

GREEN FIRE TIMES

News & Views from the Sustainable Southwest



NEW MEXICO TRADITIONS AND INNOVATIONS IN COLLECTIVISM

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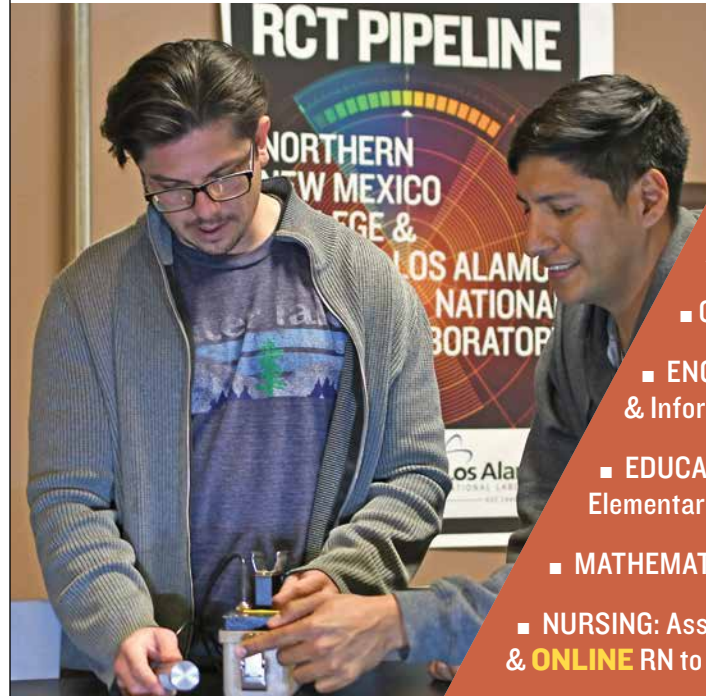


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News & Views from the Sustainable Southwest

*Snow-covered Oghá
P'ó'oge, unceded Tewa
Territory (Downtown
Santa Fe, N.M.)
January 1, 2022
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*Cover: The Posolada at the Midtown site on Dec. 19, 2021 honored Santa Fe's traditions and culture. Surveys were collected to gather input about development of the campus. The event was hosted by Chainbreaker Collective, along with the city and the Midtown Engagement Partnership: SF Art Institute, Earth Care, YouthWorks, Littlelobe, SF Indigenous Center, La Familia Medical Center and Fathers NM. To keep informed on the progress of Midtown Moving Forward, visit MIDTOWNDISTRICTSANTAFE.COM
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INTRODUCTION

BY EARTH CARE STAFF

For the last four years, Earth Care has had the honor of partnering with *Green Fire Times* to start the new year with an exploration of resilience and resistance in New Mexico.

At the start of 2022, our communities are preparing for unprecedented public investments. The multi-trillion dollar Infrastructure and Budget Reconciliation package being finalized by Congress represents an opportunity not just to rebuild but to reimagine and recreate our economy. Our communities are organizing to ensure that these investments reflect the vision, voice and needs of communities, not just in terms of what kinds of programs receive funding but *how* investments are made and structured. Resource allocation can either perpetuate structural inequity and reinforce existing power structures—or serve to shift them. We know that transformative change necessitates a shift in *who owns, controls and benefits* from public investment.

This year's edition of *GFT* explores how collective models of ownership, stewardship and management might inform how we Build Back Better and how we can seize this opportunity to transition from extractive models that concentrate wealth and power—to collective models that distribute and democratize wealth and power.



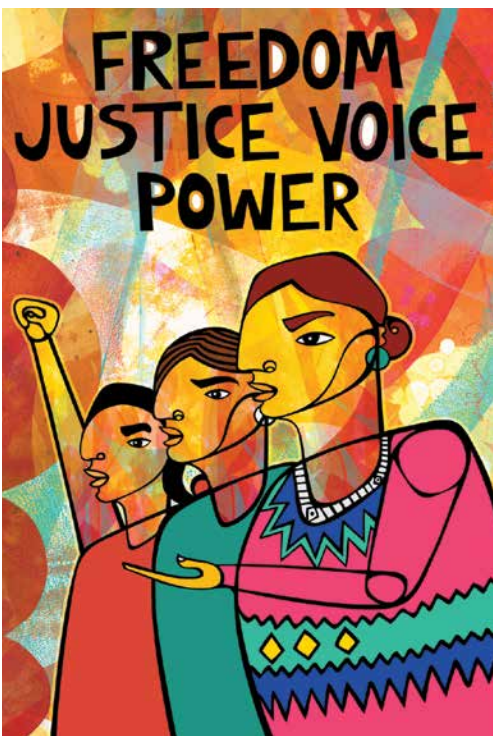
*Climate rally at the New Mexico Capitol, Santa Fe, 2020
© Seth Roffman*

New Mexico has rich traditions and exciting emerging examples of collectivism and people-powered and -controlled solutions that we want to elevate and learn from. From traditions of *ejido* and *acequia* democracy to innovations in community solar, community land

trusts and cooperative financing, we've invited writers to share insights about models that can inspire fundamental changes in how we move forward. These can inform collective work at the local and state levels as we respond to the global pandemic and put to use the long overdue public investments for infrastructure and social programs.

The pandemic has illuminated the great injustices and failures of our current economic model. Long-standing disparities and inequities in healthcare, housing, income, food security, language access and community stability have been laid bare. COVID-19 has infected tens of millions of Americans and taken the lives of more than half-a-million loved ones, leaving behind devastated families. The corresponding economic crisis led to a record loss of more than 22 million jobs nationwide, skyrocketing unemployment insurance claims and 105 million Americans facing eviction or foreclosure at the end of 2021.

On top of that, the climate crisis is displacing families, upending local economies and endangering our children's future. And we have only just begun reckoning with our racial justice crisis and the effects of systemic racism. Underlying inequities have been disproportionately borne by Black, Indigenous and communities of color. There are many drivers of these crises. But the one phenomenon in particular that has profoundly shaped all of these dynamics and every single sector of our economy is the consolidation of corporate power, which has reached extreme levels. Most industries are dominated by a handful of corporations. Concentration didn't happen by accident; it's a product of deliberate policy choices made by leaders under corporate influence. Consider that during the pandemic, U.S. billionaires' collective fortunes grew by \$1.8 trillion—nearly half of the Biden administration's proposed \$3.5 trillion package.



Artwork by Favianna Rodriguez

We have a once-in-a-lifetime opportunity.

As historic public investments come down from the federal government, we will need to work actively to ensure

that investments in infrastructure, energy, housing, health care, education and jobs—not only *serve* our people, but actually build long-term power, self-reliance and resilience for communities. We will have to fight to protect against the transfer of all of this wealth from the public sector to the private sector, into corporate hands for false solutions. We need to be ready with alternative models of ownership based on our communities' values, visions and needs.

Billions will be invested in “clean energy” infrastructure over the next decade—but what difference will that make if those investments support energy companies' hydrogen hubs in N.M. that will extend the life of and deepen our dependence on the fracking industry, vs. investments in a N.M. public power authority, which would allow our state and local communities to produce, own and profit from solar and wind generation? One model perpetuates the status quo—the exploitation of our resources (99 percent of hydrogen is derived from fossil fuels),

devastation of frontline communities and extraction of our wealth. Another model could be a driver of local sustainable economic development, help communities achieve our climate change mitigation goals, *and* be an alternative, sustainable revenue source for the state through exportation of excess energy to regional markets.

It's time to look to alternative cooperative and democratic models of resource ownership and stewardship.

Cooperative models of land, water, energy, housing, education, healthcare, financial resource management and decision-making redress the current system's legacy of structural inequities through greater public control, accountability and distributive infrastructure investments. Fundamental differences between cooperative vs. private and corporate models are reflected in how resources are circulated, how systems are structured, and the values and relationships expressed. As examples highlighted in this edition of *GFT* illustrate, *where* money, information and resources circulate is just as important as how much resources there are. The idea in a cooperative model is that the concentration of resources is unhealthy. Excess resources should be distributed and go where they are needed. The fundamental structure should be

based on equitable distribution. Basic necessities are not seen as privileges but as rights. A cooperative approach protects, uses, manages and governs our collective resources in a way that ensures they remain public assets for maximum environmental and community benefit.

Our communities have long-standing traditions of cooperative resource management, and people overwhelmingly support a shift to greater equity and economic justice. According to a report that highlights recent polling from a variety of sources on issues related to the Build Back Better proposal, a majority of American voters support significant public investment in energy, housing, healthcare, education, jobs, support raising taxes on the wealthy and corporations to fund these investments, support a uniform federal-level policy to stop all evictions during the coronavirus crisis, support rent increase freezes, investments in nonprofit and public housing, a jobs guarantee, socialized health care, and even a path to legalization for immigrants who immigrated as children or who work in an essential field.

The models exist; the public-will exists. Now we need to demand action here in N.M. We must hold our elected officials accountable and demand real, meaningful, structural change. The ship is sinking fast, and anyone who is still talking about rearranging the deck furniture has no business in a leadership position. It's time we reject incremental reforms and false solutions that perpetuate the current power structure and look instead to alternative cooperative and democratic models of resource ownership and stewardship. We have a once-in-a-lifetime opportunity. If we work together, our communities can build our collective power and transform our economy. ■

Earth Care is a community-based environmental and social justice organization led by youth and families of color in Santa Fe including YUCCA, PODER, and Santa Fe Mutual Aid members. WWW.EARTHCARENM.ORG.

Historical Collaboration and Collectivism in New Mexico

BY WILLIAM H. MEE

The U.S. Forest Service estimates that the Carson and Santa Fe National forests contain more than 1.5 million sites of Native American significance where artifacts have been found, thus making northern New Mexico a spiritual place. These ancient peoples and their modern descendants lived in harmony with the natural landscape, honoring and protecting it through their ways of life.

In 1540, Europeans and their native allies from future México entered what would become New Mexico under the flag of the King of Spain and the leadership of Coronado. With visions of gold and motivations of greed, they explored a new land. When the walls of the “Seven Cities of Cibola” (Hawikuh or present-day Zuni) turned out to be not golden but adobe, the friendly explorers became demanding invaders, and bloodshed occurred. The Europeans retreated east to the Río Grande.

Historical Collectivism

They encountered Native Americans living in settlements that the Spanish called pueblos. The Pueblo hosts, the Tiwa, advised them that the abandoned pueblo of Tiguex (today's Coronado State Monument near Bernalillo) would be a suitable winter headquarters. The Tiwa predicted a harsh winter and advised the explorers to visit Pecos Pueblo, further east, and cooperate with the Natives to harvest a supply of *cibola* (bison) and dry it for winter use. Pecos Indians led an expedition through the mountains at Apache Canyon (present-day Glorieta). About 100 miles northeast of what today is Las Vegas, N.M., the explorers found a ground squirrel they named *tusas*, our modern-day prairie dogs. The Pecos told the explorers that the *tusas* followed the great herds of *cibola*, and that this was a good sign. Coronado wrote in his journal of the chirping of this particular animal and how it lived in colonies. Within a two-day march, the great herd was found.

The Europeans' flintlock rifles made short work of enough bison to last the Pecos and the explorers through the winter. They were in awe of the way the Pecos honored each animal they killed and the Great Spirit that enabled this harvest. (They, in turn, thanked their Catholic God.) The explorers were even more amazed at the way the Pecos processed each carcass, using every part of the animal, including bones and gristle, and that



Mud plastering, San Isidro Church, Agua Fria; Museum of N.M. #005056 by T. Harmon Parkhurst, 1925

they used an assembly line for the processing. The *travois* (pulled sleds) that the Pecos brought with them made transport of the processed bison easier.

That first winter was particularly brutal for these peoples from temperate climes, who had never lived in a snow-covered landscape. Their reverence for their Native American hosts was not fully recorded in history, but would continue as the Europeans continued to enter new lands.

The Environment

The new lands were experiencing periodic droughts in cycles that the Natives had measured as a major one occurring every 100 years, with minor ones in between, every 20 years. They expected each drought to last about three years, and then an intervening period of intense moisture every seven years, in which a bumper piñon crop would materialize.

Fast forward to the colonization by Juan de Oñate in 1598 at a settlement he called San Juan de los Caballeros at the abandoned pueblo, Ohke, with advice from the village that became known as San Juan Pueblo (Ohkay Owingeh). The settlers and the Puebloans cooperated to plant fields. The Native people showed the settlers the river diversions they made, which lasted through annual floods, and how the water would run through the fields. The settlers brought wooden plows and landscape rakes attached to teams of horses, and established a larger system of *acequias* (the Moorish word for a water ditch).

Adaptation.

The settlers brought many things from Spain that just didn't work: grapes, sugarcane, rice, beets, turnips, cabbage, cauliflower, apricots, almonds, barley, oats and wheat. Although perfect staples on the Iberian Peninsula, and reminiscent of home, those crops died in the first winter and would take generations to acclimatize. The Native Americans stepped forward and offered the "Three Sisters" as a substitute: corn to grow tall, beans to grow up around the stalk, and squash to keep the base humid (the *maize*, *frijoles* and *calabacitas* we know today, versions of these colonial plants, were probably a lot smaller). The seeds the Natives offered

had "local knowledge" of the place they were about to grow—developed over 1,000 to 2,000 years. Their parent plants had been battered by early and late frosts, early and late droughts, summer monsoons, cool nights, blazing hot days, and wind. Seed swapping was an important example of collectivism.

This aspect of our history was best documented by a former *Green Fire Times* writer, and *mi maestro*, Juan Estévan Arellano (1941-2014), in his translation of *Obra de Agricultura* by Gabriel Alonso de Herrera, 1513 (also: *Enduring Acequias:*

Wisdom of the Land, Knowledge of the Water). This type of agriculture existed and exists not only in the American Southwest but also from the Philippines to India to the Middle East. Arellano's stories of *milpas*, waffle gardens, *querencia*, *La Resolana*, *Las Cabañuelas* and community water distribution systems (*suertes*) are a treasure of agricultural experience in a vast and sometimes harsh frontier land. In most of his articles you will read not only of the 400-year Spanish experience in the cultural landscape but also of the Native Americans. Stories and customs of Mesoamericans like the Mayans, Aztecs and Incas (as well as the roots of the Moors, Romans and Greeks) demonstrate examples of collective learning.

I live and study in Agua Fría Village, five miles southwest of Santa Fe's Plaza. It is a place yet to be fully explored, in my estimation. The village was very closely connected to Santo Domingo Pueblo (Keres) and San Ildefonso Pueblo. Agua Frians went to Santo Domingo by wagon to attend the Aug. 4 corn dance/feast day. I wrote a number of Agua Fría stories in a grant proposal to the Northern Río Grande National Heritage Area titled: *Agriculture in Agua Fría Village: How a Traditional Community Was and Can Be Self-Sufficient*. A grant from NRGNHA funded the transcription of oral history interviews of 13 elders in the village, each three hours of life stories about how these residents have fit into the community. Here are a few of these stories:

The owner of the general store on El Camino Real (Agua Fría Street), José Antonio Romero, opened the store in 1900 and ran it through 1950, when his nephew, Amarante Romero, opened a general store next door and ran it until 1991, when the opening of Walmart put him out of business. José was the Democratic Party chairperson for Precinct 5 (*Precinto Numero Cinco*), and as such, was eligible to get new farm equipment. The equipment was kept at his store, and people in the village would borrow it when they needed to plow or rake their fields or cut and bale alfalfa. José had a red and blue tongue. This was because he kept a two-sided accountant's pencil behind his ear, and would wet it before he wrote. He was the sacristan of the San Isidro Church and kept a ledger of where everyone was buried at the church. He also took part in keeping up the collective maintenance of the acequias. José had the first car in the village. He kept a sheet of paper next to the cash register so that four or five passengers could sign up for a ride to town with him a couple of days a week.

Trading

Agua Fría Village, for hundreds of years, was land-rich and money-poor. Many elders talked about “barter” (“Slow Money”) as the main way of purchasing something, never having any real money to use except maybe for a children’s gift or a dowry. The pig farmer traded pork for beef and wheat. The blacksmith, Ambrosio Naranjo (who castrated livestock as a side job), traded work for corn and meat. The wheat farmer traded for tools. Dresses were made out of flour sacks, jeans out of denim material, and there were a lot of hand-me-downs. Several villagers died from scarlet and yellow fever in the 1880s when they wore clothes, found at the dump, from people who had died of those diseases. Hides were traded to leather tanners, who made vests and jackets.

Trading between villages and pueblos was very common, especially along El Camino Real. Commodities such as corn, wood and piñon were traded. Wagons of corn could be loaded communally and driven down to Santo Domingo (Kewa) to see what they had to trade. Sugar cane and barley were traded commodities. La Ciénega traded wine to Agua Fría. Agua Friars rode wagons in caravans to White Lakes for salt for meat preservation.

Recycling

Corrals were often shared and passed down through the generations. Large barns were often built by collective effort. They kept horses, mules and milk cows warm because those animals were used daily and at a moment’s notice. The barn also kept animal feed fresh and out of the weather. Building a home (or the San Isidro Church in 1835) was a study in collectivism. Men usually worked alone in daily tasks, but home-building required a group of workers. Three to six brothers (or cousins) made and laid *adobes*. Cutting and retrieving enough *vigas* (roof beams) from the mountains for a room, and then laying them on a wall had to be done cooperatively because they were heavy and awkward (the proverbial barn-raising). I say a “room” because homes of newlyweds were usually one brand new room, and rooms were added as children were born. Historic *haciendas* and *palacios* were built around a central courtyard for defensive purposes and contained extended families. Often, the *vigas* and *adobes* were removed from a deceased great-grandparent’s home.

The elders’ stories tell of going to the common lands (land grants) of the Caja del Río Grant (“La Mesa”) and creating a community camping spot for the common defense against bears. Perhaps they pitched a large community tent for the women to cook meals and to have an area where children could play and be watched. Men would go out and harvest wood, or the whole family would harvest piñon. At night, there was coffee, and maybe liquor, and all sat around a campfire with music and stories. Children learned about their patrimony.

People would search for mouse nests at La Mesa. There is a Spanish term for this, “*buscando a ratonera*.” People would ferret out these cache nests—and take all the piñon. Then they would leave cornmeal behind for the rodent and then check the same places the following year. This always paid off. Some older men had a route of nests they visited for many years. Some people even did a prayer over the



Top: Men making adobe bricks, Agua Fría; Museum of N.M. #005056 by T. Harmon Parkhurst, 1925

Bottom: Man loading firewood on burros, Agua Fría; Museum of N.M. #005516 by T. Harmon Parkhurst, 1925

cornmeal. When they ground corn, they would sift it, and the jagged pieces would be held to the side so they could be fed to the rodents.

Hispanic writer Roberto Valdez has talked about how Land Grant areas suffer less from forest fires, thus asserting that the local stewards of the land do a better job than the federal government.

There were two areas of the village that had huge collective uses: *El Círculo* and *El Círculo Grande*. They were “circles” of fences where people held all their livestock in common without the need for and expense of cross-fencing. *El Círculo* was known in 1900 as having 17 separate owners. *El Círculo Grande*



Sowing wheat, men working in field.” Eduardo Otero’s ranch/hacienda (current Bosque Farms); Los Lunas Museum of Heritage and Arts

was larger and in an area where the acequia could not effectively feed the farmland, so it became a commons grazing pasture. Common lands facilitated annual branding days when everyone worked together, or when they herded the animals to shelter during heavy snowfalls.

Strengthening Agua Fría’s Community

Plants of the Southwest, Santa Fe Tree Farm and Reunity Resources and its Community Farm are businesses that now power our agricultural revitalization of Agua Fría Village. We are currently working on a MainStreet application to support these businesses and return the sense of community to the village itself. We are also trying to revitalize our partnership with our local school, El Camino Real Academy, and have it as a centerpiece of the community, as it was when it was Agua Fría Elementary School.

There is a difference in how Hispanic and Native American communities and later “American” communities view the Rule of Law. It can also be deemed as a clash of civilizations: English Common Law versus Spanish Common Law. The individual land rights and private property of the English Lords under the Magna Carta of 1215 (when King John conceded that not all land belonged to him and in fact the Lords’ heirs could inherit) versus the “commons” established by the King of Spain and the Law of the Indies (written in 1542, based on the 1512 Laws of Burgos), to protect acequias, pueblos, water and land grants. When the Americans came, they used American law to displace all others, which led to commercialization of communities, versus the honoring of a simpler way of life and collectivism.

Truly, collective action was a historical factor for a village’s success. It now may be a wise way to address climate change. ■



William H. Mee is the president of the Agua Fría Village Association, Acequia Agua Fría, and the Agua Fría Wellonners’ Association. He is a retired state employee, farmer-rancher and amateur historian.

