

JANUARY / FEBRUARY 2023

TOP-10 ENVIRONMENTAL ISSUES TO WATCH IN NM IN 2023

GREEN FIRE TIMES

News & Views from the Sustainable Southwest



NEW MEXICO LEADS THE WAY TOWARD A BRIGHTER FUTURE
CONGRESO DE LAS ACEQUIAS: TIERRA QUERIDA, BELOVED LAND
THE NEW MEXICO NO FALSE SOLUTIONS COALITION

THE CALL FOR GENERATIONAL JUSTICE

VOLUME 15 NUMBER 1

GREENFIRETIMES.COM

PUBLISHER GREEN EARTH PUBLISHING, LLC

EDITOR-IN-CHIEF SETH ROFFMAN
EDITOR@GREENFIRETIMES.COM

GUEST ASSOCIATE EDITORS
JOHN ACOSTA, BIANCA SOPOCI-BELKNAP

ADMINISTRATIVE ASSISTANT / EXECUTIVE CONSULTANT
THÉRÈSE WILLIAMS

DESIGN WITCREATIVE

COPY EDITOR STEPHEN KLINGER

CONTRIBUTING WRITERS JOHN ACOSTA, JONATHON JUAREZ-ALONZO, MARIO ATENCIO, JULIA BERNAL, DAVID FOSDECK, PAULA GARCÍA, FRANCES GONZÁLEZ, SCOTT JEANSONNE, ELIZABETH LOCKYEAR, ENNEDITH LÓPEZ, ALEXANDRIA LYONS, ANN MCCARTNEY, DIVANA OLIVAS, SETH ROFFMAN, SUSAN SCHURMAN, KIMBERLY SMITH, BIANCA SOPOCI-BELKNAP, JACOB VIGIL

CONTRIBUTING PHOTOGRAPHERS JOHN ACOSTA, ZACHARY NASH ARCHULETA, MILES CONWAY, DONATELLA DAVANZO, ANNI HANNA, CHELSEY JOHNSON, ELIZABETH LOCKYEAR, NATHANIEL PAOLINELLI, LIEZEL TAYLOR, SETH ROFFMAN, TIMBO SCURSSO

ADVERTISING SALES ADVERTISE@GREENFIRETIMES.COM

**PRINTED LOCALLY WITH 100% SOY INK ON
100% RECYCLED, CHLORINE-FREE PAPER**

GREEN FIRE TIMES ©2023 GREEN EARTH PUBLISHING, LLC
C/O SOUTHWEST LEARNING CENTERS, INC.
A NON-PROFIT EDUCATIONAL ORGANIZATION (EST. 1973)
505-989-8898, P.O. BOX 8627, SANTA FE, NM 87504-8627
GREENFIRETIMES.COM

COVER: EL ANGEL, EL SANTO Y LAS ACEQUIAS BY ANITA RODRÍGUEZ, TAOS, N.M.
FIRST PRIZE, ADULT WINNER OF THE N.M. ACEQUIA ASSOCIATION'S 2022 ACEQUIA ART CONTEST
FINEARTNEWMEXICO.COM, ANITARODRIGUEZ.COM

GREEN FIRE TIMES REALLY NEEDS YOUR SUPPORT

Green Fire Times is a platform for regional, community-based voices—useful information for residents, businesspeople, students and visitors—anyone interested in the history and spirit of New Mexico and the Southwest. GFT's small, dedicated staff and multitude of contributors generate articles documenting the interrelationship of community, culture, the environment and the regional economy. The sustainability of our region affects all of us, and requires people from all backgrounds working together to create solutions. One of the unique aspects of GFT is that it provides multicultural perspectives that link green, cutting-edge innovations with time-honored traditions.

Storytelling is at the heart of community health. We have an opportunity to change the story going forward, which can lead to positive transformational change. GFT shares inspiring stories of hope and community action. By helping our communities discover who they once were and what they can become, a more positive future can be created.

Of course, it is an extremely challenging time to continue to produce a free, quality, independent publication. Production costs have greatly increased. Many local and regional publications have folded or have been bought up by corporate entities. Fortunately, a growing number of publications are receiving boosts from nonprofits that are devoted to protecting journalism. GFT is owned by Southwest Learning Centers, Inc. (est. 1973), a nonprofit educational organization. SWLC provides a mentorship program for some of GFT's writers, aspiring journalists and documentarians.

Green Fire Times is struggling to survive. We also need funding to upgrade our online archive and make 13 years of articles more accessible to community members, students and researchers. Don't assume that someone else will help. Please consider making a tax-deductible donation through our website, or send a check made out to Southwest Learning Centers (with a notation 'for GFT') to P.O. Box 8627, Santa Fe, N.M. 87504-8627. Also, please advertise! The print edition—currently published every other month, while our website is updated more frequently—is widely distributed from Albuquerque to Taos and beyond. For a rate sheet, visit GREENFIRETIMES.COM.

FIND YOUR FUTURE @ NORTHERN New Mexico College

You may qualify for FREE TUITION with the New Mexico Opportunity Scholarship!*

Register today
for Spring 2023
CALL 505.747.2111
VISIT NNMC.EDU



NORTHERN offers 50+ bachelor's, associate and certificate programs in Arts & Human Sciences, Liberal Arts, STEM, ADN Nursing & FULLY ONLINE programs in Business, Teacher Education & RN to BSN curriculum.

*Based on NM Higher Education Department residency requirements

GREEN FIRE TIMES

News & Views from the Sustainable Southwest

CONTENTS

- THE CALL FOR GENERATIONAL JUSTICE – EARTH CARE STAFF / 3
- TOP-10 ENVIRONMENTAL ISSUES TO WATCH IN 2023 – NEW MEXICO ENVIRONMENTAL LAW CENTER / 5
- YUCCA'S ENERGY JUSTICE SCORECARD – JONATHON JUAREZ-ALONZO / 9
- OP-ED: DAVID FOSDECK – COMPREHENSIVE CLEANUP IS NEEDED TO TRANSITION FROM COAL / 10
- OP-ED: FRANCES GONZÁLEZ – THE LOCAL CHOICE ENERGY ACT / 12
- OP-ED: JULIA BERNAL AND ALEXANDRIA LYONS – THE NEW MEXICO NO FALSE SOLUTIONS COALITION SUPPORTS REAL CLIMATE SOLUTIONS / 13
- CARBON OFFSETS (DEBUNKED BY YUCCA) / 16
- ENERGY NEWSBITES: 18
- BOOK PROFILE: NUCLEAR NUEVO MÉXICO BY MYRRIAH GÓMEZ – DIVANA OLIVAS / 20
- OP-ED: JULIA BERNAL – THE NUCLEAR-HYDROGEN PUSH AT COP27 / 21
- OP-ED: ANN MCCARTNEY – WATER PROTECTION IN VALENCIA COUNTY / 23
- OP-ED: ENNEDITH LÓPEZ – HISTORIC MOUNTAIN VIEW FILING / 24
- OP-ED: MARIO ATENCIO – THE INDIGENOUS PEOPLE-LED PROTECT GREATER CHACO COALITION / 26
- CONGRESO DE LAS ACEQUIAS 2022 – DECLARATION: TIERRA QUERIDA, BELOVED LAND; PEONES DE SAN ISIDRO MUTUAL AID – PAULA GARCÍA / 28
- NIHI K'É BAÁ "LOVE ON THE LAND" – KIMBERLY SMITH / 32
- OP-ED: JACOB VIGIL – NEW MEXICO LEADS THE WAY TOWARD A BRIGHTER FUTURE FOR YOUNG KIDS / 34
- NEWSBITES / 11, 13, 27, 31, 32, 35, 36, 37
- WHAT'S GOING ON / 38



pg. 23



pg. 28



pg. 13

The Call for Generational Justice Continues

BY EARTH CARE STAFF



Seven-point-four million. That's the number of acres burned by wildfires in 2022 in the United States.¹ **Twenty billion.** That's the cost in damages caused by just one megastorm that hit the Atlantic coast last year.² **One million.**

In New Mexico, the ticking time bomb already exploded for many in 2022.

Toby King, YUCCA leader, demanding climate action at a 2022 legislative interim committee meeting

1 <https://crsreports.congress.gov/product/pdf/IF/IF10244>
2 <https://yaleclimateconnections.org/2022/10/world-rocked-by-29-billion-dollar-weather-disasters-in-2022/>

That's the number of animal and plant species threatened with extinction.³ **Thirty-six degrees.** That's the increase in average temperature in Greenland last fall.⁴ **Thirty-nine.** That's the number of lives lost to the frigid cold and record snowfall Christmas

Climate losses have huge implications for real people's lives and our planet's stability.

weekend, 2022. The big numbers are huge—but we also take note of the little numbers because even they represent climate losses that have huge implications for real people's lives and our planet's stability. **Eight** is the number of years that scientists across the world have set as the deadline for us to reverse course and drastically cut emissions in order to stabilize life on Earth as we know it.

In New Mexico, the ticking time bomb already exploded for many in 2022. Thousands of people across the state watched their beloved mountains, homes and livelihoods burn as the largest wildfires in our state's history scattered climate refugees. The fires devastated many lives—immeasurable losses that will continue to scar for generations

3 <https://www.nature.com/articles/d41586-019-01448-4?campaign=affiliatesection>
4 <https://www.arctic.noaa.gov/Report-Card/Report-Card-2022>

and threaten some of New Mexico's richest cultural traditions of land stewardship and sustainability. And yet, new leases for oil and gas drilling were signed daily as the wildfires raged and the methane hotspot in the Four Corners was joined by a sibling methane hotspot just outside of Carlsbad.⁵

For young people—the death count and expense report from climate disasters are a part of the daily news cycle—no longer novel or surprising. In fact, climate disaster is one of the only certainties young people have today. The forecasts of mass extinction, sea level rise, mass forced displacement and regular threat of climate emergencies are the inheritance adults seem set on delivering.

Seeds of resistance and resilience

Global CO2 emissions from fossil fuels hit a record high in 2022 despite a worldwide “effort” to curb fossil fuel use and keep the world’s temperature rise under 1.5°C. To achieve that limit, CO2 emissions must decline by 45 percent. The outlook appears bleak; the UN Environment Programme asserted in an Oct. 2022 report that there was “no credible pathway to 1.5°C.”⁶ “This report tells us in cold scientific terms what nature has been telling us all year, through deadly floods, storms and raging fires: we have to stop filling our atmosphere with greenhouse gases, and stop doing it fast,” stated Inger Andersen, the UNEP’s executive director.

Young people continue to rise up and call governments to account for their abject failure to protect their futures.

It’s no wonder then that young people around the world continue to rise up and call governments to account for their abject failure to protect their futures.

In 2019, thousands of young people descended on New Mexico’s state capitol calling for urgent action on climate change. Our young leaders in northern New Mexico organized the protest, and YUCCA (Youth United for Climate Crisis Action) was born. The group

developed five demands to address the “climate emergency” (declared by the youth when the governor failed to do so). So far, only one demand has been met. The governor and lawmakers have allowed industry to continue to call the shots. The New Mexico Oil and Gas Association says, “We have abundant supplies of oil and natural gas. It’s up to the government to develop support programs and then get out of the way of the industry and let us provide affordable energy and help create jobs.”⁷ And it appears that, so far, industry has been the guest of honor at the table when discussions on energy policy are underway—setting the terms and defining what will be considered palatable.

But throughout the state, communities are organizing, and voices and visions for a just transition, bold climate action and energy democracy are emerging.

