
Speech

In Love With the Wild: Thoughts About the Public Lands in the 21st Century*

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Years ago, the writer and activist Terry Tempest Williams and I stood on the sidewalk in front of the Whitney Museum in New York asking passersby if they knew what the BLM is. Terry makes me do things like that. The first nine cosmopolitan people had no idea whatsoever, so Terry, who had bet that somebody would know, cheated. She spied a woman wearing heavy turquoise jewelry crossing the street and ran over to accost her. The woman, freshly arrived from Idaho, broke the streak with a rudimentary understanding of our nation's largest land manager, and confirmed through our deeply scientific polling that almost nobody outside the West knows much about the public lands. To Terry, Utah born and bred, this was a shock, but not to me, a native son of New Jersey.

I had never been west of Pennsylvania when I met my wife, Eleanor, in graduate school, and I knew nothing whatsoever of the public lands beyond a sense that there was more to the National Park Service than historic parks and monuments like Gettysburg or the Statue of Liberty. I could have named Yellowstone and Yosemite, but honestly, the list wouldn't have been very long, and the understanding of how they were managed was murky. Eleanor, who had been exploring Utah's canyon country all her life, soon remedied the situation, bringing me over the winding route from Salt Lake to the Escalante country and changing my life for good.

I had no experience of immense open country not covered with *No Trespassing* signs, was completely unprepared for the heights and wildness of the Utah plateaus north of Bryce, and lost my heart in the redrock canyons of Deer Creek and the Escalante River. The canyons stunned me, and if my life of activism has amounted to anything, it was all nascent in those first days of awe and delight. It's a common occurrence, but unlike most who love the place from afar, we moved deep into southern Utah as soon as we could manage it. In our case that meant camping outside for most of two years while we worked at any jobs we could find and built our home on \$5,000 of savings. We cooked on a tiny fire, bathed under a waterfall in the creek, and watched from our sleeping bags as coyote families called and the milky way wheeled overhead throughout the night. Now that the calluses and scars have softened, we remember it as an incomparably romantic time in our lives.

Some of you may have noticed that I gave the organizers of this talk an unusual portrait photograph. Since they had already obviously lost their minds by inviting me to give this lecture, I thought I'd make their job even harder by giving them a picture of a big fish to advertise the talk.

I like the image for several reasons, not least because the fish, which is a muskellunge, is really a marvelous creature. I hasten to add that she went back into the lake and swam away healthy, if not happy about our

encounter, a few seconds after the picture was taken. I also like the photo because it captures me in the kind of moment of joy I have experienced throughout my life in encounters with wild creatures in wild places. And finally, I chose the image of me involved in a pursuit that a friend once called “playing with a wounded animal on a string” to remind myself that I have not been blameless or without impact as I have enjoyed a privileged existence in the midst of the public lands. Like other rural westerners, my life has been shaped in every way by the surrounding presence of our 640 million-acre common inheritance, and I have had far more than my fair share of the benefits. These days, I mostly think about how I can return the favor.

So, this talk begins with a report from the field, so to speak, a description, from an activist and stakeholder, of what it’s like to live surrounded by deep, wild public lands. I think of this first part of my talk as a personal description of what the public lands can mean to an individual life. And then, following that, I will broaden the scope and look ahead, asking how our relationships with these lands must evolve in the 21st century. It is necessary to speak in new ways about these matters at a time when the very concept of public lands is once again under assault from the Congress and from state legislatures, attacked through well-funded disinformation campaigns, and, if all the rest isn’t clear enough, the land itself occupied by armed militias—our inheritance under threat from people who have not felt lucky to earn a living off of lands and resources belonging to all of us, but who feel resentful nonetheless and determined to take everything for themselves. The American people are in danger of losing something of inestimable value without really knowing what it is and, more importantly, without having a modern conception of what role this globally unique endowment might play in helping us find a way to live in harmony with our ever more stressed planet.