The writings of Juan Estévan Arellano: [HTTP://WWW.VOCESDESANTAFE.ORG/EXPLORE-OUR-HISTORY/BIOGRAPHIESPEOPLE/1153-JUAN-ESTEVAN-ARELLANO](http://www.vocesdesantafe.org/explore-our-history/biographiespeople/1153-juan-estevan-arellano)



*Top: Agua Frians making adobes for Gateway Monument, 2013. © Lois Mee
Bottom: Agua Frians plastering Gateway Monument, 2015. © Lois Mee*

CONTINUE THE TRADITION OF THE EJIDO WITH COMMUNITY LAND TRUSTS

A Vision for a Return to Community Stewardship of Land and Housing

The disproportionate impacts of COVID-19 and the resulting economic downturn on low-income communities of color have exacerbated Santa Fe's housing and equity crisis. An ever-increasing cost of living is forcing many people to move farther to the outskirts, often to areas that lack essential services and amenities. This leads to car dependence and perpetuates a cycle of poverty. As Santa Fe continues along this path, we're becoming increasingly segregated and divided. As people become displaced, our friends and family members disappear. Our culture, traditions, histories and futures are erased with them.

The circumstances that drive displacement are created when a sudden influx of investments, repairs and additions are made in historically disinvested neighborhoods. When this happens, it creates a shockwave in the housing market that the current residents often can't absorb. After years of living with lack of schools, jobs, access to healthy food, transportation, open spaces and all the things that make a community complete, people often feel like they must choose

between more disinvestment, or being forced to leave, as the long denied necessary resources arrive to serve a new population.

Santa Fe has long been the front

Community land grants were given to both Puebloan communities and Hispanic settlements.

line for this tension in New Mexico. If our state is to maintain its rich histories, cultures and traditions, it needs to start in Santa Fe. Santa Fe is at a pivotal moment right now with the pending development of the city-owned Midtown Campus property at a time when there is a clear need for new affordable housing options that create stability for all Santa Feans. Community Land Trusts can



Courtesy Chainbreaker Collective



Courtesy Chainbreaker Collective

serve as sustainable and affordable housing models that can limit gentrification and displacement, weather economic trends and help support recovery during and after the pandemic.

Displacement in Santa Fe can be traced to different periods in the city's evolution. Policies like the Indian Removal Act of 1830, redlining and racially restrictive covenants, laid the foundation for deep racial and economic inequities in access to housing and in associated health outcomes, and to an affordable housing crisis that affects millions of people across the country. In N.M., this took the form of a history of unscrupulous land speculation. Conscious efforts were made to encourage migration into the city. In the early twentieth century, artists living in other parts of the U.S. were drawn to the Southwest. By the 1920s, Santa Fe was boasting a thriving art colony. Later, urban planning efforts—in conjunction with the real estate industry—proactively established practices and policies to encourage retirees to settle in Santa Fe. Over five decades of promoting a tourism-based economy has also shifted and displaced populations.

Over the past two decades, Santa Fe has experienced a new wave of significant gentrification, pushing many Hispanic residents to previously unincorporated territories on the outskirts of Santa Fe or other cities altogether.

These areas have more affordable housing, but lack reliable access to public transportation, parks and green space, sidewalks and other public resources.

Substantial research has found that gentrification negatively impacts the individual and community health of those being displaced from their neighborhoods. Gentrification leads directly to displacement of residents, often low-income communities of color, who are unable to pay rising rents and mortgages in their formerly affordable neighborhood. Research has found that evictions disproportionately impact communities of color. In Santa Fe, a Health Impact Assessment found that increasing housing costs and declining incomes created a risk of displacement—particularly for Hispanic and low-income residents. These residents have been made even more vulnerable with the economic insecurity from COVID-19, putting more families at risk of displacement and evictions in Santa Fe.

Forced relocations also lead to community disintegration, which can impair community power.

In short, gentrification is erasure of people: our histories, cultures and our futures. But gentrification and displacement are not inevitable. Importantly, gentrification doesn't "just happen." It is the result of federal, state and local decisions that encourage or discourage people's choices of where to live.

To combat gentrification, we need to address the deeply entrenched housing and development policies that are responsible. In 2015, the Santa Fe City Council voted unanimously to pass the Residents Bill of Rights resolution. This acknowledged the issue and identified five pillars designed to serve as policy guides: 1) Affordability; 2) Quality, Sustainability and Health; 3) Accessibility, Fairness and Equity; 4) Stability, Permanence and Protection from Displacement, and; 5) Community Control. If policies are made that follow these pillars, it is possible to slow the decades of displacement Santa Fe has faced.

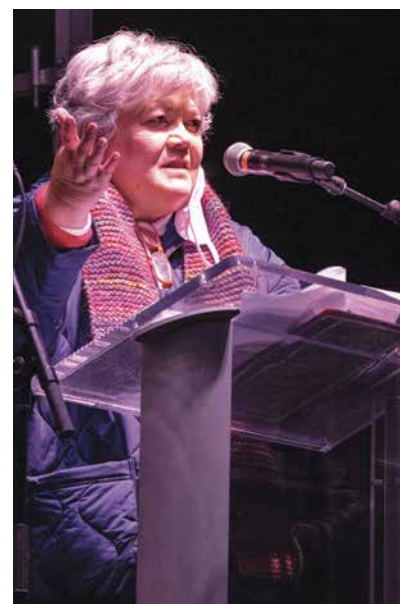
An example of a model that fulfills the "Community Control" pillar and overlaps with the other four is a Community Land Trust (CLT). A CLT is an organization that provides stewardship over tracts of land with the intent of making housing and community needs accessible to low- to moderate-income families in the community. CLTs are based on managing land locally, and are often organized as nonprofits with their board composed of residents from the CLT, other community residents, and public representatives.

CLTs adhere to local nonprofit laws of the region and are generally governed and run by community members through a democratic board. CLTs balance the interests of residents, the broader community and the public interest to promote retention of public resources and solutions for community needs. CLTs create a system of stewardship of land and housing that is committed to democracy over profiteering. CLTs create an avenue to stop harm that comes from gentrification and begin healing for our communities.

The development of the city-owned 64-acre Midtown Campus may just be the opportunity to begin that healing and be a model for development without displacement. To do that, we can look to our own New Mexican traditions for inspiration.

There is a long history of community controlled land in N.M. In the ancient and sovereign landscape that is N.M., for Native American Puebloan communities in particular, visual boundaries and multiple centers have long existed to reflect spiritual worldviews and the relationships between the natural and built environments. For the Tewa, *bupingeh*, the "center heart place," has always served as a center for community where the most meaningful physical and spiritual

CLTs create a system of stewardship of land and housing that is committed to democracy over profiteering.



Posolada, Dec. 19, 2021, at the Midtown site honored Santa Fe's traditions and culture.

Gentrification is erasure of people: our histories, cultures and our futures.

elements of community intersect. These essential concepts survived. However, the legal concepts of private and public land were imposed and codified in law following Spanish occupation and settlement in the sixteenth century.

While Spanish and Mexican grants of land included private grants to individuals, in some cases with stipulations for community settlement, there were also community land grants, which were given to both Puebloan communities and Hispanic settlements. Within these community grants, a unique and integral feature included the *ejido*, wherein certain parcels of land were recognized with special status apart from the public domain and generally used to define citizens' right to resources, though there were also other elements, like the *monte* (mountains), *prado* (quality pasture land); *dehesa* (fenced pasture land); all elements used by the citizenry in common for gathering wood, fishing, hunting, use of water and to provide pasture to their animals.

A whole body of scholarship has been devoted to interrogating and illuminating the complexity embedded in understanding how these common lands were used and challenged by courts and Congress following U.S. conquest. Because it was not typical of land tenure systems of the United States, lands in common challenged surveyors, land officials, politicians, attorneys and others following the Treaty of Guadalupe Hidalgo, and these lands largely did not survive adjudication processes and the chicanery of land speculators and government.

However, born of the Civil Rights movement of the 1960s, the Community Land Trust (CLT) emerged.

New Communities Inc., in southwest Georgia, is credited as being the first CLT, founded in 1969, and was developed to provide farmland for Black families who were forced from their land for participating in the Civil Rights movement. Over the past half century, CLTs have grown both in number and in type. There are now over 225 CLTs in the U.S. that are both rural and urban, with missions ranging from providing long-term stable housing and homeownership (including rental and cooperative housing); to community agriculture and urban green spaces; as well as for establishing commercial spaces for community and public use.

We don't have to go outside of N.M. for examples of CLT's. The Sawmill Community Land Trust in Albuquerque is a nationally recognized and well-respected example of a large-scale CLT that offers affordable homes and apartments, commercial spaces for small business owners, and resources for the community. The Sawmill CLT strives to create a permanent reserve of affordable housing for families at or below 80 percent of Area Median Income, as well as to develop commercial, retail and light-industrial spaces that benefit the community with job creation and needed services.

Community Land Trusts create affordable and permanently stable housing for generations of families and help mitigate displacement pressures on surrounding neighborhoods. As Santa Fe decides what to do on large-scale developments like Midtown, we can look to models like the Community Land Trust to honor both the past and the future. We can tap into the rich cultural traditions of N.M., learn from the teachings of the Civil Rights movement, and build a better future for New Mexicans. We can truly begin to heal and move beyond recovery. ■

This article was prepared by Tomás Rivera, executive director of Chainbreaker Collective, a Santa Fe based community organization. It includes abridged excerpts of "Health, Healing and Housing in Santa Fe," and infographics from "Equitable Development and Risk of Displacement," two reports led by long-time grassroots community organizations in Santa Fe (including Chainbreaker), and a coalition of national organizations, policy-makers and community members. The full reports can be found at [CHAINBREAKER.ORG/RESOURCES/REPORTS](https://chainbreaker.org/resources/reports).



Midtown Block Party, Oct. 2021. People offered ideas for what they would like to see developed on the Midtown Campus.



OP-ED: MIGUEL ANGEL ACOSTA

COMMUNITY HEALTH, EDUCATION AND DEVELOPMENT: FOR US, BY US

My grandmother, Doña Carmen Meza Cibrian, lived through several life-changing events during her years on this earth. She has been on my mind frequently during the pandemic, and came to me in a dream not long ago as I prepared to visit her ancestral home, Talpa de Allende, Jalisco, México. Born around 1898, she witnessed the last gasps of the Porfiriato dictatorship and the Revolution of 1910 it provoked.

She also experienced firsthand the religious fanaticism and terror sponsored by the right-wing oligarchy during its Cristero revolt. Ultimately, Porfiriato and the Cristero revolt, both partially funded and supported by U.S. and European oligarchs, would force millions, including my grandmother, from the countryside into cities and into the U.S.

These events, following on the heels of the U.S. invasion and theft of half of its territory in 1848, established a pattern of exploitive relationships with Mexicans, México and the Mexicans/Chicanos that remained on the U.S. side of the new border. I share this context because the pandemic has triggered health, economic, political and social impacts and relationships of potentially similar magnitudes for Chicanos-Mexicanos and other people of color. It has also, as in previous historic transformative moments, provoked us to act in solidarity, and to create or reclaim community ways of knowing as we build resilient practices, families and communities. Three of the more critical and interdependent areas of this work are community education, health and development.

The pandemic impacted everyone, but low-income, immigrant and people of color were disproportionately hurt (and killed) by the virus, by the economic and institutional shutdown, and by many misguided government and institutional responses. In Santa Fe, for example, schools were closed and families were encouraged to stay home. They were then directed to their local schools to pick up meals. On the Southside, however, that

There is a billion-dollar industry dedicated to managing poor people's lives. Community-led planning goes contrary to its agenda.

meant traveling sometimes significant distances because most families and children live north of Airport Road, but their schools are located south of Airport Road. This is a consequence of developer-driven, rather than community-driven school construction.

Southside residents were also encouraged to get tested and then, once vaccines were available, to get vaccinated. Good advice, except it took many months before testing sites were readily accessible. A Learning from Home curriculum was developed by our teachers and implemented by Santa Fe Public Schools. Great work! Except the majority of our children didn't have the necessary internet access at home, and that area north of Airport Road where the majority live has the lowest broadband access in the city. One solution offered was for children to do their homework outside of their schools, but that meant traveling those same distances. Oh, and we're still waiting for an

integrated and coordinated pandemic outreach program in Spanish. In the meantime, and possibly because of this failure, Covid hot-spots developed in our neighborhoods north of Airport Road and have remained there. Our families are the essential workers that keep the tourist economy going, so they have not been able to work from home. They have been more exposed to infection from tourists and others. They are the least supported by healthcare insurance, and this area remains the least resourced, despite being the most densely populated.

Families and communities with more resources and higher levels of social capital used the pandemic and institutional restructuring to create systems, networks and practices that helped minimize negative impacts during the most difficult times. They created Learning Pods and hired teachers/tutors to support their children in small groups, and they are now a part of the growing homeschooling movement and have also started Charter Schools. They were much more likely to access federal and state grants to support and/or expand their businesses. They have developed businesses and nonprofits and are poised to benefit disproportionately from the billions in Build Back Better funds. Their assets supported a level of resiliency that has left them in better shape than before, and they will be receiving a massive transfer of wealth from government spending, labor exploitation and financial markets.



Lower-income, immigrants and communities of color, on the other hand, face a dual challenge. We are as creative and innovative as anyone, maybe more so, given that we're still here despite all the attempts to erase us. The challenge is securing long-term public and/or philanthropic funding to support our communities' initiatives. There is a mistrust of poor people and their organizations because when people can make collective decisions based on their own visions, they usually choose to transform their communities to make them more equitable rather than funding programs

Low-income, immigrant and people of color were disproportionately hurt (and killed) by the virus, by the economic and institutional shutdown and by misguided responses.

to make inequity more tolerable. Public and private funders prefer the latter. It's safer and creates more jobs for them. And that's the other challenge. There is a billion-dollar industry dedicated to managing poor people's lives. It is currently busy plotting how to spend federal, state and local funds to make our lives better. Community-led planning goes contrary to its agenda. But we've been taught to transgress. And transgress we will.

This pandemic has highlighted the fact that our community is a source of disposable workers, especially in the tourism, hospitality and service sectors. Health-care systems do not exist to support healthy communities but instead to get workers patched up enough to get back to work. We have a shortage of health-care professionals at all levels (as well as educators and community builders) because these were the areas of community leadership targeted for destruction by settler colonialism and then replaced with systems of social control. Mutual Aid and other solidarity networks, which have emerged or reenergized during the pandemic, have made community health and wellness a priority. It is critical that we create our own systems based on our definitions of community health equity. Yes, we must push for universal health care, and it must be federally funded (from military and policing budget reductions) but, it must also be locally controlled and staffed by communities. It must also be linguistically and culturally accessible and reflective of Indigenous and traditional health practices.

Corporate education reform efforts, which represent about 99 percent of what we have suffered under since the Reagan neo-liberals published *A Nation at Risk*, have all failed at transforming schools and getting better outcomes. The reason is simple: that was not their goal. These efforts, paid for with billions of our taxes, were designed to weaken and undermine public education and educators, and in the process privatize education by contracting and outsourcing it out to private and religious corporations, private charter schools, management organizations and consultants.

Nonprofit service providers have too often fallen for the rhetoric and helped legitimize these efforts. In N.M. we have a process that better supports the creation of public charter schools, but the majority fail at being community-led, as the Charter School Act required, and many are heavily influenced (thanks to Susana Martínez) by corporate charter industries controlled by the Koch brothers and others of their ilk. Even good ideas like Community Schools, with their emphasis on community as curriculum, collaborative governance and family/community engagement, see themselves undermined by Trump/Susana loyalists and corporate service provider chains that prefer to manage poor people rather than allowing for real transformation and community power. The Martínez-Yazzie decision is under attack from these same actors, as well as facing opposition from a corporate Democratic state administration.

True community schools, governed by local residents, can serve as education and talent development spaces for everyone, and provide health, recreation, jobs and entrepreneurial opportunities.

The pandemic also exposed the weakness of developer-driven school construction and the big-box school model, especially on the Southside. We have only one neighborhood elementary/middle school, Ramírez Thomas. All the rest have very large and gerrymandered attendance areas. In the interest of cost efficiencies (and construction profits) we have sacrificed neighborhoods, children and their education. The newest twist is developers bringing their own charter schools along with the displacement and gentrification their housing developments create. We must instead bring education back to the neighborhood level and make small schools an integral part of creating healthy communities by connecting them to community health- and wealth-building practices. These *true* community schools, governed by local residents, can serve as education- and talent-development spaces for everyone, not just children, and provide health, recreation, jobs and entrepreneurial opportunities for neighborhood residents. They must be reflective of the cultures and languages of their communities.

The third critical focus area is community development. I lived through the last federal Build Back Better campaign. It included all the War on Poverty programs of the 1960s and early '70s, and the Urban Renewal Program. The first gave rise to the Nonprofit-Industrial Complex, and the latter destroyed low-income urban neighborhoods, cleared out non-White residents and set the stage for yuppie and hipster settlers. There is a danger of that happening again. Instead, we must insist on community-led development based on visions of sustainable and equitable neighborhoods that we create. Visions that are based on our values and principles, that support the development of strong families, that include community institutions responsive to our needs and build on our assets. For the last year, our youth and family leaders have been gathering to define principles of equitable community-led development. The following is our current framework for this work:

Principles for an Equitable Community Development Process

1. Communities have the right to participate in all decisions that affect their living, working, housing, education, recreation and economic conditions.
2. Communities have the right to say "NO" to proposals that are initiated from the outside.
3. In order to build sustainable and creative, innovative communities, communities must have the power to make their own decision, define their own visions, futures, needs and demands.
4. Real participation requires community involvement in all phases of city, town or village improvement: Planning, Implementation, Maintenance and Monitoring.
5. Participation must be built on equality between all genders and include the young and the elderly.
6. Capacity development is essential to promote equitable participation among all members of the community.
7. Communities have inherent resources that can drive city, town or village development. Capacity development can uncover these resources.
8. Among all the protagonists of development, residents know the issues most intimately. Those living closest to the impacts are also best equipped to define solutions.
9. Awareness-raising and capacity-building can make partnerships between communities, NGOs and municipal authorities more equitable.
10. Community development planned by people outside the community that only requires this free work is not well accepted by the communities in the long term.
11. Participation planning is one of the most often overlooked elements of community development.
12. Charity makes communities dependent on aid.
13. Community development is an essential contribution to global urban management.



We firmly believe that community development work that honors these principles, and integrates equitable health and educational practices, will result in a world that is much more just, democratic and sustainable. The current challenges our world is facing are the result of not embracing these principles. This is our only option. ■

Miguel Angel Acosta is co-director of Earth Care.
WWW.EARTHCAREN.M.ORG

MOVING FORWARD TO ADVANCE EQUITY

As we enter 2022, we all bring with us enhanced perspectives on where we live in the world and what structures are failing us. Collectively, we have been through a very rough time filled with loss of people and things that have meant so much. We have watched the world suffer, both up close and from afar, and many of us have done this from an unprecedented place of emotional or physical isolation.

Our children deserve an education that will prepare them to do more than work in a system based on hierarchy, racism, stress and financial inequity.

For many people of color and the communities we live and grow in, COVID-19 was another wave in a storm that has been battering our lives and the places we call home for centuries. BIPOC (Black, Indigenous, People of Color) are overly familiar with unequal healthcare, disparate health outcomes, earned mistrust of medical and other systems, and limited access to reliably good care. We have seen it all in our families, our communities and in the landscapes of the well-worn scars and wrinkles of our own bodies. We are not strangers to the fallacies and inaccessibility of the American Dream and we know too well the American nightmare.

But what now? What possibilities exist in the spaces that have arisen on the back of COVID-19, the 2020 bloom of the Black Lives Matter movement and the always-moving limbs of a Black and Brown movement that insists on liberation?

Here are 10 things that I think 2020-2021 made clear to help us move forward:

1. Black and Brown people have solutions to the world's greatest challenges. We absolutely do know how to build beautiful structures, systems and communities. We know how to grow food, raise children and heal bodies. Lack of knowledge has never been the problem; lack of freedom from White supremacist violence has.

2. Our togetherness is essential. The only thing that benefits from a failure to unite across cultural, gender and identity borders is White supremacy. Indigenous, Black and Brown immigrant bodies have every-



Youth with YUCCA and Walk the Talk at a rally demanding racial justice, an end to police killings and investment in community health, wellness and safety.
© Bianca Sopoci-Belknap

thing in common. From ancient practices to our current ways of surviving the violence of racism, we can help each other—and we must. We cannot let language or false borders stop us.