For the last five years Earth Care has had the privilege of partnering with the *Green Fire Times* on the first edition of each new year. We’ve focused on the seeds of resistance and resilience that give us hope by lifting up voices from our climate and environmental justice movements, as well as those who have found courage even in the darkest of times—to push forward the work of demanding more for our communities. We hope you’ll find inspiration from this edition and join the young people who lead our work—in fighting to ensure that 2023 is the year for climate justice—and generational justice for New Mexico. Learn more and sign up to join the Climate Emergency campaign at YUCCANM.ORG. ■

5 <https://www.jpl.nasa.gov/images/pia25592-emit-spots-methane-hotspots>

6 <https://news.un.org/en/story/2022/10/1129912>

7 https://www.nmoga.org/energy_industry_expects_numerous_challenges_at_federal_level

Top: Seneca Johnson, YUCCA campaign organizer, in front of the Eldorado Hotel in Santa Fe, where the New Mexico Oil & Gas Association held its annual meeting, Oct. 2022 Photo © Anni Hanna Center: Laura Ten Fingers, a YUCCA member, joined by more than 100 protesters on Earth Day 2022 march in downtown Santa Fe. Photo © Anni Hanna

Bottom: Hope Alvarado, Red Nation organizer, speaks about the harm to tribal communities from oil & gas extraction. Photo © John Acosta



TOP-10 ENVIRONMENTAL JUSTICE ISSUES FOR 2023

BY NEW MEXICO ENVIRONMENTAL LAW CENTER STAFF

For several years, the staff at the New Mexico Environmental Law Center (NMELC) has weighed in on what we see as the most pressing environmental justice issues for the coming year. This year we reflect on how now, more than ever, we must stop doing business as usual and address profound environmental justice challenges in a way that centers community health and wellbeing rather than financial profits. Because of the profound responsibility we have to our current and future generations, we must do everything in our power to make the right decisions that will safeguard Mother Earth, uphold environmental justice, and ensure our children and their grandchildren have a liveable future.

1. THE CLIMATE CRISIS REMAINS OUR NUMBER ONE PRIORITY

We are at a tipping point when it comes to averting the most catastrophic climate change impacts, which are already evident in drought, wildfires, famine, flooding from sea-level rise and extreme weather events. We hear a lot of lip service around the need to prioritize reducing greenhouse gas emissions but do not see enough tangible action taken by decision makers. As



YUCCA blocked the entrance to the NM Oil & Gas Association meeting in Santa Fe, 2022

a state, we bear a sobering responsibility for emissions due to the massive extraction of oil and gas in the Permian Basin.

As we face the daunting challenge to drastically reduce greenhouse gas emissions, we must take our lead from and organizers of color in New Mexico who have been demanding concrete action at the frontlines for years. The days of marginalizing or tokenizing their voices must end now. We urge legislators to heed their demands during the 2023 session, especially given the billions of dollars of surplus money in state coffers and a once-in-a-generation opportunity to be bold. For example, Youth United for Climate Crisis Action (YUCCA), Pueblo Action Alliance and other frontline youth organizations are pushing for critically important amendments to the timeline and net zero language in the proposed Climate Bill that would mandate emissions reductions throughout the state [1] [2], are calling for a just transition fund; a San Juan Generating Station clean-up bill that would require a comprehensive

independent study of coal ash contamination and other toxins at the site; Local Choice Energy, which would enable local communities to buy or generate more renewable energy and speed up the transition to renewable energy sources; and mandatory setbacks to the Oil and Gas Act.

We must think of a clean and healthy environment as a fundamental civil and human right.

We must reject false solutions to the climate crisis (like fossil fuel-produced hydrogen, carbon sequestration and carbon offsets) and create policy that is fundamentally based on a just transition from reliance on fossil fuels. ([3])

2. WILDFIRES

The year 2022 was a devastating year for New Mexicans when it comes to wildfires. A prescribed burn conducted by the U.S. Forest Service resulted in the Calf Canyon/Hermit's Peak Fire: the largest and most destructive fire in the history of the state. It burned over

Governments must heed recommendations by the water stewards and place the highest priority on traditional knowledge.



340,000 acres and destroyed more than 900 buildings, devastating rural communities and traditional water users across the northeast part of the state, threatening the domestic water supply of residents in and near Las Vegas, N.M. The fires raged for five months, and after they were extinguished, impacts continued to pile on as monsoon rains fell onto the burn scar, with the resulting flooding moving toxic ash into rivers and streams.

Federal aid has been allocated for people impacted by these mammoth fires, but bureaucratic processes have delayed communities' ability to access much of this funding. Importantly, community concerns were ignored before the burn was conducted. This disaster could have been avoided if federal agencies had listened to local voices. At the recent Congreso de las Acequias, *mayordomos* (acequia stewards) reported that 48 acequias were damaged by the Calf Canyon-Hermit's Peak fire. The Black Fire, the state's second largest, located in the Gila National Forest, damaged more than 20 acequias, and the Cerro Pelado Fire near Cochiti Pueblo burned 50,000 acres. Because of the impacts of these massive fires, they are asking for twice as much federal funding as has been allocated.

Moving forward, the process of designing and approving prescribed burns must be fully overhauled to prevent such a devastating disaster from ever happening again. The Congreso issued a declaration that includes: "The trees'[4], plants, roots, soils and cloud patterns that were our source of water and our source of life will never be the same again. ...Acequias, once flowing with clean, crystalline snowmelt from our beloved mountains, are clogged with ash and soils that eroded from burned hillslopes." As *Source NM* reported, "The declaration spells out steps the acequia leaders say are required to ensure centuries-old waterways recover, including mobilizing communities, investing in thinning and erosion control to protect unharmed watersheds, establishing emergency seed banks and dedicating more resources toward developing drought-resistant crops and livestock." Governments at every level must heed the recommendations by these water stewards and place the highest priority on traditional knowledge[5].

3. A CLEAN & HEALTHY ENVIRONMENT IS A FUNDAMENTAL RIGHT

When we think about our fundamental civil rights, we often think of the right to freedom of speech, freedom of assembly, freedom of religion and freedom from undue search and seizure, to name a few. Considering the state of our planet, shrinking habitats, damaged ecosystems and the threat of another mass extinction of species from climate change, we must think of a clean and healthy environment as a fundamental civil and human right as well. Our survival depends on it.



The Río Grande near Taos, New Mexico
© Seth Roffman

One way to elevate a healthy environment to the same importance as other rights in the courts is for New Mexico to adopt a Green Amendment. The New Mexico Green Amendment would amend Article 2 of the state Constitution by adding a new section to read that “The people[6] of the state shall be entitled to clean and healthy air, water, soil and environments; a stable climate; and self-sustaining ecosystems, for the benefit of public health, safety and general welfare. The state shall protect these rights equitably for all people regardless of race, ethnicity, tribal membership status, gender, socioeconomics, or geography.” The state would be required to “conserve, protect and maintain these resources for the benefit of all the people, including present and future generations.”

If the NM Green Amendment passes in the upcoming legislative session, the measure would then be put to the voters of the state, as it would amend the state Constitution. Elevating a clean and healthy environment to be a fundamental right would strengthen the ability of residents to obtain adequate cleanup of contamination and pollution as well as prevent it in the first place[7].

4. CUMULATIVE IMPACTS

Regulators have long looked at air pollution permits as if they exist in a silo. They evaluate predicted emissions without considering other pre-existing sources of pollution and social determinants of health in the neighborhood where the polluting industry wants to set up shop and make a profit while harming the health of nearby residents. Cumulative Impacts regulations and laws around the country have long been considered the holy grail of environmental justice[8]. These regulations require agencies to take into consideration the disproportionate impacts that low-income communities of color have to bear from toxic and polluting industries.

The Mountain View Coalition and NMELC recently submitted a historic draft Health, Environment and Equity Impacts Regulation to the Albuquerque-Bernalillo County Air Quality Control Board. The regulation would enable the Albuquerque Environmental Health Department to deny an air pollution permit



Los Jardines Institute press conference for Mountain View Coalition filing of health, environment and equity impacts regulation, Nov. 2022
Photo by Anni Hanna

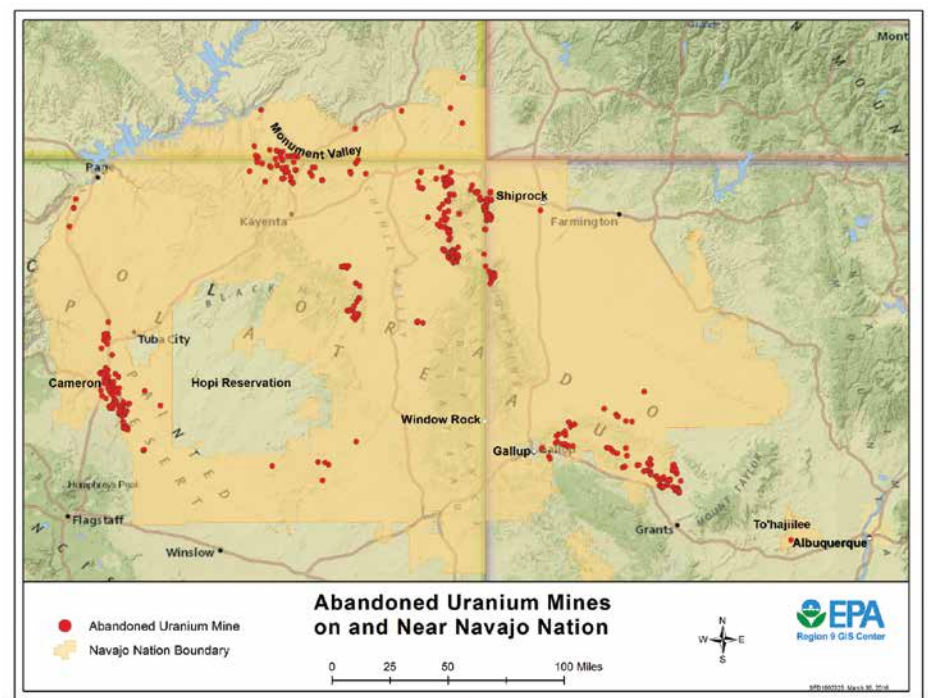
Land use must be tied to sustainable water availability.

if it will be located in an overburdened community and negatively impact the health of residents in that community. If the facility is proposed to be located in an overburdened community, the applicant must perform a Disparate Impact Screening and evaluate nine identified Health Indicators. The permit application will be denied if any one of nine health indicators in the area already exceeds the county average for those indicators.

We expect the Air Quality Control Board to schedule a public hearing on the proposed impacts regulation in the next several months. We will be pressing upon community members and all organizations to support the Mountain View Coalition’s regulation by writing letters of support and speaking up at the hearing. We also urge legislators to adopt a similar cumulative impacts regulation at the state[9] level[10].