So, picking up the story back around our little campfire, the valley where we live is bordered on the north by the gorge of the Colorado River. We basically drive through the Grand Canyon to get to town, with the backcountry of Arches National Park across the river. Immense cliffs, mesas, and towers front BLM Wilderness Study Areas on the east and west; and the bowl of the valley is completed on the south by the snowy peaks of the Manti-La Sal National Forest. It would be a national park anywhere else, but here it’s just a stretch of nice country.

In the early years I worked on the river as a boatman and on hot summer evenings we and the neighbors would go swimming at an especially nice beach. We were young and healthy and saw no need for bathing suits and it is funny now, forty years later, to see tourist cars crowded in that area as visitors search for the fabled “nude beach.” When

we needed to make concrete or mortar, we shoveled pick-ups full of sand from along the river and gathered stone for the house from talus slopes in the mountains. In fall it was easy to get ponderosa and aspen firewood from the forest, or pinon and juniper from the lower country. For forty years, I have been the ditchmaster of an irrigation company that draws water for our community's trees and gardens from a creek arising on forest service and BLM lands. To break from work, I fish in lonely trout streams, eating raspberries and rose hips beside the pools. I recall driving into Arches on a snowy December day when there was not another set of tracks on the road, not another person there to see the squalls move through the otherworldly landscape, a sudden shaft of light flaring across a pink turret backed by the white fastness of the La Sals. The next day I went into those mountains to cut a Christmas tree. It was a hard place to get rich, but a very good place to be poor.

I was not scholarly enough to know how the federal lands had built our country, paying war debts, facilitating westward expansion and trans-continental railroads, endowing institutions of higher learning, providing building materials, minerals, energy resources, and the water that allowed development of the arid regions. Those benefits flowed widely and unacknowledged throughout the background of American society; but for me and my neighbors, the public lands shaped our everyday reality in the most mundane ways.

I knew people who lived almost completely outside the cash economy. One cut juniper posts and used them to fence a rancher's federal grazing allotment in trade for a mining claim. He developed the claim and then traded for a dozer. After doing every imaginable kind of dirt-work on his homestead, he did the same for a friend with a broken down sawmill, repaired the mill and cut lumber for his house. No prizes for guessing where the logs came from. He helped fence cows out of my orchard and I hand-dug a well for him near the creek. It's an entirely sensible way of living that is passing out of the world. I viscerally understand the anger felt by many rural people who want a return to those simpler days, even as I believe that they have completely misplaced the blame.

My desert idyll soon suffered a deep inflection caused, appropriately enough, by a federal project. The Arab oil embargo had, among much else, stimulated the nuclear power business, and the U.S. Department of Energy was tasked with developing perpetual repositories for the accumulating high level nuclear wastes. The initial plan was to choose one location from among five sites in the West, while simultaneously beginning a search for a second site east of the Mississippi. DOE was looking at salt domes in Louisiana and Texas, welded tuff in Nevada, and basalt at the already contaminated Hanford nuclear site beside the

Columbia River; but their favorite geology was in the Paradox Basin of southeastern Utah. Here, DOE scientists, concerned only with geochemistry, zeroed-in on salt beds along the western edge of Arches and at the southern entrance to Canyonlands. We joked that the primary criterion for the nation's first high level nuke dump seemed to be that it had to sacrifice a national park.

Moab was a uranium town, so the multi-billion-dollar project was the subject of intense discussion. The orthodoxy arising from city and county officials was that we would gladly host the repository. I was converted from a concerned citizen to a leading activist through my response to one particularly simple minded assertion by the boosters. When they said, "We dug this stuff out of the ground here, so we have a patriotic duty to take it back," I couldn't resist pointing out that high level nuclear waste is nothing like uranium ore, or even the concentrated yellowcake coming out of the Atlas Mill. People started asking me what the dump was really going to be like and why the country wanted to hide it away in our backyard, and within two months Governor Matheson had appointed me as the citizen representative to the state task force that was Utah's official liaison with DOE.

I was cast in the role of chief opponent of the project, managing to expose all of the logistical and cost disadvantages of the Utah sites and highlighting the potential travesty of building the dump on the doorstep of a glorious national park. Perhaps this holding action was successful, though in the end, all of our studies and meetings came to seem irrelevant when Louisiana Senator Bennett Johnston, who chaired the Committee on Energy and Natural Resources, resolved the issue through what everyone called the *Screw Nevada Bill*.