3. American healthcare is a profit-driven system with a sub-par curriculum for educating its workforce. It is structurally top-down and fails to care properly for its workers and patients. Until healthcare is driven by people (particularly people of color, non-binary folks, frontline workers and traditional healers) and not profit, we cannot depend on it to keep or make us well.

4. Our traditional ways are not just opportunities for capitalism to productize, repackage and resell at a rate that we cannot afford to use or participate in. Things like yoga, breastfeeding, shamanic work and medical marijuana are examples of this.

5. No policy that is made without input from the communities most impacted will ever be equitable or effective. We see this with the legalization of cannabis, which has created yet another opportunity for young and old White hipsters and hippies to launch “legal” careers selling weed. Black and Brown communities have used cannabis and other plant medicines for centuries and been gravely penalized for it, causing intergenerational trauma and loss. Policy that monetizes the practices of POC but doesn't free and/or compensate the people from whom the practices originate is not policy, it's racism.

6. We have opportunities to define our own well-being, and people will listen. If 2020 taught us something (and it taught us a lot), it is that when we speak in a unified and unapologetic voice, people listen. The beauty of the BLM bloom after the killing of George Floyd, is that it was international, cross-cultural and loud. We must never forget what it sounds like when we roar and what it feels like when we do it collectively.

7. Universal healthcare is a no-brainer. It is the first thing that should have come out of the pandemic. But somehow, it's still up for debate. This truth reiterates how desperately new leadership is needed in this country—proportional leadership and leadership development that offers something greater than the oh-so-binary two-party system. Universal healthcare is the first logical policy outcome after a global pandemic. The fact that we don't have this yet is a sure indicator that we don't have a “healthcare” system in America. We have something else.

8. Instead of equity, diversity and inclusion training, we need a drastic reconstruction of our systems, all of which are steeped in racism. The best folks to reconstruct are folks who think, love and live non-binaurally. The non-binary, I am learning, is less about gender and more about beingness. It is a spiritual way of thinking and being that cannot exist in a White supremacist framework. The non-binary allows for balance and flows away from hierarchy. It will not be found in the traditional Western masculine and feminine. It will more likely be found in traditional POC ways that flourished pre-colonially that still exist.

9. Love cannot replace liberation. It must fuel it. We have had a visible love movement in this country for at least five decades. It has sometimes been confused with the “hippie” or “new age” movements, but both of those important efforts have not chosen to address racism and colonialism head on, and in that choice, they have perpetuated them. Gentrification and cultural appropriation are the very real shadow sides (manifestations) of those movements and personas. We must do better. Spiritualism cannot ignore racism.

Until healthcare is driven by people and not profit, we cannot depend on it to keep or make us well.

10. It's time to decide and move forward with what we want our children to know and learn in our public

and private education systems so that we can finally give current and future generations a good education. Education driven by capitalism provides much needed daycare for working parents, homogenized socialization for young people, and a stratified workforce greatly impacted by race, class and gender. But it fails to teach multicultural traditions, non-binary thinking, artistic and spiritual craft or community practices that advance and sustain equity. Our children need and deserve an education that will prepare them to do more than work in a system based on hierarchy, racism, stress and financial inequity. They deserve an education that is rooted in the best traditions of *all* of the cultures that they are part of and will be building community with. ■

Sunshine Muse works with Black Health New Mexico (WWW.BLACKHEALTHNEWMEXICO.COM), “a resource for African-American people in New Mexico, dedicated to providing greater access to information from the N.M. Department of Health, local organizations, nonprofits and health professionals.”



Mural at Santa Fe Railway, 2021
© Seth Roffman

OP-ED: GABRIELA MARQUEZ VILLEGAS

RESILIENCIA, RESISTENCIA Y RECUPERACIÓN

Un Reto Multifacético

El acercamiento del fin de un ciclo es siempre una temporalidad pertinente de hacer balances. Les invito a revisar en este texto, no haré interpretaciones aburridas de elementos cuantitativos, tampoco juicios cualitativos acabados e inamovibles.

Este se presenta como una invitación extensiva para que todas las consideraciones individuales se discutan de manera colectiva en nuestra comunidad, el texto que se presenta a continuación es una breve intención de presentar una conexión entre tres términos esenciales: resiliencia, resistencia y recuperación.

Al final de 2020 estábamos ocupados en sobrevivir, ahora es tiempo de reflexionar pues el cúmulo de experiencias traumáticas como la pérdida de seres queridos, la falta de trabajo, los riesgos de desamparo, el encarecimiento del costo de vida no nos han vencido. Se acerca el fin de 2021 y el espíritu festivo sigue tan vivo como siempre.

Este es un análisis personal de las experiencias compartidas con sujetos reales, familias y organizaciones de trabajo comunitario, una expresión de cómo hemos vencido a la adversidad. Somos capaces gracias al legado de aquellos que no brindarán el 31 de Diciembre al son de las campanadas, de nuestros esfuerzos que nos mantienen de pie. Estamos obligados de manera natural a ser felices, las sonrisas de los niños nos lo recuerdan y sus voces despiertan nuestra conciencia de golpe.

Cambiamos nuestra vida, la forma de socializar, la manera de saludarnos y todo ello condujo a un inevitable cambio interno, veo que somos capaces de hablar de nuestra manera de vivir llamada “la nueva normalidad.” Actualmente nadie evade el tema y es porque hemos creado valores dentro de la dificultad, hemos dado significado a ese valor que no entendíamos hace muy poco, la resiliencia.

Entendiendo la resiliencia como el valor como lo que queda cuando los eventos traumáticos se enfrentan, de la capacidad de salir fortalecidos de nuestros retos y miedos, sin importar la edad, todos hemos crecido.

He visto en este tiempo darnos la mano unos a otros y he escuchado la imperativa necesidad de justicia al decir “Black Lives Matter,” ello habla de la riqueza cultural, de la diversidad que nos

caracteriza. Hemos aprendido que las diferencias de raza, edad, sexo nos hacen fuertes, que aceptar a otro humano por ser humano nos hace mejores.

Este valor que ahora vivimos nos faculta para usar diferentes foros, plataformas y espacios para exponer nuestras ideas. La resiliencia no nos ciega sino que da poder de defender otros valores que se han negociado por ya cientos de años, cuyos cambios no han sido sustanciales. Entonces puedo decir sin temor a equivocarme también que el nuevo normal incluye un cambio social, que el uso del cubrebocas no silencia nuestras necesidades y pensamientos ulteriores.

Entiendo y vivo que no todos necesitamos lo mismo, infiero que la resiliencia no borra las inequidades sociales, percibo con claridad una sociedad compleja, una realidad que tenemos que interpretar caleidoscópicamente. Mi punto de vista no es el único sino uno más, he aquí otra invitación a enriquecer pero no desde el punto amable, educado y positivo que me llenan de aplausos con el que todos salimos siendo amigos para que en consecuencia nada cambie.

A lo anterior lo quisiera llamar más bien un desafío, usted es capaz de interpretar las actitudes (positivas vs negativas), la información (estadísticas, noticias, discursos y realidades) y la representación (las fuentes de donde emana la información). Todo lo anterior hay que revisarlo junto con su realidad y decirme: ¿Cómo se vive desde su perspectiva? ¿Qué tan coherente le suena?, ¿En qué difiere?, ¿Qué le une a mi punto de vista?

Si usted está pensando en que le estoy invitando a resistir está totalmente en lo correcto, resistir es el verdadero ejercicio democrático creativo que nos permitirá reinventarnos para vivir la realidad que queremos, la que responde a nuestras necesidades, anhelos y que está en concordancia con las acciones productivas diarias.

Aquí hay algunas preguntas para elicitación su participación:

- ¿Es usted un trabajador esencial?
- ¿Tiene igual de obligaciones que de beneficios?
- ¿Le causa temor cuidar de su familia y salud por su trabajo?
- ¿Se siente respetado, bien remunerado y valorado?
- ¿Siente que sus ideas están incluidas?
- ¿Puede solventar los gastos de vivienda, salud, educación y recreación sin depender de nadie?

Ahora dígame si nadie le ha rechazado, ignorado o abusado en base a su origen, nacionalidad, género, preferencia sexual, edad, religión, posición política, estatus legal, nivel educativo, lenguaje u otro factor que le defina a usted como persona.

¿Ahora dígame si en su opinión hay justicia en este sistema social y económico? ¿Qué le hace pensar de tal manera?

Su resiliencia – resistencia son como verso y anverso de la misma moneda, las dificultades nos hacen tomar conciencia, éstas nos transforman para ser capaces de enfrentar esas inequidades, esas injusticias sociales que usted enunciará, pero que sin duda existen.

Defina esa realidad tan suya que nadie puede exponer por usted, visualice una realidad nueva, más justa. Sea sumamente humano conectándose con otros para recuperar el rumbo de una sociedad en la que todos estamos juntos, y si no es pedir mucho disfrute el proceso y sea feliz.

RESILIENCE, RESISTANCE AND RECOVERY

A Multidimensional Challenge

As the end of a cycle approaches, it is always a good time for reflection. At the end of 2020, we were busy surviving. Now, at the end of 2021, it is time to reflect on our accumulated traumatic experiences such as the loss of loved ones, job losses, the likelihood of homelessness and the increasing cost of living.



Young activists in Earth Care's programs sharing stories.

Challenges such as these have not overcome us. As I write this, the holiday spirit is as alive as ever. I am writing based on shared experiences with real people, families and community organizations, to express how we can overcome adversity. I invite our community—individually and collectively—to consider the interrelationship of three essential terms: resilience, resistance and recovery.

We are capable of talking about our trauma openly, bolstered by the legacy of those who will not be here to toast at the sound of clock bells on Dec. 31. We are naturally obligated to be happy. Children's smiles remind us of this and their voices awaken our conscience. Our efforts keep us standing.

We talk about our “new normal.” We have changed the way we socialize, the way we greet each other and our style of living. This has led to an intrinsic change. We have created values within the adversity. We have given meaning to that which, until recently, was incomprehensible.

Resilience is the value that remains when traumatic events are faced. We have demonstrated the ability to emerge stronger from our challenges and fears, regardless of age. I have seen so much awakening as people have given others a hand.

This past year, we were forcefully reminded that “Black Lives Matter,” something so obvious, but denied historically. The richness of diversity; differences of race, age and sex make us stronger. We are fully human only when we truly accept another human.

Resilience does not erase social inequities. Our resilience gives us the power to defend other positive intrinsic values that have been suppressed for hundreds of years. The new normal includes social change. The use of a face mask does not silence our ulterior thoughts and needs. This value we have discovered has empowered us to use different forums and platforms to present our ideas.

I understand that some of us have different needs. Modern society is complex and there are many ways to interpret it. My point of view is but one of many. I offer this as an invitation to enrich our perspectives, but not just as a polite suggestion in which we all leave as friends, and as a result, nothing really changes.

Rather, I am offering these ideas as a challenge to be considered in relation to positive and negative attitudes and assumptions, and the news, information and opinions we receive from various sources. All of this must be reviewed together, in contrast with your reality. From your perspective, how coherent does it sound? How does it differ from how you live? How does your point of view tie in with mine?

If you are thinking that I am inviting you to resist some of the social expectations and conditioning we experience in our everyday lives, you are correct. Resisting is the only true creative democratic exercise that will allow us to recover ourselves so we can live the reality that we want, one that responds to our needs, desires, and is in concordance with all of our daily productive actions.

Here are some questions to elicit your participation:

- Are you an essential worker?
- Do you benefit to some extent from your responsibilities?
- Are you unable to adequately take care of your family needs and/or health because of your work and bills?
- Do you feel respected, valued and well paid?
- Do you feel that your ideas are included and represented in your work?
- Can you afford housing, health, education and recreation without depending on someone else?
- Has anyone rejected, ignored or abused you based on your origin, nationality, gender, sexual preference, age, religion, political position, legal status, educational level, language or any other factor that defines you as a person?
- In your opinion, is there justice in this social and economic system? What makes you think the way you do about this?

Resilience and resistance are contradictory yet interrelated elements. The difficulties we must confront can make us aware and then transform us so that we can face and call out the inequities and social injustices that continue to exist.

Define the reality that only you know. No one else can explain it because it belongs only to you. Then, visualize a new, more just reality. Connect with others to change the direction of society to a more dignified one in which we are all together, without losing our own identity. Lastly, if it's not too much to ask, enjoy the process and be happy. ■

Gabriela Marquez Villegas was born in Chihuahua, México. She taught in public schools for many years and has been a mentoring teacher and research consultant in private practice. She completed bilingual certification at Northern New Mexico College and currently works with Earth Care's Plaza Comunitaria to provide basic adult education and promote community involvement for southside Santa Fe residents.



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Acequias Brace for a Future of Water Scarcity

BY PAULA GARCÍA

The year 2021 started with a dismal outlook for spring runoff. Light snowpack promised little snowmelt. In May, the U.S. Drought Monitor showed that 99.37 percent of New Mexico was in severe to exceptional drought. Acequia leaders prepared for a difficult irrigation season. In some communities, the low runoff prompted water-sharing agreements between acequias. Many farmers and ranchers adjusted their operations.

Because acequias depend on surface water, they are uniquely vulnerable to changes in snowmelt and runoff.

Almost as an answer to many prayers, monsoon rains started in the early summer. They protected us from a potentially catastrophic wildfire season and the worst impacts of drought. In the short term, these rains enabled many

acequia *parciantes* to have a hay crop, grow their gardens, sustain their orchards, and breathe a sigh of relief to make it through another growing season.

During this time, the New Mexico Acequia Association (NMAA) was able to convene important discussions about the future of acequias that will be impacted by ongoing drought, uncertain precipitation and extreme weather events, all of which are related to climate change. One gathering focused on “Acequias and Megadrought,” and included dialogue among acequia leaders regarding both historic and current practices of water-sharing.

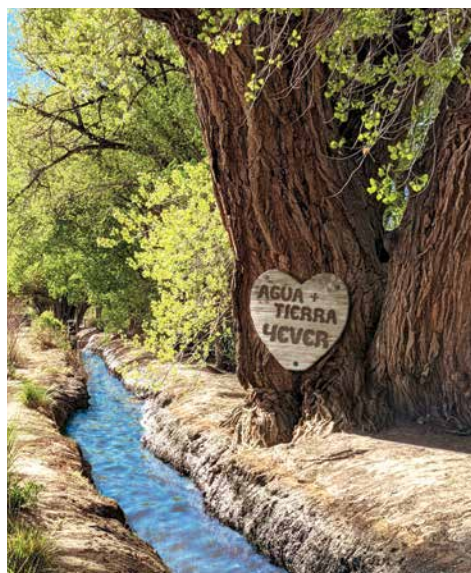
Drought affects the supply of “wet” (as opposed to on paper) water that is available in any given year or over a period of time. Because acequias depend on surface water, they are uniquely vulnerable to changes in snowmelt and runoff. Centuries of variable supplies have resulted in a degree of resilience because of customs and traditions of water-sharing (*repartimiento*). A recent study by New Mexico State University notes that the “acequia footprint” illustrates resiliency because the extent of land that is irrigated expands or contracts based on the supply of wet water.

In several communities, acequias are tenacious about sharing scarce water, creating rotations and shorter cycles with ever-smaller allocations until the water completely dries up. The question we face about climate change is the extent to which acequias maintain viability through water-sharing and at what point should communities expect and plan for dry riverbeds. In a survey in 2020 of about 20 leaders who are instrumental in water-sharing agreements, some described their traditions in detail and noted that they managed to get through the year with shared sacrifices. A few had more dire reports, including testimonials that “there was no water to share.”

At the gathering on Megadrought and Acequias, *mayordomos* and commissioners provided information about specific methods of water-sharing. The following three narratives summarize local acequia customs.

Don Bustos, commissioner, Acequia del Llano, Santa Cruz, N.M.

Don Bustos explained the importance of the *mayordomo* having an intimate knowledge of the acequia, which he established by growing up in and along the llano. He described their method of sharing water by dividing the ditch into three sections and irrigating only one section per day (depending on how water is released from the Santa Cruz dam). He emphasized the value of regular communication and commission meetings, walking the acequia, checking headgates and resolving main-



Top: Congresswoman Teresa Leger Fernández looks out on the Río Chama and Abeyta-Trujillo Acequia diversion. (Photo: Sen. Leo Jaramillo); a dry acequia diversion in Taos (© Seth Roffman); Acequia Day, N.M. Capitol, 2020 (© Seth Roffman); NMAA 2021 art competition winner, a digitally altered image by Yasmeen Najmi of Albuquerque; Beata Tsosie and son at the Roundhouse, Santa Fe (© Seth Roffman); acequias in two seasons (courtesy, NMAA)

tenance issues. On this ditch, everyone has to call the mayordomo to get water. In times of shortage, his acequia first prioritizes the use of gardens, pastures and orchards—and then lawns and landscaping. “We are telling people, ‘Just use what you need,’ and urging the importance of everyone getting some water.”

Bustos said that our limited water supply is “the new normal” and reflected on how his ancestors had found a way to ensure every irrigator had water to survive. He listed current challenges in the management of the water, including newcomers who have a legalistic view of the system and do not understand that their paper water right does not translate to full wet-water irrigation; encroachment from the City of Española; and developments in the foothills above the acequia that do not have a drainage system and contaminate the ditch with runoff. Finally, he emphasized the importance of regional water-sharing among acequias that was facilitated by the Santa Cruz Irrigation District during the spring and the irrigators’ ability to work together in a peaceful way during times of hardship.

Phil and Sylvia Villarreal, mayordomo and commissioner, Acequia de los Chupaderos, Chupadero, N.M.

“My responsibility is to make sure that the water is circulated in the valley. We handle it upon demand,” remarked Phil Villareal, mayordomo on Acequia de los Chupaderos. Villareal said that the determination of how much water *parciantes* get is based on what is available in the river and on the demands from other *parciantes*. He noted that not all *parciantes* are actively engaged in the acequia, though everyone is encouraged to irrigate. Their acequia is impacted by the Aamodt adjudication, and they have to submit reports every spring, “showing who is using it, and we have to account for every drop that goes through our metering system. It is getting very legalistic.”

Acequias are tenacious about sharing scarce water, creating rotations and shorter cycles with ever-smaller allocations.

Sylvia Villarreal, Phil’s wife and an acequia commissioner, noted that an additional challenge they face is people new to the area who do not understand the practice of water-sharing and being fair to all in the community, and are creating gardens larger than can be supported by the meager water supply. Phil said, “It is hard to keep everyone happy.” A victory for this team has been working to revitalize acequias in their area, including breaking ground to create infrastructure repairs for which they have received state funding. The impetus to do the work was the Aamodt adjudication.

Corazón y Querencia Declaration

Acequias Respond to the Water and Climate Crisis

Adopted at the Congreso de las Acequias, Dec. 4, 2021

The New Mexico Acequia Association’s (NMAA) theme for 2021, *Corazón y Querencia*, is rooted in love, which is the most potent force for survival and resilience for our families and communities in the years to come. Drought, climate change and the global pandemic have reminded us of our interconnectedness both locally and globally. We believe in the power of building stronger communities through cooperation, sharing and mutual understanding.

Acequias have been caretakers of water for centuries in New Mexico. For nearly four decades, acequias have mobilized to protect water from commodification through protests of water transfers and by strengthening acequia governance. Our communities are confronting an urgent existential crisis that must be addressed on multiple levels:

- 1) The **water crisis** has been underway for decades, prompted in part by climate change and drought, but also by water policy decisions. For more than two generations, acequias have sounded the alarm about an impending water crisis resulting from over-appropriation of water, unsustainable and inequitable management of our water resources based on water markets, water transfers out of agriculture to other uses, and irreversible depletion of finite groundwater.
- 2) The **climate crisis** has increased the urgency to be exemplary caretakers of our watersheds, rivers, acequias and farmland, to reaffirm customs and traditions of water sharing, i.e.: the *repartimiento*, as well as to re-localize our food systems with native and landrace seeds, healthy soils, resilient and dynamic herds of livestock and regenerative agricultural practices.
- 3) The **economic crisis**, driven by unprecedented wealth inequality, manifests in our communities as gentrification, development patterns that cannot be sustained in an arid environment, underinvestment in rural community development and infrastructure, and food and agriculture policy that undermines small-scale farmers. The most immediate impact for acequias is the commodification of water driving the movement of water out of agriculture to extractive industries, water speculation, land development speculation, as well as luxury resorts and hunting lodges for the extremely wealthy.

