

The march of AI threatens to reshape Nevada's



Birds and a Wire

wilderness. But could a bird save the Basin?

By Oliver Roeder

Photography by Donavon Smallwood



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ate at night at the Silver Legacy in Reno, Nevada, in an elevator from the casino to the hotel rooms above, a man told me that he was having a miserable time, though he used stronger language. He'd just lost \$20,000 at the tables.

The casino was cursed, the city was cursed, the state was cursed. He was heading to wake up his girlfriend and drive them home to California.

To do that, he'd head west through the forest of the Sierra Nevada mountains, escaping the Great Basin into the Central Valley and towards the blue ocean beyond. I would head in the other direction, deep into the desert heart of the jagged brown bowl of the American west.

Just east of the neon of Reno is an area that advertises itself as the largest industrial park in the world. Its tenants include major factories, distribution facilities and data centres. They are the back-office infrastructure of modern commerce and the power-hungry engine rooms of modern computing and AI.

East of that is the Basin and Range, a vast desert alternation of parallel valleys and mountain ranges, caused by "the fragmentation of a crustal slab above a plastically extending substratum", according to the US Geological Survey - the stretch marks of the Earth. On the quadrilateral of Nevada, they look like stone raindrops dripping down a windowpane.

Through the belly of the basin runs US Route 50, a two-lane highway spanning nearly the entire country, east to west from Ocean City, Maryland, to West Sacramento, California. The segment that ribbons over and around the Nevada mountains is known as "the loneliest road in America". It's among the most untouched parts of the continental US. Most of the time, a driver on this road could safely stop their car, climb atop it and witness in every direction no evidence of human existence. Instead, they would see an ancient lake bed, alkali flats and sagebrush, cradled east and west by ranks of fading peaks.

But modernity may soon leave its imprint. A planned high-voltage transmission line called Greenlink North would follow the path of the loneliest road for 235 miles, in a utility corridor two-thirds of a mile wide, connecting with a new collector station and expanded substations. Pending solar farms would blanket certain valleys for Greenlink North to ferry their megawatts away. Near the eastern end of the line, a mountain would be turned into a battery, with groundwater moving up and down between reservoirs to balance electric load in the driest state in the country.

At a recent event hosted by a commercial real estate association in Las Vegas, the director of business development for NV Energy - the state's largest utility, builder of Greenlink North and wholly owned subsidiary of Berkshire Hathaway - explained that data centres were largely responsible for requests that the utility triple its energy baseload. The umbilical Greenlink North would help it meet the challenge. "We are excited to serve this load," he said.

Capital expenditures on AI are now a visible slice of US GDP. Companies that train and power it are worth trillions of dollars. The chips and servers will need power plants and grids. At

the chipmaker Nvidia's annual AI conference, its CEO, Jensen Huang, praised Donald Trump's "pro-energy" stance for helping to make this possible. The artificial has a physical presence. In northern Virginia, northern Texas, the fields of Ohio and Iowa, the desert of Arizona, the mountains of Nevada, the cloud is claiming land.

In October, a photographer and I spent a week in the Basin and Range, a reconnaissance mission ahead of this pending invasion. While it was still lonely, we travelled the loneliest road east and then retraced it west, a journey of some 1,000 miles. The roads may be lonely, but this country is not empty. The desert has its faithful. We were also searching for a bird - a bird that might save the basin.

FALLON

IN THE LOBBY OF THE SILVER LEGACY, WE MET

Russell Kuhlman, executive director of the Nevada Wildlife Federation. Piling into our vehicles, we sped away from the city and the last remnants of the Sierra Nevada foothills, past the industrial park and into the Carson Desert and the land began to breathe. Twenty miles down Highway 50, we stopped in Fallon, a town of 9,000 people and the last strip malls we'd see for days.

The prospect of industrialising an unspoilt stretch of Nevada is sacrilege to many here, whose cathedrals are remote valleys. The project has united in opposition hunters, wildlife conservationists, environmentalists, academics, certain bureaucrats and Native American tribes, all keen to safeguard their holy places. "In Nevada, it's very hard to piss everyone off, and this has been about the closest example," Kuhlman said.

In a coffee shop we were joined by Greg Tanner, a Nevada native with a long face, blue eyes and a camouflage cap. Tanner has spent his life in its wilderness. He retired as chief of game for the state government's Department of Wildlife. "The sage grouse was my baby," he said.