5. URANIUM IMPACTS AND INTERNATIONAL HUMAN RIGHTS

Uranium mining and milling activities have left a legacy of disease, mortality and contaminated lands, water and air, especially in tribal communities across the state. The EPA has counted 523 abandoned uranium mines [see map] and allotted funds to assess and clean up 230 of the mines, fewer than half. In spite of that legacy of harm, the Nuclear Regulatory Commission (NRC) licensed additional uranium mining and milling activities in Church Rock and Crownpoint in 1998; the company has changed hands in the decades that have followed, from HRI to Laramide, but the license remains viable. Grassroots community



members united to fight back and formed Eastern Navajo Diné Against Uranium Mining (ENDAUM), and filed a petition with the Inter-American Commission on Human Rights in 2011. In 2021 the IACHR ruled ENDAUM’s petition, filed by the NMELC, as admissible, only the second time for an environmental justice case against the United States. As we wait for a decision on the merits, ENDAUM and NMELC have requested that the decision be expedited, and that a thematic hearing

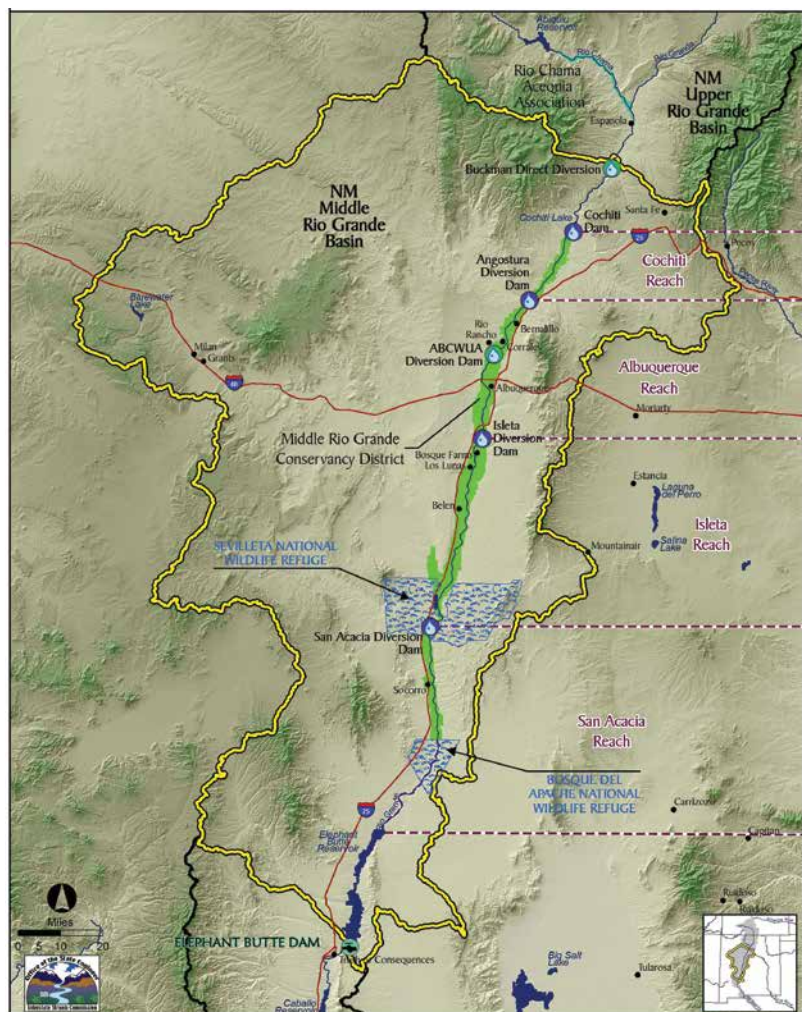
The military industrial and nuclear complex has left a legacy of contamination and disease on traditional Indigenous territories and communities.

on uranium impacts to tribal communities be held at the next IACHR session, which will be held in early March in Los Angeles.

The threat of renewed uranium mining has not been higher in decades; Russia's war on Ukraine has indirectly led to subsidies by the Biden administration for domestic uranium mining exploration. Right now, activity at the proposed mine near Church Rock has the local community alarmed, asking questions and mobilizing to assess their options. The Red Water Pond Road Community Association was recently pleased to see the NRC put a halt to their plan to move mine waste only half a mile down the road, after three NRC commissioners came to Church Rock in April 2022. But we have now learned that the NRC has lifted the pause and intends to move forward with the flawed plan that doesn't adequately protect the Diné community whose land and health the mine waste threatens[11].

6. FREE, PRIOR AND INFORMED CONSENT (FPIC)

In 2007, the United Nations General Assembly adopted the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). At first, the United States voted against the declaration, but then reversed its position. UNDRIP specifies that free, prior and informed consent be a prerequisite for any activity that affects ancestral lands, territories and natural resources of Indigenous peoples. In the New Mexico context,



New Mexico's Middle Río Grande Basin

FPIC must apply to the extraction and cleanup of lands impacted by uranium mining and milling and storage of radioactive waste. Federal and state government agencies need to do more than just send letters to tribal governments and check off the consultation box, something we see the NRC, for example, do when an Environmental Impact Statement (EIS) is prepared.

We are seeing Environmental Justice principles being prioritized in the Biden administration across many departments and agencies, but those discussions, Powerpoint presentations and memos are not filtering down to concrete policy changes enough. The military industrial and nuclear complex has left a legacy of contamination and disease on traditional Indigenous territories and communities, and government agencies must do a better job incorporating FPIC into their decision-making processes, whether that is concerning clean up or when considering new extraction projects[12].

7. WATER AVAILABILITY, DROUGHT & EQUITY

Water is life. Without water, we cannot survive. We seem to recognize these truths, yet this knowledge and wisdom is not reflected in our policies. In Bernalillo County, for example, land-use decisions and water availability are no longer tied together. Development projects are approved by planners and the Bernalillo County Commission with little regard to whether there is actual "wet" water available to meet the needs of a new project. Land use must be tied to sustainable water availability. If there is no water available, the proposed development project must be denied. Period.

The western region of the United States is experiencing a historic megadrought, the worst in 1,200 years, according to researchers. The years 2000-2021 were the driest 22 years since the year 800 CE. According to evidence shared by the New Mexico Water and Natural Resources Committee, this ongoing drought is characterized and exacerbated by less snowpack, diminished stream flow and increased variability of precipitation. The Middle Río Grande Water Advocates are attempting to wake up water policy decision-makers to the hydrologic reality we are currently in. Twentieth-century water management rules won't work in the 21st century as the Southwest becomes more arid.

New Mexico has unmet obligations under the Río Grande Compact; the accrued debt to Texas was more than 127,000 acre feet of water as of calendar year 2022. Our reservoir levels are at historic lows. Water use must decrease, water infrastructure must be upgraded, and resources must be allocated to bolster convenings to discuss the hard but necessary decisions that must be made. The current system to allocate water is inequitable. One of the key commitments made by the Middle Río Grande Water Advocates is to be in

Too often we see elected officials supporting business interests and large campaign donors at the expense of community well-being and environmental health.

compliance with the State-Tribal Collaboration Act so that "state cabinet agencies diligently seek collaboration with tribal governments and give full consideration to their water management strategies, policies, and concerns." As

tough decisions about water allocation are contemplated in the years ahead, the water rights of traditional communities, irrigators and acequia users who have sustainably managed water in this arid region for centuries must be protected[13].

8. AIR QUALITY

New Mexico's clear blue skies can be very deceiving. Air quality issues in our state are often invisible to the naked eye. Significant health impacts are experienced by residents, especially in low-income communities of color where the most toxic and hazardous polluting industries are located. Two such communities are Santa Fe's Southside and Albuquerque's Mountain View neighborhoods. Asphalt plants emit tons of dangerous chemicals and fine particulate matter. Both the New Mexico Environment Department (NMED) and the City of Albuquerque's Environmental Health Department (EHD) have a long history of rubber-

Urban sprawl exemplified by the Santolina development project is simply not needed and not sustainable.



Community members speak out about expansion of an asphalt plant on Santa Fe's southside. Photos courtesy Earth Care

stamping air pollution permits for facilities located in vulnerable, already overburdened communities.

NMED approved Associated Asphalt & Materials' (AAM) application to consolidate two plants in Santa Fe's Southside despite the community's opposition and that the plant will spew harmful emissions 24 hours a day, seven days a week during certain parts of the year. This neighborhood is primarily made up of lower-income, young, Spanish-speaking families. Earth Care NM has been organizing with these families to fight back against this egregious environmental injustice, with the assistance of NMELC's attorneys. A Hearing Officer determined that the AAM facility would cause or contribute to violations of the National Ambient Air Quality Standards and negatively impact the health and quality of life of the surrounding community, but the Environmental Improvement Board subsequently voted to set the recommendation aside, ignoring significant health and environmental impacts.

In the Mountain View community, EHD similarly issued an air pollution permit for a company called New Mexico Terminal Services. Concerned residents formed the Mountain View Coalition, and utilizing legal services provided by NMELC, appealed the permit to the Air Quality Control Board. The permit was recently remanded to EHD by the Air Board because EHD failed to consider whether the NMTS facility could be built in a reasonable period of time, and two years have passed since the permit's issuance. Meanwhile, residents were pleased when another asphalt company, Star Paving, applied for a permit but was denied by EHD. The asphalt assault on overburdened communities must stop. We are hopeful that if cumulative impacts regulations are adopted across the state, the environmental injustice present in air quality decision-making will finally be addressed[14] and disrupted.

9. URBAN SPRAWL DEVELOPMENT PROJECTS

Urban sprawl is defined as uncontrolled expansion of urban areas. In the case of the greater Albuquerque area, the biggest threat lies on the West Side. Sandia and Isleta Pueblo as well as Kirtland Air Force Base prevent expansion to the north and south, and the Sandia Mountains to the east.

For nearly a decade a small but mighty group of dedicated community members and grassroots organizations—the Contra Santolina Working Group—has fought against a massive housing development project called Santolina. The developer, Western Albuquerque Land Holdings, acquired the former Atrisco Land Grant when London-based Barclays Bank bought it. WALH asked the Bernalillo County Commission to let it build 37,000 homes for 95,000 people, and the county approved the Level A Development Agreement in 2015 despite overwhelming public opposition. The developers have never secured water for that many residents.

While the agreement is still on the books, the Santolina housing development has never been built, thanks to steadfast organizing by the community in partnership with skilled and tenacious legal representation by NMELC attorneys. By the end of 2022, developers had obtained approval from the Bernalillo County Commission to build out industrial uses for a small part of the acreage that could possibly include solar, battery storage, a tire dump or a landfill. It remains unclear. Meanwhile, NMELC, on behalf of our clients, has filed a suit to challenge the BCC's approval of this proposal in order to safeguard the due-process rights of the community. We have seen a long pattern of the county not following its own procedures. The big picture concerns corporate profits over community concerns, and the failure to connect land-use decisions to water availability. We also must recognize that projected population growth has failed to meet predictions. The urban sprawl exemplified by the failed Santolina development project is simply not needed and not sustainable. We need smart, community-driven planning, not piecemeal, developer-driven sprawl[15].

10. GOVERNMENT ACCOUNTABILITY

A common thread running across all of our environmental justice issues is government accountability. At NMELC, we, our clients and allies consistently find ourselves having to remind government agencies at the local, state and federal levels what their job is and why they were ostensibly created. So often these agencies act beholden to corporations and polluting industries instead of the people. We also too often see elected officials, who were elected to represent their constituents, supporting legislation that serves business interests and large campaign donors at the expense of community well being and environmental health. This dynamic is on display when appointments are made to fill legislative seats between elections.

The influence of big money from the oil and gas industry is evident across New Mexico politics. This pattern was recently covered in a report by New Mexico Ethics Watch. We must address this inequitable process by no longer considering campaign contributions as free speech or corporations as people. The voices of the people and especially those most harmed by environmental, climate, health and social injustices, must be at the forefront and prioritized in all legislation, policies and by governmental agencies. ■

The New Mexico Environmental Law Center has been defending environmental justice since 1987. It is our mission to work with New Mexico's communities to protect their air, land and water in the fight for environmental justice. For more information about the New Mexico Environmental Law Center, go to WWW.NMELC.ORG.



YUCCA's Energy Justice Scorecard

BY JONATHON JUAREZ-ALONZO

Youth United for Climate Crisis Action (YUCCA) has been gearing up to make the 2023 New Mexico Legislative Session one of the most successful so far for climate legislation. Guided by our founding demands, which were hand-delivered to Gov. Lujan Grisham's desk in 2019, we've spent two months meeting with key lawmakers and crafting our legislative agenda. We are implementing a new tool called the "Energy Justice Scorecard," which was developed by the Initiative for Energy Justice. We can score each piece of legislation with 0 being the lowest possible score and 25 being closest to "perfect energy-just policy." That means that it fully meets the requirements of the energy justice indicator. A score of 16 or below means that the policy does not sufficiently meet those requirements.