Core Values

Guided by our core values, acequia *parciantes*, families and neighbors will strive to work together, not only survive multiple levels of crisis but to strengthen our communities. We resolve to build and sustain relationships based on *respeto* (respect) in which we treat each other with dignity. As acequias, water sharing customs and traditions, known as the *repartimiento*, are central to our culture and our identity. Likewise, *mutualismo*, characterized by relationships of mutual aid, democratic decisions and collective management of resources, is a core value deeply rooted in acequia history and culture. The core value of solidarity compels us to work with multiple movements for social, economic and environmental justice.

Acequias and the Way Forward: Actions for 2022

Water Sharing Agreements: The *repartimiento* tradition, as we define it for our present time, is the practice of sharing water within acequias and between acequias. As long-term megadrought and climate change intensify, communities have to prepare for less snowpack, less runoff and less predictable precipitation. In 2022, the NMAA invites acequias to engage in a local dialogue to affirm values and customs of water sharing and to update and reinvent customary practices during this era of climate-change when adaptations are necessary.

Water as a Community Resource vs. Commodification: Acequias have been on the front line of challenging the commodification of water for over a century in

New Mexico. In 2022, NMAA will continue to support acequias in filing protests of water transfers, to build capacity to exert decisions over proposed water transfers out of acequias, and to organize a base in communities to defend water as a community resource.

Infrastructure and Disaster Preparedness: Generations of acequia parciantes have built and maintained acequia infrastructure. NMAA remains committed to supporting local acequias securing resources for improvements to infrastructure and to advocating for climate-resilience in planning and design of irrigation works. Acequias must remain vigilant to disasters such as fires and floods and will need support to prepare for disasters and to navigate emergency management and disaster recovery.

Care for our Watersheds and Aquifers: Our watersheds, rivers and aquifers are interconnected. Efforts to improve the health of our watersheds must be increased by an order of magnitude to reduce the threat of catastrophic wildfire. Acequia leaders can be valuable partners in planning watershed restoration projects with soil and water conservation districts and other partners. Likewise, acequias have a role in protecting aquifers from groundwater depletion. It is vital that stronger conjunctive management be implemented in New Mexico to ensure that aquifers can be sustained for future generations. The acequia landscape, our waterways and farmland, which contribute to aquifer recharge, must be protected through various regulatory and legal tools.

Clean Water for Drinking, Growing Food, Wildlife and Ceremonies: Climate-change induced water scarcity will likely exacerbate water quality problems in our streams and rivers. Pollution from industries, municipalities, weapons laboratories and ski areas continues to be a concern because of detriment to water supplies, including surface waters used for irrigation. NMAA will continue to partner with advocates and community leaders in defending water from contamination and will work toward a regulatory framework that is effective in achieving clean water for our communities and future generations.

Food and Seed Sovereignty: Growing food and raising livestock are central to acequia continuity for centuries past and future. Re-localizing our food systems includes all the necessary work of protecting land and water as well as saving, protecting, and propagating native and landrace seeds. Our communities need a more robust support system for acequia-scale farming and ranching that includes paid training and apprenticeship opportunities, assistance with purchasing and using equipment, food system infrastructure for aggregation, storage, and distribution, and community support in providing a vibrant local market. We can build upon programs that incentivize making fresh, locally grown food affordable and available to the most vulnerable in our communities.

Land: In New Mexico, a tiny fraction of land is arable, and these irrigated lands hold the promise of food sovereignty. Irrigated lands used for farmland and pasture are vulnerable to economic forces driving subdivision and development. All lands, including rangelands, are vulnerable to soil erosion, which will be exacerbated by climate change. Major investment of resources from the state and federal level for conservation programs is needed to restore the health of our landscape and to build healthy soils that support food systems and sequester carbon. It is imperative to people who wish to farm with people willing to lease or lend their land to be used for growing food. Acequias will continue to work with land grants to gain more recognition and protection for traditional land uses.

Youth Education and Leadership. Younger generations are inheriting a land vastly different from that known by our parents and grandparents. We are in a time of reckoning when we will be assessing our efforts to protect our land and water, gleaning our lessons learned, and supporting youth in taking on leadership roles in our movement. In 2022, NMAA will support existing youth projects, encourage networking between youth leaders, and incorporate youth leaders into NMAA projects, programs and governance. Additionally, NMAA will collaborate with partners to develop curriculum inclusive of acequias and land grants for use by schools and organizations.

Organizing and Popular Education: For over three decades, the NMAA has been engaged as a grassroots organization to protect water and strengthen acequia agriculture. NMAA includes elders with deep roots in social justice and the civil rights movement. The dual climate and economic crises that we confront require us to learn from our past work to organize in our communities and to strengthen our efforts to build a grassroots base so that we can act in our collective interests. Our methods will be to embrace popular education methods and to involve youth in key roles in community organizing. ■

cation process and the need for better irrigation efficiency. They noted that 2021 has been a hard year, including being separated from one another because of COVID-19, but many lessons have been learned.

Harold Trujillo, commissioner, Acequia de la Isla, Ledoux, N.M.

Harold Trujillo explained that there are two acequias sharing water from Morphy Lake on a 40/60 basis. The two commission presidents of the acequias maintain control of the outlet gate and they have to be very careful how much they open the gate, as “we have a very tight schedule.” If the headgate is opened too wide, they will rapidly drain the lake and thus not be able to make it through the irrigation season. The challenge for mayordomos, he said, is when everyone wants to irrigate and there is a shortage of water. The two acequias have always been a joint operation and have managed the water successfully. Issues have arisen when parciantes pressure their mayordomo for more water.

Trujillo also shared the story of how Morphy Lake was built by local families, starting in the 1880s and building up the embankments until 1940. “It took the cooperation of the community for all those years. It was a long-term commitment.” The acequias also lease Morphy Lake water to the U.S. Fish and Wildlife Service, which gives them annual revenue. He also reminded us of the value of the foresight, collaboration and hard work of our ancestors.

While history is a guide for local acequias, new challenges include institutional requirements related to water administration by the state, as in the case of Aamodt. It is clear that acequia mayordomos and commissioners have important roles that are rooted in ancient customs, but they also need to be prepared to deal with modern and unprecedented challenges. Acequias face many uncertainties. Forecasters predict that La Niña, a Pacific Ocean weather pattern, will cause drier-than-normal conditions in the Southwest through the winter and spring in 2022. This is a story that continues to unfold, and we will continue to learn as our communities work to adapt and survive. ■



Paula García is executive director of the New Mexico Acequia Association. [HTTPS://LASACEQUIAS.ORG](https://LASACEQUIAS.ORG)

NM Environmental Law Center's Top-10 Environmental Justice Issues For 2022

BY NMELC STAFF

For the last four years in *Green Fire Times*, the New Mexico Environmental Law Center has shared our perspective on the top environmental issues to watch in the coming year. Three of those years focused on the gutting of environmental safeguards by the Trump administration; last year we reflected glimmers of hope, both on the national and the state levels, regarding environmental protection. A year later, we again take stock of efforts to hold both regulating agencies as well as industry and polluters accountable for contamination of air, lands and water. Here are our top-10 environmental justice issues for 2022.



1. The Climate Crisis

As we have been repeatedly reminded by young leaders and other environmental justice-focused organizations, we must have a greater sense of urgency regarding the global climate crisis. Simply put, we are running out of time. On the minds of many is the goal to drastically reduce how much carbon is released into the atmosphere, and that target date is now only eight years away. The time for

incremental change is past. Reductions of greenhouse gas emissions that target 2050 are too little, too late. Targets that only get us to 50 percent reduction by 2030 are also completely inadequate. The state must provide adequate staff and sustainable funding resources to create a rigorous system of emissions mitigation and monitoring across the state.

We must make the tough choices now in order to prevent the worst scenarios: sea-level rise; more frequent abnormally high or low temperatures; more frequent violent storms and the ensuing catastrophic damage to people, cultures and entire nations; more frequent and hotter wildfires; and mega-drought. New Mexico is particularly vulnerable to drought, heat (higher temperatures and warmer weather starting earlier and extending later) and impacts to agriculture. Along with facing the climate crisis head-on, we must adhere to climate-justice demands for a just transition by addressing lost jobs and revenue in fossil fuel industries. Environmentally conscious groups such as YUCCA propose that funding to help displaced workers transition into green jobs in renewable energy or environmental cleanup come from the oil and gas industry that

knowingly drove global warming without taking its foot off the gas in spite of what climate scientists have been telling us for 30 years. We urge elected officials to make the tough choices we need in order for the planet to be livable for current and future generations.

Nuclear energy relies on uranium; it is not clean energy and thus is not a solution to the climate crisis.

2. Water Conservation

According to the U.S. Drought Monitor, 2021 started out with the entire state in some degree of drought condition, and more than half of the state experiencing exceptional drought. Exceptional drought leads to major rivers, such as the Río Grande, running dry during part of the year, which has a detrimental impact on wildlife, migratory species and aquatic life. Farmers and irrigators that depend on acequias were forced to irrigate less often as well as to stop irrigating crops earlier this past fall. As Santiago Maestas



from the South Valley Regional Association of Acequias said, "Given the difficult water supply conditions and the need to minimize the N.M. debt to Texas under the Río Grande Compact, the N.M. Interstate Stream Commission requested the Middle Río Grande Conservancy District Board of Directors consider ending irrigation season at the beginning of October. A special MRGCD board meeting was held on Aug. 20, and the board voted to end the irrigation season on Oct. 1, 2021." That is a month earlier than normal and is the second straight year of early cutoffs. As the Interstate

Stream Commission develops its 50-year water plan, it faces the challenge of not knowing the timing of monsoon rains or the frequency of precipitation events in the future due to climate change. New Mexico's current hydrologic reality must be considered when making any decisions related to the use of limited water supplies across the state.

3. Equity & Racial Justice

If we are advocating for true equity and justice, we must always center the people most impacted by toxic and polluting industries. This entails holding accountable the local, state and federal government agencies that fail to adequately regulate industries. We must name environmental racism when we see it, especially within and across the environmental and conservation movements. Equity and racial justice take more than offering a workshop on Diversity, Equity and Inclusion (DEI) or holding EJ listening sessions for community members. Equity cannot be merely performative or a simple checking off the box. There needs to be fundamental and structural change



across the board in how air pollution permits are issued, where polluting industries are sited, how hearings are conducted, how community members are treated by gatekeepers, and deciding who is at the table when policy discussions are held and bills are drafted.

There needs to be a recognition that becoming a more equitable society is a lifelong process, if we are going to disrupt systemic inequity and dismantle White supremacy and institutional racism.

Oil and gas production is the elephant in the room in N.M. Elected officials have made a deal with the toxic devil.

4. Asphalt Plant Proliferation

Communities already disproportionately affected by air pollution across N.M. are seeing an alarming increase in the number of asphalt plants applying to conduct operations in their communities. In Albuquerque's South



Valley, the Mountain View community has been forced to host two asphalt plants and is faced with applications

for three more. In south Santa Fe, the N.M. Environment Department rubber-stamped an application for an existing plant to expand operations. This uptick in air pollution permit applications appears to be part of a trend throughout the U.S.—from Flint, Michigan, to Houston, Texas, and beyond—likely in response to the recently passed federal infrastructure law.

While our state's need for improved infrastructure is real and pressing, infrastructure development cannot come at the expense of low-income communities and communities of color. Asphalt plants emit a toxic soup of pollutants, including benzene (a well-established carcinogen), fine particulates (known to cause a range of respiratory diseases) and ozone precursors. (Ozone also contributes to a large number of respiratory conditions.) Communities already overburdened by air pollution should not be forced to continue to bear an unfair proportion of pollution for our state's infrastructure development. One way to address this proliferation is for the state and local governments to adopt cumulative impact regulations that would prevent the permitting of additional pollution sources in neighborhoods already disproportionately impacted by emissions. New Jersey has set the stage on how other communities can implement a statewide cumulative impacts regulation.

5. Uranium Mining and Processing

In-situ leach uranium mining threatens precious aquifers that provide drinking water to thousands of Indigenous community members on the Navajo Nation, especially in Crownpoint. No in-situ leaching (ISL) mining operation has ever restored groundwater conditions



to their natural state after leaching operations have ceased. Uranium mining for the development of nuclear weapons is currently being incentivized under proposals to expand the Strategic Uranium Reserve. The continued uranium mining on the Navajo Nation, which harbors a disproportionate amount of uranium waste,

including 520 abandoned mines and three mills, which are Superfund sites, is a clear example of environmental racism. These abandoned sites have contaminated billions of gallons of groundwater and countless acres of land and are the cause of significant illnesses and death in nearby Indigenous communities.

According to Dr. Loretta Christensen, a recent study found that over 36 percent of Diné men and 26 percent of Diné women were found to have high concentrations of uranium in their urine, and some babies are being born with high concentrations as well. These children have slower development and face a higher risk of autism spectrum disorders. This is completely unacceptable and a form of genocide. Nuclear energy relies on uranium; it is not clean energy and thus is not a

Environmental issues must be given the highest priority for policy makers if we are to ensure life will continue on our planet.

There needs to be fundamental and structural change across the board.



solution to the climate crisis.

Eastern Navajo Diné Against Uranium Mining (ENDAUM) has been fighting against ISL mining for decades, and the Inter-American Commission on Human Rights is expected to hold a hearing on their complaint against

This moment demands we undergo a fundamental shift in our economic system from profit-driven resource extraction to sustainable ways of living.

the United States for licensing uranium mining activities in Crownpoint and Churchrock sometime in the spring of 2022. NMEIC has represented ENDAUM on this important case for more than 20 years.

6. Oil and Gas Emissions

Oil and gas production is the elephant in the room in N.M. Elected officials have made a deal with the toxic devil, forming too strong a dependence on fossil fuel revenue to fund state programs including education and health and human services. In 2020, oil and gas revenues made up over a third of the state budget, \$2.6 billion. Oil and gas production in N.M. broke records in 2020, especially in the Permian Basin in the southeast corner of the state. The additional revenue for the state comes with more emissions. According to the N.M. Environment Department, methane gas levels have nearly doubled over the past three years. Eight counties—Eddy, San Juan, Chaves, Río Arriba, Bernalillo, and Doña Ana—have elevated ozone levels.

Oil and gas producers should be held accountable for greenhouse gas emissions that contribute to global warming and fuel the climate crisis. Proposed rules would limit emissions from operations in N.M. by requiring companies to detect and repair leaks that are responsible for 70 percent of state emissions of methane, as well as control other pollution sources. Leaks from oil and gas operations harm the health of residents and workers. Not only must decision-makers adopt dramatically stronger regulations on the industry to protect health and mitigate the worst effects of climate change, but most critically, oil and gas must be kept in the ground if we want to achieve national and global environmental goals.



7. Urban Sprawl

Urban sprawl is the rapid expansion of poorly planned, low-density, and car-dependent cities and towns over large areas.

In N.M., urban sprawl poses a grave threat to dwindling water supplies.

The typical low-density or suburban community uses more water than a high-density city community does because water is used for outdoor landscaping for residential homes. Other

negative effects of urban sprawl are loss of wildlife habitat, recreational public and open spaces and health risks associated with increased air pollution that occurs from longer and more frequent commutes to areas of new sprawl development. Green spaces are needed because trees offer fresh air and cooler temperatures within urban communities.

Sprawl also aggravates global warming by forcing people to drive. Rather than encouraging vibrant communities where necessities such as grocery stores, medical care and retail shops are a short walk or bicycle trip away, sprawl forces people to drive, often long distances, for these necessities, resulting in increased carbon emissions and emissions of other hazardous pollutants.

Without comprehensive planning that consults and plans with surrounding communities to leverage existing resources, proposed projects such as Santolina on Albuquerque's West Side could result in poorly planned developments occurring on the outskirts of urban centers. Studies have also shown that urban sprawl leads to racial segregation as people of color are often left behind in the poorest parts of a region where schools are often overcrowded and underfunded. With water availability now at crisis levels in our state, we simply cannot afford the high costs of irresponsible sprawl development. Predictions of water availability

over the next 50 years must directly connect to land-use decisions.



8. Hydrogen Produced from Fossil Fuels

Gov. Michelle Lujan Grisham has stated that creating a hydrogen hub in N.M. will be her signature priority for the 2022 legislative session. This is despite the outcry from environmental groups including NMELC that argue that hydrogen

as a fuel source is another false solution to the climate crisis as it will merely continue our reliance on carbon-emitting fossil fuel energy. According to a new report by Cornell and Stanford University, researchers say “green” or “blue” hydrogen may not be better for the climate and may be potentially worse than continuing to use fossil fuel natural gas. Green hydrogen is derived from water using renewable-powered electrolysis; blue hydrogen is derived from methane and requires carbon capture and sequestration (CCS) technology to reduce the release of carbon into the atmosphere. Gray hydrogen—the most commonly produced form today—is made from methane without using CCS, resulting in an even higher emissions footprint.

Our governor is surely motivated by the federal funding for hydrogen development that is being dangled to states to incentivize/subsidize the hydrogen industry. If the governor's legislation is approved, N.M. could potentially become one of four hydrogen hubs in the region. The “Hydrogen Hub Act” in 2022 is a bid to attract money from the Department of Energy, but investing in hydrogen production has risks. The state must weigh the long-term financial prospects with the risks of blue and green hydrogen, which fuel a market that will result in further emissions that would increase rather than decrease global warming.

The International Energy Agency reports that 96 percent of hydrogen produced worldwide is made using fossil fuels—coal, oil and natural gas. New Mexico's first investment priority

should be renewable energy sources such as wind and solar development as well as technology that spurs energy-efficiency, not a hydrogen hub that would only delay our transition away from fossil fuels.

9. Nuclear Waste

New Mexico has been disproportionately impacted by the nuclear industry since the 1940s, when the Manhattan Project was sited in Los Alamos. Between uranium mining,



We simply cannot afford the high costs of irresponsible sprawl development.

nuclear bomb-making, the Trinity Test, the radioactive waste accident at Churchrock in 1979, the nuclear arsenal at Kirtland Air Force Base, contamination of canyons and waters on Pueblo lands downstream of Los Alamos National Labs (LANL), and the Mixed Waste Landfill managed by Sandia National Labs in Albuquerque, N.M. has been designated an unwilling sacrifice zone for decades. The Waste Isolation Pilot Plant (WIPP), the world's only underground nuclear waste dump, was sited in N.M. between Carlsbad and Hobbs to store transuranic waste for 10,000 years. It was supposed to stop taking shipments in 2024, but now the N.M. Environment Department has permitted WIPP to continue construction of a new shaft that will enable additional shipments with no end date. Southwest Research and Information Center (SRIC) and Concerned Citizens for Nuclear Safety have appealed the decision. Scott Kovac from Nuclear Watch N.M. said that WIPP is being equipped to take in waste that will be produced during plutonium pit manufacturing for nuclear warheads at LANL.

LANL has expanded its operations in Santa Fe and plans to produce 30 plutonium pits per year. According to Nuclear Watch N.M., the Pentagon has called expanded plutonium pit production the number one issue in its planned \$1.7-trillion, 30-year so-called “modernization” of U.S. nuclear forces. This expansion is unnecessary, extremely dangerous, and puts New Mexicans' health at risk.

Another threat to N.M. from nuclear waste is from spent fuel rods currently stored at dozens of nuclear power plants across the U.S. Holtec International has applied for a permit from the Nuclear Regulatory Commission (NRC) to transport and “temporarily” store (for up to 120 years) high-level radioactive waste in spent nuclear fuel rods in a site it proposes to build near WIPP. Holtec is partnering with the Eddy Lea Energy Alliance (ELEA), which considers the Centralized Interim Storage proposal as economic development.

However, N.M.'s governor, senators, two of its three members of Congress and the state land commissioner have all written letters in opposition to the Holtec site, and the state attorney general has filed a lawsuit against the NRC seeking to halt the project. The complaint says that the NRC is “acting beyond the scope of its authority and that the interim storage facility will jeopardize the state's water resources and agricultural interests and shift to the state and local governments the enormously expensive job of training and equipping first-responders for up to 120 years to deal with any mishap that occurs as a result of the NRC's untested and unauthorized plan.” The governor has called the Holtec project “economic malfeasance” due to the threat high-level nuclear waste would pose to oil and gas production in the Permian Basin. The NRC is expected to issue its final decision on Holtec's permit in 2022. Meanwhile, a public comment period ends on March 4, regarding consent-based siting of spent fuel storage. Sample comments are forthcoming per Nuclear Watch New Mexico.

10. Money in Electoral Politics

Discussions of environmental justice issues cannot exclude the insidious and damaging influence of money in our electoral system, both nationally and locally. We see climate change mitigation projects being held hostage by one U.S. senator who is deeply invested in the coal industry in West Virginia. We see it in N.M. when state senators on powerful committees let strong environmental bills die without even being put up for a discussion and a vote. Campaign contributions to N.M. candidates from oil and gas producers are part of the public record. The stranglehold the oil and gas industry has on our electoral

politics must be broken. Voters must educate themselves about where candidates get their funding. Money talks.