In 1960, when he was eight years old, Tanner climbed into the front seat of his miner father's pick-up truck carrying a small-calibre shotgun. They drove through the night and arrived at the sagebrush steppe as day broke. They drove out on to the bench and climbed out. "I saw those sage grouse get up, and just by their sheer numbers, they just *rolled*," he recalled. "Unbelievable numbers, and I saw that with my own eyes."

The greater sage grouse is a chunky bird, about 2ft long, speckled brown and grey with a black belly, small head and long tail. The males have a white breast and a black throat. It shares a taxonomic family with the wild turkey, prairie chicken and ring-necked pheasant. Its numbers in the American west have fallen more than 80 per cent since Tanner was a child.

The sage grouse's range coincides more or less with the range of sagebrush itself. An aromatic shrub, typically a few feet tall with a deep taproot, the plant dots these valleys in dusky shades, like Seurat painting a Rothko. Perhaps no bird is more intimately connected to a plant than the sage grouse to sagebrush. They are born in it, they live in it, they eat it, they die in it. The bird is therefore an umbrella for a whole ecosystem and a couple dozen other sagebrush-obligate species, including mule deer, pygmy rabbits and sage thrasher.

The west loses a million acres of sagebrush a year. Over two recent decades, Nevada lost 70 per cent of its core habitat. The largest threat, Tanner explained, is fire, fuelled by drought and cheatgrass, an invasive weed that burns as well as gasoline. Other threats are anthropogenic. Greenlink North would, the conservationists say, harm the grouse and its plant with noise and construction, and provide perches for its predators, including ravens and golden eagles. "It's catastrophic," Patrick Donnelly, the Great Basin director at the Center for Biological Diversity, told me before my trip. "The mother of all sage-grouse killers."

This summer, Kuhlman's Nevada Wildlife Federation, Donnelly's Center for Biological Diversity and a handful of other groups filed a protest against the Greenlink North project with the Bureau of Land Management, which administers nearly 50 million acres of public land in Nevada, about two-thirds of the state. The groups assert that the bureau failed to inform the public of the project's effects, ignored its full environmental impact, assumed its impact would be mitigated and eliminated alternatives "without an adequate or lawful basis". The word "grouse" appears 158 times.

"The sage grouse is important to us because we work on endangered species, but also because it's the best legal hook," Donnelly said. "There's no legal hook for, 'You're ruining my life.' The sage grouse is going to stand in for the less tangible harms that these communities are going to suffer."

The greater sage grouse is not a federally listed endangered species, though there have been many such petitions. Instead, states in the west have adopted their own conservation plans, in effect to ward off a listing, which would impose a prohibitive burden. In Nevada, the 167-page "Greater Sage-grouse Conservation Plan" begins with the declaration that the bird is a "historically and culturally significant species". The plan operates in part on a ledger system: disruption earns would-be developers debits, while restoration elsewhere earns credits.

A planned high-voltage transmission line would follow the path of the loneliest road for 235 miles

There is a sense among its opponents that the utility has been less than forthcoming with its intentions. For instance, the project was initially a simple power line and became a full-service corridor. "A lot of evidence points to the fact that it's really just BLM and NV Energy in a closed room," Kuhlman said. (NV Energy did not respond to multiple requests for an interview for this article. The Bureau of Land Management declined an interview request, citing the federal government shutdown, but did respond to a written list of questions.) Meanwhile, Tanner sees his hard work eroding as personnel and politics change. "Ten

Top: a taxidermied greater sage grouse.
Below: a truck in a ranching allotment in Jakes Valley

years ago, NV Energy would never have proposed that,” he said. “And I don’t have to tell you about the current administration. Long story short is they don’t give a shit.”

We were also joined at the table by Catherine Williams-Tuni, the chair of the Fallon Paiute-Shoshone Tribe, who lives on its reservation nearby. “As indigenous people, we’re trying to balance two worlds,” she said. In particular, economic development and stewardship of the land. Balance was a refrain in the basin. “We cherish our land, we cherish our ancestors that still lay to rest in many areas out there, and we cherish our animals such as the sage grouse.” The bird was a food staple for her people alongside pine nuts and ducks, she said.

Williams-Tuni recalled another recent battle over land, during which she had assembled with the governor, congresspeople, officials from the Department of the Interior, the mayor and military brass at Fairview Peak. They gazed over the valley towards a Navy instalment - the military uses a chunk of this desert for bombing practice.