This blunt bit of politics let Johnston's home state and every other candidate state off the hook and terminated the search for an eastern site as long as there was universal agreement to force the repository on Nevada. Ever after, until the program was defunded in 2011, opposition to the Yucca Mountain site was a perquisite for holding a major political office in the Silver State. Now, despite the presence of the wastes at reactors across the country, it is a nearly incontestable fact that nobody in America is willing to have the high level waste dump nearby.

I tell this story, despite its odd ending, because it was my first experience with the outsize involvement rural citizens in the western states can have in federal decision making. Where I grew up, you'd have to devote a career to becoming dogcatcher, but here I was debating national policy with the Secretary of Energy after mere months of involvement. The complaint that easterners and distant Washington bureaucrats shouldn't be imposing their foolish ideas on beleaguered westerners is

arrant nonsense. Any local with half a brain can make a major mark in the public lands states. I know this to be true.

Living in a small town during the various phases of the Sagebrush Rebellion, I gradually became dismayed at the way our elected officials misunderstood our economy and needs. In a county that is the gateway to two national parks, we depend heavily on federal jobs, tourism, and, largest of all, transfer payments arising from a quality of life economy.

Things were booming for clever entrepreneurs. But, instead of emphasizing education so our kids might share in the success, or the construction of high speed internet to support telecommuters, or the even more important protection of the public land assets everything hinged on, community leaders instead grouched endlessly about the collapse of the mining industry, blaming the feds instead of the market. Doubling down on that clear thinking, they ranted about grazing restrictions in the least agricultural county in Utah. And, in the early nineties, the county commission ignored the impending closure of our hospital and repeatedly spent our \$50,000 monthly mineral lease payment on an Environmental Assessment for the infamous Book Cliffs Highway. This boondoggle would have pushed a major haul road from the hydrocarbon fields in the Uinta Basin down through some of America's wildest country and over the road construction nightmare of the Book Cliffs to Interstate 70 and the transcontinental railroad.

In the end, some real local news coverage, and radical misjudgment of informed public opinion by the county commissioners, led to an overthrow of the commission form of government and a free-for-all election for a new county council. I ran against 12 other candidates for one of the seats and won election, if you could call it winning, to a new seven-member council heading a wildly divided county that had been left a budget soaked in red ink as a going away present from the commissioners. Proceedings for a recall election began on the day we took office.

It was a fascinating experience that shaped the perspectives I am presenting here. The new council sorted out the budget and quickly killed the Book Cliffs Highway project. We used the mineral lease funds instead to save our hospital from closure. The sagebrush rebels were convinced that we were about to reintroduce wolves to the school playgrounds; but the voters were pleased by this bout of non-ideological good governance.

As a councilmember, I got to redraw the boundary of Arches National Park, incorporating the glorious, stream filled canyons north of Delicate Arch. I stopped the plans of the Nuclear Regulatory Commission to leave 16 million tons of toxic uranium mill tailings marinating in the

groundwater beside the Colorado River, and I led the way on the Department of Energy project to remove them to a geologically favorable site in the Cisco Desert. It seemed as though we locals were being asked to resolve major public lands issues on a weekly basis. But the story I want to emphasize here is about our fitness for that heavy role.

Soon after our election, Governor Leavitt and the Utah delegation decided to assemble a bill to settle, once and for all, the Wilderness “problem” in Utah. Their method was straightforward: ask the commissioners to tell them what should be Wilderness in each county and release all the rest. Our Council was ideologically divided, with three devotees of land protection, three passionate advocates of extraction in all its forms, and a friendly guy who liked everybody and just wanted us to get along. We were systematically considering all the proposed wilderness in the county and the swing voter, sitting beside me, was voting for designation of one area and against designation of the next, without reference to geography. When we got to Mill Creek Canyon, the watershed for the City of Moab, it was time for a “No” vote, and so it was decided to throw open this Wilderness Study Area to development.