For example, strong bills like the Green Amendment, which would “secure a constitutional right to pure water, clean air and a stable climate and healthy environment for all people, including future generations, regardless of race, ethnicity, religion or income,” should pass the Legislature in 2022 and go on the ballot for N.M. voters to decide on. We don’t want to see bills that would urgently address the most pressing environmental justice issues of our time get bogged down again like last year in the legislative process due to a handful of powerful legislators who are representing fossil fuel interests instead of the constituents they took an oath to represent.

Nationally, we recognize that the Biden administration has made strides toward incorporating environmental-justice principles in federal agencies. However, this commitment must translate beyond holding EJ community meetings that listen to frontline community members and show up in actual policies and meaningful regulation by agencies such as the EPA and at the Department of the Interior. There are signs of hope with the proposed ban on new oil drilling permits on federal lands and the buffer zone around Chaco Canyon, but EPA has to stop hamstringing impacted communities from resisting sources of toxic and hazardous contamination of the places they live, work, play and pray.

Broadly speaking, environmental issues must be given the highest priority for policy makers if we are to ensure human life will continue on our planet. We are facing unprecedented existential threats. We must step back and look at the bigger picture of how the decisions we make today will impact current and future generations. This moment demands we undergo a fundamental shift in our economic system from profit-driven resource extraction to sustainable ways of living, including valuing traditional knowledge of Indigenous peoples. We owe it to those who come after us to not destroy and make unlivable this planet we call home. ■



For over 34 years, the NMELC has been working alongside the most impacted communities to protect our environment; defend everyone’s fundamental right to clean air, land and water; and to fight to uphold environmental justice across the state.

From battling the toxic legacy of uranium mining, to holding government agencies and decision-makers accountable, to standing alongside clients in defending limited water resources and fighting for clean air on behalf of clients, NMELC is working tirelessly at providing free to very low-cost legal services to those who need it most—frontline and fenceline communities who bear the brunt of pollution and environmental degradation.

For more information about the NMELC, please visit [HTTPS://NMELC.ORG/](https://nmelc.org/), like NMELC’s Facebook page, follow the organization on Twitter and/or Instagram. You can sign up to receive biweekly eblasts.

Also, consider supporting NMELC’s work with a tax-deductible donation, online at [HTTPS://NMELC.ORG/DONATIONS/](https://nmelc.org/donations/) or send a check to 1405 Luisa Street, Suite 5, Santa Fe, N.M. 87505. You can contact the law center at (505) 989-9022 or NMELC@NMELC.ORG.

OP-ED: JOSUE DE LUNA NAVARRO

PEOPLE-POWERED: THE CASE FOR RENEWABLE ENERGY DEMOCRACY

Climate change has made the need for decarbonizing our economy a priority. By passing the Energy Transition Act (ETA), New Mexico joined a growing number of states that have enacted legislation requiring 100 percent renewable energy for its electric grid by 2050 or sooner. However, this transition is opening doors to outside corporations seeking to profit. Any energy transition that doesn’t guarantee a pathway to public ownership continues inequality and wealth extraction from New Mexicans. Regardless of the economic development and job creation private companies bring, the system is designed so that company shareholders win and New Mexicans

are excluded from a new opportunity to generate wealth.

There is no climate justice without including economic benefits to poor communities.

Oil and gas, transportation and electricity are the main sectors producing greenhouse gases

(GHG) in N.M. They account for 53 percent, 14 percent and 11 percent respectively, as depicted in Figure 1. As of 2020, N.M. produced 113.6 million metric tons (MMT) of GHG— directly contributing to the global climate crisis. It is critical to point out that the oil and gas sector continues to be responsible for more than half of all emissions. Seriously addressing the climate crisis requires not only decarbonizing our electricity sector, but also shifting away completely from oil and gas. The current ETA only addresses 11 percent of the state’s emissions. The upcoming decade is crucial. New Mexico must phase out operations throughout the state while addressing economic and social inequalities in BIPOC communities.

N.M. is selling its renewable energy potential to outside corporations.

Figure 1: Greenhouse Gases in N.M. by sector. The drivers of the climate crisis are directly impacting New Mexicans.

The Oil and Gas Threat Map shows that 7 percent of N.M.’s population lives near oil and gas operations. That comes with exposure to pollutants and health hazards. Climate change is putting at risk infrastructure all New Mexicans depend on. In 2020, monsoon rains caused flooding, impacting small communities such as Truth or Consequences, while wildfires burned 3,000 acres of forest near Santa Fe. The state is also experiencing extreme drought. Things don’t look better for the future. Scientists noted in the N.M. Climate Change Report 2020 that the state will experience bigger flash-floods, stronger wildfires, longer droughts and significant ecological changes, such as smaller alpine meadows and wildlife extinctions.

New Mexico has the opportunity to build wealth, equity and Energy Democracy through public- and community-owned clean-energy infrastructure. The state’s residents are standing on a potential gold mine of solar and wind energy. As the ETA activates that renewable energy infrastructure, however, N.M. is selling that potential to outside corporations. Along with \$207 million in lost revenues, N.M. is currently providing \$165 million worth of tax credit to a well-established clean-energy industry. If, as of 2019, N.M. had built its existing wind and solar



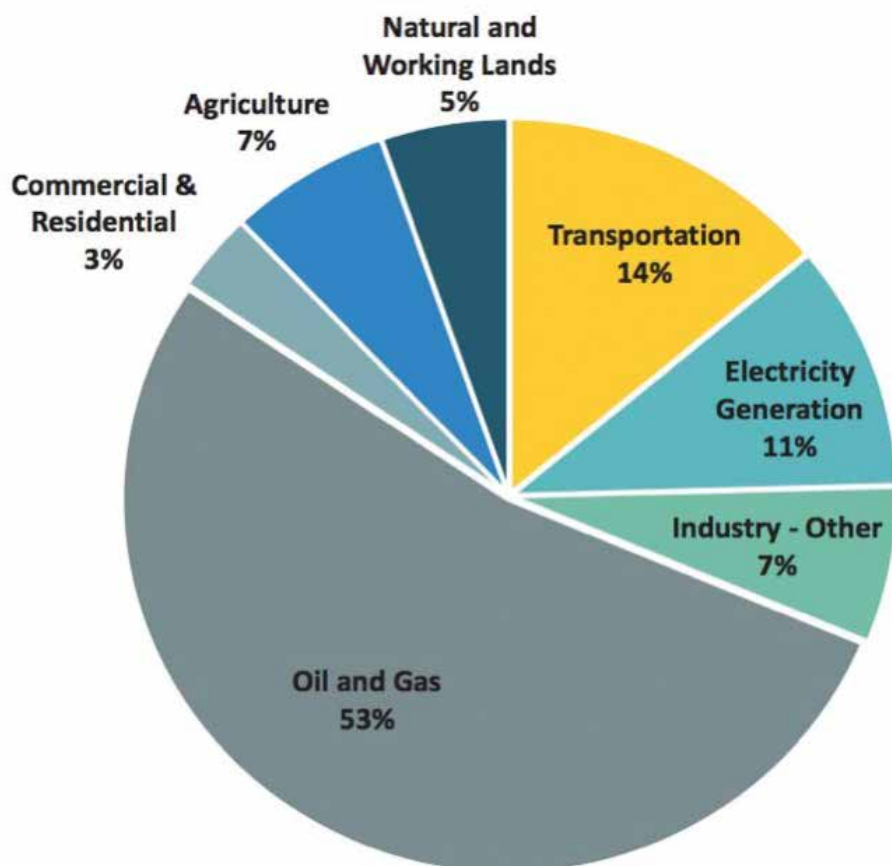
Sponsors of the proposed Local Choice Energy bill hold a press conference about community choice aggregation, a form of public power that currently exists in nine states and has growing support in N.M. Photo courtesy New Energy Economy

generation capacity under public ownership, we could have generated an additional \$7.7 billion in economic benefits and an additional 61,680 jobs.

This isn't to say that some contracts with the private sector (for example, construction) will not be needed. However, this case study shows what N.M. is losing by not creating an option for the public to own its clean energy. Along with a positive financial impact, public ownership would also address energy burden and barriers to implementing home energy-efficiency and owning renewable generation capacity. It would transform access to energy from a for-profit service to a basic human right for all New Mexicans.

Clean energy infrastructure will increase exponentially in the next few decades. New Mexico is headed toward a cleaner future, but this doesn't necessarily mean a more just future. As N.M. continues to prioritize the environment and the state's role to decarbonize our economy, it is

Figure 1: Greenhouse Gases in New Mexico by Sector



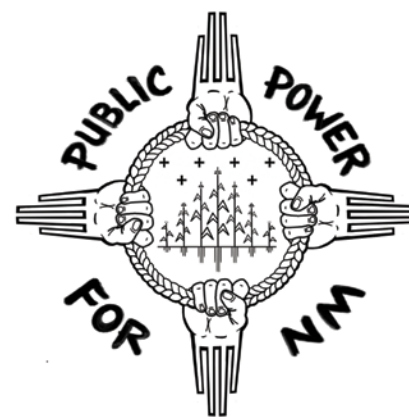
PETITION TO STUDY PUBLIC POWER FILED WITH THE N.M. PUBLIC REGULATION COMMISSION

State Senator Liz Stefanics and Representative Andrea Romero, jointly and with their colleagues, filed a petition on Dec. 21, 2021 with the New Mexico Public Regulation Commission to initiate a comprehensive study to determine the costs, benefits and pathways to public power and evaluate whether its implementation will protect the public interest, reduce and stabilize electricity rates, create revenue generation for the state, and result in the deployment of 100 percent renewables plus storage, as well as enhance local economic benefits.

Legislators who signed the petition include Sens. Jeff Steinborn, Carrie Hamblen, Leo Jaramillo, Linda M. López, Harold Pope, Antoinette Sedillo López, William Tallman; and Reps. Brittney Barreras, Joanne Ferrary, Derrick Lente, Roger E. Montoya, Kristina Ortez, Angelica Rubio, and Debra Sariñana.

The potential benefits of public power include rate stability, local jobs, policies aligned with community values and significant opportunities for revenue from both local energy consumption and energy exports that would otherwise flow to private corporations and shareholders.

The petition states: *“Within the next decade, trillions of dollars will be invested in energy infrastructure across the United States. From federal policies to market forces to the inevitable replacement of retiring fossil fuel plants, the transition to renewable energy sources will necessitate a massive restructuring of not only the power grid and generation sources, but energy markets, ownership and control. With some of the highest solar and wind capacity of any state in the nation, New Mexico will be presented with numerous opportunities and important decisions as this transition unfolds.”*



critical to remind the state that there is no climate justice without including economic benefits to poor communities. It is the state's obligation to ensure that the wealth being generated by our clean-energy resources be kept by the people and not owned by corporations.

The following recommendations will help achieve these objectives.

Short-Term Policy Recommendations

- Enact a Community Solar Act that would prioritize grassroots solar energy development rather than corporate-owned operations, and a Local Energy Choice Act that would create a legal pathway for Tribal communities, municipalities and nonprofits to be able to choose and create their own solar farms and utility agencies.

The oil and gas sector continues to be responsible for more than half of all emissions.

- Create a New Mexican Community Ownership of Power Administration (COPA) This would be a financial and technical capacity program designed specifically to be a catalytic tool for a new energy system based on local, community benefit.

Long-Term Policy Recommendations

- Require state agencies to enter into long-term Power Purchase Agreements (PPAs) with

Transform access to energy from a for-profit service to a basic human right.

community-owned renewable projects.

- Create a Public Bank designed to direct funding and financing for the capital cost for community-owned renewables to frontline and disadvantaged communities.
- Set up an Energy Democracy office that would create a pipeline for frontline community input in guiding how N.M. should transition away from investor-owned utility infrastructure to a publicly owned infrastructure. The office would also create a foundation for an agency that would oversee public energy infrastructure.
- Enact a N.M. Public Utility Holding Company Act. This would force the breakup and restructuring of corporate electricity monopolies, including taking back corporate assets and distribution lines throughout the state. ■

Josue De Luna Navarro is a Climate Justice coordinator at the Center for Civic Policy in N.M. and an Associate Fellow at the Institute for Policy Studies in Washington,



D.C. He is a former N.M. Fellow at the Institute for Policy Studies and co-founded the N.M. Dream Team, the largest statewide, undocumented-led organization.

OP-ED: POUYA NAJMAIE

COMMUNITY SOLAR: OWNED AND CONTROLLED BY THE PEOPLE

New Mexico is in the process of figuring out how to implement the Community Solar Act, which was passed in the 2021 legislative session and signed into law. Developers, utilities, advocacy groups and citizens have been weighing in on the rule-making process. The rules are to be finalized in early 2022 and projects can be built as early as 2023.

The intent of the Act is to make solar more accessible. Grassroots groups see it as an opportunity to advance energy equity and generate local jobs and revenue, while supporting climate justice goals. (“Climate justice” is a term that acknowledges climate change can have social, economic, public health and other impacts on underprivileged populations.)

The key question, as always, is: *who will own, control and benefit* from this new form of solar in New Mexico? Will the program help address historical inequity and injustice? Will power change hands—or will big developers capitalize on a new market where community members continue to be relegated to the role of consumers, rather than decision-makers and collective wealth builders?

It is critical to consider models of truly transformative energy provision. Energy is the basis of our economy and its use underlies every facet of our daily lives. Nationally, trillions of dollars in infrastructure investments and revenue are up for grabs—based on how we transition to renewables in the next decade.

Community Solar Gardens (CSGs) were approved by the Minnesota Legislature in 2013. The program launched in earnest two years later and has grown fast. The Institute for Local Self-Reliance studied Community Solar nationwide and ranked Minnesota number one. By a wide margin, Minnesota has the most megawatts online and no program size limit. In 2021, Community Solar accounted for about half of the state’s roughly 1,560 megawatts of solar installed. The state now produces enough to supply about 195,000 homes, and several new projects are being developed. Planners who contributed to writing N.M.’s Community Solar Act studied Minnesota’s law and advocated for including its strongest provisions.

Minnesota has excelled in growing capacity but didn’t carve out provisions to help those with institutional and structural barriers to participation. So big developers and commercial customers have been the primary beneficiaries, as well as residents who have the preferred credit or income status. Poorer people, often residents of color, have been left behind.

An opportunity to advance energy equity and generate local jobs and revenue, while supporting climate-justice goals



Cooperative Energy Futures’ Community Solar array in Minnesota

New models are trying to change that. The organization Cooperative Energy Futures uses a framework to support energy democracy. CEF operates eight community solar gardens in Minnesota and plans to add seven more. The co-op’s 900 owner-members, 700 of whom subscribe to community solar, vote on organizational decisions and receive a proportional share of revenues. More than 85 percent of solar capacity goes to residential customers, and the organization has made concerted efforts to target those with the highest bills and fewest resources. Low-income households and communities of color tend to pay a higher share of their income on power. Through CEF’s model, households generally save about 10 percent on their bills

Billions of dollars in infrastructure investments and revenue are up for grabs.

in the first year, and savings increase over time. As more projects come online, the co-op is earning more money, which will mean larger dividends for members.

Most solar gardens require a credit check and a minimum score for subscribers. The co-op doesn't require a credit check or money up front, and allows easy exits on 25-year contracts for members.

For CEF, it's not just about making sure that community members have access to the program as customers. As owners, members are decision-makers (they vote for board members and can run to be board members) and community advocates representing their own interests and their environmental and social values. CEF focuses on serving communities, whether geographic, cultural or faith communities, that wish to develop CSGs. The primary goal is to empower members of a shared, clean-energy enterprise and design projects that help them achieve their goals and visions.

CEF's cooperatively owned Shiloh Temple Solar Garden powers a church, a mosque and 29 nearby residents who opted in to share in credits from the energy produced. The group also operates the Ramp A solar garden in downtown Minneapolis, which splits power among the Minnesota Department of Transportation and about 150 mostly low-income households. In coordination with the City of Edina, CEF built and owns a solar garden on the top of the public water works building. In the city of Eden Prairie, a solar garden sits on the top of PAX Christi church. CEF also owns and operates four ground-mounted CSGs in rural areas. CEF's solar gardens are mostly subscribed by, and owned by, low-to-moderate-income households.



New Energy Economy team with Santa Fe County Commissioner Hansen after passage of the Community Solar Act in 2020. Dozens of organizations, local and Tribal governments worked to secure the law's passage. Photo courtesy New Energy Economy

Lessons for New Mexico

YUCCA (Youth United for Climate Crisis Action) asked CEF to share information with the grassroots movement in N.M. that is advocating for implementation of community-owned solar. There are relevant lessons that stakeholders can learn from Minnesota as they participate in the process underway at N.M.'s Public Regulation Commission.

The first area of YUCCA's concern is "program administration." This is one of the topics about which the PRC is collecting input. CEF advises that utilities should *not* be allowed to administer the Community Solar program at all, or they should do so in the most minimal way, with community oversight. In Minnesota, Xcel Energy was allowed

to administer the program, and it led to many unfortunate outcomes—from interconnection issues, to bill credit issues, to application process issues and more. It may be appropriate for a third party (depending on who that is) to administer elements of the program such as project solicitation, selection and consumer outreach. The decision between a third-party-administered program and a PRC-administered program should depend on which parties local stakeholders believe would be more sympathetic to community-owned solar gardens and the larger Energy Democracy movement. In all cases, it is certainly not the investor-owned utility.

The second topic of YUCCA's concern is ratemaking. CEF advises against—as much as possible—against allowing utilities to control bill credit calculations or rate-class-making. Time-of-Use rates for the bill credit and transmission costs should be included in the Total Average Retail Rate. Anything that avoids Community Solar funding being counted as a cross-subsidy should be promoted.

Market Oversight

Community Solar advocates want a project selection process that takes into account a developer's relationship with the community, one that will serve low-income populations. They want to know if the developer is community-owned and controlled. CEF advises that it is critical that adequate bill credits are included in order to provide for the ability to finance a solar garden in a way that makes it truly accessible. These are important criteria within the selection process.

Grassroots groups and community solar advocates need to continue to be as involved as possible during the rule-making stage. It is much easier to influence this process than to try to correct errors down the road. Energy Democracy allies in N.M., such as New Energy Economy, can help smaller groups navigate the process. ■

Pouya Najmaie is policy director with the Minneapolis, Minnesota-based Cooperative Energy Futures. [HTTPS://WWW.COOPERATIVEENERGYFUTURES.COM](https://www.cooperativeenergyfutures.com)

EXPANDING SOLAR POWER IN THE U.S. WEST

In December 2021, the U.S. Bureau of Land Management, which oversees almost a quarter-billion acres of land primarily in Western states, issued a call for development of "solar energy zones" within about 140 square miles in New Mexico, Colorado and Nevada. The agency approved three major solar projects in California and is considering 40 large-scale solar proposals, including several in Arizona. The BLM also issued a draft plan to reduce fees paid by companies authorized to build wind and solar projects on public lands.

Environmentalists, concerned about impacts on plants and animals, are opposed to some of the large-scale solar projects.

Solar power on public and private lands is expected to account for more than 20 percent of total U.S. electricity production by 2050, according to the U.S. Energy Information Administration.

The Biden administration is promoting renewable wind and solar power on public lands and offshore to reduce greenhouse gas emissions that are warming the planet. However, the administration was unsuccessful in attempting to suspend oil and gas sales on public lands and waters after a judge ordered sales to resume following a lawsuit from Republican-led states.

WESTERN SPIRIT TRANSMISSION LINE IS ENERGIZED

A large-scale transmission line that connects to the New Mexico energy grid has been energized. The Western Spirit transmission line spans 155 miles and will carry 1,050 megawatts of wind-generated energy from Pattern Energy's Clines Corners Wind Project and several other wind farms that have recently been completed in Guadalupe, Lincoln and Torrance counties. Combined, the transmission line and wind farms cost nearly \$2 billion.

The Renewable Energy Transmission Authority (RETA) and Pattern Energy are co-developers of the "U"-shaped line, which goes from the Albuquerque area south to Belen, then east and north toward Clines Corners. The line received approval from the Bureau of Indian Affairs (BIA) and more than 430 easements from ranchers and other landowners.

On Dec. 13, 2021, PNM announced that it had purchased the line for \$285 million and that the purchase will not impact the rates of current retail and wholesale customers. RETA Chairman Robert E. Busch, in a news release, said that the line is the largest upgrade to the PNM system since the 1980s. "The completion of the Western Spirit transmission line and wind farms will be a major leap for New Mexico toward a clean-energy future," Busch said.