“Welcome to my playground,” said a commander.

“Welcome to my ancestral homeland,” Williams-Tuni responded. As she was talking about her ancestors, an eagle came from out of nowhere, just swooped down. “I said, “There he is, telling us the story.”

The loneliest road was given its name in a short item in Life magazine in July 1986, part of a spread on American superlatives. “It’s totally empty, there are no points of interest,” the magazine quoted a representative of the American Automobile Association. “We warn all motorists not to drive there unless they’re confident of their survival skills.” The state embraced the moniker and it now appears on Nevada’s official road signs and maps, one of which we purchased from a pile next to the pine nuts in a gas station after being warned against trusting GPS. When it did work, our car’s navigation system often displayed a single line, Cartesian straight, on a blank white field. And in the hypnotic windshield perspective of the Basin and Range, roads in the distance appeared to turn vertical. I had in mind the words of Neil Armstrong who, while on the Moon, said, “It has a stark beauty all its own. It’s like much of the high desert of the United States.”

It is east of Fallon that the loneliest road begins in earnest, as does sage-grouse country. Here we began to look for the bird on which so many hopes locally were resting, constantly scanning the underbrush and the sky. Early in our drive, the only other vehicles in view for miles were two helicopters in desert camouflage livery. We stopped at a historical marker commemorating the sesquicentennial of the Pony Express. By now we were lodged in the slow stone sine wave of this road. It was a sunny and still autumn day. The air was fresh and dry and it was, above all, quiet.

“It is a soul-shattering silence. You hold your breath and hear absolutely nothing,” wrote the physicist Freeman Dyson, of standing in a Nevada flat like this. “You are alone with God in that silence. There in the white, flat silence I began for the first time to feel a slight sense of shame for what we were proposing to do.”





Catherine Williams-Tuni



John Uhalde

What they were proposing to do was explode nuclear bombs underground, which they did in that desert, many hundreds of times, during the second half of the 20th century. The Sedan crater, 100m deep and blown into the Earth in 1962, is now listed in the National Register of Historic Places.

➔ **AUSTIN, NEVADA** •

WHEN ONE ENCOUNTERS THE GREATER SAGE GROUSE in the scientific literature its name (*Centrocercus urophasianus*) is often accompanied by a parenthetical, human name (Bonaparte). This is Charles Lucien Bonaparte, a naturalist and ornithologist and nephew of Napoleon.

“It is with the liveliest satisfaction,” Bonaparte wrote in 1828, “that we are enabled finally to enrich the North American Fauna with the name, portrait, and description of this noble bird; which must have formed from the earliest periods a principal ornament of the distant wilds of the west.”

Bonaparte called the bird “hardly inferior to the Turkey in size, beauty, and usefulness”. But he never saw a sage grouse, not really. He examined a specimen in the collection of a British taxidermist and leaned heavily on descriptions in the journals of Meriwether Lewis and William Clark, who documented the bird during their expedition into the newly acquired Louisiana Purchase and the American west. They called it the cock of the plains.

The birds perform courtship rituals on carefully chosen, geographically specific arenas

Approaching Austin, the Reese River Valley presents perhaps the most striking view of the great series. It is the mother church, at the far end of which stood the snow-capped rood screen of the Toiyabe Range. Improbably, an Italianate castle tower stands above the mountain town of 167 residents and the rough midpoint of the loneliest road. The castle was built by a mining and railroad magnate, but he left shortly after and never returned. The population density of this county is one person per square mile.

Dave Hardin sat in a small park perched above town. He wore cargo pants and a work shirt and had a deep outdoorsman’s tan. He pulled out a map displaying the road and the power line, and filling the valleys were tight groups of dots, like large bunches of grapes, that represented pending rights of way for solar projects.

