancouver! Vancouver! This is it!” Courtesy U.S. Geological Survey.





Jeff Renner (left) interviews U.S. Geological Survey volcanologist David Johnston at Mount St. Helens in March 1980. Photo by helicopter pilot Bob Wright. Courtesy Jeff Renner.

While preparing for one of many live broadcasts that day, an engineer handed me a small piece of paper. “The latest estimate of presumed dead,” he whispered. Then, with a catch in his voice, he continued, “I’m told we’ll recognize some of the names.” My chest tightened, my heart seemed to rise in my throat and I had a profound sense of disconnect with the broadcast that was now just seconds away. But the countdown cues had already started. “Five...four...three...two...one...go!”

I would remember very little of those broadcasts. When I had an opportunity to view one of them a few days later, I was surprised to see little outer evidence of the emotional stress I felt. The experience of covering Mount St. Helens before, during and after May 18 would be among the most significant influences in my life. It was almost the last event of my life. And it represented the culmination of a journey that began just two years before, in the crater of a different volcano: Mount Baker.

A volcanic crater is a hellish place. It can also be a place of beauty, fascination and awe. Few knew that better than David Johnston. Few could offer a richer introduction to such an environment. I was fortunate to join David and two colleagues in late 1978 when they climbed into the crater of Mount Baker, a volcano in Whatcom County east of Bellingham, Washington.

Standing 10,781 feet tall, Mount Baker’s heavily glaciated flanks serve as a beacon for the rugged North Cascades, and it dominates the skyline along the U.S.-Canada border. The original Nooksack people called the mountain *Koma Kulshan* or ‘Great White Watcher.’ But the ‘watcher’ was becoming ‘the watched.’ In 1978, Mount Baker was believed to be the Northwest volcano most



Jeff Renner on the crater rim at Mount Baker, following a climb in 1978 with David Johnston of the U.S. Geological Survey and Steve Malone of the University of Washington. Photo by Bill Fenster, KING Television. Courtesy Jeff Renner.

likely to erupt. The team to which David belonged was conducting scientific fieldwork to assess that likelihood. I was documenting their work as a science reporter for KING Television in Seattle.

I had only recently moved to the Pacific Northwest, and had been assigned to learn the rudiments of mountain climbing to prepare for this very assignment. I would discover that I had spent part of my boyhood just miles from David’s family home in suburban Chicago. It was just one of several parallels that would serve to connect us. But what had become second nature to David, was then decidedly unnatural to me.

The silent snowy beauty of the volcano’s upper slopes gave way on our descent to the deafening roar of steam from vents called fumaroles. Surrounding those vents were gaudy deposits of yellow and orange. “The yellow is sulfur, and the orange is a compound of arsenic,” explained David with enthusiasm. He grinned, “That’s why we’re wearing gas masks when we get close.” What seemed like hell to me was heaven for David. He methodically conducted his research with no more drama than if he were preparing

breakfast. David’s confidence eased my stress, his obvious enthusiasm was infectious. He patiently explained to me the significance of each test.

Just a year and half later, David and I reconnected at Mount St. Helens in Skamania County. A shallow earthquake there on March 20, 1980 was the first suggestion that 123 years of silence at Mount St. Helens was ending. Seven days later, a steam explosion opened a quarter-mile crater at the summit, blackening the surrounding snowfield with a smudge of ash.

As we prepared to fly to St. Helens that day, I telephoned the University of Washington Seismology Lab, now called the Pacific Northwest Seismic Network, seeking a scientist

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to accompany us in our helicopter. “How about a real volcanologist?” they responded. Of course! That “real volcanologist” was David Johnston. During our flight south from Seattle, David summarized his latest work, and provided background on Mount St. Helens’ volcanic history and threat. After surveying the volcano from the air, we landed on a nearby ridge. “We stand next to a keg of dynamite,” David told me. “The fuse is lit, but we don’t know how long it is.” After a brief pause he added, “If it were to explode right now, we would die.”