ENERGY JUSTICE SCORECARD QUESTIONS

1. Have marginalized communities participated meaningfully in the policy making process with sufficient support?
2. Does the policy aim to remedy prior and present harms faced by communities negatively impacted by the energy system?
3. Does the policy center the decision-making of marginalized communities?
4. Does the policy center economic, social, or health benefits for marginalized communities?
5. "Does the policy make energy more accessible and affordable to marginalized communities?"

We're hoping this scorecard will help lawmakers prevent a situation similar to the last legislative session with House Bill 6—the Clean Futures Act. While HB6 included some important aspects like emissions reduction standards, it also included dangerous false solutions that left loopholes for polluters.



YUCCA considers climate solutions like hydrogen production, cap-and-trade, carbon pricing and capture and sequestration "greenwashed false solutions" because they are all promoted as viable ways to mitigate the climate crisis when in reality they are largely unproven technologies. They drastically increase our dependency on fossil fuels while allowing polluters to continue business-as-usual for the next 25 years. We don't have that kind of time to waste.

Blue hydrogen production, proposed during the last session, is 60 percent more carbon intensive than burning coal or natural gas for the same purposes—and worst of all, it relies heavily on methane extraction, a greenhouse gas at least 80 percent more potent than CO₂ when it comes to trapping heat in our atmosphere. Green hydrogen, which is being proposed across the country,

We're not lacking solutions and technologies to become the renewable energy capital of the country by 2030—we're lacking political willpower.

requires a lot of water, a resource New Mexico can't afford to spare during a megadrought. Cap and trade and carbon pricing are market-based mechanisms that sound good on paper, but in reality they open the door for polluters to continue business as usual and pay their way past emissions reductions and penalties. Lastly, carbon capture and

We oppose greenwashed facades like hydrogen that have no place in New Mexico's energy transition.

YUCCA'S 2023 LEGISLATIVE PRIORITIES

• JUST TRANSITION LEGISLATION

Establishing a fund from fossil fuel revenues to pay for the planning, research, development and implementation needed to end our state's dependency on fossil-fuels, and to help rapidly transition our economy.

• COMMUNITY CLEAN-UP LEGISLATION

Remediating the historic harms against frontline communities by cleaning up the spills, radioactive waste and other hazardous waste left behind by extractive industries.

• EMISSIONS REDUCTIONS LEGISLATION

Concrete standards that get our state to 100 percent renewables no later than 2030.

• NEW MEXICO GREEN AMENDMENT

A constitutional amendment to include the right to clean air, water and a sustainable climate in New Mexico's Constitution.

• 16 VOTE INITIATIVE

Expanding the ballot box to our 16- and 17-year-old peers so they can participate in local elections that directly impact their lives, like school boards.

• LOCAL CHOICE ENERGY

Breaking up the monopolized utility companies in New Mexico and giving ratepayers the ability to choose how their power is bought, sold and generated. This will open the door for local competition, which will serve as an economic engine for local development and allow our communities transition to 100 percent renewables without waiting for PNM.

sequestration (CCS) rely heavily on unproven technologies to pull carbon out of our atmosphere and store it deep underground. Even if these technologies continue to improve, it's highly unlikely that they will be scalable to the size we need to mitigate the crisis.

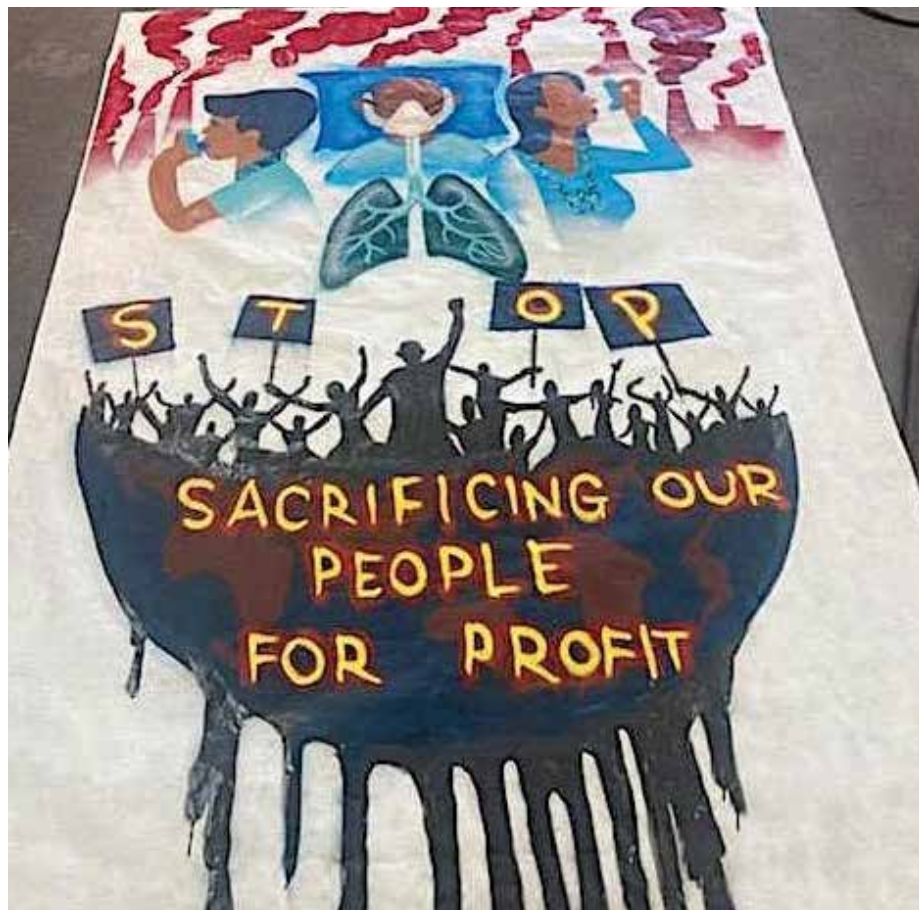
YUCCA convened a coalition of grassroots organizations that called for several key amendments to the Clean Futures Act, including moving up the timeline, removing false solutions like offsets from the bill, and including meaningful participation from impacted communities at every step of the decision-making process. Only two of our amendments ended up in the final draft, and the bill ultimately never made it out of committee. After meeting with Sec. Sarah Cottrell Propst and her team from the Energy, Minerals and Natural Resources Department, we're excited to see some of our amendments codified into a draft of the department's 2023 climate bill, but we must continue to push for more.

New Mexico has some of the highest untapped potential for renewable energy anywhere in the country. We're not lacking solutions and technologies to become the renewable energy capital of the country by 2030—we're lacking political willpower to look beyond the profits of the fossil fuel industry and hold it accountable for the crisis it has created.

By using the energy justice scorecard, we hope to champion policies that center on proven solutions supported by BIPOC (Black, Indigenous, People of Color) communities that are on the front lines of fossil fuel extraction—not false solutions being proposed by the allies of the extractive industry to greenwash and derail a rapid transition toward a 100 percent green and renewable economy.

We're excited that the 2023 legislative session might finally be our time to make significant progress. We'll also be pushing for legislation that establishes a Just Transition Fund from oil and gas revenues, emission reduction standards, and the cleanup and restoration of communities that have historically been wronged by extractive industries. ■

Jonathon Juarez-Alonzo is a member of YUCCA's 10-person Steering Committee Member and serves on its staff as Policy Lead. He is from the Pueblos of Laguna and Isleta.



OP-ED: DAVID FOSDECK

BEYOND CLOSURE

Comprehensive Cleanup Is Needed to Transition from Coal

This fall, the San Juan Generating Station (SJGS) was shuttered after nearly 50 years. Unfortunately, those of us with experience with the plant and coal mine fear that the threat to the area's water and land will continue unless efforts are made to perform a comprehensive cleanup.

When coal is burned to produce electricity, toxic chemicals are released through the smoke, but there is also a byproduct. Just like when you burn fuel in your woodstove, ash is left behind. Coal ash is toxic waste that contains high concentrations of carcinogenic heavy metals. This includes fly ash, fine powdery particles that are carried up the smokestack and captured by pollution control devices, as well as coarser materials that fall to the bottom of the furnace. Coal ash typically contains arsenic, lead, mercury, cadmium, chromium, sulfate, sodium, chloride and more. If eaten, drunk or inhaled, these can cause cancer and nervous system impacts such as cognitive deficits, developmental delays and behavioral problems. They can also cause heart damage, lung disease, respiratory distress, kidney disease, reproductive problems, gastrointestinal illness, birth defects and impaired bone growth in children. The Environmental Protection Agency (EPA) has found that living next to a coal-ash disposal site can increase your risk of these diseases.

Unfortunately, coal ash from the SJGS's operation still poses a major threat to water quality and the health of the area's inhabitants. When it comes into contact with water, its toxic constituents can "leach" or dissolve out and percolate through water. For many decades, Public Service Company of New Mexico (PNM) and other co-owners of the plant have deposited the ash into unlined landfills and waste ponds where the lack of a barrier between the ash and groundwater left them vulnerable to leaks and contamination.

I know this from experience. I worked as a land surveyor in Farmington, where I have lived for 12 years. In that time, I worked as a contractor at the SJGS. I have been on the San Juan mine property and have done surveying work for PNM's subcontractor, GeoSolutions, the company hired to build the Shumway Arroyo Recovery Project at SJGS site.

Protect the San Juan River from pollution and contamination.

The Shumway Project was an enormous structure built in 2019 with the intention of preventing toxic wastewater from leaking into the San Juan River. The project was a result of a Sierra Club lawsuit brought years before against PNM. There were many change orders required for the construction. As I understand it, even though a Consent Decree was approved in 2012, which required the "Recovery Project," it was still being constructed in May 2019. Between 2012 and 2019, did toxic water leak into the river? It seems very likely, and as a result, I believe that the groundwater and land in this area at the SJGS site should be tested for poisoning and contamination.

The Shumway Project containment wall (according to PNM) "ranges from five feet to 40 feet below ground surface," but one of the worst problems, first detected in 2010 and continuing until 2017 (when the North Evaporation Pond was finally decommissioned) was a plume of nitrate contaminants in groundwater at San Juan that was caused by a leak in the North Evaporation



Makai Lewis stands near the San Juan Generating Station. He and Kimberly Smith completed a health impact assessment with hundreds of community members in the area. Their top concern was cleanup. © Miles Conway

Pond. Again, according to PNM, the nitrate plume that contaminated the water table is “probably around 100 feet deep in that area.” So, another nagging and disturbing question is: Does the wall constructed pursuant to the Shumway Arroyo Recovery Project actually prevent contaminants from migrating from the San Juan site into the San Juan River today? How many gallons of toxic wastewater has the project actually accumulated and piped back to the evaporation ponds? Was the wastewater tested for coal-ash contaminants, and, if so, what were the results?

Coal ash from the SJGS’s operation still poses a major threat to water quality and the health of inhabitants in the area.

just downstream of the original groundwater recovery trench and upstream of the new Shumway groundwater recovery structure was collected and submitted for chemical analysis. Parameters selected for analysis consisted of constituents commonly encountered in groundwater and surface waters on and around coal-fired generating stations. The water can be characterized as a high Total Dissolved Solids (TDS) wastewater with elevated concentrations of sulfate, sodium, chloride, boron and lithium. This suite of parameters is often found at elevated concentrations on and around coal ash-impacted facilities.

I know from my own line of work that data is key to a professional analysis. You need to know the right data for answering a question about contamination risk. Rep. Anthony Allison (D- San Juan) is sponsoring a bill to have the New Mexico Environment Department (NMED) and the



The San Juan Generating Station is located near its coal source, the San Juan Mine, near Watereflow, between Farmington and Shiprock, New Mexico.

