

# The Fifth Wave: Agrarianism and the Conservation Response in the American West

by Courtney White

"All things alike do their work, and then we see them subside. When they have reached their bloom, each returns to its origin... This reversion is an eternal law. To know that law is wisdom."

– Lao-Tsu (6th century, B.C.)

**Abstract:** *Social movements are like ocean waves. They arise at a certain period of time for a specific reason and work under a particular set of historical circumstances toward a defined goal. They gather strength, grow and become an effective agent of change for a while. At their height, they either succeed outright in their goals or else begin to fade as circumstances evolve and their effectiveness declines. Some movements regain strength with fresh ideas and energy in order to make another run at the shore, but many are carried out to sea by the irresistible tide of history. In the American West, the conservation response to natural resource depletion and crisis has followed this pattern. Since the late nineteenth-century, there have been four distinct waves of conservation—federalism, environmentalism, scientism, and collaboratism. Each is now in a different stage of the “back-to-sea” cycle, making way for an emerging fifth wave—agrarianism. This wave builds on the strengths and weaknesses of the previous waves as it meets the emerging conditions and challenges of the 21st century.*

## The First Wave

In the fall of 1909, twenty-two year-old Aldo Leopold rode away from the ranger station in Springerville, Arizona, on his inaugural assignment with the newly created United States Forest Service. For this Midwesterner, an avid hunter freshly graduated from the prestigious Yale School of Forestry, the mountainous wilderness that stretched out before him must have felt both thrilling and portentous. In fact, events over the ensuing weeks, including his role in the killing of two “timber wolves” — immortalized nearly forty years later in his essay “Thinking Like a Mountain” from *Sand County Almanac*—would influence Leopold’s lifelong conservation philosophy in important ways. The deep thinking would come later, however. In 1909, Leopold’s primary goal was to be a good forester, which is why he chose to participate in a radical experiment at the time: the control and conservation of natural resources by the federal government.

Beginning in 1783, the policy of the federal government encouraged the disposal of public lands to private citizens and commercial interests, including retired soldiers, homesteaders, railroad conglomerates, mining interests and anyone else willing to fulfill America’s much-trumpeted “manifest destiny.” However, this policy began to change in 1872 when President Ulysses Grant signed a bill creating the world’s first national park, Yellowstone, launching the U.S. government down a new path: retention and protection of some federal land on behalf of all Americans. In 1888, the year after Leopold’s birth, this trend accelerated when Congress created the National Forest Reserve System which protected large swaths of valuable timberland from development. These reserves were dramatically and controversially doubled in size in 1906 by President Theodore Roosevelt who burned the midnight oil with Gifford Pinchot, his visionary secretary of agriculture. Three years earlier,

Roosevelt had burnished his conservation credentials by creating the first National Wildlife Refuge, Pelican Island, in southern Louisiana.

These parks, forests and refuges were part of an audacious conservation philosophy at a time that emphasized governmental control and scientific management of natural resources. For Pinchot and other leaders in the budding conservation movement, the need for a new approach could be summed up in one word—scarcity. Take timber, for instance. Appalled by the razing of the great white pine forests of the upper Midwest by private industry after the Civil War, Congress created the Forest Reserve System and gave it the mission of conserving valuable timber for future national needs. It was a mission vigorously supported by Pinchot, who studied forestry in Europe and came to believe that a nation's natural

resources should serve "the greatest good" for the greatest number of citizens. This new conservation philosophy was captured in the

U.S. Forest Service's first field manual: "Forest Reserves are for the purpose of preserving a perpetual supply of timber for home industries, preventing destruction of the forest cover which regulates the flow of streams, and protecting local industries from unfair competition in the use of forest and range. They are patrolled and protected, at Government expense, for the benefit of the Community and home builder." Reversing resource scarcity and arresting the associated land degradation that went with it would now be the job of the federal government.

Meanwhile, scarcity of a different sort motivated other conservation leaders to support this new federal role, including John Muir, an itinerant mountain-lover and amateur geologist from Scotland. Worried about the loss of wildness and beauty to development,

Muir campaigned vigorously for the creation of national parks and monuments (the latter a product of the Antiquities Act of 1906), adding his voice to what was quickly becoming a chorus of support for the protection of wilderness, wildlife and natural wonders for non-utilitarian purposes. It worked. The National Park System expanded from two dozen units in 1916, the year Congress created the National Park Service, to over 400 units eight decades later. The federal role in the West continued to expand after World War II when the vast public rangelands were organized into the Bureau of Land Management (BLM). In 1964, Congress added an additional layer of protection with the passage of the Wilderness Act, which ensured that roadless areas on public lands would remain "untrammelled" for generations to come.

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It was all part of the First Wave of conservation called "federalism."

It was a remarkable ride for those who caught the Wave, heady days for professionals such as Leopold, but also exciting times for day-trippers and vacationers across the nation newly liberated by rising affluence and declining prices of automobiles. Recreation quickly took its place alongside resource protection as part of the mission of federal land agencies. Starting in the 1920s, America embraced its parks and forests with a fervor as citizens hit the road in record numbers. In the process, a benevolent and ever-helpful "Ranger Rick" became synonymous with the U.S. government in the public's eyes.

Meanwhile the nation's embrace of the Great Outdoors had an important collateral effect: federalism as a conservation philosophy

began to extend beyond land ownership and management to the belief that governmental regulation of the environment was needed in order to protect citizens from harm. Thanks to pressure from activists, more and more regulatory work was assigned to the federal government over the decades, culminating in the creation of the Environmental Protection Agency in 1969 and a raft of historic environmental legislation in the early 1970s.

Federalism, it seemed, was destined to keep rolling ashore.

Fast forward to today, however, and it is clear that this First Wave of conservation has pulled back to sea. In retrospect, its high water mark as an effective conservation strategy in the West was reached in the early 1950s, just prior to the eruption of major controversies involving

effective conservation strategy was ebbing.