PNM spokesman Ray Sandoval said that "the reason we wanted to buy and control it is for grid reliability." Much of the energy the line will carry will go to California, but New Mexico could benefit during outages or when backup energy is needed. In addition to cutting emissions, the line is expected to reduce the amount of water taken from lakes and rivers by nearly 850 million gallons, the company said.



Supporters of Community Solar celebrate the first phase of the project Picuris Pueblo

Picuris Pueblo Adding Phase II of Energy Self-Sufficiency

BY THE PUEBLO OF PICURIS UTILITY DEPARTMENT

As New Mexico grapples with a "just transition" in deciding how to restructure its energy sector to advance climate justice and equity, the Pueblo of Picuris has many important lessons to teach. Picuris was the first tribe in the state to embrace renewable energy. The pueblo's quest to sustain its traditional activities and be in harmony with the land and nature led to producing solar energy. Governor Quanchello has said, "Our solar project is aligned with Mother Earth."

Picuris is located approximately 60 miles north of Santa Fe and 24 miles southeast of Taos on N.M. Highway 76, in an area of serene beauty known as the "Hidden Valley" of the Sangre de Cristo Mountains. The village

Picuris's story is one of resilience and revitalization.

sits along the banks of the Río Pueblo. The pueblo has the smallest population of any tribe in the state. Two-thirds of its people live on the reservation. All tribal buildings and households are located within a two-mile footprint. Picuris operates a water and sewer utility. There is no natural gas distribution. Homes are heated with propane and electricity and supplemented by wood stoves.

Picuris's story is one of resilience and revitalization despite a long history of attempted colonization. The prehistoric Plains-Pueblo "macro-economy," in which Picuris prominently participated, is one the best-known examples of farmer-forager relations. Picuris produced surpluses of corn, beans and other crops that were traded to Plains groups that brought bison and other game to the pueblo for exchange.

The Pueblo of Picuris is on its way to establishing its own tribal utility in order to become energy self-sufficient, lower its carbon footprint, save money and improve reliability. In 2017, the Tribe built its first solar system. Kit Carson Electric Cooperative (KCEC), the local electricity provider, purchases all of the system's output under a Power Purchase Agreement. The 1 MW system, a single-axis, ground-mounted solar array located on six acres of tribal trust land, is one of the pueblo's economic development projects. The array generates just under 1.5 million kilowatt-hours (kWh) of energy each year from approximately 4,000 photovoltaic (PV) panel modules. The system has proved to be very reliable and has become a successful business that provides a subsidy to reservation households.

The project is now a model of community solar. Officials from most of New Mexico's tribes as well as other tribes have visited the project. They have wanted to know how the smallest and least-resourced tribe in the state has been able to complete and operate such a project.

The tribe recently received a second photovoltaic grant from the U.S. Department of Energy's Office of Indian Energy and matching funds from Grid Alternatives' Tribal Solar Accelerator Fund and the 11th Hour Project. Phase II of the project will be a grid-connected community micro-grid. Sandia Labs and the U.S. Department of Energy's Office of Electricity Energy Storage will provide ongoing technical assistance for the energy-storage system. Electricity generated by the additional solar array will go directly into tribal buildings, households, economic development projects and energy storage. Surplus energy will then go to the local utility.

The electricity generated is not subject to regular PRC ratemaking—which also adds to significant cost savings. The two solar projects will reduce the cost of electricity to low- or no-cost.

As we have seen over the past several years, extreme weather brought on by climate change has impacted grid reliability. For isolated rural communities such as Picuris Pueblo, brownouts or blackouts can make reliance on locally-generated electricity particularly important. The tribe's ability to generate electricity locally for its own buildings with storage capacity is an exciting step toward self-reliance and the tribe's goal of energy sovereignty.

Based on its experience with Phase I of the project, Picuris has made a commitment to continue to showcase its solar site as a model for Indigenous-owned energy production. A new Natural Resources building, to be built this year, will provide a location for workshops and education. ■



Solar-powered firehouse, Picuris Pueblo
© Seth Roffman

HOPI UTILITIES CORP. A FINALIST IN BUILD BACK BETTER CHALLENGE

Six Native coalitions have received \$500,000 grant awards from the \$1-billion Build Back Better Regional Challenge and will compete for millions more in federal funding. The awardees include Window Rock, Ariz.-based Hopi Utilities Corp.

In December 2021, the Economic Development Administration (EDA), a bureau of the U.S. Department of Commerce, named 60 finalists, selected from 529 applicants. Between 20 and 30 will advance to the second round, where they could potentially receive up to \$100 million for their proposed projects. The deadline for the second phase of the challenge is March 15.

"This program will bring communities back in regions across America," Assistant Commerce Secretary for Economic Development Alejandra Castillo said in an interview with the Associated Press.

The Hopi Utilities Corp.'s "large scale solar project" in northeast Arizona aims to shift the Hopi economy from coal to renewable energy, according to a proposal submitted to the EDA. Through a partnership with the Navajo Nation and Peabody Energy, royalties from the coal-powered Navajo Generating Station represented nearly 90 percent of the Hopi Tribe's budget. The NGS's 2019 closure "blindsided the Tribe," the company wrote in its application. The goal of the proposed project is to bring renewable energy—and associated royalties—to the Hopi reservation to make up for the loss of the NGS. The current plan proposes building a solar station and battery storage facility, along with attracting an "industry partner" who can co-locate an energy-intensive operation on the site.

The EDA has committed allocating \$300 million of its \$3 billion in ARPA funding to support coal communities transition to new industries as part of its Coal Communities Commitment ([HTTPS://EDA.GOV/ARPA/COAL-COMMUNITIES/](https://EDA.GOV/ARPA/COAL-COMMUNITIES/)). The EDA also funds these communities through its Assistance to Coal Communities initiative, through activities and programs that support economic diversification, job creation, capital investment, workforce development and re-employment opportunities.

Transforming the State's Economy with a Public Bank

BY DOROTHY GAMBLE

Currently, New Mexico's money—three to nine billion dollars on any given day—is deposited and managed globally for profit elsewhere. The proposed Public Bank of New Mexico (PBNM) would safely invest our taxes and fees to improve the well-being of all New Mexican communities. Establishing a public bank will put the state's financial investments and outcomes in the hands of the people, democratizing our money.

Defining a Public Bank

The Bank, guided by a mission statement to mobilize and redirect public revenue, will invest in healthy, culturally appropriate, environmentally sound, socio-economic development. It works in collaboration with local banks, credit unions, tribal entities, municipalities and Community Development Financial Institutions (CDFIs) by forming partnerships for local lending programs.

The PBNM is not a retail bank. It does not accept individual deposits and therefore does not compete with local community banks and credit unions. Its operational costs are reduced because it has no branches, tellers, ATMs, retail services or expensive marketing. The PBNM does not make loans to private individuals.

How a Public Bank Will Work

As proposed, the PBNM would collaborate with the state's public and private financial institutions to invest in community development. The return on local investments will grow, becoming a steady revenue source. Economic models based on an initial \$50-million capitalization from the state's general fund and \$60 million in deposits from which to leverage loans in the first year can, by the seventh year, have total gross loans amounting to more than \$485 million. Growing such a lending fund changes the current problem of depending on boom and bust resources from volatile industries. The PBNM alone will not solve all of the weaknesses of NM's finance system and low rankings on socioeconomic measures of well-being. However, it does set up a springboard for how to tackle those low rankings. In partnership with local banks, credit unions, municipalities and tribal entities, the PBNM's collaborations can boost investment in local entrepreneurs who want to:

- Increase local agriculture and food growing and processing ventures
- Invest in renewable energy and related technological endeavors
- Invest in health clinics and community educational systems that recognize the most productive and creative people in any community will be healthy, knowledgeable and open to learning at any age
- Contribute to the diversification of the economy by helping small entrepreneurial activities grounded in local cultural and environmental regeneration

The PBNM is not a retail bank. It does not accept individual deposits and does not compete with local community banks and credit unions.

- Gain equitable access to financial resources in the parts of the state often neglected by national and statewide programs

Why the PBNM Would Be Transformative

Lending money is more powerful than saving money. The PBNM can leverage its capital by lending up to 10 times its equity value and still be profitable. That means money the PBNM lends and the profits can be the state's next economic stimulus. Over the course of several years Public Bank supporters have studied the needs of local communities through work with academic and financial experts who understand the way the PBNM could be established. Review of NM Finance Authority (NMFA) and Economic Development Department (EDD) programs, work with faculty of the UNM Anderson School of Management and others with investment experience, and interviews with principals in the Bank of North Dakota, (the only existing state public bank in the U.S.), has convinced supporters as well as many N.M. legislators that there are needs in the state that the PBNM could effectively address. As a nonprofit, state-owned entity, the bank can make loans at a discount for regional, county, municipal and tribal projects. This precludes the need to engage in the bond market, which can add up to 30 percent to money borrowed. Right now, New Mexican tax dollars are slipping away from the state to stockholders of corporate financial institutions or gaining tax credits for people of wealth, many out of state.

Empowering Communities To Meet Local Needs

Public banks hold a bank charter legally subject to applicable state and federal banking rules, regulations and oversight. While the NMFA is the primary state agency designated for organizing bonds to loan money for county and regional projects, it does not have the authority to take advantage of all the possibilities a public bank offers. The NMFA has revolving funds only and cannot leverage its holdings tenfold as a bank can do. Also, the NMFA does not have access to the Federal Reserve System and therefore cannot increase its potential loan capacity. The PBNM could more effectively and efficiently make funds available quickly because of its partnerships with community banks and credit unions and its relationship with regional and tribal community development organizations. These local organizations are closer to people in smaller communities and know the needs, cultural strengths and community contexts.

The PBNM would collaborate with the state's public and private financial institutions to invest in community development.

An October 2021 Report from the NMEDD entitled *Empower and Collaborate* pointed out obstacles to New Mexico's economic future and strategies to achieve progress. Among the priorities listed were modernizing the economic development ecosystem, strengthening N.M.'s communities, reimagining education and training, promoting equity through economic justice, enabling high-quality home-grown innovation and diversifying the economy. Collaborative efforts with a N.M. public bank would respond to each of these priorities.

Community banks often have limitations on the kinds of loans they can make. Typically, community banks do not make shorter-term loans, loans for amounts under \$100,000 or longer-term loans for three years or more. In addition, community banks are not usually

eager to lend to new entrepreneurs, who pose a higher risk. Collaboration with the public bank can mitigate these limitations.

Examples of Why New Mexico Needs a Public Bank

- An Albuquerque manufacturing facility that produces fresh juices and other products had to obtain financing from a bank in Chicago rather than through local banking options.
- A retiree from Los Alamos National Laboratories invented an allergy remedy now sold in pharmacies throughout the Southwest. He was unable to secure a loan and was forced to use his own funds to finance his start-up company.
- A veterinarian who works at a small vet clinic about to be sold to a franchise wanted to buy the clinic but was unable to get a loan.
- A well-established farmers' market in northern N.M. wanted to refinance the mortgage for its building. The group's lender told them that it did not work on local deals anymore, and it had to turn to an out-of-state, regional bank for refinancing.
- A woman from Gallup who sells pottery found that her only financing option was a \$7,000 loan from a payday lender, who charged 100 percent annual interest.
- Neither a coffee shop owner in Las Cruces nor a print shop

owner in Santa Fe could obtain financing to grow their successful businesses through the national bank where they were customers.

Support the Establishment of a Public Bank of New Mexico

Legislation for the PBNM continues to gain strength among N.M. legislators. First introduced as a "memorial" to study the benefits of a Public Bank in the 2019 legislative session, it was introduced as a bill to create a Public Bank in 2021. It was heard by several committees but did not get a full session hearing. Numerous organizations testified in support of the PBNM, including the N.M. Food and Agriculture Policy Council, the Young Farmers Coalition and the Healthy Soils Working Group. In addition, the state Credit Union Association, three city councils and four county commissions endorsed the establishment of a Public Bank. Support has come from more than a dozen legislators who have a strong interest in pursuing legislation in 2022 that will respond to the investment needs for their communities.

Since its origins in 2018, the Alliance For Local Economic Prosperity (AFLEP) has advanced a vision that supports the socio-cultural, environmental and economic needs of all New Mexicans, especially rural, Native American and Hispanic residents. A PBNM would democratize tax money by bringing it under the control of the state's residents. We will again introduce legislation in 2022 based on the stories of New Mexicans who just want a chance to participate in building lively, economically active, healthy communities where the environment and cultural perspectives are respected and preserved. You can help this effort by learning more (visit AFLEP.ORG) and by writing to the governor and your legislators about how the PBNM could invest in your community's needs. ■

Dorothy "Dee" Gamble is an outreach volunteer with the Alliance for Local Economic Prosperity.

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Rio Embudo, Northern New Mexico

NO HIDING PLACE FOR THE LEADERS AT COP26

BY MERLE LEFKOFF

When I arrived on Nov. 1, 2021 at the COP26 climate summit in Glasgow, Scotland, I was hoping to gain as much information as possible before our presentation the following week. My organization, the Center for Emergent Diplomacy, was partnered with Drs. Mary and Joe Neidhardt and their daughter Nicole from the Groundswell Climate Collective to talk about how Indigenous ways of being and the new Western science of complex systems could find solutions for the climate crisis.

There is a worldwide yearning for change rooted in community, agency and action.

We decided to fan out when we arrived at the “civil society” Green Zone at COP26 (the 26th Conference of Parties). Putting on a mask and waving my vaccination card through security, I headed for a presentation about something called the U.N. “Global Citizens Assembly.” Much to my astonishment, walking up to the small stage was First Minister Nicola Sturgeon, the head of Scotland’s government. She had just come from the official opening ceremony in the “assembled diplomats” Blue Zone, where decision-makers from each country would be searching for consensus to put plans, long sitting on shelves, into action.



First Minister of Scotland, Nicola Sturgeon © Merle Lefkoff

First Minister Sturgeon welcomed us and said, “Thank you for everything you are doing to make your voices heard, to make sure there is no hiding place for the leaders gathered here today.” She went on to share her brief to the Scottish Parliament before COP began: that small countries like Scotland “could lead the way “in avoiding what U.N. Secretary General Guterres said was inevitable climate catastrophe, based on insufficient promises made by the member states so far. The promises, he warned—even if brought into action—would only keep global warming increases

New Mexicans attend a global conference trying to reach agreement on the future of human survival.

had quietly developed a new mandate to bridge the longstanding divide. “The Global Citizens’ Assembly for COP26,” announced by Guterres at the launch on Oct. 5, 2021, was offered as “a practical way of showing how we can accelerate action through people power.” The invitation that went out included a toolkit that outlined steps organizers could use for facilitating local assemblies through a process of exploring the depths of the climate crisis.

The new climate assembly consisted of two parts: a “Core Assembly”; and a drawing together of the work of many smaller “Community Assemblies,” with support from the U.N., already underway all over the world, that had generated ambitious and actionable goals. The 100 citizens of the Core Assembly were selected by lottery, using an algorithm that made sure anyone could be selected and that the global population was represented. Thus, 60 percent are from Asia, half are women, and 70 percent earn \$10 a day or less.

The lucky chosen initially gathered online on October 7, 2021, in the first of five blocks of meetings, to prepare for a presentation of their final recommendations to the delegates searching for actionable consensus on slowing down global warming. I was awestruck as I listened to people (each had a translator) from some of the poorest countries in the world. They spoke with power and confidence to a global conference trying to reach agreement on a fair and sustainable future for all on a planet already altered by climate change.

According to the organizers, “The Global Assembly” network is on fire. In a world where so many feel jaded, overwhelmed and disillusioned, we’re tapping into a worldwide yearning for change rooted in community, agency and action.”

Here in New Mexico, we have many ongoing community-based efforts at resilience. For example, visionary climate planning workshops at Pueblo de San Ildefonso resulted in a Climate Action Plan

to 2.7 degrees centigrade by the end of the century—“a hellscape on Earth.”

Responding to U.N. climate scientists’ gloomy reports, and clearly embarrassed by the continuing absence of grassroots leaders at the negotiating table as the “experts” continued their failure to slow down global warming, the U.N.



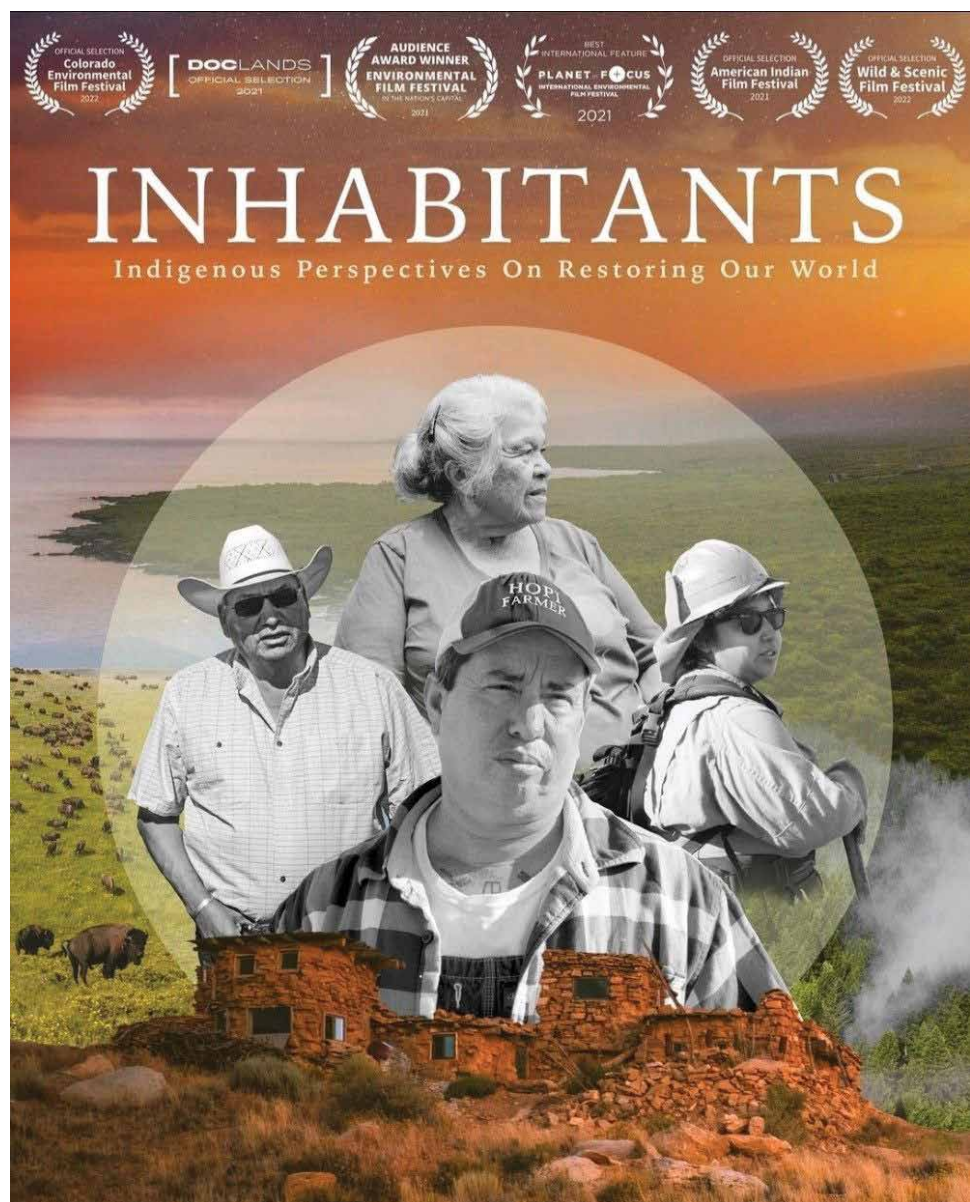
Exhibit hall at COP26 © Merle Lefkoff

to ensure ongoing adaptation. Years of citizen meetings resulted in the introduction at the Legislature of a Public Banking Bill that gives citizens more power through a citizen-owned bank to determine how local tax monies are allocated. The Santa Fe River Traditional Communities Collaborative was formed to protect historic acequias and river flows. These are examples of community grassroots “assemblies” that can help navigate new climate solutions.

According to the feedback at COP26 from delegates who read the first Global Assembly Declaration, “One of the many things that’s remarkable about citizens’ assemblies is that they tend to generate policies far more ambitious than decision-makers come up with alone.”

People’s Declaration for the Sustainable Future of Planet Earth (A Summary)

1. 1.5°C maximum temperature rise must be implemented and strictly enforced.
2. Developed countries should provide financial and technological support to developing countries. National government should safeguard the livelihoods of all segments of society, particularly disadvantaged groups.
3. Powerful countries and large corporations have disproportionate influence over global climate decision-making. The voices of the most affected people and areas have to be prioritized in climate decision-making.
4. All people have a right to a clean environment. This right should be included in the Universal Declaration of Human Rights and be strictly enforced at the international level.