I was present when New Energy Economy had experts conduct a SJGS site inspection and took water samples for lab testing of coal ash contaminants. A sample of surface water flowing in the Shumway arroyo

New Mexico Department of Energy, Minerals, Natural Resources Division (EMNRD) collaborate to provide an independent comprehensive assessment of the SJGS and San Juan mine site. PNM and the other co-owners have opted for “retirement-in-place,” which

essentially means that they will do no demolition, restoration or remediation for 25 years.

In order to protect human health and the environment, the Legislature and executive agencies must conduct an independent comprehensive assessment, create a cleanup with the impacted community, and report back to the Legislature on the progress. Sometimes, further investigation is needed to obtain additional information in order to draw accurate conclusions. Without a complete set of data, the decision-making process will suffer. I applaud Rep. Allison and all legislators that proactively vote to protect the San Juan River from pollution and contamination. ■

David Fosdeck has performed surveying work at the San Juan Generating Station and on the San Juan mine property, as well other land surveying in the Four Corners area for 12 years.

FARMINGTON DROPS PLANS TO REVIVE SAN JUAN GENERATING STATION

The City of Farmington, N.M. has ended the plan it announced in 2019 to acquire the San Juan Generating Station (SJGS) and run it with Enchant Energy as a speculative carbon-capture coal plant.

Critics of the plan said that the proposed large-scale sequestration project, which would have prolonged the use of coal, was uneconomical and required quantities of water that are not available. The project also faced competition from renewables that are less expensive and are increasingly aligned with consumers’ values. Converting the SJGS would have cost Farmington and Enchant an estimated \$1.4 billion, and 365 of the plant’s 924 megawatts of power would have been devoted solely to running the carbon-capture equipment, according to Mona Blaber, communications director of the Sierra Club Río Grande Chapter.

“The solar and storage replacement power approved in 2020 will provide \$1 billion in investment in the communities most impacted by San Juan,” said Blaber. “With pandemic supply-chain- and other delays, it is incumbent upon PNM to work with developers of the solar and storage replacement power to overcome these obstacles and get those projects online as soon as possible. Analyses showed that the San Juan Solar project, to be sited in the same school district, will replace the entire property-tax base of the SJGS.”

PNM and other plant owners will dismantle the SJGS during decommissioning. An arbitration panel rejected the city’s attempts to halt auctions of electrical components. PNM threatened legal action if the city continued to delay the decommissioning. In a press release, Farmington Mayor Nate Duckett said, “We will continue to support efforts to diversify our economy through various regional efforts.”

THE LOCAL CHOICE ENERGY ACT

Growing up in the mining district in Grant County in a proud union family and being a public servant for most of my life taught me that our rural communities can do bold, great, innovative things that inspire the world and improve our lives. That is why I sponsored a resolution in support of the Local Choice Energy Act, which passed unanimously at the Bayard City Council.

The Local Choice Energy Act will allow counties, municipalities and tribes to be able to purchase or generate their own renewable energy (RE), price it affordably, and work with existing utility providers to transmit and distribute electricity over the existing grid for the same terms, fees and conditions they charge their own customers. This is the law of the land in 10 states. Local Choice Energy Providers (frequently called CCAs) serve millions of Americans in more than 1,300 communities. They provide good local jobs, lower bills, community control over electric generation and programs, increased revenue in local government budgets for community needs and they accelerate the transition to renewable energy. All electricity providers in the U.S. that have gone 100 percent renewable are community-owned, and many are Local Choice Energy Providers. We can achieve this for our communities in New Mexico too.

In a rural area like Bayard, we're interested in using more renewables, and we also want to offer residents a more competitive and affordable way to power our homes. The economic development potential of Local Choice Energy is significant and exciting for us. When we build out clean-energy infrastructure and become a Local Choice Energy Provider, we create good jobs and bring more revenue into our community through our sales of renewable electricity. We can attract businesses that are interested in using RE, and our successes can inspire others to take control of their electric generation. We can create microgrids for resiliency, powering our schools, libraries, healthcare centers, supermarkets and affordable housing developments. We can create programs that make it easier for those with low or fixed incomes to keep the lights on.

Rural communities can do bold, great, innovative things.



Solar installers at Cochiti Pueblo. Local Choice Energy would allow tribes to generate and sell electricity.



New Mexico has such extraordinary renewable energy potential.

Sofia Leyba, YUCCA member from the NM School for the Arts, calls for 100% renewables. Communities throughout the country that have succeeded in going 100% renewable are all publicly owned.

If Local Choice Energy is passed by the Legislature, local communities like ours will be able to elect to become energy providers. This decision will be made by local governing councils. Once our community becomes a provider, we choose our energy suppliers and set our preferences through the same democratic processes, as we define what criteria are most important to us when we issue competitive requests for proposals. For example, we can decide to generate the electricity ourselves, as a community. Or we can give preference to independent producers that site their projects locally. Or we can give preference to RE projects that also commit to training our young people to be skilled workers.

New Mexico has such extraordinary RE potential. We have abundant sunshine, wind and geothermal resources that can power our communities while helping the environment. Currently, we don't have choices in how our electricity is generated, and the monopoly corporations that make those choices choose the most toxic, expensive, dirty fuels so that they can make money for Wall Street. Passing Local Choice Energy at the Legislature in 2023 will give us choice and will have beneficial impacts throughout our state, particularly for rural areas in the midst of energy transition and in metropolitan areas as well. Local Choice Energy benefits historically marginalized communities and those that have been disproportionately affected by pollution and extraction.

Many institutions and politicians talk about going green. Our local copper mine often talks about going green. Let's stop talking and start doing it. I'm a get-on-the-bus or get-off-the-bus person. The time to act is now. We know we need to reduce carbon emissions if our planet and communities are to have a fighting chance of survival in the face of climate change. Bayard's residents support Local Choice Energy and our city council voted unanimously to support it. I am excited to see other communities signing on. You can learn more about the legislation and get involved at PUBLICPOWERNM.ORG. ■

Frances González is a city councilor and active community member in Bayard, New Mexico. She works on conservation issues including wildlife and water, as well as for veterans, women's rights and social justice.



YUCCA members call for people-powered energy solutions.

AFFORDABLE HOMEOWNERSHIP HELPS COMBAT CLIMATE CHANGE

According to a panel discussion sponsored by Homewise, increasing access to affordable housing can help combat climate change. As last year's wildfires demonstrated, climate change poses an immediate threat to virtually everything New Mexicans hold dear.

Transportation is the single largest source of greenhouse gas emissions, and passenger vehicles are the largest single source of emissions within the transportation sector. Although remote work, increased utilization of ridesharing, public transportation and more fuel-efficient vehicles can help reduce commuting's carbon footprint, decreasing the number of miles New Mexicans drive remains critical to reducing emissions and successfully combating climate change.

Increasing the number of New Mexicans who live in close proximity to work, shopping, services and school is key to reducing the state's automobile dependence. The panelists agreed that, due to rapidly escalating housing costs in job-rich areas, the burden of living far from the workplace is increasingly borne by lower-income workers and people of color. And one way to combat both climate change and its disproportionate impact on vulnerable communities is to create affordable home ownership opportunities near employment and amenities.

OP-ED: JULIA BERNAL AND ALEXANDRÍA LYONS

THE NEW MEXICO NO FALSE SOLUTIONS COALITION SUPPORTS REAL CLIMATE SOLUTIONS

As New Mexico sees investments from federal programs such as the Inflation Reduction Act (IRA), Justice 40 and other bipartisan infrastructure funds initiated by the Biden administration, it is critical that frontline, Indigenous and youth-led Environmental Justice (EJ) organizations and other stakeholders remain vigilant.

Among other states seeking to lower greenhouse gas emissions, New Mexico aims to be a climate leader by setting carbon reduction targets (30x30 programs). After the 55th Legislative Session, several grassroots EJ groups created a statewide coalition to help guide the conversation around a just transition for our state. New Mexico No False Solutions (NM NFS) includes Youth United for Climate Crisis Action (YUCCA) and Earth Care, Pueblo Action Alliance (PAA), Indigenous Lifeways (ILW), Los Jardines Institute (LJI) and New Energy Economy (NEE). We seek to ensure that unproven climate-mitigation measures that rely on market-based mechanisms such as investment in hydrogen and carbon-offsetting schemes are properly critiqued and debunked.

In 2019, PAA attended the first train-the-trainer program with the Indigenous Environmental Network (IEN) on carbon pricing. Since then, PAA has pivoted



Protest organized by YUCCA, Pueblo Action Alliance, Red Nation and the Center for Biological Diversity during the president's visit to tour wildfire devastation in New Mexico, summer 2022. The groups called on the Biden administration to stop oil and gas exploitation on public lands.

Do we want to continue the legacy of allowing our precious land, air and water to be grounds for testing new or unproven technologies?



YUCCA leader Yang Toledo leads chants at a protest against hydrogen development in Prewitt, N.M.

New Mexico must lower its consumption of fossil fuels and end its reliance on an extractive economy.

its work to oppose the commodification of air, land and water.¹ The organization organized campaigns to protect what Pueblo people hold sacred and to address how the historical legacy of oil and gas, uranium mining and other extractive industries have harmed the natural world and adjacent communities. Since this epiphanic moment, PAA has worked to build political analysis on how market-based mechanisms written into proposed New Mexico climate policies, executive orders and government agreements continue to perpetuate violence on the land and people. After returning to New Mexico with newfound information and understanding of how greenwashing and neoliberal agendas are positioning climate policies in the wrong direction, PAA was ready to push for *real* climate solutions which center Environmental Justice.

¹ <https://co2colonialism.org/wp-content/uploads/2019/11/Carbon-Pricing-Volume-2-Webready.pdf>

The same year, Gov. Michelle Lujan Grisham released an executive order on “Addressing Climate Change and Energy Waste Prevention,”² which calls for the “[a]doption of a comprehensive market-based program that sets emission limits to reduce carbon dioxide and other greenhouse pollution across New Mexico.” This raised several red flags among NM NFS-affiliated organizations. Like other market mechanisms written into drafts of climate policies and initiatives led by this administration, this executive order proposed the mechanisms of global capitalism to address problems caused by extraction and colonialism.

We seek to ensure that unproven climate-mitigation measures that rely on market-based mechanisms are properly critiqued and debunked.

Knowing this, PAA, and many of the other coalition groups, simultaneously worked to provide educational resources and training to other frontline and grassroots groups. During the summer of 2021, PAA hosted its first Carbon Conference.³ Indigenous leaders and partner organizations were able to evaluate and debunk greenwashing climate policies in international, national and regional political contexts. With the guidance of IEN and Los Jardines Institute, the conference provided intergenerational and multigenerational opportunities to discuss upcoming state legislative initiatives where common-sense policies that center grassroots narratives and solutions for a real energy transition can be initiated.

The Points of Unity reflect the NM NFS’s work with movement elders, Indigenous leaders and prominent social justice organizers across the state.

An assembly of organizations (PAA, YUCCA, LJI, ILW, Earth Care, and NEE) had a strong presence during New Mexico’s 2022 Legislative Session, opposing all iterations of hydrogen, net zero and carbon offsetting climate bills. Following the session, NM NFS organized its second annual Carbon Conference, the “No False Solutions Gathering,” to bring communities together to discuss solutions and begin strategizing for the next legislative session and other events.⁴ During this conference, the organizations created NM NFS’ *Points of Unity*, which outline the following shared commitments:

- **Protect the Sacred**
- **Debunk Greenwashed Solutions/ Market Mechanisms**
- **Build Collective Grassroots Power**
- **Build an Intergenerational/Multicultural Movement**
- **We speak for Ourselves**

The *Points of Unity* are a value system that aid the creation of climate initiatives

³ https://www.instagram.com/p/CQzFbVlryMj/?utm_source=ig_web_copy_link

⁴ Llanos, R. E., & Feather, C. (2011). The reality of REDD+ in Peru: Between theory and practice. AIDSESP. <https://www.forestpeoples.org/sites/fpp/files/publication/2011/11/reality-redd-peru-between-theory-and-practice-november-2011.pdf>

We need to clean up and rematriate the land and hold corporations and energy monopolies, such as PNM, accountable.

that cooperate with Environmental Justice tenants and an Indigenous worldview. They are grounded in values similar to those outlined in the *Jemez Principles for Democratic Organizing*, written in 1996 by the Southwest Network for Environmental and Economic Justice (SNEEJ). The *Points* reflect the NM NFS's work with movement

elders, Indigenous leaders and prominent social justice organizers across the state. Such guiding principles set a precedent that New Mexico will no longer be an energy sacrifice zone, and outline that we stand with our Indigenous relatives in the global south and around the world.