That's not to say the idea of public land staled. The democratic ideal represented by public ownership of western lands is still strong and necessary. What has changed is the government's ability to do conservation effectively. It has faded in recent years for a variety of reasons including shrinking budgets, reduced personnel, increased public demands and a bevy of conflicting laws and regulations. The conservative and conformist nature of bureaucracies had a role too. Over time a resistance to innovation grew among the agencies, as did issues of power, control and a certain degree of arrogance. Toss in a lack of synchronicity with the times as public opinions changed and new ideas came along, and by the 1970s the result was increased ineffectiveness.

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In a sense, that's alright. One could argue that federalism achieved its original goal: to halt to the destruction of the West's forests, grasslands and rivers

the government's dam-building program on the Colorado River and its over-harvesting of timber on our national forests—controversies that began to sour the public on some of our federal agencies. This souring mood grew during the 1960s and 1970s as activists fought the government over hard-rock mining, cattle grazing and endangered species protection on public lands, thus causing many urban residents to shift their view of federal agencies from the "good guys" to the "bad guys." Ironically, the shift was also shared by rural residents who began to view the government as captive of urban interests, and specifically environmental activists. As a result, federal employees began to find themselves in the crossfire of an increasingly rancorous struggle between activists and rural residents across the West. It added up to one inescapable conclusion: federalism as an

and to do so by way of public ownership and sound stewardship. It also achieved a second goal: to provide diverse recreational opportunities for a restless, urbanizing nation. For a time, this second mission pushed the Wave farther onto the shore, propelled by the nation's love affair with its national parks and forests. But it didn't alter the inevitable ebbing, not that federalism didn't try to evolve with the times. Over the years, it embraced a variety of new conservation concepts, including wilderness protection, sustained yield, adaptive management, endangered species protection, an ecosystem approach and so on. None of these altered the basic fact that what had once been federalism's chief asset, its role as a buffer between nature and its exploiters, had, by the 1970s, become its chief liability. It now stood between the land and innovation.

I experienced this first hand beginning in the mid-1990s, initially as an activist with the Sierra Club and then as a co-founder of the nonprofit Quivira Coalition. In our work with federal land agencies, including our promotion of progressive livestock management, our direction of riparian restoration projects and our operation of the only public lands grassbank in the West (where Quivira became a Forest Service livestock permittee), evidence of the First Wave's ebbing became manifest. I'll cite three examples: first, it became clear that the default position of agencies on anything out-of-the-box was "no" — *no to this idea, no to that activity, no you can't do this, no you can't do that*. Getting to "yes" wasn't impossible with the agencies, but their regulatory mandates, musical-chair personnel changes and ever-rising workloads, made getting to "yes" a time-consuming, expensive and frustrating process for potential partners. It was much simpler for the federal agencies to say, "No."

Second, there were few positive internal incentives for agency employees to try anything new. In fact, disincentives abounded, including the perpetual threat of lawsuits by watchdog groups. Innovating within the system was rarely rewarded, and was sometimes punished. Thinking out-of-the-box might mean getting pushed out of your job. There was much less stress for employees if they acted "by-the-book", a situation which often made partners feel like they were talking to a stone wall.

Third, there was a culture of command-and-control within the federal agencies, the Forest Service especially, that discourages partnerships and innovation. Agencies often had the last word on a project, and knew it. This meant that when they entered into a collaborative effort, the partnerships were unequal. The agencies had the ability to shut things down and all it took was one person in a position of power. Throw

in the inevitable change of leadership among line officers every three to four years and the risk of "no" rises substantially. For example, of the approximately 20 Forest Service employees involved in the creation of the grassbank project in 1998, 19 had moved to new jobs within five years, essentially orphaning the project from the government's perspective.

It all adds up to a status quo on public lands today. The trouble is that in the 21st century, the status quo isn't really an option anymore. Managing land for climate change, for instance, will require rapid, flexible and innovative responses; a tall order for federal agencies stuck in a business-as-usual paradigm. To their credit, agencies sense this and are trying to find ways to respond, but reform, innovation and breaking gridlock look largely unreachable for federalism

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now. Perhaps the First Wave will reinvent itself, gather strength and rise again as a new wave of conservation, headed for shore. I hope so—the idea of public land ownership is an important one in a democracy. There is still a big need for federal oversight and expertise as well. However, three other waves of conservation have come ashore since Leopold rode away from the ranger station in 1909, with a fourth one rising. If federalism swells again into a new wave, I suspect it will be propelling a new sort of surfer toward shore.

### **The Second Wave**

The next wave of conservation in the American West is what we today call "environmentalism." The early stirrings of this wave can be traced back to the mid-19th century as the destructive effects of the Industrial Revolution began to visibly impact the natural world, in particular

wildlife populations. Early prophets included Henry Thoreau, George Perkins Marsh and John Muir. A vocal advocate for federalism, Muir also played a key role in the development of the Second Wave when he founded the Sierra Club in San Francisco in 1892. Initially a hiking and camping association for outdoor enthusiasts, the Sierra Club quickly drew activists into its fold, no doubt inspired by Muir's relentless campaign to protect Yosemite National Park from a proposed dam in its heavenly Hetch Hetchy Valley (a dam that Gifford Pinchot supported). Although Muir lost the fight, his defeat propelled the Sierra Club and other budding conservation organizations to become vigilant in defense of the nation's parks, forests and refuges, and to keep a watchful eye on the federal agencies entrusted to protect them.

As the nation's love affair with the Great Outdoors took off, this Wave swelled with new members and advocates, beginning a vigorous push toward shore. It showed its first

substantial "white water" in 1955 with a highly public fight to stop another dam project, this one located in Echo Park, deep inside Utah's Dinosaur National Monument. Led by the Sierra Club's charismatic and energetic president David Brower, an avid mountain-climber, the conservation community set itself squarely against Congress and the federal government in a high-stakes showdown. It won. The dam was never built. Riding the momentum of this victory, the Second Wave swelled in 1963 with the publication of Rachel Carson's *Silent Spring* which propelled activists into the arena of human health and industrial pollution, transforming the conservation movement into what today is called environmentalism.