5. Ecocide must be codified as a crime in international and national laws, applicable to governments and corporations. It has to be firmly enforced alongside existing environmental protection laws.

Toward the end of COP26, I met with Beth Beloff, director of the Coalition of Sustainable Communities NM, and Mark Hayden, director of purchasing for NM governmental entities. Beloff highlighted the need to act much more quickly to meet the goal of net zero by 2050 that N.M. Gov. Michelle Lujan Grisham had laid out in well-received meetings with Blue Zone delegates. “The urgency is now!” Beloff insisted. “No one strategy will save us. We must end the competition among countries, and tech companies must collaborate to innovate toward a decarbonized future.” Hayden shared his excitement about decarbonizing the power sector on a fast track to deliver net zero by 2045.

I suggested that perhaps we could formalize a citizens’ assembly in N.M. to take advantage of the global connections and collaborative tools developed by the UN to aid community dialogue and share the determination of citizen “diplomats” to carry the Global Assembly model into the future. This would give everyone on earth a seat at the global governance table by creating a permanent Assembly with over 10 million participants by 2030, convening each year.

I tried very hard to bring a bit of good news home from the most important climate summit in the world. However, there is pretty much universal agreement that once more, even after 25 years of meetings, the latest COP was another missed opportunity to force empty promises into action. Only a few new promises that seemed to have potential are worth watching: stopping or even reversing deforestation, and an agreement to shut down coal plants everywhere, permanently.

I marched through the streets of Glasgow with tens of thousands of young activists demanding action so that they might have a sustainable future. The atmosphere outside where the delegates were meeting was electrifying, one that reaffirmed my long-held belief. Perhaps our best hope for a flourishing future on a much-altered planet depends on grassroots organizing and demands for action from a groundswell of protest from young leaders emerging into activism. ■

Merle Lefkoff is executive director of the Center for Emergent Diplomacy (WWW.ERGENDIPLOMACY.ORG), a global social-profit based in Santa Fe that trains leaders to facilitate radical community problem-solving conversations in an unknowable future challenged by climate emergency. From Jan. 25–28, she is offering an online course. [HTTPS://PDINSTITUTE.UOTTAWA.CA/EN/COURSE/ADDRESSING-CLIMATE-CRISIS-THROUGH-FACILITATION-ONLINE-SESSION](https://pdinstitute.uottawa.ca/en/course/addressing-climate-crisis-through-facilitation-online-session)



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COLORADO RIVER CONSERVATION "500+ PLAN" SIGNED

In December 2021, the water level in Lake Mead, the reservoir of Hoover Dam, fell below 1,065 feet, the lowest level in its 86-year history. That triggered mandatory cuts for Arizona, New Mexico and Nevada in 2022. Those states receive Colorado River water via the lake, which is the largest reservoir in the U.S. The dam's turbines generate power for 1.3 million people. If the water level falls below 950 feet, the turbines will stop.

In December, officials from Arizona, California and Nevada signed the "500+ Plan," which aims to keep faucets running in 1.5 million households for a year. The states voluntarily agreed to reduce their use of water from the Colorado River. The cuts will add 500,000 acre-feet to Lake Mead during 2022 and 2023, increasing its water level by 16 feet. The agreement is an effort to prevent mandatory cuts after 2026, when current guidelines and a drought plan expire. Arizona, a junior water rights holder, is expected to continue to pay the Colorado River Indian Tribes and the Gila River Indian Community to help fulfill the state's water obligations.

The three states will also invest \$200 million—which includes a match from the federal government—for Colorado River conservation projects. Actions and programs to be implemented include efforts in both urban and agricultural communities, such as funding for short-term crop-fallowing on farms in California. The plan is the latest collaborative effort by Lower Basin states, in partnership with the U.S. Bureau of Reclamation, to bring sustainability to the river, which has been in a historic drought since 2000.

The 500+ Plan will also draw on funding from the recently ratified Infrastructure Investment and Jobs Act ("Bipartisan Infrastructure Bill"), which includes \$8.3-billion to help minimize impacts of drought and develop a long term plan to facilitate conservation and economic growth. The bill will fund water-efficiency and recycling programs, rural water projects, WaterSMART grants and dam safety "to ensure that Tribes and adjoining communities receive adequate assistance and support."



Hoover Dam

THE COLORADO RIVER COMPACT AFTER A CENTURY

The biggest river in the North American Southwest is the Colorado River, which in earlier decades had an average annual rate of flow of 15 million acre-feet per year. An acre-foot is an acre of water one foot deep, measuring about 326,000 gallons. There are several tributaries, including the San Juan River, the Green River and the northern reaches of the Colorado River. The overall watershed spans about 245,000 square miles and the main stem extends about 1,440 miles. It used to drain into the Sea of Cortez, but that was before eastern Americans of northern European descent re-plumbed the river to grow crops and serve burgeoning urban populations.

In the late 19th and early 20th centuries, agriculturalists in southern California and Arizona started irrigating their fields from the river, concurrently displacing scattered Native Americans who had been growing produce for centuries. As ethnobiologist Gary Nabhan pointed out, Cocopah Indians would blow seeds from their mouths into the floodplains to later harvest grains for foodstuffs.

Newly arrived Southern Californians had a bigger, better idea—to create a massive irrigation ditch running from the river into what is now the Imperial Valley. As author William deBuys noted, due to unexpected heavy precipitation, this irrigation ditch changed the course of the river and filled what is now the Salton Sea. It took at least two years, the Southern Pacific Railroad and a “crack team of engineers” to restore the river to its earlier course.

Lights blinked on in the minds of other residents throughout the watershed, igniting the worrisome notion that California might try to claim the entirety of the flow of the Colorado River by claiming prior rights. Members of the seven states privy to these waters convinced the U.S. Congress to provide a legal document guaranteeing that the waters would be divided equitably. Hence, a meeting was scheduled to be held at Bishop’s Lodge near Santa Fe that included citizens of Wyoming, Utah, Colorado, New Mexico, Arizona, Nevada and California. The meeting was to be presided over by then-Secretary of Commerce, Herbert Hoover, who later went on to become the 31st president of the U.S.

Because of the complexity of apportionments, it was decided to divide the river into the Upper and Lower Basins at Lee’s Ferry north of the Grand Canyon, based on the assumption that the Colorado River yielded 15 million acre feet (MAF) per year, each basin to receive 7.5 million acre feet annually. The waters were apportioned as follows:

Upper Basin:

Wyoming: 1.043 MAF

Colorado: 3.855 MAF

Utah: 1.714 MAF

New Mexico: 838,000 acre feet

Arizona (northern strip in Navajo-Hopi country): 50,000 acre feet

Lower Basin:

Nevada: 300,000 acre feet

Arizona: 2.8 MAF (originally 2.3 MAF)

California: 4.4 MAF.

Arizona adamantly refused to sign, claiming that its apportionment of 2.3 MAF feet was unfair relative to California’s 4.4 million. But more on this downstream.

The Colorado River Compact, as it became known, was signed into law in 1922. And through massive political maneuvering, The Law of the River

gradually came into its own. Over the next hundred years, the Law of the River became more complex for the fate of the Colorado River than for any other river system in America. Former Arizona Congressman and Secretary of the Interior Stewart Udall told me that he regarded Herbert Hoover to be “California’s agent” at Bishop’s Lodge. After all, Hoover was secretary of Commerce, and economics lay at the heart of political procedure.

Indeed, California wanted to implement its major plan, thus construction of the Boulder Dam (now Hoover Dam) was completed in 1936, resulting in Lake Mead. The All-American Canal was also completed, which pumped water from the Colorado River into the Imperial Valley and beyond to mainly serve agriculturalists who turned the otherwise arid habitat into produce that continues to supply much of the nation as well as implement huge benefit to California’s economy. Concurrently, construction began on the California Aqueduct that sucked water from the Colorado River westward to serve several major cities including Los Angeles and San Diego.

Arizona wanted its own project, but it took 41 years before the U.S. Supreme Court decided to up Arizona’s ante from 2.3 million acre-feet to 2.8 million acre-feet plus the instate flow of the Gila River and its tributaries, the Verde and Salt rivers. This decision occurred in 1963. It also turns out that California was pumping another 1.2 MAF from the river that wasn’t being used in the Upper Basin.

Arizona’s irrigation plan became known as the Central Arizona Project (CAP) and was originally intended to provide irrigation water to farmers in the central valleys of Arizona. But again, more on that downstream.

Colorado River scholar and author of “The Great Thirst,” Norris Hundley, imparted to me that indeed, the Colorado River Compact was an “ethnocentric document” in that it excluded both American Indians and Mexicans from the Bishop’s Lodge meeting. I would add to that that the Compact was an anthropocentric document because it utterly excluded any regard for the needs of the Colorado River watershed, including its many species of plants and animals and geophysical characteristics.

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The good news is that the Winters Doctrine of 1908 had already considered the plight of Native Americans with regard to water rights. According to the Encyclopedia of the Great Plains, “The judicially crafted Winters Doctrine (1908) provides water for the needs of Native Americans who reside on federally reserved lands. This judicial decree, while not absolute, is highly significant given the demands for this critical natural resource in a region where water is often not abundantly available.”

Indeed, the North American Southwest is the most arid landscape on the continent. The Mexicans were particularly upset because there was no water allocated to farmers south of the international boundary in the Compact. Then, 19 years later, America became involved in World War II with the bombing of Pearl Harbor, and for nearly four years we rallied as a population in support of the tens of thousands of military men and women involved in fighting the Axis powers that included Germany, Italy and Japan. According to Stewart Udall, in 1944, President Franklin D. Roosevelt wanted to mollify the Mexican government by agreeing to México’s apportionment of 1.5 MAF per year to farmers south of the border—in order to thwart any Mexican notion of allowing Axis military bases to be established in México, thus bringing World War II to American soil.

With the Mexican Treaty, the apportionments of Colorado River water rose to 16.5 MAF per year. Former Commissioner of the Bureau of Reclamation, Floyd Dominy, told me that they knew full well that the Colorado River couldn’t guarantee that much water every year. Thus, new legislation was enacted in 1956 that resulted in the Colorado River Storage Project (CRSP). This resulted in a series of dams throughout the Upper Basin, most of which were equipped with electricity-generating turbines that both provided water storage and power including electricity for farmers to pump irrigation water. Dominy, a native Nebraskan and witness to the Dust Bowl years of yore, was enamored of dams and hydro-electricity. He likened the Hoover dam with its superbly crafted turbines to be “as elegant as the Taj Mahal.”

The Compact utterly excluded any regard for needs of the watershed including its many species of plants, animals and geophysical characteristics.

Dominy had a dream dam—the Glen Canyon Dam—that would create a reservoir nearly as great as Lake Mead behind Hoover Dam. The dividing line between the Upper and Lower basins at Lee’s Ferry is located just south of the Arizona-Utah border. Dominy told me that Glen Canyon was ideally situated to be the perfect reservoir to allow the Upper Basin states to provide their mandated 8.3 MAF to the Lower Basin to comply with the Colorado River Compact and the subsequent treaty with México.

Thus was born the most contested dam in America—the Glen Canyon Dam—that resulted in drowning one of the most beautiful canyons in the world beneath waters that became Lake Powell. Glen Canyon had been regarded by John Wesley Powell as magnificent as he floated down the Colorado River with his hearty crew in 1869, the first to do so as far as is known. Friends of mine also floated through and camped in Glen Canyon and marveled at its beauty. Folk-musician and movie actress Katie Lee; Ken Sleight, outfitter and river runner; author and environmental activist Ed Abbey—each imparted their disgust, their outrage, their deep sense of humiliation on behalf of Glen Canyon, all of which contributed big-time to the genesis of the modern radical environmental movement. I am deeply honored to have known and befriended these truly great fellow humans, each of whom loved, revered and held sacred the mosaic of habitats of the North American Southwest.

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Heading on downstream from Lake Mead and Hoover Dam, we come to Lake Havasu that backs up behind Parker Dam, yet another hydro-electric “cash register” dam. On the west bank of the lake is a pumping station that pumps water through the California Aqueduct to serve much of the urban population of southern California. The Supreme Court ruled in 1963 to increase Arizona’s apportionment from 2.3 to 2.8 MAF per year. Arizona was then poised to construct its own great project, the Central Arizona Project (CAP). But there was a catch. California, with its greater number of members of Congress, refused to sign off on the new apportionment until Arizona agreed that if there was not enough water in the Lower Basin to meet California’s apportionment, Arizona would make up the shortage from its own new apportionment. Arizona agreed and was rarin’ to go on the CAP.

The concept was to construct a pumping station on the east bank of Lake Havasu and create a concrete-lined canal that would extend from the lake all the way up and over mountains to Phoenix and beyond to Tucson. The plan called for construction of two new hydro-electric dams, one just south of Grand Canyon and one to the north.

At which point, David Brower, one of the 20th century’s greatest environmentalists, said, “No way,” as only he could. Brower asserted that would flood the Grand Canyon, one of the greatest natural wonders in the world. He was then the director of the Sierra Club, which backed him all the way. As Floyd Dominy told me four decades later, “Dave Brower and the Sierra Club beat us hands down on that one.”

So how to find electricity to power the pumps to pump water for the CAP? Black Mesa, in the very heart of Hopi/Navajo country, contained an enormous deposit of sub-bituminous coal. The plan was to strip-mine the mesa, transport the coal via a railroad to be constructed atop Kaibito Plateau from the north end of Black Mesa to a coal-fired electrical generating sta-

This year—2022—marks the hundredth anniversary of the Colorado River Compact.



tion to be constructed by the shores of Lake Powell. A 273-mile-long slurry line would convey crushed coal to the Mohave Generating station in Laughlin, Nevada. Water was to be pumped from the Pleistocene aquifer to slurry the coal. Contracts were negotiated between the Hopi and Navajo Tribal councils and Peabody Coal Co. of East St. Louis, with the blessings of the U.S. Department of the Interior.

No one considered mentioning this to the traditional Hopis

to whom Black Mesa remains a sacred landform. The traditional Hopis were enraged and sought every means of thwarting this secularization of land to generate electricity. They saw this as a technological folly perpetrated by bahanas (non-Hopis) against the principles outlined by Massau, personification of the Great Spirit. A tiny group of hard core environmentalists joined the Hopis' battle, to little avail. We had taken on the Central Arizona Project, and it would take far more than a handful of hardcore radical environmentalists and traditional members of the Hopi people to stop CAP's momentum. Arizona politicians, however, working hand-in-hand with corporate "money kings" and lawyers had few qualms. The CAP became a reality, as did the rape of Black Mesa.

Originally, the CAP was to provide irrigation water for the farmers of central Arizona. But many found it more lucrative to sell their land to developers, allowing Phoenix and Tucson to spread across the face of the fragile Sonoran Desert. One time, nearly four decades ago, my compañero, Ed Abbey, and I gazed down from a point near our campsite in the Superstition Mountains. Ed said to me, "The Central Arizona Project has caused the metastasis of Phoenix and Tucson in the Sonoran Desert."

This year—2022—marks the hundredth anniversary of the Colorado River Compact. When the Compact was signed, the human population of our planet Earth was less than two billion. A hundred years later, it is nearly eight billion. The Colorado River now provides water for 40 million people plus vast areas of agriculture. There is now less precipitation providing water throughout the watershed. As a result, Lake Powell has a 'bathtub ring' that rises above the surface of the lake. Lake Mead is less than half full. For the first time, Arizona will be required to relinquish 500,000 acre-feet to make up the shortfall for California. The Navajos want to run a pipeline from Lake Powell to their reservation. St. George, Utah, wants to run water from Lake Powell to serve its own burgeoning population. Las Vegas intends a deep tunnel from the bottom of Lake Mead in order to suck out the last drops when the lake finally runs dry. The treaty with México is inviolate. Due to decreasing waters, urban folks are competing with agriculturalists.

Basically, the Colorado River Compact—federal legislation mandating the siphoning off of these sparse desert waters for presumed human needs—is in direct violation of Nature's principles.

One hundred years of hindsight provides a remarkable vantage point from which to criticize the authors of the Colorado River Compact and subsequent Law of the River. Each of the representatives of those seven states privy to the waters of the Colorado River was subject to his own system of cultural and personal biases, as was the esteemed Secretary of Commerce Herbert Hoover. The Compact was authored by descendants of the Civil War and the Indian Wars. In the late 19th and early 20th centuries, the New Mexico Territory was regarded as the most

Here in the northern Río Grande watershed, we have the opportunity to establish a new model of human comportment, a new paradigm.

outlaw-ridden landscape in America. It was also the most arid. Fatal gun-fights over water holes and springs became part of the fabric of human history. Strong cultural and personal biases provided the weft woven through the warp in human history west of the 100th meridian.

Today ethnic, religious, cultural and personal biases continue to prejudice the fabric of human history, blindsiding us to reality. They overwhelm intellectual, intuitive and even commonsensical perspectives. I admit to being heavily biased against biased people. Thus, I'm a victim of conflicting absolutes—as are we all.

We must collectively understand that we are but part of Nature, not its master. We are part of the flow of Nature through the present here on planet Earth—this wondrous planet that spawned us all with a lot of help from the Sun. Due in part to our overly dense human population, we have altered the characteristics of the flow of Nature into a somewhat different course than the one to which we are accustomed. If we continue, Nature will exclude us as well and thousands of other fellow species from the continuum of life on our planet.

Here in the northern Río Grande watershed, we have the opportunity to establish a new model of human comportment, a new paradigm. We have Native Americans of different cultural persuasions, Hispanos, Gringos, Blacks, Asians, farmers, scientists, bohemians of every ilk, bureaucrats, politicians, females, males and otherwise. We all rely on our watershed to sustain us. We live in the most arid region in America. It would behoove us to weave mutual cooperation into the fabric of our daily lives, not only for fellow humans, but in true dedicated reciprocity with fellow species in our homeland, our watershed. I thoroughly believe that reciprocity with Nature is key to possible human endeavor not only here in our home watershed, but everywhere on planet Earth. Flawed as it was, the Colorado River Compact of 1922 was an attempt at mutual cooperation between peoples of seven states adjacent to the Colorado River.

I think that we can do better than that. I think we can begin to temper our biases by hearkening to a much bigger picture.

What do you think? ■



Jack Loeffler has produced about 400 documentary radio programs for Public Radio, and many sound collages for museums. He has written several books and scores of essays. He has donated his aural history archive to the New Mexico History Museum in Santa Fe.

PHOENIX TEMPERATURES AND POPULATION GROWING

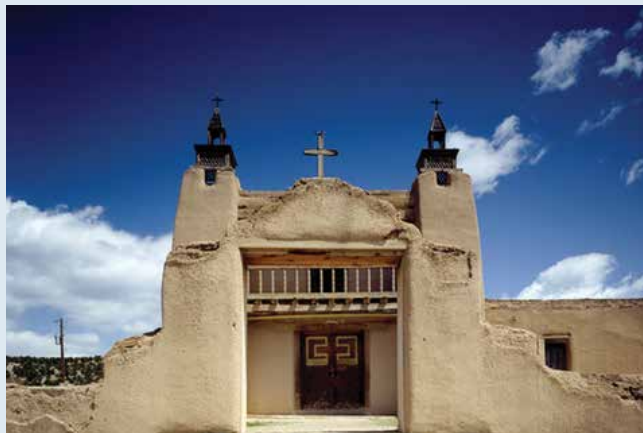
Phoenix, Arizona, is the nation's fifth-largest and fastest-expanding city. Maricopa County, where Phoenix is located, has increased its population by 15.8 percent over the past decade to 4.4 million.

Climate change has made Phoenix even hotter than it already was. In June 2021, the metro area endured a record six consecutive days over 115 degrees. The city now has an Office of Heat Response and Mitigation, one of the first such publicly funded offices. The Federal Emergency Management Agency's (FEMA) Risk Index Map shows that Phoenix, Las Vegas, Houston, Ft. Worth and Seattle are at "relatively high to very high risk" of natural disasters such as hurricanes, flooding, wildfires and frequent, severe heat waves.

Maricopa County recorded 323 heat-related deaths in 2020. According to a May 2021 study in the journal *Nature Climate Change*, more than one-third of the world's annual heat deaths are due directly to global warming. Often the people at greatest risk are those in poor and racially diverse communities where households lack the means to cope with disasters. The heat is especially hard on low-income renters who cannot install solar panels and rely on landlords to fix air conditioners.