New Mexico must lower its consumption of fossil fuels and end its reliance on an extractive economy. This economy endangers traditional ecological knowledge, sacred sites and the various land-based cultures present in New Mexico today that have prevailed since before Spanish colonization. Any policy that endorses market-based mechanisms will support the fossil fuel industry and ultimately uphold a neoliberal agenda that relies on sacrificing community and culture—delaying the timeline for a Just Transition to clean energy. NM NFS believes that we can not continue to engineer our way out of a climate crisis by compromising values and working with the same bad actors that set us on the path toward ecological delegation. Instead, we must come together to create regenerative economies that uplift land-based tenure, allowing abundance along the Río Grande.

As a growing movement, we believe that the organizations tied to the NM No False Solutions Coalition have the proper analysis to engage in the upcoming legislative session by fighting for real solutions such as publicly owned renewables, an energy



Organizers with Pueblo Action Alliance, YUCCA, NM No False Solutions Coalition and the Indigenous Environmental Network at a national meeting on climate justice

that has scientifically been proven to reduce GHG emissions over and over again. We need to clean up and rematriate the land and hold corporations and energy monopolies, such as PNM, accountable, all while keeping the investment of unproven technologies such as hydrogen and carbon offsets out of New Mexico. False Solutions are only made viable by federal investment. The question for all New Mexicans is this: Do we want to continue the legacy of allowing our precious land, air and water to be grounds for testing new or unproven technologies? Especially when even larger Carbon Capture and Storage (CCS) projects have shown to be unsuccessful in places such as Australia and South Africa?

New Mexico cannot afford to waste investment opportunities from Justice 40 or any other federal program to become stranded assets in the future. Collectively, we must push for 100 percent publicly owned renewables, cleanup of the San Juan Generating Station, and take a firm stance against hydrogen projects that will only waste precious land and water. NM No False Solutions Coalition will continue mobilizing communities facing the deepest impacts of the climate crisis, and continue protecting what is sacred. It is time for frontline, youth and Indigenous communities to hold the fossil fuel economy responsible, and to return to the values that allowed our ancestors to cultivate resilience. ■

GREEN FIRE TIMES

News & Views from the Sustainable Southwest

PLEASE DONATE NOW
to GREEN FIRE TIMES

Your Tax-Deductible Gift
Will Help GFT
Continue to Publish

PLEASE MAKE CHECKS PAYABLE TO:
Southwest Learning Centers, Inc.
(with a notation: 'GFT')

MAIL TO: PO Box 8627, Santa Fe, NM 87504

OR VIA FUNDLY:

[HTTPS://FUNDLY.COM/SUPPORT-GREEN-FIRE-TIMES-IN-2021#](https://fundly.com/support-green-fire-times-in-2021#)

THANK YOU!

Julia Bernal (Sandia Pueblo/Yuchi) is executive director of the Pueblo Action Alliance. She serves on the Natural Resources Committee of the All Pueblo Council of Governors and is a board member of the Middle Río Grande Water Advocates and the Native Lands Institute. Bernal is pursuing dual master's degrees in Water Resources and Community and Regional Planning.



Alejandría Lyons, a Xicana organizer from Los Lunas, N.M., is coordinator of the New Mexico No False Solutions Coalition. She works on environmental justice issues. Lyons received her master's degree in Community and Regional Planning from the University of New Mexico.



CARBON OFFSETS (DEBUNKED BY YUCCA)

WHAT ARE CARBON OFFSETS?

- *Carbon offsets* are carbon market schemes that allow carbon-emitting actors (often corporations in polluting industries) to purchase *credits* that “offset” their emissions.
- Offsets typically function by creating or preserving *carbon sinks*—natural areas like forests or grasslands that sequester carbon dioxide from the atmosphere. Occasionally, offsets are also sold through the operation of carbon capture, usage, and/or storage (CCS or CCUS) machines.
- Carbon-emitting actors pay for enough credits, generated by these carbon sinks, to theoretically negate their own emissions.

WHY DO CARBON OFFSETS MATTER?

- Purchasing carbon offset credits is often cheaper and easier for companies than cutting their emissions at the source.⁵
- As such, carbon offsets are a popular mechanism among corporate actors to reach *net zero emissions* targets: the point at which their carbon emissions equal the amount of carbon they sequester.

WHY ARE CARBON OFFSETS FALSE SOLUTIONS TO THE CLIMATE CRISIS?

- Carbon offsets *do not reduce carbon emissions*.
 - ◇ The latest academic research indicates that carbon sequestration and carbon emissions are not a “symmetrical” exchange. For larger amounts of carbon emissions, sequestration by offsets is unlikely to match.⁶ This means that negating industrial carbon emissions through offsets is *not feasible*.
 - ◇ The estimates used to calculate the amount of carbon sequestered per offset credit are notoriously inaccurate and rife with loopholes, fraud, and abuses. We have seen numerous examples of this, such as:
 - » A spurious fossil gas offset project that used already-existing wind farms in China and forests in Zimbabwe.⁷
 - » California’s offset program was found to have created between 20 and 39 million “ghost” carbon offset credits that sequestered no additional carbon.⁸
 - » British airline EasyJet purchasing offsets in an area of the Amazon rainforest that is being logged.⁹
 - ◇ The carbon sequestration accounted for in offset projects is assumed to be permanent. However, this is not the case, as we have seen as forest fires across the North American west have burned down areas reserved for offsets, releasing their carbon into the atmosphere.¹⁰

5 Irfan, U. (2020). Can you really negate your carbon emissions? Carbon offsets, explained. Vox.com, 27. <https://www.vox.com/2020/2/27/20994118/carbon-offset-climate-change-net-zero-neutral-emissions>

6 Zickfeld, K., Azevedo, D., Mathesius, S., & Matthews, H. D. (2021). Asymmetry in the climate-carbon cycle response to positive and negative CO₂ emissions. *Nature Climate Change*, 1-5.

7 Stapczynski, S., Rathi, A., & Marawanyika, G. (2021, August 11). How to Sell ‘Carbon Neutral’ Fossil Fuel That Doesn’t Exist. Bloomberg Green. <https://www.bloomberg.com/news/features/2021-08-11/the-fictitious-world-of-carbon-neutral-fossil-fuel>

8 Song, L., & Temple, J. (2021, April 29). The climate solution actually adding millions of tons of CO₂ into the atmosphere. ProPublica. <https://www.propublica.org/article/the-climate-solution-actually-adding-millions-of-tons-of-co2-into-the-atmosphere>

9 Hill, D. (2021, September 14). EasyJet’s Amazon carbon offsets project is even more problematic than you thought. David Hill. <https://hilldavid.substack.com/p/easyjets-amazon-carbon-offsets-project>

10 Anderegg, W., “Gambling with the climate: how risky of a bet are natural climate solutions?” AGU Advances, 2021, <https://doi.org/10.1029/2021AV000490>. Coffield, S.R. et al., “Climate-driven limits to future carbon storage in California’s wildland ecosystems,” AGU Advances, 2021, <https://doi.org/10.1029/2021AV000384>.

- ◇ Because offsets do not reduce emissions, they function as a “pay-to-pollute” license, enabling the actors driving climate change to greenwash their public reputation while continuing to destroy the environment and exacerbate the climate crisis.
 - » Major polluters like General Motors, Ford, Dow, DuPont, DTE, Nestle and others buy carbon offsets to burnish their public image while continuing to pollute the environment.¹¹
 - » Large financial institutions responsible for financing fossil fuel projects and deforestation, such as BlackRock and JPMorgan Chase, also purchase carbon offsets while continuing to pour money into these destructive projects. They also seem poised to accept offsets in the climate plans of the companies they invest in and/or finance, despite pledges to be “greening” their portfolios.
- Carbon offsets *work against environmental justice and Indigenous rights*.
 - ◇ Black, Indigenous, and people of color (BIPOC) and low-income communities face the greatest burdens from industrial pollution.¹² Carbon offset programs provide these polluters with a license to continue polluting in these communities based on offsets elsewhere.
 - ◇ Carbon offset programs often allow large corporations based in the Global North to continue polluting activity and destructive commodity production while placing the burden for environmental remediation and carbon sequestration on Global South communities, thereby *increasing global inequality*.¹³
 - ◇ Land used for carbon offsetting frequently generates *conflict and exploitation of Indigenous groups and local residents*, for example:
 - » The Peruvian government committed a series of land grabs from Indigenous Kichwa people in order to establish a national park used to sell offsets to aviation and oil companies.¹⁴
 - » A REDD+ offset project in Brazil on Suruí land failed to adequately compensate members of the community, fomenting divisions and conflict.¹⁵
 - » EasyJet’s aforementioned offset project, in addition to allowing logging, encroached on Indigenous territories protected by local and national Indigenous federations (see footnote 5).
 - » AIDSEP, Peru’s largest Indigenous organization, has denounced offset programs like REDD+ as “*carbon piracy*,” a *continuation of colonialist land-grabs* that undermine Indigenous land rights and self-determination.¹⁶
- Carbon offsets *undermine sustainable farming* and increase consolidation in agriculture.
 - ◇ Because corporations and large landowners have more resources to pursue offset projects, offset programs give *additional leverage* to

11 Jhong-Chung, J. (2021). Carbon Markets: What Is At Stake For The Future of Communities in Michigan? Michigan Environmental Justice Coalition.

12 Thind, M. P., Tessum, C. W., Azevedo, I. L., & Marshall, J. D. (2019). Fine particulate air pollution from electricity generation in the US: Health impacts by race, income, and geography. *Environmental science & technology*, 53(23), 14010-14019.

13 Gilbertson, T. (2019). Carbon Pricing: A Critical Perspective for Community Resistance. Indigenous Environmental Network and Climate Justice Alliance.