I muttered something about it being the stupidest thing we had done since being elected, and the decider asked me why. I told him that we’d just missed the opportunity to protect our water supply and he replied blankly, “Oh, Mill Creek, is that the place up behind the old drive-in movie theater?” He had just cast the deciding vote shaping major federal legislation and he didn’t even know what we were talking about. Experience has shown that his act was not really an anomaly. I keep that in mind when I hear about locals being the people who know the lands best. The unworthy bill that arose from that effort was mercifully killed by Bill Bradley’s Senate filibuster, a Jersey boy imposing some sense on the rural West.

Now, somewhere along here, in a talk like this one, I am supposed to say that public land policy needs reform—that we need to involve local governments and citizens more deeply to take advantage of their expertise and honor their stake and unique local circumstances. Yet, despite the chorus of complaints, we almost never learn anything specific and factual about what has been done to damage the interests of local jurisdictions. So, it is with serious caveats that I acknowledge the kernel of truth in that position.

On the other hand, I far too rarely hear emphasized the prosaic idea that the framework for managing public lands works pretty well amongst competing demands; or that it would work far better if we gave the land management agencies consistent and enlightened political direction and provided budgets that allowed for robust science staffs and the kind of

genuine public involvement that would lead to creative alternatives as envisioned when NEPA was passed.

As a Councilmember, I was barely beginning to learn the ins and outs of public lands when my life took one of those strange turns lives take, and I found myself in a role never repeated before or since in Utah and perhaps not in other western states, either: I became a full-time, professional environmentalist, working for the Grand Canyon Trust, while sitting on a rural county government. Suddenly I didn't have to work long hours making furniture to support my family, while fitting government work into the cracks; and having the standing of an elected official with the focus and resources of a conservation group behind me was a privileged position that let me explore some new angles in conservation work on the Colorado Plateau.

Don't worry, I'm not going to recount the war stories of a career of activist campaigns. Instead, I'd like to spend my remaining time describing a few key issues that point toward principles we should keep in mind as we craft a new vision for the public lands. Having a compelling, modern vision is probably the best antidote to the militias and legislators who want to take over and privatize our inheritance. It is an auspicious time for thinking about these things. We often talk about how the environmental constituency is stagnating, white, affluent, and reaching retirement age—people who first became concerned during the days of Rachel Carson and the flaming Cuyahoga River. But there is immense energy arising among young people today who realize that the world they are inheriting is ricocheting into scary, uncharted territory.

This generational transfer will not be a gentle evolution of environmentalism as we have practiced it. Our successors will determine the future of our public lands according to whether they believe those 640 million acres can be a useful asset in managing a climate run amok, in providing habitats for legions of species on the brink, in delivering breathable air and usably clean water. I'd argue that this new activism will be more pragmatic than environmentalism has been, evaluating decisions based on full life-cycle analyses, and addressing the inhumane systems responsible for our predicament; but I'd bet that the new environmentalism will be more visionary as well, necessarily embodying concern for all of humankind, and all our co-travelers on this planet.

The young activists I know want reason to believe that the future does not have to be all adaptation to ever grimmer circumstances. They want to know that the future also holds the prospect of great beauty and meaning. They are asking nothing less than the overarching question: "How shall we live that it might be so?" We owe it to them to offer the boldest, wisest advice we can conjure from our experience. So, here I want

to offer a collection of thoughts about how America's unique endowment of public lands can be the scene of a globally important experiment in how protecting and restoring the world around us can help us save ourselves. Not one of these ideas originates with me, but I hope there is value in pulling them together into a single picture that points in the direction we need to go.

I'll begin in the spring of 2009 when a scary drought in southeastern Utah momentarily broke into a violent wind storm, blowing dust in every direction. At my house, the sky turned an unhealthy green and then ominously darkened as a small tornado churned up the Colorado River canyon and burst into our valley, passing within twenty feet of my house. This black hole of energy tore trees out of the ground by their roots and flung large branches hundreds of feet across our field before disappearing. We'd never seen anything like it and, as we shook our heads, it began to hail in one of those storms where the ice crystals bounce a foot off the ground and the deer in the yard run chaotically until they find shelter under a tree. Just as it occurred to me to worry about the roof and car windshield, the hail turned to mud. It poured mud from the sky for half an hour. I wondered if frogs were about to begin falling next.