There are two principle reasons why this Wave became large and successful:

- it built on the strengths of federalism while confronting its weaknesses; and
- it synchronized itself with the rapidly changing times, embracing new ideas and values and putting them to work effectively.

Although the early phase of the Second Wave was consonant with the goals of federalism, especially the push to create new parks and monuments. As early as the 1930s, it started to have doubts about governmental effectiveness. Led by Aldo Leopold, who had left Forest Service employment in 1924, conservationists began to question the ability of agencies in the wake of the national calamity of the Dust Bowl to implement what Leopold later dubbed a "land ethic." Some government programs worked but many did not, especially with the end of the positive incentives they employed such as

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direct payments to landowners and technical assistance. That left many agencies holding the familiar "stick" approach to conservation, rather than the proverbial "carrot." However, Leopold came to believe that both approaches were antithetical to good stewardship over the long run. A land ethic needed to come from the heart, he argued, not a bureau. He urged the conservation movement to lift its sights – to change America's ethics, not just its policies.

Activists responded vigorously to Leopold's call and the Second Wave swelled, especially as America's economy rocketed into the stratosphere after World War II. They began by leaning on federal agencies to adopt higher environmental standards. Activists pushed back, for example, when the Forest Service embarked on a vast timber-cutting program

in the 1950s that included widespread use of clear-cuts. They also criticized the BLM for its poor oversight of livestock grazing and hard-rock mining on public lands; they maintained their struggle with the Bureau of Reclamation over its dam-building program, winning a widely publicized fight to stop two projects in the bottom of the Grand Canyon. They also criticized the U.S Fish and Wildlife Service for its inadequate oversight of endangered species; and they even turned up the heat on the National Park Service, which they thought was dragging its feet on wilderness designation.

In this work, the Second Wave both shaped public opinion concerning environmental protection as well as followed its lead. In the mid-1960s, a series of natural disasters and slow-boil crises caught the public's attention, including choking smog in big cities, toxic waste dumps, oil spills, rivers catching on fire, urban sprawl and a growing concern about nuclear power. The consequence of this rising concern was the passage of a raft of federal legislation in the early 1970s aimed at ensuring clean air, clean water, endangered species protection, wild and scenic river designation, and an open planning process for the management of public land.

The Wave also tapped into changes on the economic front out West as recreation and tourism became significant engines of prosperity, a development that would eventually be called the "New West." It was a booming amenity-based economy that emphasized play (hiking, fishing, biking and "ranching the view") over traditional forms of work (mining, logging, farming, livestock ranching). However, the denigration of work in favor of play, especially on public lands, led to numerous clashes with rural residents, many of whom staunchly opposed this new economy. Feelings on both sides hardened during the 1980s, causing environmentalists to dig in and redouble their efforts, and on many fronts they appeared to be successful. In reality, it was an

early sign of the Wave's inevitable ebbing.

Fast forward to today. Despite environmentalism's continued hard work, high profile and healthy membership, it is clear that the Second Wave has ebbed significantly and is no longer an effective conservation strategy in the West.

Two important metrics support this observation:

- the continued steady decline of animal and plant species populations and their habitats around the planet; and
- a steady loss of interest in nature and outdoor activities among Americans, especially the younger generation - a trend with alarming ramifications for both nature and people, a condition that author, Richard Louv, calls "nature deficit disorder."

Environmentalism didn't cause these two developments, of course, but it has become increasingly ineffective at reversing, or even curbing, them. There are three primary reasons why.

The first is author and farmer Wendell Berry's long-standing criticism that environmentalism never developed an economic program to go along with its preservation and health programs. It had no economic retort, in other words, for industrialism. It never truly confronted our economy, the source of most environmental ills; and, without an effective alternative, the average American had no choice but to participate in a destructive model of economic growth. Wallace Stegner, one of Berry's mentors, voiced a similar complaint years ago when he wrote that his fellow westerners had not yet "created a society to match the scenery."

I saw this played out during my time in the Sierra Club, where I learned that most activists considered environmental problems to have environmental solutions and ignored their economic sources. This meant we spent too much time and energy on symptoms instead of causes. Aldo Leopold flagged this problem decades earlier when he cautioned us against trying to "fix

the pump without fixing the well.” We didn’t heed his advice, and for 50 years focused our attention on the pump while the well began to run dry.

Many environmentalists might argue, in contrast, that they did have an economic agenda—tourism and recreation. This is true and for awhile the benefits of both looked generous. Over time recreation and its associated side effects (congestion, exurban sprawl, transitory populations ) began to take on darker hues and may have even made the situation worse in some places. And as the 21st century progresses with its concerns about climate change, carbon footprints, oil depletion, food-miles and sustainability in general, an economy based on tourism looks increasingly shaky.

Second, environmentalism is ebbing because it left the land behind. The movement lost the

they lost an understanding of good land use, particularly those for-profit activities such as logging and ranching that could be conducted sustainably. Instead, as the movement drifted away from land, it began to equate non-use with the highest and best use of land, especially on the public domain. The exception was recreation, of course, though as one western historian commented on 21st century challenges; “play can’t handle the weight.”

Third, the environmental movement never really walked the talk of a land ethic. While trumpeting Leopold’s famous call to enlarge our ethical sphere to include plants and animals, environmentalists ignored his insistence that people and their economic activities be included too. “There is only one soil, one flora, one fauna, and one people, and hence only one

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conservation problem,” Leopold wrote in the *Sand County Almanac*. “Economic and esthetic land uses can and must be integrated, usually on the same acre.” Or this from his essay *The Ecological Conscience*: “A thing is right only when it tends to preserve the integrity,

feeling of “the soil between our toes,” as Leopold put it, meaning it lost an intimate understanding of how land actually works. As a result, it lost what Leopold described as the role of individual responsibility for the health of the land. “Health is the capacity of the land for self-renewal,” he wrote, and “conservation is our effort to understand and preserve this capacity.” By losing the feel of soil between our toes, the movement missed the opportunity to understand, and thus preserve, land health—the foundation on which all health depends.