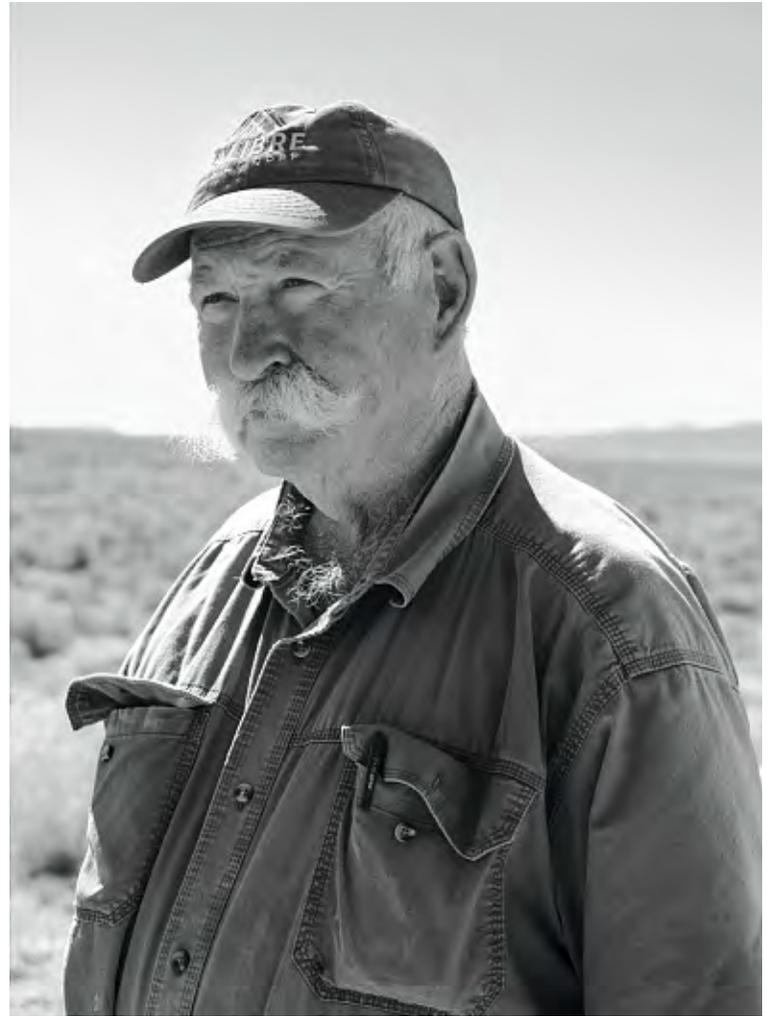
Sitting next to him was his friend Robyn Veach. Veach used to live in the Bay Area, where she worked in human resources. For five years, she and her husband travelled the US and Canada in a motorhome. They performed an exhaustive census of beautiful valleys of the continent, and chose to live here. “Once you drive through Big Smoky - there’s nothing like it,” she said.

The greater sage grouse has a deep devotion to place as well. The birds perform their courtship rituals on carefully chosen, geographically specific arenas called leks. On a lek, a male inflates two air sacs on its chest, the colour of egg yolk, and knives its tail feathers into an upright starburst. Then, for hours, a complex schedule of sounds: wing swishes, heaving of vocal sacs, rubbing of feathers, cooing and two pops from the air sacs, between which a whistle. Birds visit the same lek, an otherwise unremarkable patch of ground, year after year for their entire lives, often the one their parents visited, and their parents visited. “It’s a hard-wired thing, they know where to go,” Allison Jones, a field biologist, told me. Lekking in the animal kingdom is rare and exhibited by an incongruous menu of species. There is evidence, in the form of prehistoric claw marks, that dinosaurs used leks.

The complexity of the sage grouse is responsible for hundreds of doctoral theses and thousands of academic papers. One academic in California sends robotic female “sage grouse” into real leks, “observing courtship from her perspective”. But the



Dave Hardin and Robyn Veach



Gracian Uhalde

emphasis on ritual above all, and the pious devotion to place, come at a price. An exhibit attached to the groups' protest shows 37 "active" or "pending" leks along the planned corridor. Even if the line does not kill birds directly, the disruption of leks imperils future generations.

Lekking season is well over by October, the birds scattered into the brush and up to the mountaintops. Our search for the principal ornament of the west would be tricky. Hardin said we could find them above 9,500ft. But he and Veach didn't give much of a damn about the greater sage grouse; they cared more about the desert. "They're scraping the desert, they're destroying the desert," Veach said, referring to an extant solar project. "It's heart-wrenching - it is heart-wrenching, actually." She realised she meant it.