14 Forest Peoples Programme. (2021, July 1). Press Release: Indigenous Kichwa Community take Peruvian State and National Park to Court. <https://www.forestpeoples.org/en/press-release/kichwa-take-Peru-state-PNAZ-court>

15 Bonilha, P. (2015, January 12). Lideranças Paiteer Suruí pedem extinção de projeto de carbono com a natura. Conselho Indigenista Missionário | Cimi. <https://cimi.org.br/2015/01/36894/>

16 Llanos, R. E., & Feather, C. (2011). The reality of REDD+ in Peru: Between theory and practice. AIDSEP. <https://www.forestpeoples.org/sites/fpp/files/publication/2011/11/reality-redd-peru-between-theory-and-practice-november-2011.pdf>

agribusinesses and factory farms that have long squeezed farm income and drained rural economies, while increasing environmental pollution.¹⁷

- ◇ This further entrenches the factory farm and corn/soybean monocultural model at the expense of small farmers, including Black and Indigenous farmers and Tribal Nations.
- Carbon offsets prioritize enriching profit-seeking speculators over protecting the planet.
 - ◇ The cheap pricing of offset credits, designed to attract businesses, has resulted in market oversaturation. In the case of the United Nations Clean Development Mechanism (CDM), prices dropped so low that a massive surplus of offset credits was created, giving even more companies greater license to pollute.¹⁸

17 Institute for Agriculture and Trade Policy, "Why carbon markets won't work for agriculture," January 2020 at 2.

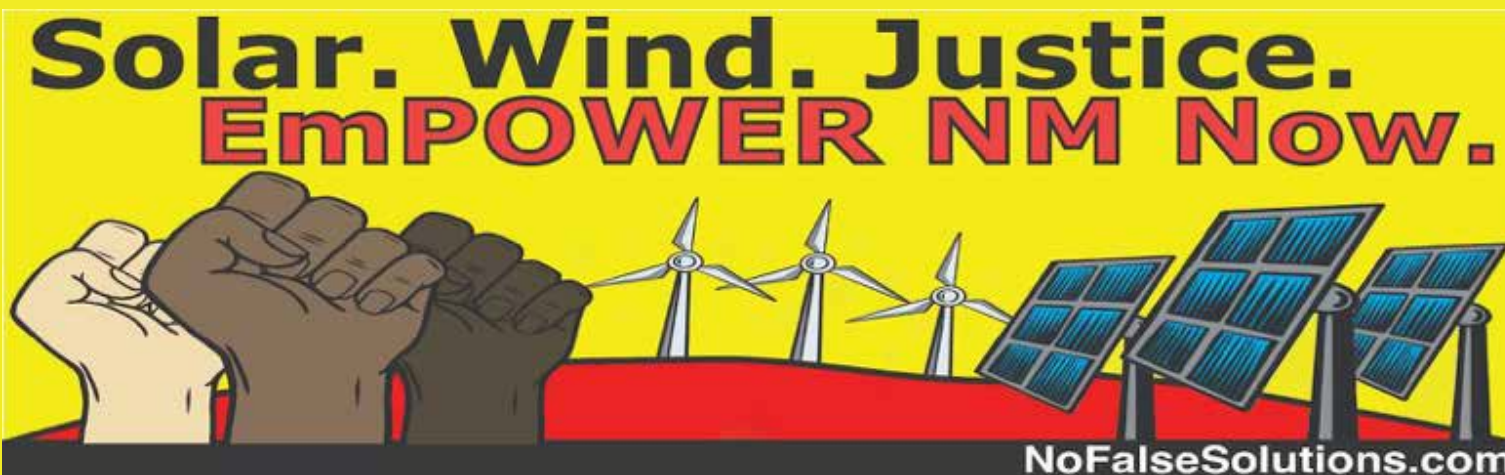
18 Gilbertson, T. (2019). Carbon Pricing: A Critical Perspective for Community Resistance. Indigenous Environmental Network and Climate Justice Alliance.

- ◇ Speculative trading of offset derivatives and financial products has already begun, tying carbon offsets to the boom-bust cycles of the market and thus reducing the likelihood that offsets will ever be priced meaningfully.¹⁹

What are the real solutions?

- Rapid reductions in emissions from the burning of fossil fuels and other industrial activities
 - ◇ There is *no substitute* for halting fossil fuel emissions. Fossil fuels must be drawn down and eliminated to effectively mitigate the climate crisis.
- Rapid elimination of commodity production that drives deforestation
 - ◇ Protection of carbon sinks like forests cannot be entrusted to market mechanisms designed to enrich corporations and speculators.
- Increased commitments and contributions to rights-based nature protection and restoration.
 - ◇ Indigenous peoples are the best protectors of land, water, and forests. They also deserve self-determination, autonomy and compensation for harms perpetuated by colonialism. Respecting Indigenous land rights and sovereignty is the only way forward.

19 Hache, F., 50 Shades of Green: The Rise of Natural Capital Markets and Sustainable Finance, Green Finance Observatory. March 2019, [HTTPS://GREENFINANCEOBSERVATORY.ORG/WP-CONTENT/UPLOADS/2019/03/50-SHADES-CARBON-FINAL.PDF](https://greenfinanceobservatory.org/wp-content/uploads/2019/03/50-shades-carbon-final.pdf).



Paid Advertisement

JANUARY 16, 2023
TWO PART EVENT 4:30-7PM

MLK DAY CLIMATE JUSTICE & ENERGY DEMOCRACY CONVERGENCE

ON ZOOM - REGISTER @ YUCCANM.ORG

JANUARY 17, 2023
12:30 PM

MASS MOBILIZATION

LOCATION: SF STATE CAPITOL



ENERGY NEWSBITES

\$155 MILLION CLEAN ENERGY TRANSPORTATION AND RECREATION CORRIDOR ANNOUNCED

In September 2022, Gov. Michelle Lujan Grisham announced an initial \$5-million state investment in a planned \$155-million Clean Energy Transportation and Recreation Corridor. The \$5 million appropriation was approved by the 2022 Legislature. The governor said that \$30 to \$50 million more in investment funding will be coming soon. "Taos County will become a truly sustainable model for climate resilience," she said. "Because of our climate change mitigation efforts, communities across the West will look to north-central New Mexico for examples of green initiatives such as forest and watershed restoration, electrification, clean energy jobs and education."

The clean energy corridor is to include a variety of collaborative transportation, watershed restoration, energy and outdoor recreation projects. The entities involved include Taos County, for erosion control near Valdez, wildfire reduction risk work, Río Grande cutthroat trout protection and electric vehicle charging stations; Taos Pueblo for watershed restoration on the Río Lucero and wildfire reduction work; the Taos Soil and Water Conservation District for acequia water quality monitoring; and the Village of Taos Ski Valley to repair water infrastructure.

Lujan Grisham's infrastructure adviser, former Albuquerque Mayor Martin Chavez, whose top recommendations include broadband and water infrastructure, told *The Taos News* that the state will receive \$3.8 billion for infrastructure from a new federal law, 40 percent of which will likely be doled out in grants. The Legislature will have a major say in allocating the funds.

ALBUQUERQUE'S ENERGY GRID GETS MAJOR CAPITAL INVESTMENT

The City of Albuquerque has announced a \$95-million Industrial Revenue Bond (IRB) to assist in the creation of one of New Mexico's first stand-alone battery energy storage systems (BESS), advanced energy infrastructure that is necessary as the state progresses toward a 100 percent emissions-free future for electricity production.

The "Sandia Peak Grid" BESS project, a utility-scale facility, is designed to provide flexible capacity and ancillary services while maintaining reliable, low-cost electric service to homes and businesses. By managing the supply of stored energy in the grid, the technology will enable growth of the city's renewable energy sector. "It is vital that we invest in infrastructure that supports our growing economy and continues to set Albuquerque apart as a leader in next-generation clean energy production," said Terry Brunner, acting director of the Economic Development Department.

Mayor Tim Keller signed legislation issuing the IRB to assist with the purchase and improvement of a vacant site to create the BESS near PNM's Reeves Generating Station. "This location was chosen because of its ability to provide grid-balancing solutions directly in the heart of PNM's largest load zone, adjacent to a gas-fired power plant," said Eolian, L.P. CEO Aaron Zubaty. Eolian, the parent company of the Sandia Peak Grid project, has nearly 20 years of experience in developing and operating clean energy projects across the country.

The project is estimated to create between 60 and 100 primarily local jobs during construction of the facility and produce a positive fiscal impact for the city over the term of the bonds.

DOE ANNOUNCES \$8 MILLION TO INTEGRATE SOLAR ENERGY PRODUCTION WITH FARMING

The U.S. Department of Energy (DOE) has announced \$8 million for solar energy research projects in six states. The funding supports agrivoltaics—the co-location of agricultural production and solar energy generation on the same land—and aims to reduce barriers to utility- and community-scale solar energy deployment.

The new projects reflect the Biden-Harris administration's efforts to ensure that every community can unlock the public health and cost-saving benefits of a clean-energy future, and support goals to decarbonize the electricity sector by 2035 and achieve a net-zero emissions economy by 2050. "DOE's research into agrivoltaics provides an incredible opportunity to pair solar energy generation with safe and robust crop production," said U.S. Secretary of Energy Jennifer M. Granholm in a news release. "With these exciting projects, we're supporting sustainable agriculture and investing in technologies that enable us to make our climate goals a reality."

Agri-voltaics is defined as crop production, livestock grazing and/or pollinator habitat under or between rows of solar panels. In a recent report, researchers at DOE's National Renewable Energy Laboratory highlighted the ecological and agricultural benefits that could result.

The Foundational Agrivoltaic Research for Megawatt Scale (FARMS) funding program seeks to develop replicable models that can provide economic opportunities while potentially reducing land-use conflicts. DOE is focused on lowering the cost of agrivoltaic practices, making them easier to adopt and maximizing benefits for farmers, rural communities and the solar industry. The projects selected build on ongoing DOE-funded research and will examine configurations of solar system design, crops and cultivation methods and soil and environmental conditions. Researchers will work with agricultural extensions and develop resources to spread the best practices to farmers and communities.



The investments are also intended to advance diversity, equity and inclusion—supporting the Justice40 Initiative to ensure that the clean energy economy

benefits all Americans, especially those in underserved and underrepresented communities. The projects will engage with regional rural and farming communities, including Hispanic, tribal and immigrant farmers. By selecting awardees with large extension networks, DOE aims to enable more collaboration among farmers, rural communities and the solar industry.

One of the projects is at the University of Arizona (Tucson). The project was awarded \$1.2 million to pilot grazing and climate-smart agriculture under a traditional utility-scale solar site to maximize energy, food and water benefits in the arid Southwest.

DOE analysis estimates that the United States will need to quadruple the amount of solar energy installed per year by 2030 to achieve the goal of a 100 percent clean economy by 2050. To learn more, visit <https://www.energy.gov/eere/solar/solar-and-agriculture-co-location>.

NEW MEXICO INVESTS \$150 MILLION IN GREEN INFRASTRUCTURE FUND

In November 2022, the state's Investment Council made a climate-friendly investment. The council, which is made up of public members and state officials, voted to invest \$150 million into the Sandbrook Climate Infrastructure Fund. That fund will invest it in businesses and projects that address at least one of several United Nations Sustainable Development Goals.

Since the Investment Council was created in 1957, the council has worked to protect the state's funds and to invest and grow the state's cash. The state owns around \$36.5 billion in investment assets. Now, for the first time, they're investing in a climate infrastructure fund. The investment is less than 1 percent of the council's total assets.

The fund "focuses on investing in energy transition assets and companies that seek to combat climate change," according to a summary by the Mercer asset management company. State Land Commissioner Stephanie Garcia Richard said, "A \$150-million investment is right where New Mexico should be with our money—on the cutting edge of renewable sustainable projects."

CLEAN ENERGY MINERALS OVERLAP WITH INDIGENOUS LANDS

BY DEANNA KEMP, JOHN OWEN AND KADO MUIR, [PHYS.ORG](https://www.phys.org)

Energy transition minerals are essential to tackling climate change. Vast quantities of minerals are needed to accelerate the transition to a clean energy future. Minerals and metals are essential for wind turbines, solar panels and batteries for electric vehicles.

But Indigenous peoples have raised concerns about more mining on their lands and territories. If new mining projects are fast-tracked, there is a huge risk of corners being cut. Without proper consultation and legal protections, the future supply of transition minerals could put Indigenous peoples' lands at greater risk.

A study published in *Nature Sustainability* on Dec. 1 identified 5,097 mining projects involving about 30 minerals needed in the energy transition. Fifty-four percent are located on or near Indigenous peoples' lands. And almost one-third are on or near lands over which Indigenous peoples are recognized as having control or influence for conservation purposes. These lands are valuable ecologically and culturally. Their soils, and land-cover such as forests, store carbon which helps regulate the planet's climate. Typically, the lands are also intrinsic to Indigenous peoples' identity and way of life.

"Free, prior and informed consent" is enshrined in the United Nations Declaration on the Rights of Indigenous Peoples. It means Indigenous peoples should be able to accept or reject mining on their traditional lands, and to negotiate conditions such as protecting natural and cultural heritage.