For example, I learned that while activists and others could recognize poor land use, such as overgrazing, and rightly worked to correct it,

stability, and beauty of the community, and the community includes the soil, waters, fauna, and flora, as well as people.”

A land ethic encompassed it all. But environmentalists didn’t heed Leopold’s advice. Instead, many engaged in a form of environmental isolationism. Work was segregated from nature, and nature was largely confined to parks, wildernesses, refuges, and other types of protected areas. Not only was there no attempt to integrate people into nature economically under this preservationist paradigm, some activists made an energetic effort to curtail certain land uses, such as ranching, whether they preserved the integrity,

stability and beauty of the community or not. The land, in their mind, had to be *saved* apart from the people, and their pitch to the public emphasized dehumanized landscapes—pretty pictures of wild country and charismatic wildlife. In general, while activists were quick to invoke Leopold in their campaigns to save this or that, they ignored his holistic view that “bread and beauty grow best together.”

In its time, environmentalism accomplished an astonishing amount and the world has benefitted immensely from its diligent efforts. But waves come and go. Federalism reached its high water mark in the mid-1950s and by the 1980s had pulled back to sea. Environmentalism reached its high mark in the mid-1970s and is nearly back out to sea today. In the meantime, two more Waves rose to replace them.

### **The Third Wave**

The next Wave of conservation, which stirred after World War II, had two principal components: an emphasis on science and a focus on private land. This was no accident – these components represented important shortcomings of the previous two Waves. Federalism, by definition, focused on public lands, which meant that one-half of the American West which is privately-owned land, had been largely neglected by the conservation movement. This became a pressing concern after WWII as the suburban and exurban development of private land sped up considerably. Meanwhile, the rise of ecology and other environmental disciplines meant that data and scientific study could now complement, and sometimes supplant, the emotional and romantic nature of environmentalism. In fact, many of the private land acquisition and protection strategies employed by this new Wave of conservation were driven by ecological or biological objectives, which is why I call this Wave “scientism.”

An illustrative example of this Wave is the rise and growth of The Nature Conservancy, a landmark nonprofit organization that is now one of the largest conservation groups in the world.

In 1946, a small group of scientists in New England formed a organization called The Ecologists Union and tasked it with the goal of saving threatened natural areas on private land, especially biological hot spots that contained important native plant and animal species. The protection of biologically significant parcels of land had traditionally been the job of the federal government, state wildlife agencies, or private hunting and fishing groups. Parks, forests, refuges, wilderness areas and game preserves were the dominant means by which protection was provided to critical areas in the years leading up to World War II. A growing number of scientists believed this strategy wasn’t sufficient any longer because it largely overlooked privately owned property, land that was rapidly being paved over in the post-war boom.

Gearing up for the challenge, the Ecologists Union changed its name in 1951 to The Nature Conservancy (TNC) and embarked on a novel strategy for the time: private land acquisition for ecological protection. In 1955, the organization made its first purchase, 60 acres along the New York/Connecticut border. Six years later it donated its first conservation easement, which restricts development rights on a property in perpetuity, on six acres of salt marsh (again in Connecticut). This new strategy of buying and preserving land proved popular with members and donors, causing the organization to grow rapidly. By 1974, TNC was working in all fifty states, often in tandem with state and federal agencies. It wasn’t all about acquisition, however. Frequently TNC acted as the “middle-man” buyer between a willing seller and the federal government, the eventual owner of a property. In the process, TNC became adept at deals, especially real estate deals, developing a business acumen that was as novel for a conservation organization at the time as was its land protection strategy. TNC also launched an ambitious land trust program which included an important decision to accept conservation easements on property it did not own.

Soon, TNC was working internationally, buying land and facilitating major conservation projects. In 2000, it launched the “Last Great Places” campaign, raising over \$1 billion dollars for land acquisition and research. By 2007, TNC was protecting more than 117 million acres of land and 5,000 miles of rivers in the U.S. alone, as well as directing over 100 conservation projects in a variety of environments.

However, it wasn’t just about buying land. Employing hundreds of scientists on staff, TNC has based much of its conservation work on research, including a science-based modeling approach to large landscapes which helps the organization determine where to work, what to conserve and what strategies should be employed. In other words, their work was no longer simply

focused on saving the rarest species here and there, as it had been in the 1950s. Now, they worked at the ecosystem level across large landscape so that all species might thrive, a strategy TNC calls “enough of

everything.” They do this by establishing science-based priorities and then setting out to influence the social, political and economic forces at work in these critical landscapes.

TNC’s success has been mirrored by many other Third Wave conservation organizations, including Conservation International, the Trust for Public Land and the World Wildlife Fund. It also helped to ignite a land trust movement around the world. Today, there are over 1,700 individual land trusts in America alone focused on private property of every shape and size from small community or regional trusts to state-wide agricultural organizations. A great deal of science-based conservation work was also

integrated into various nonprofit organizations, public agencies and private operations. The emergence of ecology in the 1940s, thanks in no small part to Aldo Leopold, also led schools and universities to embrace science-based curriculums and implement numerous environmental study programs across the country. Professional journals in ecology and conservation biology proliferated as a result. At the same time, many public lands-focused environmental organizations incorporated science into their advocacy work, especially those focused on large predators, wildlife corridors and endangered species.

In contrast to environmentalism, however, the Third Wave eschewed the noisy emotionality and confrontational tactics of the Second Wave,

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preferring the quiet diplomacy of research and deal-making to accomplish its goals. Although it still adhered to a “protection paradigm” that it shared in common with the first two Waves, scientism was guided by data, not poetry, and it sought cooperation, not regulation or litigation, to accomplish its objectives. And as the success of TNC demonstrates, for a time this Wave was extraordinarily effective.