Even the most ardent conservationists we met recognised that Greenlink North, or something like it, would be built, and agreed the state's electrical grid needs upgrading. They were proponents of renewable energy, if thoughtfully deployed. In any case, Nevada is constitutionally required to run on at least 50 per cent renewables by 2030. Like many, Hardin and Veach wished the project were relocated to the Interstate 80 corridor, an hour or so north, already much busier and more disturbed. But even in the Basin and Range, the shortest path between two points is a straight line, and the BLM has said that such a move is not economically feasible.

"I had somebody say to me, 'Oh, it's a not-in-your-backyard thing,'" Veach said. "No, it's more than that. It's preservation of something that is incredibly special, that is hard to convey."

They recommended we visit Spencer Hot Springs, not far away by Basin and Range standards, in the Big Smoky Valley, Veach's backyard. "You can probably make it before it's dark," Hardin said. "Look south and imagine everything you see is solar panels from that point on."

In the dusklit valley a family bathed in a small pool and a couple set up camp with beers and their three dogs. Other characters lurked and lived in small hills around. A gradient sky followed the range to the vanishing point of the basin. It was 6pm, and the sun was setting behind Bunker Hill. Then it did set, with an explosive alpenglow.

Everyone we spoke with had a lead on the grouse - this creek, that summit - and we followed them. Mostly we found ravens and magpies and little daredevils that flirted with traffic. Thinking they might be following the grouse, we followed the ravens, and found more ravens.

Our search became creative. Somewhere in Monitor Valley, and somewhere near the banks of Berry Creek, I played a recording of the bird's call on my phone, rolled down the windows and crept slowly along back-country roads. (It sounded to me like a shrill beckoning: *He-ere, he-ere.*) We hoped that this might work as in a cartoon, the car quickly

surrounded by curious grouse peering in the windows. We called a state senator who we'd heard had an extensive collection of creatures. We checked a local office of the Department of Wildlife, content by this point even with a stuffed specimen. A few birds did decorate its small anteroom, but none of them was a grouse.

EUREKA

THE COCK OF THE PARKING LOT WOKE ME EARLY THE next morning, cock-a-doodle-dooing outside the Cozy Mountain Motel. The loneliest road gets curvy east of Austin, winding over and down the Toiyabe. Blind curves skirt the brinks of sheer, rocky drops. Twenty miles east, we noticed a rare sign ("there are no points of interest"). I jammed the brakes just in time to make the turn into Hickison Petroglyph Recreation Area, on an old migration trail between Monitor and Big Smoky.

Taking the carvings here at face value, one of the prehistoric artists was called Erin, and phallic symbols were central to their culture - this despite the security camera and the sign warning of monitoring by the Department of the Interior. But farther into the woods the petroglyphs were less defaced by modern hands. Abstract and faded, it was hard to separate the work of humans from that of time and nature.

Farther along the road, the area around Eureka, population 364, is ranching, farming and gold-







mining country, along with some molybdenum and vanadium. Bad luck for the sage grouse, a lot of Nevada's gold happens to be in sagebrush habitat. In the late morning, everything on Main Street - the name of Highway 50 as it crawls through town - was closed or empty.

An actual tumbleweed rolled down the road in front of the red-brick office of Jake Tibbitts, the natural resources manager of Eureka county, which is 80 per cent BLM land. Tibbitts sat behind his desk in a chequered shirt and jeans. The line would run over the mountain outside his window. "The issue isn't the line itself," he said. "What plugs into that line? It's the *Field of Dreams* - if you build it, they will come." He mentioned the pending solar projects, hanging off the vine of Greenlink North on a map of the great valleys.

The line, Tibbitts said, would not only transect prime sagebrush but also impinge on Eureka's long-planned growth should it, say, have a mining boom. Eureka had proposed a reroute, which NV Energy and the BLM said was not feasible. Despite this, the county commissioners with Tibbitts's blessing decided not to protest Greenlink North, but rather to work alongside NV Energy and the BLM. "We could protest and likely our document would go in the round file," he said. Within Nevada's arithmetic conservation plan, Tibbitts is hoping to work with them to find mitigating credits close to home.

One of the many bird theses was written by Justin Small, now a specialist in the game division of the Nevada Department of Wildlife. Small finds the credit system "a little Pollyanna". He also questions its moral underpinnings. In this Great Basin trolley problem, this system can prefer a hypothetical future aggregate over actual living individuals. "What value do you put on a current population of animals?" Small said. "You don't only take away what they have, you take away everything they're ever going to have."