We know now that 2009 and 2010 were extraordinary years for spring storms that stripped disturbed land across the southwest and deposited the dust on the Rocky Mountain snowpack. The runoff from the warmly blanketed snow occurred six weeks early in those years, accelerating evapotranspiration and reducing water flows in the Colorado River by 900,000 acre-feet, or more than the amount used by Denver, Las Vegas, Phoenix, and Tucson combined.

It has been dry and windy in the southwest since time immemorial, but these levels of soil loss are the bitter harvest of our modern land uses. After the ranchers and miners arrived in the 1880s, the amounts of dust on the mountain snow rose as much as 700 percent, and then stabilized at five times prehistoric levels. Today, as temperatures rise and soil crusts wilt, more dirt than ever is being scoured into the air, and this is coming home to us through the water supply, where it hurts. Our management of land is important in every way we can imagine, right down to stabilizing the soil surface, and it's important in many ways we haven't understood yet. Aldo Leopold's guidance is still succinct wisdom for a complex and consequential world: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." Shelves of land management agency manuals could be replaced with those two sentences.

And note, please, this is not a throwaway line: In his new book, *Toward a Natural Forest*, former Deputy Chief of the Forest Service, Jim

Furnish, concludes with the observation that, “The transition of our public forests to timber production after the Second World War was a policy choice, enabled and led by the Forest Service. We can make a similar policy pivot to manage public lands primarily for diverse habitats, clean water, restoration, carbon stores, and other environmental values, while still producing wood products sustainably.” The remarkable thing is that, if we summon the will, we can actually make such pivots in the management of public land, where no such emergency response is possible on private lands.

The most widespread use of our public lands is grazing, and I’d like to focus on that briefly to highlight the stakes of current management and suggest how we can do better. There are 760 million acres of rangelands in the United States and half are public lands in the West. Many, especially in the arid regions, are grossly overgrazed. Rather than being carbon sinks, overgrazed lands have become carbon sources. It is estimated that preservation and restoration of healthy rangelands could sequester an additional 200 million tons of atmospheric carbon dioxide each year for many decades. That’s 3.3 percent of the greenhouse gases from our fossil fuel combustion. As the Department of Energy has observed, using natural processes to store carbon in terrestrial ecosystems is the most viable and cost effective way to offset emissions.

But, let me come at this from the more tangible direction of grassland health, since we are all numb to discussions of greenhouse gases. Shortly after President Clinton designated the Grand Staircase-Escalante National Monument in 1996, I had the chance to do something good for the Escalante River, the place where I first fell in love with the West. Through personal friendships made as an elected official, I was able to take the bull by the horns, so to speak, and negotiate a private deal with four ranching families to end grazing throughout the sublime length of the Escalante River and most of its tributary canyons. The BLM ratified that agreement in 1999 through an amendment of the resource management plan. Perhaps they wouldn’t have been brave enough to do it, but Governor Mike Leavitt wrote approving of the deal as did the Utah Division of Wildlife Resources. I think it is worth quoting from that agency letter, because even the bland bureaucratic prose can’t disguise a mounting sense of the marvels that healthy country can give us.

There are important wildlife values in the area that would be enhanced by the proposed changes in livestock grazing. Riparian vegetation and understory cover along the Escalante River and several tributaries would be protected and improved...Healthy and abundant streamside vegetation benefits native fishes like the flannelmouth and bluehead suckers, and improves water quality by

providing cover and food resources, regulating water temperature, filtering and trapping sediments, and increasing water storage for release over longer periods... Moreover, upland grasses, forbs, and vegetative cover would increase and provide better habitat for Southwest willow flycatchers, mule deer, desert bighorn sheep, rabbits, and other small mammals, which are in turn prey species for predators such as mountain lions, bobcats, coyotes, foxes, and raptors... Increasing vegetative cover can also improve watershed quality, reduce soil erosion...and enhance recreational and aesthetic values.