But like all waves, this one too eventually began to ebb.

In the West, the high water mark for the Third Wave began in 1990 when TNC purchased the beautiful and biologically-rich, 322,000-acre Gray Ranch, located in the boot-heel of southwestern

New Mexico. Sheltering more than 700 species of plants, 75 mammals, 50 reptiles and 170 species of breeding birds, the Gray Ranch was considered one of the most significant ecological landscapes in North America. That is why the U.S. Fish & Wildlife Service had coveted the Gray Ranch as a wildlife refuge for decades. Indeed, in the 1980s a similar-sized ranch in southern Arizona, the Buenos Aires, was purchased by the U.S. Fish & Wildlife Service from the same Mexican millionaire who owned the Gray Ranch. This time however, the financial terrain was different and TNC was needed to broker a deal, which it did at a high financial cost to the organization. No matter – TNC had every intention of quickly reselling the Gray Ranch to the federal government and thus recouping its investment.

Except the transfer never took place.

When local residents heard of the Gray Ranch purchase and pending resale to the federal government they raised vigorous objections. Going first to their elected representatives and

then to the media, their opposition became front page news across the West, and for a reason: it fit a changing mood in the region. Across the West, a pushback against federalism and environmentalism had been gathering steam, often expressed noisily as an exercise of “private property rights.” It was more complicated than that, of course, but the bottom line was the same: Push had come to shove in the rural West.

The Animas-area residents raised three specific objections to what TNC was trying to accomplish:

- the Gray Ranch was still a working cattle ranch, and thus a tax-paying, cowboy-hiring member of the local economy that residents wanted it to stay that way;

- a wildlife refuge would devalue the cultural and historical significance of the Gray Ranch, which was part of the historic Diamond A Ranch, one of the area’s legendary operations; and
- it was time to stop this pattern of transferring private land to the federal government.

It was this last point that made the headlines. Local residents took their complaints directly to TNC officials where, to their surprise, they found a sympathetic reception. That’s because TNC was hearing similar complaints in other places around the West. It gave the organization pause not simply because they didn’t like controversy but because TNC had always considered itself to be a cooperative conservation group. Their

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method was to buy land and easements from willing sellers, to work collaboratively with government agencies, and to create deals that benefited people and nature while keeping a low profile. However, local residents disagreed, saying TNC was not being cooperative (not with them anyway). The complaints stung, causing TNC to ask itself an important question: could it accomplish its scientifically-guided conservation goals while maintaining the Gray Ranch as a privately-owned working cattle ranch? And perhaps just as importantly: could it find conservation buyer who would help them recoup their substantial financial stake in the property?

The answer to both questions proved to be “yes.” But it also signaled the start of the Third Wave’s ebbing.

In 1993, The Nature Conservancy sold the Gray Ranch to Drum Hadley, a local rancher who also happened to be an heir to the Budweiser beer fortune. After the sale, Hadley and members of his family created the Animas Foundation, named for the nearest town, to manage the ranch for conservation as well as community goals. It would remain a working cattle ranch, but one with conservation objectives as well. That seemed like an oxymoron to many environmentalists who subsequently objected to TNC’s new plan, though to no avail (it was another sign of the Second Wave’s ebbing). It all added up to a new approach toward conservation. Success required that TNC, the Gray Ranch, local residents and public agencies cooperate with each other. To that end, a year later TNC and the Animas Foundation became charter members of the Malpai Borderlands Group, a pioneering collaborative partnership of ranchers, conservationists and government agencies in the region. And the stirring of the Fourth Wave of conservation in the West was born.

Scientism ebbed for two main reasons. First, the benefits of a protection paradigm, whether science-based or not, began to be less and less effective over time as the nature of environmental trouble diversified. Climate change, for instance, largely defies the paradigm: What does “protection” mean under rising temperatures, water scarcity and climatic disorder? Piecemeal protection also exposed the paradigm’s limitations as subdivision developments boomed across the West. TNC and other organizations were confronted with a growing dilemma: What benefit does buying a large property for protection purposes do if the neighboring ranches sell out to a subdivider who fragments the surrounding land? Also, the top-down approach of scientism, which shared a command-and-control philosophy

with federalism and environmentalism, met increasing resistance from bottom-up groups, limiting its effectiveness. Locals wanted to be heard and involved now. Directives by outsiders, no matter how well-meaning, provoked pushback among the grassroots.

Second, as with environmentalism, scientism failed to develop a viable economic program to go along with its protection paradigm. While supportive of working landscapes, it struggled to help local residents find paychecks in conservation-friendly enterprises. For example, while TNC could afford to manage its own land without a profit motive, it had great difficulty finding an economic strategy that would keep its neighbors in business (and thus keep “For Sale” signs from appearing). As the “subdivision crisis” in rural counties heated up in the 1990s, TNC realized that it could not buy all the critical land needed to protect species. There simply wasn’t enough money. Nor would easements complete the job. Some sort of “conservation” economy, other than tourism and recreation, would be necessary. To this end, TNC tried a variety of economic strategies, including a “Conservation Beef” pilot project in Montana, but it wasn’t enough. Despite TNC’s success, it became clear to many that in order to accomplish the landscape-scale effort needed to help species and local people, especially if it involved public lands, a new approach would be required, one that featured partnerships and profits. These realities gave rise to the next Wave of conservation.

### **The Fourth Wave**

Mixing metaphors for a moment, the Fourth Wave began as spot fires across the West, and in one place that meant literally.

In 1991, the Forest Service extinguished a 500-acre fire burning on private land along a stretch of the remote Geronimo Trail Road, located in southeastern corner of Arizona. On the surface, it was an unremarkable event—the Forest Service had long reacted to wildfires with

the same response: Put it out. Period.