ELY

A BURLY MINER, 20FT TALL, WIELDED HIS PICKAXE above the marquee of the Nevada Club on Aultman Street in downtown Ely, a town of 4,000 people. But where were they? There were lunchettes but no diners, saloons but no drinkers, schools but no children. There were only maintenance workers, putting a fresh finish on the loneliest road.

At Comins Lake, on the town's southern outskirts, we found Bill Miller, the county's former roads superintendent and a veteran of sportsmen's organisations, wildlife boards and land-management committees. He helped build the boat dock nearby. Miller, too, seemed hard-wired to this place, to what he called historical, cultural values. "The ranching, the fishing, the hiking, the way that nature is today," he said. He was a walking, talking topographical map. The pinyon and juniper around us, he explained, were evidence of a mining industry that once flourished here. Trees were cut and shovelled into fireplaces or the coke ovens nearby, beehive structures that processed silver ore and later hid stagecoach bandits.

Top: brush near Comins Lake, Ely. Bottom: a road in Berry Creek. Previous pages: a mountain range, McGill

Miller gave us a very hard time for living in New York City. He could never stomach the people, and didn't understand how we could. Manhattan could easily fit in such-and-such valley, and the only wildlife we had were rats. Finally, we made a deal. I'd teach him to ride the subway and he'd teach me to ride a horse.

With the arrival of Greenlink and whatever plugs into it, Miller feared a scraped desert, and a region hostage to fugitive dust. He said that the valley over there will look like Saudi Arabia. "We are bringing in a renewable resource to save the planet, and yet we're killing off Mother Nature."

Kyle Horvath, the county's tourism director, arrived at the lake in sporty sunglasses. He'd been setting up for a disc golf tournament, and still had miles of boundary to spray-paint. Other organised recreations in the area include horse races, mountain-bike races and, not surprisingly, car races. "When you live this far out here, you don't have anybody to tell you 'no'."

"Ichthyosaurs and woolly mammoths and sabretoothed tigers all roamed this area," Horvath said. Highway 50 is also a fossil imprint of centuries of human travel. The passage was a Native American trading route; the Overland Trail brought stagecoaches and gold-rushers west; the Pony Express brought messages; the transcontinental telegraph brought them faster; and the Lincoln Highway connected the coasts for automobiles. But the transcontinental railroad and Interstate 80 took a more northerly path, leaving the loneliest road frozen in dirt.

Horvath said that he had driven Highway 50 "more than any modern person". Later, Miller quietly disputed this claim, believing that he had driven it even more.

"Nevada's history is resource extraction," Horvath said. "Everybody looks at it as a place to dip their pick in the mountains and draw something out of it, even if it's sunshine or wind." The state has also lost hot springs to geothermal power. Again, his plea was for balance. "There's a way to do it, and it's not having another gold rush."

Following supper at Margarita's, a Mexican restaurant inside the cigarette-perfumed casino of the Prospector Hotel, we returned to the lake after dark to find a full moon rising above the Schell peaks, shimmering on the water. Despite the moonlight, the Big Dipper dipped over town and a brush of the Milky Way scraped the inky dome overhead. Data from a government satellite shows the loneliest road to be among the darkest night-time places in the country. Only the coots called out in the dark.

Early the next morning, we turned the car around and headed back west.

GOING WEST AGAIN

JUST WEST OF ELY, ON THE WINDWARD SIDE OF Robinson Summit, are existing power lines, wire stretched over hills on tall crossbeam arms like a miles-long queue of alien invaders. We underran them and turned left into Jakes Valley, crunching a few gravel miles south of the loneliest road to a nameless road after that. Miller shepherded us off the highway and through the sagebrush.

Tucked along the side of this valley is the Robinson Summit Substation, acres of metal lattice and

wire surrounded by chain-link fence. A sign read: "No unauthorised personnel". It is a central cog in the distribution of power here and would be the eastern terminus of Greenlink North.

Outside its gate stood Gracian and John Uhalde, father and son, third- and fourth-generation sheep and cattle ranchers. Gracian leaned on the hood of his pick-up truck and John stood tall and poised in a cowboy hat. Their dog sought shade under the truck.

This was their grazing allotment, about 30,000 acres permitted to them by the Bureau of Land Management, one of 13 such allotments pieced together by Gracian's grandfather, also called John. They still use water wells here drilled by John's grandfather, also called Gracian. It's a key piece of land for the fall grazing of sheep. From the Uhaldes' summer range to their winter range is a drive of 170 miles.