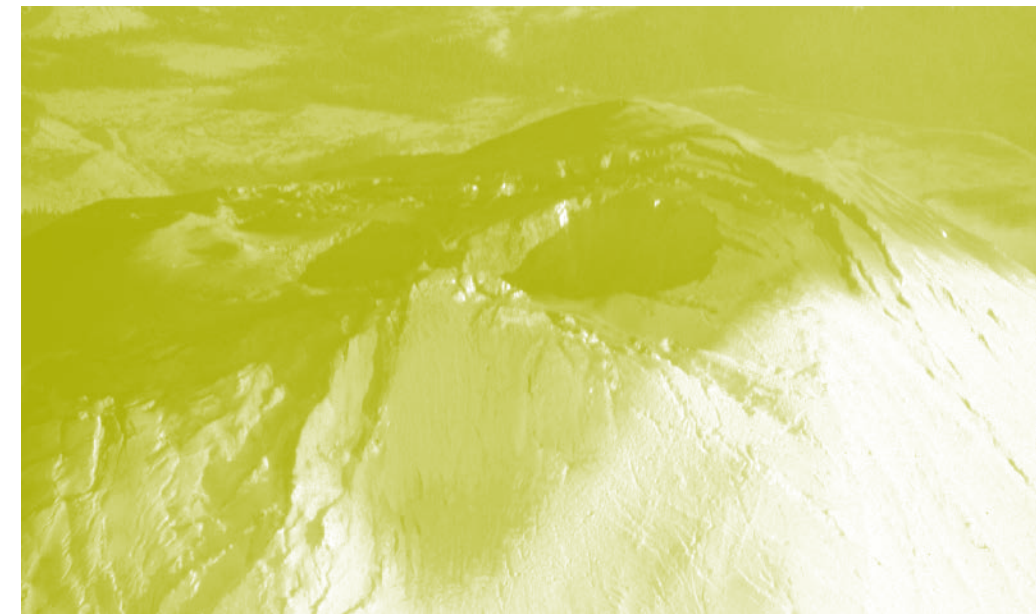
Upon our return to Seattle the next day, we joined a crowded huddle in the KING 5 newsroom. The objective was to develop a comprehensive plan to cover the volcano’s re-awakening and its impact on residents of southwestern Washington. Photographer Mark Anderson, engineer Mike Carter and I were to be sent with a camper to a remote ridge overlooking the volcano. I couldn’t have asked for two better colleagues. Both were skilled, steady and shared the sardonic humor that helps a team navigate a risky assignment under constant deadline pressure. And the camper would be a definite step above our earlier solution of sleeping (or trying to sleep) jammed between television gear in the crowded front and back seats of our news car.

We gathered the television gear necessary to report from the ground and from our helicopter and to transmit live broadcasts during our evening news

programs. There was food to purchase, and clothing to gather that could protect us in a range of environments, from the soggy old growth forests to the exposed, high-altitude slopes of Mount St. Helens. I made a quick trip to the University of Washington bookstore to pick up texts on geology and volcanology. There was no internet in 1980, and even if there had been, we would not have had Wi-Fi service at our remote campsite. I certainly didn’t expect to become an expert during study breaks in our camper, but I did hope to learn enough to pose appropriate questions to the experts I’d encounter at or near the volcano. I quickly learned that the time invested in background research was invaluable not just for gaining access to knowledgeable scientists, but also for establishing credibility and trust with them in the field and with our viewers at home. Our team knew we needed to offer pictures, writing and stories that would transport viewers to the volcano and provide them with the context necessary to understand the risks St. Helens did and did not pose.

We would spend stretches of up to ten days at our mountaintop camp. We drove for hours, bouncing over rutted logging roads to capture stories in the nearby communities of Toledo, Toutle, Kid Valley and Cougar. We visited with locals stressed by earthquakes, ash and the prospect of an eruption, and spoke with local business owners experiencing both increased income as well as alarm. We stopped to examine the wares offered by four-wheeled traveling merchants who set up shop near roadblocks, hawking everything from hot dogs to Hawaiian barbecued chicken, plastic tchotchkes to T-shirts.

And there was our growing friendship with the crusty local resort owner Harry Truman, who famously refused to leave and who became something of a celebrity that long-ago spring. At his Spirit Lake Lodge, he entertained KING’s viewers (and us) with his earthy opinions, player piano music



Mount St. Helens signaled its new phase of activity with an initial steam blast on March 27, 1980. Courtesy Jeff Renner.



and uncannily accurate earthquake estimations. “There. That’s bigger than a 5.0, but not so big as a 5.4. I’d say it’s about a 5.2. I know, I’ve seen and felt so many of them,” Truman would say. Now on a roll, he would add, “They’re especially exciting at night. On a double mattress with good springs you get that drunken action. You don’t know whether you’re half geed-up or sober!” Amazingly, Harry would be very close in his estimates, all based on watching his still-hanging kitchen window Christmas ornaments!