Except this fire proved to be different. The local ranchers did not want it extinguished, agreeing with scientists that fire had an important role to play in ecosystem health. They asked the federal government to let the fire burn, arguing that it posed no appreciable threat to life or property. The landowner was supportive too; in fact he had thinned the overgrown brush recently in order to create the right conditions for fire's return. But the Forest Service didn't listen. It put the fire out over all protests. This routine act, however, ignited the community into action. "No more," it said aloud. Consequently, within three years, the nonprofit Malpai Borderlands Group was born – a coalition of ranchers, scientists, conservationists, public agencies and concerned citizens in the area. They were determined to do things differently within the nearly one million-acre border land they called home. They decided to give collaboration a try.

It was a similar story with other spot fires around the West at the time. When a federal judge shut down logging in old-growth forests throughout the Pacific Northwest in 1991 in response to a lawsuit by environmentalists over the Spotted Owl, a firestorm of protest in rural communities was ignited. It also lit two small but important bonfires of change. The first was in the Applegate Valley of southwestern Oregon, where a small coalition of activists, loggers and Forest Service personnel met for potluck suppers and peacemaking. The second was a similar group that met in the only place they considered neutral in the logging-dependent town of Quincy, in northern California – the public library. The goal of both groups was

the same: better forest management through collaboration, not confrontation. Both groups took an extraordinary amount of heat from all sides for their efforts. But these, and other, bonfires wouldn't go out despite the assaults. In fact, they soon grew into a major conflagration across the West.

Up in Montana, the Malpai Borderlands Group quickly inspired two groups of ranchers to form nonprofits and give collaboration a try. One was in the Blackfoot River valley northeast of Missoula and the other in the Madison Valley, northwest of Yellowstone National Park. Like Malpai, residents in both valleys grappled with a host of challenges, including the threat of land fragmentation due to subdivisions, curtailment of livelihoods due to endangered

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*...the Fourth Wave emphasized profits along with protection, arguing persuasively – as Aldo Leopold tried years earlier – that good stewardship flowed from ethical and regenerative attitudes toward land, business and people. Profit could be a force for conservation, the Fourth Wave said, not against it as so many environmental activists had insisted. The proof was in the pudding of these early collaborative efforts: conservation and capitalism (of the local sort) worked effectively side-by-side across the West.*

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species regulations, and changing demographic trends. Instead of fighting the future, however, they chose to link arms with conservationists, scientists and agency employees with the goal of making progress where it mattered: on the ground. It wasn't easy, especially in the beginning. In many places trust had to be rebuilt or created; in others, key players wouldn't come to the table. This changed over time, however, as people began to see genuine results. The process was messy, difficult, time-consuming and frustrating, but it worked. In time these bonfires spread, watershed by watershed, into a Wave that I call (for want of a better word) "collaboratism."

Others called it the "radical center", a term coined by rancher Bill McDonald of the Malpai

Borderlands Group. It was radical because it challenged various orthodoxies of the other three Waves at work at the time, including the belief of environmentalists that conservation and ranching were part of a zero sum game in which one could only advance if the other retreated. The “center” referred to the pragmatic, middle-ground between extremes. It meant partnerships, respect and trust. But most of all, the ‘center’ meant *action*—a plan signed, a prescribed fire lit, a workshop held, a hand shaken. Words were nice but working in the radical center really meant walking the talk.

The Fourth Wave drew strength from the first three waves while filling in blanks and correcting important deficiencies. It aimed to

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*For all its success, however, the Fourth Wave will too, in time, reach a high water mark and commence its inevitable ebbing. In fact, there are signs that this pullback may already be underway. As the wave evolved from its gridlock-breaking and peace-making roots into a proactive effort that has brought ecological and economic health to the region and its people, the world evolved too, bringing with it new challenges and opportunities.*

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protect open space and wildlife, it valued working landscapes, it incorporated public lands, it employed ecology and other sciences, and it required trust and fairness. It also strove toward economic realities, often by exploring and promoting the diversification of business enterprises on private lands. These include: fees from hunting, fishing, camping and wildlife viewing; bed-and-breakfast services; dude ranching and other amenity-based activities that attract urban visitors; grants from foundations and agencies for a variety of watershed-based improvements; and involvement in various energy projects (wind, solar) or small-scale development projects (a few home sites), that create additional revenue for the ranch operation.

In doing this work, the Fourth Wave emphasized profits along with protection,

arguing persuasively, as Aldo Leopold tried years earlier, that good stewardship flowed from ethical and regenerative attitudes toward land, business and people. Profit could be a force for conservation, the Fourth Wave said, not against it as so many environmental activists had insisted. The proof was in the pudding of these early collaborative efforts: conservation and capitalism (of the local sort) worked effectively side-by-side across the West. The keys were partnerships and dialogue—handshakes and countless meetings. It all led to an explosion of collaboratives of varying stripes in the late 1990s, including the formation of many watershed-based nonprofit organizations. The radical center united, rather than divided; it was

a practical and fact-based approach to land and people.

One area where it worked best was ecological restoration. Ecology had led to a deeper understanding of land “sickness” — to use Leopold’s term, and methods

to restore forests, rangelands and riparian areas back to health. Ranchers, conservationists, agency personnel and others began to implement these ideas in pilot projects around the region. These included: controlling noxious weeds; the proactive use of livestock; conducting riparian and upland restoration work for water quality and wildlife habitat improvement; tackling forest overgrowth through thinning and prescribed fire; and repairing and upgrading low-standard roads in order to restore natural hydrological cycles. Success, however, required cooperation among multiple stakeholders, particularly across private/public and urban/rural divides.