The ostensible emptiness gives way to what John sees as a moral hazard of the desert. "These solar projects are out here to save the world," he said. "But in the meantime, we destroy the environment that I see so that somebody in the big city can plug their car in and feel good about it. They don't live in Jakes Valley."

John pointed across the canyon to a 40,000-acre swath of plants glowing in the morning sun. It was the largest monoculture of white sage in North America. The plant is 20 per cent protein (he has tested it) and therefore an elemental input into their livelihood; it's also called winterfat. He picked a sprig from nearby and examined it in a rough hand. The plant, of course, is powered by solar and its glowing swath is dotted for a photovoltaic solar field. "It's gonna be the end of us if they allow it," Gracian said.

A family doesn't rely on this land for a century without considered thought of its conservation, John said. He jabbed a finger towards his father. "True environmentalist." He jabbed one towards himself. "True environmentalist." John, too, thought the project ought to be relocated. He had an idea. "Let's put it on the Utah salt flats if that's what we have to," he said. "You can't destroy nothin' out there, it's literally bare ground."

This delicate valley may power chatbots. It may help scrape the work of human beings and generate deepfakes and hallucinations and fill the world with slop. But for the Uhaldes, the Great Basin is already a useful machine. It was a machine long before they arrived and it will be a machine long after they're gone.

"There's a flow to everything," John said. "There's a flow to an allotment, there's a flow to migration for elk, deer, sage grouse. Any ungulate, any livestock, horses, cattle, sheep, goats. There will be a flow to a canyon, there will be a flow to a mountain." He pointed at the substation: "This disrupts the flow." As it happened, John had seen sage grouse just the other day, near Gleason Creek, but he didn't think the tyres on our rented vehicle could make the journey.

Before we left, Gracian retrieved a small booklet from his truck. It was titled *Atomic Tests in Nevada*, published by the federal government in March 1957 and distributed to locals. It was a handsome artefact, with a tattered charcoal cover and delicate pages. Fallon, Austin, Eureka and Ely were labelled on its small frontispiece map alongside the test site.

One of its chapters was titled "Potential Exposure Is Low" and another "Radiation Is Nothing New".

"Very few of us can explain electricity, although we have learnt to live with it and to use it," reads the latter chapter. "Even fewer can explain nuclear radiation. It is little understood by most of us, being something we can't see, feel, hear, taste, or smell."

When Gracian was a child, it sometimes looked like it was snowing in midsummer. He said that he'd developed a tumour on his bladder, and his sister had a tumour on her brain. From a mountain pass, they'd watched clouds of pink or angry red rise into the sky, and wondered which way the winds would take them.

The wind picked up and howled through Jakes Valley. "It's a pretty clear day, but we know the storm's comin'," John said.

It was a Native American trading route; the Overland Trail brought stagecoaches and gold-rushers west

The BLM was circumspect in answering a question about the future of Greenlink North, saying only that once a protest-resolution report is published it will announce an "overall project schedule". In the final silence of the desert, I had in mind what Horvath had said, that Nevada had been shaped by a series of gold rushes. If the data rush is to be the latest it will, like the others before it, create winners and losers. Whoever they are, AI, with its mammoth appetite for resources, will impact environments and landscapes and the species that depend on them for a long time to come. "As the sage grouse goes, so goes the Great Basin," said Donnelly, of the Center for Biological Diversity. The sage grouse may as well be a canary.

We continued west. It was late afternoon and on certain of the highway's ascents it seemed like we were driving directly into the sun. Basin, range, Eureka, basin, range, Austin, basin, range, basin, range, Fallon. Slow-motion déjà vu. We saw two fighter jets flying in tight formation, before they split off over the horizon. We stopped for a burger at an unlikely roadhouse. The stereo played Hank Williams Jr's "A Country Boy Can Survive".

Night fell near Fallon. We merged on to a busy Interstate 80 towards the neon. Traffic came to frequent halts for reasons we never knew. Just off the interstate, technological engine rooms glowed and smoked.

In the morning, a couple hours before our flight home, we finally found the greater sage grouse. It was long dead and taxidermied, standing next to the antelope in a diorama beneath the enormous skylights of a Reno sporting goods superstore. **FT**

Oliver Roeder is the FT's US senior data journalist