If that circus-like mix intrigued viewers and left our news managers clamoring for more, my greatest personal and



Jeff Renner and KING Television photographer Don Metcalf explore the pumice plains to the north of Mount St. Helens. Photo by Washington State Geologist Mike Korosec. Courtesy Jeff Renner.

professional sense of joy and fulfillment came from being on or near the mountain itself. I felt simple, unadulterated awe experiencing the transformation of this re-awakening volcano. It was inspiring to witness and explain to KING’s audience the first-class work of highly intelligent and dedicated scientists performed in difficult and dangerous settings. These men and women were advancing the field of volcanology, innovating and improvising techniques before our eyes. The scientists were generous with their time, helping us understand their work, explaining the questions they sought to answer, and offering guidance in communicating it all during our multiple broadcasts. In one of our off-camera conversations, David Johnston offered his sense of mission: to advance scientific understanding and offer explanations to the public, and, when possible, responsible projections of what might happen.

If I felt great respect for and gratitude to the scientists, I also felt those same emotions for the excellence of my

colleagues on the mountain and those back in Seattle, and for the unwavering support from the owners of KING Television, the Bullitt family. Our coverage was an expensive undertaking. No other local television station had committed that degree of resources or accepted that degree of risk to its well-deserved reputation, granting essentially complete journalistic freedom to a very young crew. At the time, all of us were only in our mid-twenties.

Of course, we faced technical and personal challenges. Cramped quarters, cold water and limited heating in our thin-walled camper. Pumice showers overnight from volcanic outbursts that hammered on our metal roof like hail, the darkness making it impossible to gauge the seriousness of the activity. Nocturnal visitors that left large tracks—and scat—just outside our door in the morning (yes, bears). And then the repeated deadline pressures of getting fresh videos and stories for our broadcasts. We didn’t think much about the risks we were taking, focusing instead on the process of telling the continuing story. We discovered later that others did think about those risks; one group of scientists at the University of Washington was placing wagers on when our luck would run out, believing we’d be the first victims of the volcano.

But events would soon prove we weren’t the only ones living “on the edge.” The sense of novelty, adventure and even entertainment that prevailed from late March through most of April gave way to fatigue and stress by May. The near-constant presence and pressure of the curious began to fray the nerves of local residents and law enforcement officials, to say nothing of the drain on the budgets of local communities

and counties. And there was the unsettling recognition that this volcano could remain a threat indefinitely, a threat that was looking more serious each day. The increasing earthquakes along with larger plumes of ash and pumice prompted officials to set up a barricaded “Red Zone.”

The molten rock rising within the volcano was exerting increasing pressure on the steep north face of Mount St. Helens. That pressure first raised a blister of rock, then a steadily growing bulge by mid-April. Cracks appeared in the ash-covered glacier, expanding in both depth and length each day. Scientists begin to weigh the possibility that the slope could collapse, and that the resulting landslide and release of pressure on the molten rock beneath could trigger a massive horizontal eruption. And all of this could happen with little, if any, warning.

But when that activity eased slightly in early May, the growing impatience of Red Zone property owners boiled over. “We pay taxes, we want to use our property” grumbled one cabin owner. “A crock of s--- cooked up by environmentalists,”



Harry Truman, proprietor of Spirit Lake Lodge, lived near Mount St. Helens for more than 50 years, and perished in the eruption on May 18, 1980. Courtesy U.S. Forest Service.

raged store owner Stan Lee. “That’s just poop,” sneered resort owner Harry Truman. In response, Governor Dixy Lee Ray bowed to demands of property owners, ignored the warnings of scientists like David Johnston and others, and agreed to open the Red Zone to supervised tours.

About the same time as the decision was being made in Olympia, I had enjoyed a day-and-a-half break from the mountain back in Seattle, and my wife and I celebrated our third wedding anniversary a few days late. That respite was particularly welcome, since my KING colleagues and I had exchanged the luxury of a camper for the thin protection afforded by tents pitched on a new observation post at Spud Mountain. Our new location was deep within the Red Zone and highly unofficial, but it afforded us an unparalleled view of Mount St. Helens. Although spring had officially begun, temperatures were still cold, and rain, snow and sun alternated, sometimes within the same hour. We accepted that we would be beyond potential rescue if the volcano exploded.

So when Governor Ray scheduled the first of the tours on May 17, I agreed to cut short my break. I was sent back to St. Helens to accompany the caravan into the Red Zone.