For all its success, however, the Fourth Wave will too, in time, reach a high water mark and commence its inevitable ebbing. In fact,

there are signs that this pullback may already be underway. As the wave evolved from its gridlock-breaking and peace-making roots into a proactive effort that has brought ecological and economic health to the region and its people, the world evolved too, bringing with it new challenges and opportunities. In short, the times are changing again. Twenty years after the wildfire that ignited the Malpai Borderlands Group, the Fourth Wave, for all its strengths, is becoming misaligned with current conditions, especially as we enter into a period of increased climate instability, economic stress and social anxiety. For these reasons, I detect the stirring of a new wave out at sea.

### **The Fifth Wave**

*Sustainability. Adaptation. Mitigation. Local. Grassfed. Resilience.*

These words, so much in the news and on the minds of people today across the globe, barely registered on radar screens fifteen years ago. When we founded the Quivira Coalition in 1997, we were focused on peacemaking, collaboration, land health and good stewardship. Issues such as climate change, peak oil, local food production, grassfed meat and other “modern” concerns were rarely discussed, if at all. That’s not the case today, of course, which is an indication of how much the times have changed. In particular, the prospect of hotter and drier conditions in the Southwest as a consequence of climate change—a near certainty under current greenhouse gas emissions rates according to scientists—is very much a concern for people these days (or ought to be, anyway). Soon, I predict, these words will dominate our lives and require a new conservation response in the American West, one that combines the ecological, the economic and the social. In fact, it has already started. Here are two examples:

**Local Food Production.** There has been an explosion of interest in recent years among urban residents in local, organic, natural and grassfed food. The reasons for this explosion

are varied, including concerns about chemicals, feedlots, globalization and “food miles.” But the net result of this interest is clear—increased social and economic profitability for ranchers. Grassfed beef, for instance, can frequently command 50 percent more per pound in price than commodity (feedlot) beef. This price difference, which is offset somewhat by additional costs involved in raising and marketing niche products, can make the difference between turning a profit on a ranch and going further into debt. Almost as important, however, are the social and emotional benefits of getting into local food markets such as face-to-face contact with customers (who often become advocates for the farm or ranch). Producing healthy, locally-raised food for grateful customers while contributing to the local community, in my experience, creates an emotional lift to ranch work that puts a spring in a landowner’s step, an intangible benefit whose significance should not be underestimated.

**Ecosystem Services.** For centuries, well-managed farms and ranches have been delivering to cities ecosystem services, such as healthy topsoil, wildlife habitat, clean water, fuel sources, food, functioning wetlands, buffers against floods and fires, and on and on. It is only recently, however, that these services have come to be recognized, and therefore valued, as something worthy of protecting, restoring and maintaining, especially as urban populations grow and negative pressures mount on natural resources. Mechanisms for compensating ranchers and other landowners for delivering ecosystem services to society (including the protection of open space) are the subject of intense analysis, experimentation and debate right now. What seems indisputable, though, is that their importance will only rise over time. The capacity of watersheds, for instance, in arid and semi-arid environments to deliver sufficient water to downstream users will depend significantly on the skill of upstream landowners and managers. It will require stewardship, it will

require people and it will require profit.

Another example is what I call a “carbon ranch,” purpose of which is to mitigate climate change by sequestering additional CO<sub>2</sub> in plants and soils, reducing greenhouse gas emissions, and producing co-benefits that build ecological and economic resilience in local landscapes.

Right now, the only possibility of large-scale removal of greenhouse gases from the atmosphere is through plant photosynthesis and related land-based carbon sequestration activities. Strategies include: enriching soil carbon, no-till farming with perennials, employing climate-friendly livestock practices, conserving natural habitat, restoring degraded watersheds and rangelands, increasing biodiversity, lowering agricultural emissions, and producing local food. Over the past decade, these strategies have been demonstrated individually to be both practical and profitable. A carbon ranch bundles them into an economic and ecological whole for the benefit of all living things.

There are six strategies that can increase or maintain the carbon content of grass-dominated ecosystems:

- planned grazing systems using livestock, especially on degraded soils;
- active restoration of degraded riparian and wetland zones;
- where appropriate, removal of woody vegetation to encourage grass to grow in its stead;
- the conservation of open space, so there is no further loss of carbon-storing soils;
- the implementation of organic no-till farming practices; and
- management of land for long-term resilience.

Fortunately, a great deal of the land management *toolbox* required to implement these strategies has largely been tried and tested by practitioners, landowners and researchers. Over the past decade, these strategies have been demonstrated individually to be both practical and profitable. A carbon ranch bundles

them into an economic and ecological whole with the aim of reducing the atmospheric content of CO<sub>2</sub> while producing substantial co-benefits, including local food production, improved ecosystem services, restored wildlife habitat, rural economic development and the strengthening of cultural traditions.

But none of this is the principle job of the first four Waves of conservation. Parts of these Waves can help, but progress in tackling sustainability, adaptation, mitigation, local, grassfed and resilience requires a new paradigm. Fortunately, one is emerging, and it has a name: “a new agrarianism.”

Across America, there is a resurgent interest in local, family-scale, sustainable food, fiber and fuel production. It began slowly but has gathered speed recently. Local food is the focus and key to this new movement, but it’s more than food systems. It’s collaborative watershed groups focused on restoring health to riparian areas, it’s the innovative use of livestock to combat noxious weed infestations, it’s the carbon-sequestering practices of good land stewardship and much more.