All that and substantial carbon sequestration too. That is what Aldo Leopold was getting at. Are changes like that achievable at scale? Not if we continue in thrall to the myth of the cowboy. Not if land management continues to be a pawn in our political paralysis. But what if we reviewed everything about how we are using all 640 million acres of public land with a primary focus on climate, on ecosystem integrity, and on beauty, and did it like our lives depended on it? What if, as Jim Furnish suggests, the land management agencies were given the central mission of sequestering carbon and providing healthy, interconnected habitats? If that sounds politically naïve, I'm guilty as charged; but I'd argue that anybody who thinks we can get by without that kind of change is scientifically naïve.

Of course, saying that we want healthy habitats is not the same thing as getting them at a time when the world is changing so fast. Do we need to become interventionist gardeners establishing durable new systems in the Anthropocene, or should we keep our clever ape fingers off of things we don't understand? I have a strong preference for protecting the biggest areas of wild country possible, connecting them, and drawing their boundaries along ecosystem or watershed lines so that they are still manageable when the surrounding country is developed. Even though these areas may change from what they have been, nature will make good use of them, and this is the most affordable form of insurance available to us. Where possible, degraded areas should be subjected to conservative, adaptive restoration that is planned so that we efficiently learn what works and what does not. This must be approached with a great deal of humility, since it so easy to get wrong, and the stakes are so high.

The federal agencies are already tasked with considering the costs and risks of climate change by Executive Order. The trouble is, they are still mainly managing for old ideas of multiple use while our understanding of the impacts is evolving at a terrific rate. Every time we look, the costs are drastically higher. To understand why, consider that estimates of the social cost of carbon do not yet include damages from

things like ocean acidification, loss of the Arctic sea ice, melting permafrost, large scale forest diebacks, or changed ocean currents. I wonder if those disasters, taken collectively, will impose any social costs? Nobody has any real idea how to price the projected loss of up to one third of the species of life on earth.

These knowledge gaps have consequences. Federal forests in the northwest hold some of the densest carbon stores of any terrestrial ecosystem, perhaps 150 percent of annual U.S. carbon emissions. In its Preferred Alternative for managing federal forests in western Oregon, BLM used 2013 data to calculate that climate costs may be double the benefits from timber production, and amount to \$91,000 for every timber related job; costs they were willing to sweep aside in order to get out the cut. But new cost-of-carbon models from last year reflect the fact that climate change will not only destroy property and reduce crops, but also cripple the global economy's ability to grow. When this more accurate information is used, economists calculate that BLM's Preferred Alternative for Oregon will entail climate costs nearly thirty times higher than timber benefits, and each timber job will cost society \$1.6 million. Now, cost of carbon models are in their infancy, so these numbers aren't gospel, but how badly out of whack does the balance need to get before we assign new meaning and value to the public lands now, while it can still make a difference?

Probably nowhere are all these issues drawn in starker terms than the *Keep It In The Ground Campaign*. The Secretary of the Interior is the largest manager of energy assets in the U.S. and, perhaps, the world. More than 20 percent of current U.S. carbon emissions come from fuels mined on federal lands, and, as yet, the energy companies only have their hands on a small fraction of what's out there. A prominent recent study showed that making an agile pivot and ending the federal leasing of fossil fuels could keep 450 gigatons of carbon dioxide equivalents out of the atmosphere. This is more than a quarter of all global emissions permissible if we aim to keep warming below 2 degrees centigrade. That is the target the U.S. committed to in the Paris Accord, and it's a truly excellent idea for people who enjoy advanced civilization. The most recent scientific research on vanishing ice packs, suppressed ocean circulations, and the emergence of superstorms declares, in rather unscientific language, that we are in a global emergency. Fortunately, people are rising to meet the challenge.

Last fall I attended a summit of environmental leaders where we discussed the reasonable path forward on climate change: conserve as much as we can; convert everything to electricity; decarbonize the grid; and build as much distributed renewable generation as possible. For the

public lands, people were heartened that the administration is beginning efforts to develop measurement tools for scoring and tracking the potential carbon emissions from different actions on different landscapes. Building on that knowledge, the pros conceived a phased strategy to first stop mining federal lands for the worst fuels, beginning with coal and nightmares like tar sands and oil shale, and turning later to take on oil, and, ultimately, natural gas. The campaign to keep coal in the ground was already underway, with an early victory in the January moratorium on federal coal leasing.