Phoenix doesn't have much shade. As increasingly hot summers drain reservoirs fed by the Colorado River, city officials and the nonprofit group Trees Matter are working to plant tens of thousands of drought-resistant trees in low-income neighborhoods, particularly around schools. The goal is to reach 25 percent tree canopy cover throughout the city by 2030. Strategies such as "cool pavement" coatings are also being instituted to counter the heat island effect—when built environments absorb heat and re-emit it—particularly at night. Over the next few years, 400 shade shelters will be installed at bus stops and other locations.

With a \$30-million grant from the U.S. Department of Housing and Urban Development, Phoenix is also replacing obsolete public housing in a majority Latino neighborhood with new, mixed-income, affordable units landscaped with trees and other vegetation.



TERRA 2022 - 13TH WORLD CONGRESS ON EARTHEN ARCHITECTURAL HERITAGE

A scholarship program for tribes and pueblos throughout the Southwest and Northern México is intended to ensure greater skill-sharing and community voices at Terra 2022, an international congress organized by the earthen architecture community, taking place in Santa Fe, June 7–10. There are also several pre-conference workshops. Supported by Getty Foundation and Chamiza Foundation grants, Cornerstones Community Partnerships is managing the scholarships for professionals and students from pueblos and tribes. Applications are due by Jan. 16. Visit <https://wwwwcstones.org/terra-2022>.

Santa Fe and New Mexico have a long, rich tradition of earthen construction and a wealth of significant archaeological, historic, modern and contemporary sites.

Hundreds of specialists will attend Terra 2022 from many fields, including site management, conservation, anthropology, architecture and sustainable development. Workshops, presentations, posters and digital media will illuminate current research and teach best practices in conserving earthen heritage across the world. Up to 600 attendants are expected to participate in person or virtually.

The conference is the 13th meeting (since 1972) of specialists in earthen heritage conservation and preservation. It is organized by Getty Conservation Institute, National Park Service, Vanishing Treasures Program and the University of Pennsylvania Stuart Weitzman School of Design, under the aegis of the International Council on Monuments and Sites, International Scientific Committee on the Conservation of the Earthen Architectural Heritage. For more information, visit WWW.TERRA2022.ORG.



Earthworks in New Mexico: Las Trampas Church; Great Kiva, Chaco Canyon; Ghost Ranch, Abiquiu, Palace of the Governors, Santa Fe

WHAT'S GOING ON

ALBUQUERQUE / ONLINE

JAN. 12, 7:30 PM

MAPPING INDIGENOUS POETRY

Kimo Theatre, 423 Central, NW

U.S. Poet Laureate Joy Harjo in conversation with Lali Long Soldier about the Living Nations, Living Words: A Map of First Peoples Poetry project. \$15/\$10: ABQTICKETS.COM. Followed by book signing/reception at 516 ARTS, where the Counter Mapping exhibition continues through Jan. 22. 505-228-9857

THROUGH JANUARY

"COUNTER MAPPING"

516 Arts, 516 Central Ave. SW

Exhibit seeks to reclaim stories and memories of place through geography, identity, politics and the environment. Painting, sculpture, photography, video and installation. Tues.–Sat., 12–5 pm; Fri., 5–7 pm. Free. 505-242-1445, 516ARTS.ORG

MARCH 2–4

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JUNE 21–24

ENERGY TRANSITION WITH ECONOMIC JUSTICE

UNM, Albuquerque

Annual ASES Solar Conference hosted locally by the N.M. Solar Energy Association. INFO@NMSOLAR.ORG

THROUGH JULY 10

TEMPO Y TIEMPO: 4 PHOTOGRAPHERS IN N.M.

National Hispanic Cultural Center, 1701 4th St.

Photos by Frank Blazquez, Bobby Gutiérrez, Pico del Hierro-Villa and Ximena Montez tell stories about what it is to live in N.M. Masks required indoors. Tues.–Sun., 10 am–4 pm. 505-246-2613, [HTTPS://WWW.NHCCNM.ORG/](https://www.nhccnm.org/)

TUESDAY–SUNDAY, 9 AM–4 PM

INDIAN PUEBLO CULTURAL CENTER

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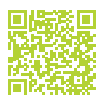
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Jan. 5, 5 pm signup deadline. Anyone who has not submitted a written comment, may comment at the hearing via telephone. (One person per organization.) Non-commenters can watch live on YouTube. 505-670-4830, ISAAC.SULLIVAN-LESHIN@STATE.NM.US

THROUGH JAN. 9

SITELAB 15: JOANNA KEANE LÓPEZ: LAND CRAFT THEATRE

SITE Santa Fe, 1606 Paseo de Peralta

N.M.-based artist explores boundaries between large-scale installation and adobe architecture, celebrating the legacy of the *enjarradora*. 505-989-1199, SITESANTAFE.ORG

JAN. 17

WALKING 4 THE CLIMATE

Teams of walkers will journey from four directions to the Roundhouse, arriving at noon to encourage N.M. to take brave action to combat climate change. CCLI@TAKERESPONSIBILITY.US, [HTTP://TAKERESPONSIBILITY.US/CCLI%20WALKING%20PROJECT.PDF](http://TAKERESPONSIBILITY.US/CCLI%20WALKING%20PROJECT.PDF)

JAN. 17

ENERGY DEMOCRACY CONVERGENCE ON MLK DAY

Info: WWW.EARTHCARENM.ORG

FEB. 2

N.M. MAINSTREET WINTER CONFERENCE

La Fonda Hotel

A program of the N.M. Economic Development Department, working with local organizations to “Engage people, Rebuild Places, Revitalize economies.”

[HTTPS://WWW.NMMAINSTREET.ORG/](https://WWW.NMMAINSTREET.ORG/)

FEB. 11 SUBMISSION DEADLINE

CALL FOR ABSTRACTS

Earth USA International Conference on Earthen Architecture & Construction, Scottish Rite Center and online, Sept. 23–25. [HTTPS://WWW.EARTHUSA.ORG/CALL-FOR-ABSTRACTS/](https://WWW.EARTHUSA.ORG/CALL-FOR-ABSTRACTS/)

THROUGH FEB. 27, SAT.–SUN., 11 AM–5 PM

SANTA FE MODERN

CCA's Spector Ripps Gallery, 1050 Old Pecos Tr.

Photo exhibition and book by Casey Dunn examines how Indigenous design and materials have informed the architecture of Santa Fe. Proof of vaccination required. 505-982-1338,

[HTTPS://CCASANTAFE.ORG/SANTA-FE-MODERN/](https://CCASANTAFE.ORG/SANTA-FE-MODERN/)

MARCH 19–20

SF HOME SHOW & REMODELERS SHOWCASE

SF Convention Center

Presented by the SF Area Homebuilders Association. 505-982-1774,

[HTTPS://SFAHBA.COM](https://SFAHBA.COM)

MARCH 28–APRIL 29

FREE N.M. ENVIRONMENTAL JOB TRAINING

Training, skills and certifications needed to become Environmental Technician through SF Community College's EPA workforce development program. Partners include LANL, NNMC, ENIPC. 505-428-1866, janet.kerley@sfcc.edu,

WWW.SFCC.EDU/PROGRAMS/ENVIRONMENTAL-JOB-TRAINING

THROUGH MAY 16

KATHLEEN WALL “A PLACE IN CLAY”

Museum of Indian Arts and Culture, 710 Cam. Lejo

The Jemez Pueblo artist is MIAC's 2020-2021 Native Treasures Living Treasure.

505-476-1269, INDIANARTSANDCULTURE.ORG/

JUNE 7–10

TERRA 2022

SF Convention Center

13th World Congress on Earthen Architectural Heritage. Looking back, moving forward. Advances in Conservation. Podium presentations, poster sessions, speaker meet & greet, tours, workshops, earthen architecture inspired art. WWW.TERRA2022.ORG/WEBSITE/8033/

THROUGH JUNE 16

CLEARLY INDIGENOUS: NATIVE VISIONS REIMAGINED IN GLASS

Museum of Indian Arts and Culture, 710 Cam. Lejo

Works by 30-plus artists, including Ramson Lomatewama, Preston Singletary and Adrian Wall. 505-476-1269, INDIANARTSANDCULTURE.ORG/

THROUGH JULY 10

EXPOSURE: NATIVE ART AND POLITICAL ECOLOGY

LILA Museum of Contemporary Native Arts, 108 Cathedral Pl.

International Indigenous artists' responses to impacts of nuclear testing, accidents and uranium mining on Native peoples and the environment.

[HTTPS://IAIA.EDU/EVENT/EXPOSURE-NATIVE-ART-AND-POLITICAL-ECOLOGY/](https://IAIA.EDU/EVENT/EXPOSURE-NATIVE-ART-AND-POLITICAL-ECOLOGY/)

THROUGH JAN. 15, 2023, 10 AM–5 PM

#MASK: CREATIVE RESPONSES TO THE GLOBAL PANDEMIC

Museum of International Folk Art, 706 Museum Hill

\$7/\$12 505-476-1200, INTERNATIONALFOLKART.ORG

TUES., SAT., 8 AM–1 PM

SANTA FE FARMERS' MARKET

1607 Paseo de Peralta

505-983-4098, SANTAFEFARMERSMARKET.COM

WEDS.–SAT., 10 AM–6 PM; FRI.–SAT., 10 AM–6:30 PM

SANTA FE CHILDREN'S MUSEUM

Interactive exhibits, play areas, weekly programs. Masks required for ages 2 and older. \$10/\$8/\$7/\$3/one & under free. 505-989-8359, SANTAFECHILDRENSMUSEUM.ORG

THURS.–SAT., 1–4 PM, THROUGH AUG. 2022

TRAILS, RAILS AND HIGHWAYS

Museum of Spanish Colonial Art, 750 Camino Lejo

How trade transformed the art of Spanish New Mexico. \$12/\$5/under 12 free. 505-982-2226, RESERVATIONS@SPANISHCOLONIAL.ORG, SPANISHCOLONIAL.ORG

EL RANCHO DE LAS GOLONDRINAS

334 Los Pinos Rd., La Ciénega, N.M.

Living history museum. 200 acres, 34 historic buildings. 505-471-2261, GOLONDRINAS.ORG

SF HABITAT FOR HUMANITY

Seeking land, donated or for sale, to build affordable housing. Low-income homeowners help build homes and make mortgage payments to the nonprofit HFH. Property owners can qualify for 50 percent Affordable Housing tax credit through the N.M. Mortgage Finance Authority. 505-986-5880, ext. 109

STATE MUSEUMS

Museum of International Folk Art (10 am–4 pm), Museum of Indian Arts and Culture (10 am–4 pm), N.M. History Museum (10 am–4:30 pm), N.M. Museum of Art (Tues.–Sun., 10 am–4 pm). NEWMEXICOCULTURE.ORG/VISIT

YOUTHBUILD / YOUTHWORKS!

Paid training for Youth 16–24. Construction, Culinary, GED. 505-989-1855, WWW.SANTAFEYOUTHWORKS.ORG/SANTA-FE-YOUTHBUILD/

TAOS / ONLINE

BEGINS IN MARCH. MON., WEDS.

ANCESTRAL, FOLK & HERBAL MEDICINE PROGRAM

9-month program. Field trips, herbalism, food as medicine and more.

Info/Registration: [HTTPS://NATIVEROOTSSHEALING.COM](https://NATIVEROOTSSHEALING.COM)

HERE & THERE / ONLINE

EARLY 2022 APPLICATION DEADLINE

TRIBAL AGRICULTURE EDUCATION FELLOWSHIP

For Native American students pursuing degrees in agriculture.

[HTTPS://NATIVEAMERICANAGRICULTUREFUND.ORG](https://nativeamericanagriculturefund.org)

JAN. 7 APPLICATION DEADLINE

LOS SEMBRADORES ACEQUIA FARMER TRAINING

Mid-Feb. to Mid-Dec. apprenticeship at northern NM farm and support to work plots in home communities. NM Acequia Association. 505-995-9644,

[HTTPS://LASACEQUIAS.ORG/LOS-SEMBRADORES-FARMER-TRAINING/](https://lasacequias.org/los-sembradores-farmer-training/)

JAN. 8, 12, 15, 19, 22

MIDDLE RÍO GRANDE WATER ADVOCATES CONFERENCE

[HTTPS://MRGWATERADVOCATES.ORG/NEXT-CONFERENCE/](https://mrwateradvocates.org/next-conference/)

“The Great Change—Surviving NM’s Arid Future—A Call to Action!”

Create strategies to manage over-committed, declining water resources.

JAN. 11 REGISTRATION DEADLINE

CREATING RESILIENT & PROFITABLE CROPLAND

Online Course

For small- to large-scale farmers. [WWW.HOLISTICMANAGEMENT.ORG/ONLINECROPPING](http://www.holisticmanagement.org/onlinecropping).

Tuesdays, Jan. 11–Feb. 22.

JAN. 11 APPLICATION DEADLINE

NATIVE AMERICAN SPRINT

Online

Free business accelerator for Native Americans presented by Arrowhead Center at NMSU.

[HTTPS://BUFF.LY/3OA8ZTT](https://buff.ly/3OA8ZTT)

JAN. 14, 9 AM–3 PM

SUSTAINABLE EQUITABLE ECONOMIC DEMOCRACY N.M.

[HTTPS://SEEDNM.ORG/VIRTUAL-POLICY-SYMPIOSIUM](https://seednm.org/virtual-policy-symposium)

Discussion on how to achieve a sustainable, equitable economy in N.M. Virtual policy convening by N.M. affiliate of the American Sustainable Business Network.

JAN. 21: RESPONSES TO 1/6 PUBLIC HEARING COMMENTS DUE

N.M. PRC PROPOSED COMMUNITY SOLAR RULES

[WWW.NM-PRC.ORG](http://www.nm-prc.org) Docket number 21-0112-UT “Exhibit A”

JAN. 21 APPLICATION DEADLINE

YOUTHBUILD

Program funds organizations to provide pre-apprenticeship programs that encompass education, occupational skills training, leadership development and placement opportunities for youth.

[HTTPS://WWW.GRANTS.GOV/WEB/GRANTS/VIEW-OPPORTUNITY.HTML?OPPID=336698](https://www.grants.gov/web/grants/view-opportunity.html?oppid=336698)

JAN. 22 APPLICATION DEADLINE

OUTDOOR RECREATION CERTIFICATE

Collaborative effort of Anderson School of Management and Santa Fe Innovates focused on central and northern N.M. early-stage entrepreneurs.

[HTTPS://WWW.MGT.UNM.EDU/NMFORGOOD/OUTDOOR-RECREATION/DEFAULT.ASP](https://www.mgt.unm.edu/nmforgood/outdoor-recreation/default.asp)

JAN. 29

MASTER’S AUCTION

Northern N.M. master artists Roxanne Swentzel, Jim Vogel, Roger Montoya and others. Benefits Moving Arts Española: “Building Community and Cultivating Leaders through Arts and Culture.”

[WWW.MOVINGARTSESPANOLA.ORG](http://www.movingartsespanola.org)

FEB. 3–6

WE THE PEOPLES BEFORE

The Kennedy Center, Washington, D.C.

Knowing, honoring and sharing Indigenous America. Performances, workshops, film screenings, cooking demos, discussions and more. [WETHEPEOPLESBEFORE.ORG](http://wethepeoplesbefore.org)

FEB. 27, 2022 APPLICATION DEADLINE

FOOD LABS ACCELERATOR

Creative Startups partnership with the City of Santa Fe. Designed for northern N.M.-based entrepreneurs building food companies, early- and growth-stage startups, startups expanding into new

markets and businesses adapting to COVID-19. Online cohort meets Tues. and Thurs. mornings. March 14–April 22. \$175 fee, once accepted.

ALICE@CREATIVESTARTUPS.ORG

MARCH 1–3

HIROSHIMA INTERNATIONAL CONFERENCE ON PEACE AND SUSTAINABILITY

Hiroshima University, Japan

Discussions of the latest findings on conflict due to social, political, economic and environmental factors.

[HTTPS://WWW.IEREK.COM/EVENTS/HICPS2022#INTRODUCTION](https://www.ierek.com/events/hicps2022#introduction)

MARCH 24–25

THE GREEN SUMMIT

San Diego, Calif. and Online

Leaders in renewable energy, cleantech and sustainability. Presented by

[WWW.GREEN.ORG](http://www.green.org)

APRIL 1

SW JÉMEZ MOUNTAINS CFLRP

AND RESILIENT LANDSCAPES MEETING

Location TBA and/or Online

Long-term restoration strategy for forest and watershed restoration.

KARL.BUERMEYER@USDA.GOV,

[WWW.FS.USDA.GOV/DETAIL/SANTAFE/LANDMANAGEMENT/PROJECTS/?CID=STEL-PRD3826396](http://www.fs.usda.gov/detail/santafe/landmanagement/projects/?cid=STEL-PRD3826396)

MON.–SAT., 9 AM–4 PM; SUN. CALL FIRST OR AFTER 3 PM N.M. WILDLIFE CENTER

19 Wheat St., Española, NM

Self-guided tours, 505-753-9505, JESSICA@NEWMEXICOWILDLIFECENTER.ORG

THURS.–SUN, 10 AM–4 PM

BOSQUE REDONDO MEMORIAL

Fort Sumner, N.M.

“A place of suffering, a place of survival.” New exhibit examines the history of the Long Walk in the 1860s, when Diné and Mescalero Apache were forcibly marched to barren reservation in eastern N.M. Free. 575-355-2573,

[WWW.BOSQUEREDONDOMEMORIAL.COM](http://www.bosqueredondomemorial.com)

CITIZEN SCIENCE VOLUNTEERS

Río Chama

Boaters running the Wild and Scenic section of the river are needed to collect insect samples. Training and sampling kits provided. RHETT@NMWILD.ORG

INDIGIEXCHANGE MARKETPLACE

[WWW.INDIGEXCHANGE.COM](http://www.indigexchange.com)

Online marketplace for Indigenous artists and entrepreneurs across Indian Country who have graduated from N.M. Community Capital’s programs.

N.M. ACEQUIA ASSOCIATION PRESENTATIONS

Online or Outside

Youth educators are available for presentations and coordination of special projects with classroom and community educators on topics such as acequia history, ecology and culture; local farming and ranching traditions, water, land and climate change. 505-995-9644, EMILY@LASACEQUIAS.ORG,

[WWW.LASACEQUIAS.ORG/YOUTH-EDUCATION](http://www.lasacequias.org/youth-education)

NM 5-ACTIONS PROGRAM

[HTTPS://NM5ACTIONS.COM](https://nm5actions.com)

Community training on addressing trauma. A self-guided roadmap for those struggling with addiction. Free. NM Crisis Line: 1-855-662-7474

RURAL PATHWAY TOURISM INCUBATOR

Free service provides N.M. communities comprehensive technical assistance to create tourism products and matching funding for implementation. Applications

Accepted through May 1. Projects must be completed by June 30. [HTTPS://WWW.NEWMEXICO.ORG/INDUSTRY/WORK-TOGETHER/GRANTS/RURAL-PATHWAY-PROGRAM/](https://www.newmexico.org/industry/work-together/grants/rural-pathway-program/)

Saving water is always in season!



#ValueWater

Bees Trees Water

The City of Santa Fe is proud to be a Bee City USA affiliate. As such, the City is committed to supporting our pollinators and you can too! Visit savewatersantafe.com/urban-forest to get started on your waterwise pollinator garden.



Make a Reservation to Save Water!

We encourage locals and visitors alike to dine at Santa Fe's **Certified Waterwise** establishments. These restaurants are committed to reducing their water footprint in The City Different.

Visit savewatersantafe.com/waterwise-dining to see a list of restaurants that are **Certified Waterwise**.

savewatersantafe.com

Saving water means caring for our limited water supply properly that we depend on to sustain life. It is up to each one of us to use water efficiently.

Keep an **EyeOnWater** use!

Set up leak alerts



Don't wait for an unexpected high water bill before you realize you have a leak. **EyeOnWater** will let you know when there's ongoing continuous flow through your meter.

Got a leak alert - now what?



- Check **EyeOnWater** to see when the leak began to help identify what is leaking.
- Check your irrigation system for cracked hoses, missing sprinkler heads, or broken timers.
- Check the toilets to see if water is leaking out of the tank through a bad flapper.
- Still no luck? Call the Water Conservation Office (WCO) at 505-955-4222

Is your leak an expensive fix?



We understand that fixing leaks can sometimes be expensive to fix. Please call the WCO at 505-955-4222 and we will work with you to find solutions to fix leaks and save water.

EyeOnWater is a free water use monitoring app for City of Santa Fe water customers.

santafem.eyeonwater.com/signup



Stay informed. Follow us!

@savewatersantafe

City of Santa Fe Water Conservation