What is this new agrarianism? Here are three definitions. The first is by Wendell Berry:

*There is another way to live and think: it’s called agrarianism. It is not so much a philosophy as a practice, an attitude, a loyalty and a passion – all based in close connection with the land. It results in a sound local economy in which producers and consumers are neighbors and in which nature herself becomes the standard for work and production.*

The second is by Prof. Eric Freyfogle:

*Agrarianism, broadly conceived, reaches beyond food production and rural living to include a wide constellation of ideas, loyalties, sentiments, and hopes. It is a temperament and a moral orientation as well as a suite of economic practices, all arising out of the insistent truth that people everywhere are part of the land community, just as dependent as other life on the land’s fertility and just as shaped by its mysteries and possibilities.”*

The third is one I wrote from my own experience:

*It is an ecological economy centered on food and land health that builds resilience, encourages ethical relationships and celebrates life.*

I credit Aldo Leopold for laying the foundation for this resurgent agrarianism. Over the course of a diverse and influential career, Leopold eloquently advocated a variety of critical conservation concepts including wilderness protection, sustainable agriculture, wildlife research, ecological restoration, environmental education, land health, erosion control, watershed management and famously, a land ethic. Each of these concepts resonates today, perhaps more so than ever as the challenges of the 21st century grow more

complicated and more pressing. It was Leopold's emphasis on conserving whole systems—soil, water, plants, animals and people together—that is most crucial today. The health of the entire system, he argued, is dependent on its indivisibility; and

the knitting force was a land ethic – the moral obligation we feel to protect soil, water, plants, animals and people together as one community.

After Leopold's death in 1948, however, the idea of a whole system broke into fragments by a rising tide of industrialization and materialism. Fortunately, today a scattered but concerted effort is underway to knit the whole back together, beginning where it matters most, on the ground. Leopold's call for a land ethic is the root of a new agrarianism – a diverse suite of ideas, practices, goals and hopes all based on the persistent truth that genuine health and wealth depends on the land's fertility.

The new agrarians practice what Aldo Leopold called a unifying force, something "...

that reaches into all times and places, where men live on land, something that brackets everything from rivers to raindrops, from whales to hummingbirds, from land estates to window-boxes. I can see only one such force: a respect for land as a living organism; a voluntary decency in land-use exercised by every citizen and every land-owner out of a sense for and obligation to that great biota we call America."

A new agrarianism is that decency. And as we begin to tip over on the other side of the bell-shaped curve called "industrialism", the issues of decency, food, hope, joy and good land use couldn't be more important. We are all agrarians now. Our health and wealth depends on what we choose to eat, how we produce our energy,

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*This is the Fifth Wave of conservation in the West. It is a vision of local, sustainable food production from farms and ranches that are managed for land health, biodiversity and human well-being. It is a vision of new agrarians working to sequester carbon in soils, improve water quality and quantity, restoring native plant and animal populations, fixing creeks, developing local energy sources, and replenishing the land for people and nature alike. It is a vision of coexistence, resilience, and stewardship – a place for people in nature, not outside it.*

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where our water comes from, who benefits from sustainable practices—and each has its root in the land. It is from these roots that the Fifth Wave is forming.

One can view the history of conservation in the American West as a transition from placing people outside of nature to placing people within it. In the late 19th century, early conservation efforts were designed primarily to protect nature from the long arm of civilization, be it in the form of overgrazing livestock, development, logging or some other exploitative activity. That's why the early responses included national parks, forests, wildlife refuges, wilderness areas and other

“fortresses” of conservation that aimed to keep people at a distance. Today, however, conservation is focused on finding a place for people within natural systems, especially as it pertains to ensuring enough food, fuel, fiber and fresh water to ensure human well-being.

Recently, The Nature Conservancy’s chief scientist, Peter Kareiva, said the goal of conservation in the 21st century is better management of nature for human benefit. Kareiva believes that by restoring and protecting essential ecosystem services for humans, such as clean water or soil fertility, we’ll end up protecting a significant portion of the natural world’s biodiversity, as well as creating legions of grassroots advocates for nature. The key is engaging in activities that ensure the health of both land and people, he insists. Besides, we don’t have much choice.

“Look,” he said, “we’re in nature. The deal is how to work with it and how to help it work for us.” Most of the world’s seven billion people don’t care about biodiversity, he said. What people want is security, food and shelter, and an opportunity to better their lives. They will use natural resources in any way they want to accomplish these goals regardless of what conservationists think. This means the movement needs to focus less on protected areas and more on working lands.

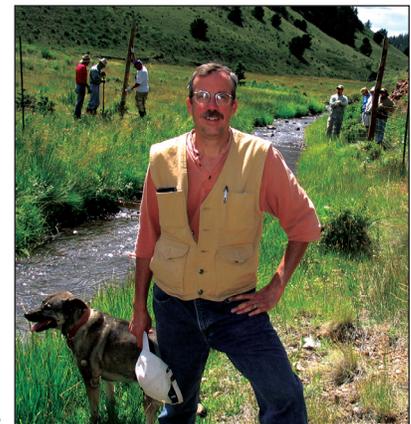
“The key is to take each of the major needs of people,” he said, “and find the future that meets these needs and protects nature. This should be the endgame for The Nature Conservancy and the conservation movement...until we make a vivid and compelling connection between what people want and the need for conservation, our work will never save the world.”

This is the Fifth Wave of conservation in the West. It is a vision of local, sustainable food production from farms and ranches that are managed for land health, biodiversity and human well-being. It is a vision of new agrarians working to sequester carbon in soils, improve water quality and quantity, restoring

native plant and animal populations, fixing creeks, developing local energy sources, and replenishing the land for people and nature alike. It is a vision of coexistence, resilience and stewardship—a place for people in nature, not outside it.

But more importantly, this wave is being led by youth as every wave before it has been. The difference, however, is that today’s young agrarians can stand on the shoulders of their predecessors and thus see farther. I have no doubt that what they see is both energizing and daunting, but I am equally confident they have the skill sets and the right attitudes to tackle these challenges. Fortunately, the toolbox at their disposal is full of ideas and practices that have been tried and tested in the field already. And undoubtedly they will innovate new ones to go along with what we know works. Our role, for those of us who have surfed earlier waves, is to provide as much mentoring, inspiration and encouragement as we possibly can...and cross our fingers.

This wave will eventually crest and ebb, as previous waves of conservation have done—following a timeless law of human nature. That’s off in the future, however. In the meantime, I intend to do all I can to help this new generation of surfers ride this wave all the way to the shore. 2)



Courtney White,  
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