The morning of Saturday, May 17, 1980 was sunny and mild. Several dozen cars queued up at the barrier gate, each occupant signing a waiver acknowledging they understood the risks and releasing the state from liability. KING Television videographer Richard DePartee and I did the same, climbed into our news car and followed the group to Spirit Lake. Caught up in the recollections and reverie of cabin owners, it was all too easy to ignore the threat of the volcano now visibly inflating with magma. We briefly considered following the caravan out, then circling back in on the logging roads we’d come to know so well to access our camping site within the Red Zone. But lacking the gear needed for an overnight stay and recognizing our video was intended for that evening’s newscasts, Richard and I headed back to Seattle. I didn’t know that I’d be returning within just hours.

After enjoying a Saturday evening out with my wife, I slept later than usual Sunday morning before being abruptly

awakened by a muffled ‘thump’ on our house. It was a sound, but also a sensation, as though a truck had backed into the garage door. Situated on a quiet cul-de-sac in Redmond, that was impossible. Still groggy, I began to drift back to sleep. Then the telephone rang. Squinting at the clock, I saw it was a little after 8:30 a.m.

“Jeff, the mountain’s erupted a big cloud.” The caller was Carl Berg, a volunteer for county emergency services who had befriended our KING Television crew. “The wind has probably just shifted, Carl, and now the ash is drifting toward your direction,” I said, but not wanting to seem dismissive, I added, “but if it continues or seems unusual, call me right back.” I don’t think my head returned to my pillow when the phone rang again. It was Carl again, and this time, he said, “This cloud is huge and black and full of lightning.” I didn’t realize it then, but the thump I’d heard was from the eruption blast wave ricocheting off a layer in the atmosphere called the tropopause, rattling windows as far north as Victoria, British Columbia.

Within the hour, our volcano team of photographer Mark Anderson, pilot Bob Wright and myself had re-assembled and were flying back toward Mount St. Helens. Passing Tacoma under brilliant blue skies, we could make out a thin brown-gray line just above the southern horizon. That line broadened to a dirty cloud deck as we flew over Olympia. It was volcanic ash. Our assignment desk had chartered a twin-engine plane for another crew to obtain video of the massive eruption cloud from a fairly high altitude. Given our familiarity with the area, our crew was directed to fly low, to get as close to the volcano as possible, and to document the

**“WHERE ARE THE TREES?” I WONDERED. THERE WAS NO GREEN ANYWHERE—NOTHING BUT GRAY OR BROWN.**

eruption and its impact. Bob Wright banked his Hughes 500 helicopter to the left, turning from Interstate 5 toward the Toutle River and the Spirit Lake Highway.

“Where are the trees?,” I wondered. There was no green—anywhere—nothing but gray or brown, and that included the river, now filled with debris moving downstream. We realized the trees hadn’t disappeared—at least in the area beneath us—but they instead had been smothered by a layer of ash. If the bulge on the north face of Mount St. Helens had collapsed and set off this eruption, we knew we would need to follow the North Fork of the Toutle River toward the volcano. Navigation was difficult as little felt or looked familiar. A pall of ash cast somber shadows on the ridges and valley. We spotted an ooze of red, like a massive blood stain, discoloring the ground near a Weyerhaeuser logging facility. It was hydraulic fluid leaking from logging trucks that had been strewn about like toys by the force of the Toutle River, which was now carrying as much mud and ash as water.





CLOCKWISE FROM TOP: The North Fork of the once forested Toutle River Valley, just west of Mount St. Helens, early on the morning of May 19, 1980.

Renner, locating a victim of the blast not far from where he and the KING Television crew had camped in the days before the eruption. Photo by KING Television photographer Mark Anderson.

A mudflow at Mount St. Helens on May 18, 1980, taken from a helicopter flying over the North Fork of the Toutle River.

Renner exploring the lava dome after the eruption with KING Television photographer Steve Dowd. Photo taken by helicopter pilot Bob Wright. All images courtesy Jeff Renner.

OPPOSITE: The memorial at Johnston Ridge, which pays tribute to David Johnston and others who died in the 1980 eruption of Mount St. Helens. Courtesy Jeff Renner.

Sensing motion at the periphery of my vision, I turned to see a towering Douglas fir, probably close to two-hundred feet in height, swaying under the buffeting force of the mudflow. It briefly hesitated, and then collapsed. There was little conversation in our helicopter because none of us knew what to say. We simply kept flying, shooting video and taking notes. There was just enough separation between the ceiling of ash and the mudflow below to allow continued flight upriver. Rafts of logs swept beneath us. We tracked one group in order to estimate the speed of the mudflow and measured an astounding 45 miles per hour. As the falling ash began to sprinkle our windshield, we recognized that if our helicopter engine ingested much of the glass-like particles, it would fail. A forced landing in these circumstances would almost certainly be fatal.