Well, the activists were out ahead of us, and not just on coal. The Obama administration has already tried, with limited effect, to turn most of the big knobs we have on emissions through actions like mileage standards and the Clean Power Plan. Looking deeper, it didn't take activists long to track the problem back to the ultimate source of the carbon fuels beneath public lands. With low oil prices idling drill rigs everywhere, bidders at federal auctions were paying virtually nothing for the right to drill, inciting protests that have already blocked these so-called "climate auctions" of oil and gas in Utah, Montana, Wyoming, and Washington, D.C.

Just as the Republicans seem to have underestimated the anger of the voters in their primaries, everybody is underestimating the determination of the climate movement. They mean it when they say "Keep it in the Ground." No more fossil fuel extraction from federal lands...period. It will be fascinating to watch what happens when this immovable object meets the irresistible force of the energy companies. On the side of the protesters is the stark reality that unless we swiftly make the kinds of changes they are demanding, there will be more and more awful evidence that they are right, however much all of us might wish it was not true.

The final thread I want to follow reaches far back into time, because, of course, the landscapes I've been talking about have stories stretching back forever. Their modern incarnation as America's public lands is a relatively new status resulting from a fascinating, sometimes awful, story that is usually neglected to our great impoverishment. So, let me arbitrarily enter that great story by noting that today, April 21st, is the 180th anniversary of the Battle of San Jacinto. It was there in 1836 that Sam Houston's army of Texians won the decisive battle of the Texas Revolution, defeating Santa Anna's Mexican army in just 18 minutes. When Santa Anna signed a peace treaty three weeks later, the short-lived Republic of Texas became an independent country claiming disputed title to 390,000 square miles of territory carved out of the Republic of Mexico all the way up through western Colorado to the Wyoming border.

We don't talk much about the complex history of Spanish exploration

and conquest in America. How many know that the same Garcia Lopez de Cardenas, who visited the South Rim of the Grand Canyon in 1540 with Hopi guides, was later convicted of war crimes for his brutal role that winter in the Tiguex War against the Tiwa people along the Rio Grande? It was the earliest named conflict between Europeans and the Indigenous people in America, and predated the Declaration of Independence by a gulf of time equivalent to the one that has passed since our country was founded.

Much later, but still very early in the West, in 1765 the party of Juan Maria Antonia Rivera became the first Europeans to see the Colorado River in Utah, more than a century before the remarkable Mormon San Juan Expedition entered that territory by crossing Glen Canyon at the Hole in the Rock. Rivera recorded in his journal an exploration of the canyons upstream from Moab, during which they spent a night camped on or near the land that claimed me as its caretaker two hundred years later. These histories offer fascinating insights about our place in the world, but the stories are rarely told of the Hispanic explorers and settlers, or of Blacks, whose status as slave or free was the principal question at issue when the Republic of Texas was admitted as a state in 1848.

It is time we begin to more actively recognize the roles played by diverse peoples in the making of this country. The public lands are an ideal place to do it, since they have been a key part of our democratic experiment at least since the first Homestead Act in 1862. This goes beyond just historical understanding of how we came to be the people we are; we need to invite the widest spectrum of Americans into the enjoyment of our public lands and into the conversation about how we want to manage our shared inheritance in the future. We need to reach those nine out of ten New Yorkers who would think I was speaking Urdu if they were dropped into the audience tonight.

President Obama has made a fine start in broadening our view with the designation of places like the Cesar Chavez and the San Gabriel Mountains national monuments. If our public lands don't continue to evolve along with our society, they risk becoming irrelevant, bereft of defenders just when they need them most.