Returning to the athletic fields at Toutle Lake High School to the west, we saw military tents had already been erected. Emergency crews were carrying stretchers to the tents, some with survivors, others with blanket-covered figures of those who had perished; those were the first of the fatalities, as I would report that evening. Later, I would discover that my friend Dr. David Johnston was one of the dead. Though his body was never found, it is believed that the force of the super-heated blast literally blew him off his observation post, now named Johnston Ridge in his memory.

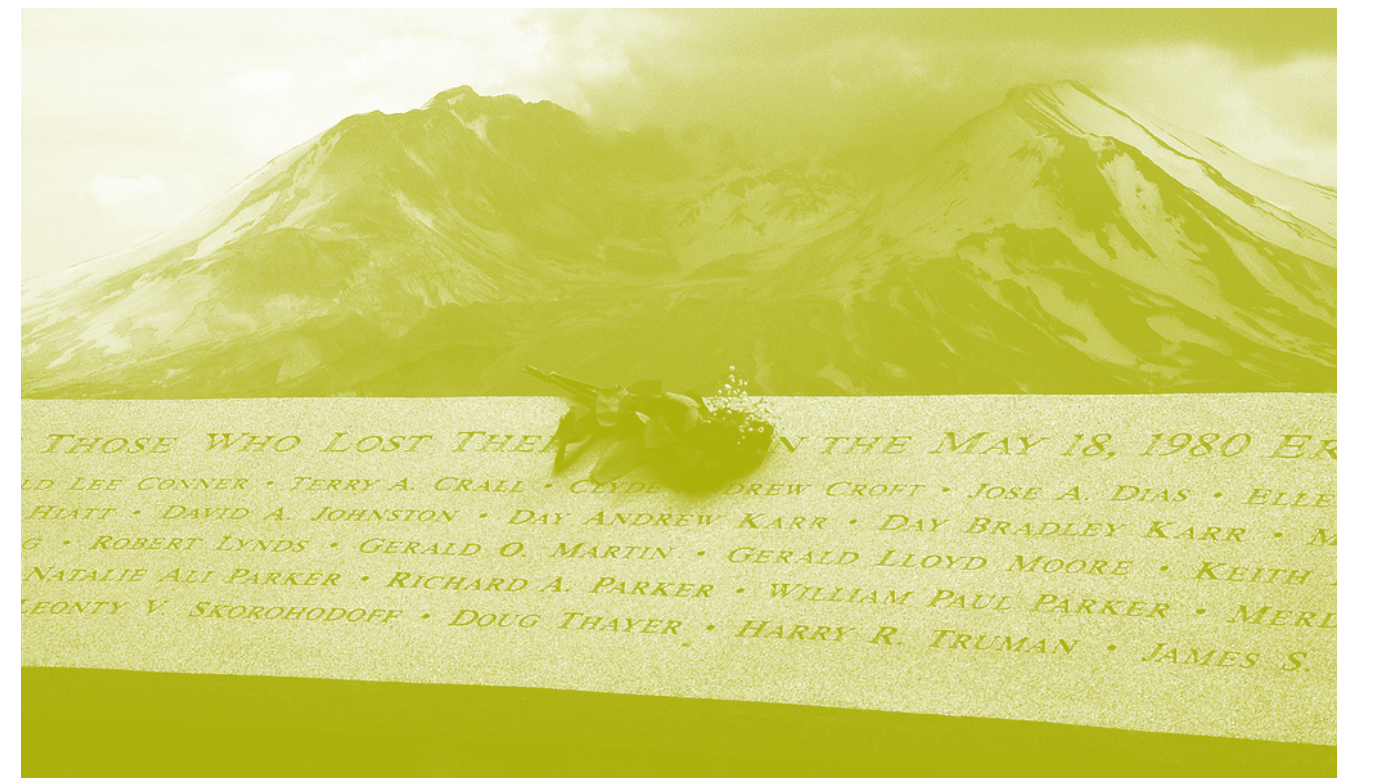
The next day, I would get a sense of how close we came to death. Helicoptering back to the volcano shortly after sunrise, we flew through a landscape that seemed totally alien, with the once symmetric volcano now blunt, ugly, and prehistoric. The trees that once carpeted the mountain ridges lay toppled in rows, like a field of mature wheat after a thunderstorm downdraft. No sign of life was to be seen anywhere. We set course for our campsite on Spud Mountain. A Datsun B-210 was parked not 50 yards from where we'd pitched our tent. The compact car's paint had been scoured off by the blast, the plastic and aluminum trim melted into now-congealed

strands. Glimpsing a body inside, I requested that we land. I exited our helicopter and walked to the car and saw a victim of the eruption, which is a sight I still carry with me today. That driver could have been me or any of my colleagues. Later that night, I struggled to find brief rest from the sensory and emotional overload. During one period of sleeplessness, I realized that had the eruption occurred just two hours later, as cars were assembling for the next scheduled tour, the death toll would have been in triple rather than double-digits, that those ridiculing the advice and concerns of scientists would have quickly been engulfed by the mudflows.

Now 40 years later, with the perspective of decades of experience as a science journalist and meteorologist, I'm struck by the parallels between the debates over the proper response to Mount St. Helens, and more recently, to ongoing environmental degradation and climate change. We hear the same words now that we heard in 1980: "I don't believe it!" "It's junk science!" Or, "It's just a theory!"

Had the warnings of David Johnston and his colleagues been taken more seriously by some political leaders and more members of the general public, the final toll of 57 people killed by the 1980 eruption of Mount St. Helens would have been much lower, with possibly as few as just one person perishing in the blast and its aftermath. Ironically, it would have been David Johnston, who saw it as his duty to remain at his post next to a volcano he had characterized two months earlier as "a keg of dynamite," who might have been the only victim.

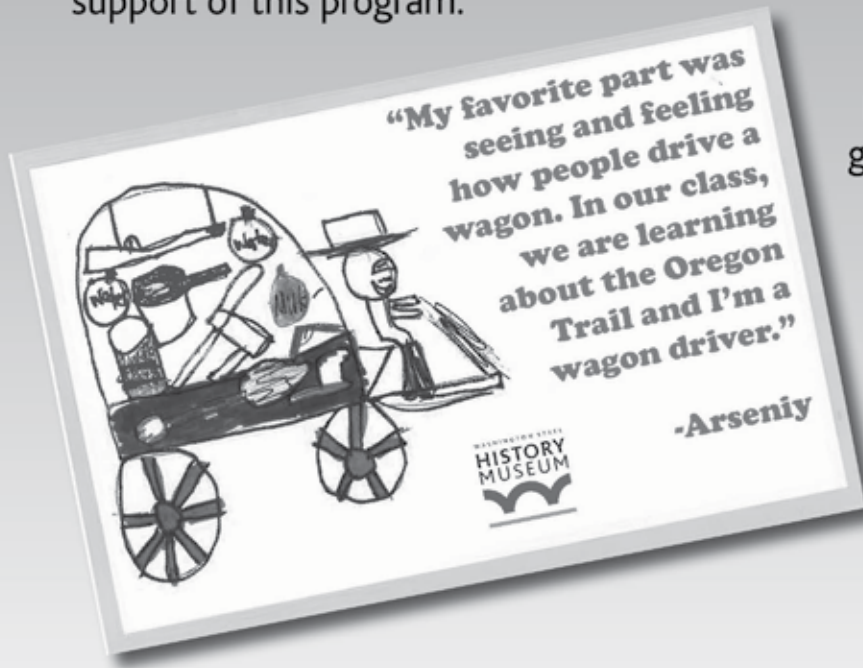
I believe Mount St. Helens offers lessons today as we confront new environmental hazards such as climate change and extinction of species. Moving forward, I believe it's science that should inform our political, public and personal decisions as we face critical decisions which will echo into the future much more than a volcanic eruption. Will Washingtonians attend to what science is telling us today? ☘





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### ON THE COVER

Jeff Renner is a mountaineer, meteorologist and accomplished scuba diver who became a household name in Western Washington in 1980 while covering the eruption of Mount St. Helens as a science reporter for KING TV in Seattle. He shares his memories of that long-ago disaster for the cover story in this issue of *COLUMBIA*. Photo of Jeff Renner on Mount Baker by Bill Fenster; courtesy of Mr. Renner.

## COLUMBIA

The Magazine of Northwest History  
A quarterly publication of the



VOLUME THIRTY-FOUR, NUMBER ONE

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Printed on FSC-certified 10% PCW recycled-content paper.