And this brings me back to those Tiwa people whose pueblos were attacked by Coronado's men, or to the Hopi who guided Cardenas to the Grand Canyon and stood with the violent and otherworldly Conquistador on the East Rim within sight of the ancient Hopi Salt Trail pretending that they didn't know a way down into the sacred abyss. They and many other indigenous peoples are still among us, having endured genocide, smallpox, relocation, forced acculturation, and other horrors too numerous to recount. These peoples have found ways to live within the terms imposed

by this continent for thousands of years, based on a relationship of reciprocity with the world, rather than dominion. What should be their role in determining the management of the lands they once inhabited? Might we not have some urgent need of their wisdom? It is long past time to bring the Native Americans formally into the process of managing the lands where they lived, where their ancestors are buried, and where they still gather medicines and sustenance and visit sacred sites. It will require a bold act of leadership to launch this historic new era, and I am excited to say that one is in the offing.

Congress passed the Antiquities Act in 1906, just forty years after the atrocities and forced deportations of the Navajo Long Walk and a mere sixteen years after the massacre at Wounded Knee. By the time Congress took action, the indigenous population of America had been reduced by 97 percent; yet the purpose of the 1906 law was to protect the prehistoric ruins and artifacts rather than the living victims of this campaign of genocide. When modern Indians talk about being invisible, this is what they mean. In the entire 110-year history of the Antiquities Act there has never been a Native American campaign for a national monument, until now.

Today, the Navajo, Hopi, Zuni, Uintah and Ouray Ute, and Ute Mountain Ute tribes have formally united to secure a presidential proclamation establishing a 1.9 million-acre Bears Ears National Monument. This is the extraordinary cultural, ecological, and scenic landscape stretching from Canyonlands National Park south to the San Juan River in southeastern Utah. The land holds a globally significant record of their long inhabitation in the form of innumerable rock art sites, ancient villages, cliff dwellings, trails, and burial grounds, and is still in active use to this day.

The five tribes of the Bears Ears Inter-Tribal Coalition have developed a visionary and workable plan for America's first national monument that will be collaboratively managed by the tribes and the federal government. Their proposal envisions a world-class center for the integration of Native American traditional knowledge and western science at Bears Ears. The Coalition's proposal has been favorably received by the White House and appointees in the Obama Administration at the departments of Interior and Agriculture. The parties are negotiating over the terms of collaborative management.

The Coalition's effort is so important in the nationwide evolution of tribal sovereignty that a further twenty southwest tribes have endorsed the proposal and it has been recognized as among the highest priorities of the National Congress of American Indians. It is now considered a leading candidate for an end-of-term national monument designation by President Obama.

This work represents a unique opportunity to secure a new kind of national monument that restores relations between Native Americans and their ancestral lands. The Coalition's proposal for Bears Ears also offers a chance for a profound kind of healing—of past injustices, of the land, and of relations among all people—native and non-native alike. I have never been involved with a project that seems more right and more important than this one.

From the idea of healing let me shift slightly to close with a thought about beauty. Even if governments act rapidly and decisively at the international scale, we are in for some rough bumps on the road ahead. Activists will experience unrelieved urgency and frustration as natural and social systems wobble and fray. But, when our love turns to grief, we will have to find ways to turn that grief into even stronger love and beauty.

How could something as fragile and evanescent as beauty stand up to implacable planetary geophysics run amok? How do we find meaning when the financial and energy companies take each new president aside and tell her how it is going to be? Well, beauty seems purposely woven into the fabric of our world and is not as frail as it seems. Goethe said, "The beautiful is a manifestation of secret laws of Nature, which, but for this appearance, had been forever concealed from us." Every system scientists probe turns out to be vastly more intelligent, adaptive, and interrelated than they originally supposed—never the reverse. Reciprocity is often more important than Darwin's competition.

Perhaps beauty is a gift that might be our best guide to dealing with dark times. I have argued for Aldo Leopold's literal truth that selecting the more beautiful option is the best guide to land management decisions. Do you not find it heartening that redressing wrongs between peoples might kindle a synthesis of modern and ancient wisdom that could yield critical missing pieces to the riddle of how we should live? Isn't it humbling to see that restraint and forbearance in our use of the natural resources we never made and cannot replace might lead us to a more prosperous future? I am overwhelmed with gratitude when I fully see the glory of the other creatures and the unfathomable depth of the creation we share, and believe with all my being that our best path into the future is through a compassionate, giving love affair with all of the creation.