At the international Indigenous Peoples Forum on Climate Change at the 2022 COP27 climate conference, advocates gathered to discuss achieving a just energy transition. Indigenous representatives said that one practical step toward addressing power imbalances is that Indigenous people must have access to the latest data and information—including what future mineral wealth lies on their lands.

BOOK PROFILE

NUCLEAR NUEVO MÉXICO

COLONIALISM AND THE EFFECTS OF THE NUCLEAR INDUSTRIAL COMPLEX ON NUEVOMEXICANOS

BY MYRRIAH GÓMEZ

THE UNIVERSITY OF ARIZONA PRESS, 2022. \$30.00

REVIEW BY DIVANA OLIVAS

In a packed University of New Mexico classroom and in an online room, a group of people recently came to hear Nuevomexicana scholar, Dr. Myrriah Gómez, speak about her book, *Nuclear Nuevo México: Colonialism and the Effects of the Nuclear Industrial Complex*. Gómez began by thanking the audience and acknowledging students struggling for dignity, graduate students who were on strike. Her book is "for the activists."

Nuclear Nuevo México is a social and cultural history—from the nuclear weapons complex of the Manhattan Project in the mid-20th century to the state's present-day cradle-to-grave reality—everything from uranium mining to nuclear waste repositories. Gómez's history of the industry departs from dominant narratives that center on the scientists, the labs and their experiments. It is told from a perspective of how the labs, government, military and private companies colluded to exploit Nuevomexicanas/os, beginning in 1942. Gómez focuses on families who were displaced and made invisible, both in everyday life and in the official historical record of the nuclear industrial complex.

The book's most important contribution is Gómez's conceptual framework of nuclear colonialism as an ongoing process that has manifested as intergenerational trauma and environmental racism, as well as contamination, disease and death. In each chapter she explains how this has played out. She describes the deaths of Nuevomexicano laborers due to an explosion at the labs in 1950. She explores the underrepresentation of New Mexican women in the popular media, such as TV shows about the Manhattan Project. Other chapters cover the contemporary activism of the Tularosa Basin Downwinders Consortium and the campaign against a nuclear waste repository in southeastern New Mexico.

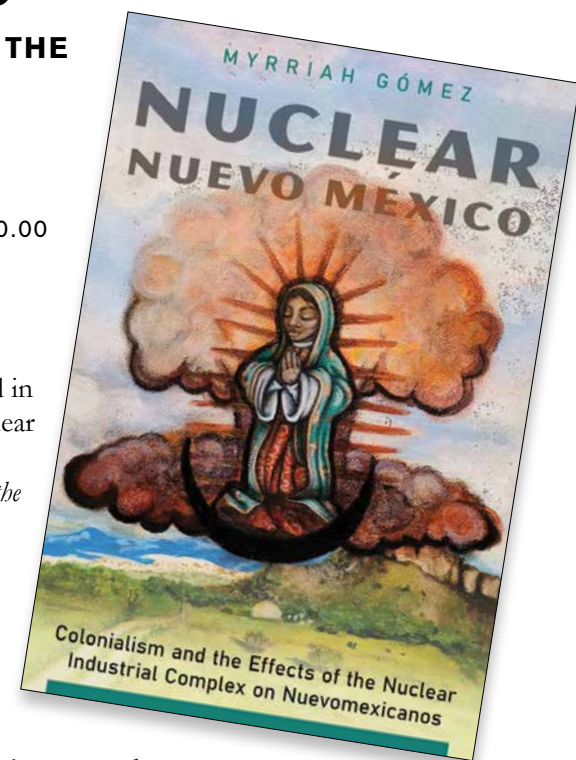
The chapters are based on oral histories Gómez collected with elders in her community (Pojoaque and El Rancho), qualitative archival research, cultural analysis and her involvement with organizers across the state on nuclear industry-related issues.

Readers learn about families like José María and Delfina Serna, who lost their land when eminent domain was claimed on the Pajarito Plateau to make room for Site Y of the Manhattan Project, and Corsinio Cordova's daughters honoring his memory and others who were killed during a 1959 explosion at Los Alamos National Labs' S-Site. They also learn about organizers like Tina Cordova, who continues to fight tirelessly to get families impacted by nuclear testing compensation for decades of disease and death in their communities.

This book is an important contribution to New Mexico's history, the history of nuclear industries around the world and social histories that center exploited laborers and landscapes that are often seen as expendable in the face of science, industry and progress. *Nuclear Nuevo México* would make a great addition in high school classrooms, undergraduate and graduate courses, for organizers working on environmental and economic justice issues, and any place where people gather to think critically. ■



Divana Olivas is a Ph.D. candidate in American Studies and Ethnicity at the University of Southern California. Raised in New Mexico to Mexican immigrant parents, she is also a 2015 graduate of the Chicana and Chicano Studies Department at the University of New Mexico.



THE NUCLEAR-HYDROGEN PUSH AT COP27

After a 25-hour flight to Egypt, the first thing I saw was COP27 (the United Nations Framework Convention on Climate Change) advertised at the Cairo airport. After years of organizing efforts to address climate change and environmental justice in New Mexico, this would be my first time representing myself and our organization, Pueblo Action Alliance, on an international stage.

During the historic gathering in Sharm el-Sheikh, the United States, along with 165 nation-state signatories, debated and negotiated global adaptation and mitigation initiatives. The focus of COP27 was financing and “loss and damages,” to ensure that all nation-states have adequate resources to implement strategies.

Witnessing the nation-states’ negotiations and the overwhelming presence of fossil fuel lobbyists, I learned quickly that Indigenous and frontline representation was sparse. This put many stakeholders at a disadvantage, as what was being discussed will greatly impact regional and local climate initiatives.

I attended COP27 with the It Takes Roots delegation. My role was to be a spokesperson on issues relating to oil and gas, Indigenous people’s rights and hydrogen energy production. My “observer” badge only allowed me to witness the climate negotiations, but I was allowed to participate in various panels and actions to discuss how the nation-states’ exclusion of Indigenous peoples and frontline communities is ultimately a setback for global climate action as we try to maintain habitable global climate temperature well below 2°C.

Corporations’ partnerships with dominant nation-states are “greenwashing” energy initiatives.

Being a dominant nation-state, U.S. participation in the COP was imperative for meaningful global emissions reduction. However, President Biden and the U.S. were nowhere to be seen during the “loss and damages” discussion, the initiative for dominant nation powers to commit to provide funding for developing nations that are most impacted by adverse climate change impacts. At previous COPs, major emitting countries like the U.S., the UK, France and China—the main contributors to global warming—pledged to help developing nations with their adaptation strategies.

In 2021, Biden labeled himself the Climate President and announced an Executive Order on Tackling the Climate Crisis at Home and Abroad, promising to phase out fossil fuels, incentivize renewable energies and align with the Paris Climate Agreement. His key environmental initiatives include financing domestic policies to ensure that the U.S. is working toward climate targets such as lowering emissions 30 percent by 2030, and incentives for wind and solar. But, after attending this meeting, I have to question whether the U.S. is actually moving toward real climate action and away from dirty energy production.



New Mexico Gov. Michelle Lujan Grisham spoke at the COP27 climate change conference in Egypt, Nov. 2022

What was being touted at COP27 was “clean” hydrogen and nuclear energy as ways to phase out fossil fuels. Those were the top initiatives backed by private corporations that hope Article 6 Section 8(b) of the Paris Agreement will encourage the public-private sector to support top-down initiatives. Most will continue to rely on fossil fuel interests and leave Indigenous sovereign nations, local governance and environmental justice communities out of the conversation. Most importantly, without correct information about how corporations’ partnerships with dominant nation-states are “greenwashing” energy initiatives, hydrogen and nuclear energy production will be the next climate scam, whereas, financing renewable energies like wind and solar, and helping Indigenous and frontline communities actually absorb some of the shocks from climate change would actually move us toward real climate targets.

Hydrogen (H₂) energy production is an energy carrier and tiny molecule prone to leaking and corroding steel and is extremely flammable. Hydrogen production is a very resource-intensive process regardless of the “color” or production process. Blue and gray hydrogen require the use of natural gas, whereas green hydrogen uses large quantities of water. Pink hydrogen is produced using nuclear energy. While burning hydrogen is clean, the production of hydrogen is not.

During the second week of COP27, I attended a panel with Department of Energy Secretary Jennifer Granholm, where she discussed DOE’s hydrogen initiatives funded by

I have to question whether the US is actually moving toward real climate action and away from dirty energy production.

the Bipartisan Infrastructure Act and the Inflation Reduction Act. While hydrogen and nuclear energy roll-outs were praised and applauded, there was no mention of meaningful tribal consultation or “free, prior, and informed consent” with tribal nations, as called for under the United Nations Declaration on the Rights of Indigenous Peoples. When I asked the secretary what the department’s plan was for tribal consultation, she replied that only four meetings had taken place and she was very proud of the direction DOE was going toward working with tribes on “clean” regional hydrogen hubs.

The Pueblo Action Alliance’s analysis of hydrogen energy production is that it is a “greenwashed” technology that hasn’t been proven to actually lower greenhouse gas



Financing renewable energies and helping Indigenous and frontline communities absorb climate change shocks would move us toward real climate targets.

emissions, unlike wind and solar. And it is ultimately propping up the fossil fuel economy. It is not a coincidence that New Mexico and other states with falling fossil fuel economies endorsed and promoted hydrogen energy, as it appeases fossil fuel industries and federal climate financing incentives.

During the 2022 N.M. Legislative session, environmental groups were unified in opposition to hydrogen hub development. What we have seen this past year in New Mexico is that top-down government initiatives are continuing to undermine local and regional democratic processes. If we allow hydrogen to become the state's economic driver, we are continuing the historic legacy of natural resource extraction with frontline communities and the environment being the tradeoff. And ultimately, we will not actually be addressing the climate crisis. ■

Julia Bernal (Sandia Pueblo/Yuchi) is executive director of the Pueblo Action Alliance. She serves on the Natural Resources Committee of the All Pueblo Council of Governors and is a board member of the Middle Río Grande Water Advocates and the Native Lands Institute. Bernal is pursuing dual master's degrees in Water Resources and Community and Regional Planning.

Top photo: Panel discussion at COP27

Below: Julia Bernal (l) on an Indigenous Peoples panel at COP27



Start and end your day with us!

KSFR fm
santa fe public radio 101.1

**Award winning news,
public affairs & talk radio**

Eclectic music

**streaming live
@ ksfr.org**

Listener supported public radio

VALENCIA WATER WATCHERS

Water Protection in Valencia County

Imagine a water bottling company taking water from a village in New Mexico with an over-appropriated aquifer in the middle of a statewide permanent water shortage to bottle and ship in plastic bottles. Sound outlandish? This scenario is disturbing, to say the least.

But here we are. Valencia Water Watchers (VWW), a small set of Valencia County citizens, banded together to fight a company trying to take more water from our aquifer. In 2017, Niagara Bottling signed an agreement with the Village of Los Lunas (VLL) to use 285 acre-feet per year to ship to consumers, mostly in New Mexico but also out of state. Niagara returned in 2020 asking to amend their agreement with the village, this time seeking 685 acre-feet. VWW—a small but mighty group—formed to oppose the requested additional appropriation. VWW garnered lots of media attention and organized a community rally and a parade of cars to the bottling plant. The day after the 2020 protest, Niagara withdrew its request.

Fast forward to June 2022, and Niagara was back for even more water—700 acre-feet per year this time. VWW headed up a protest at the VLL council meeting and started a media campaign to express community opposition. The council tabled the request. A long-awaited water consultant's report for VLL has not yet been produced. Village Attorney Larry Guggino recently suggested the amended agreement with Niagara may be considered again in January. The Water Watchers are

The Water Watchers oppose more bottling and selling of our desert water.

ready to protest and oppose more bottling and selling of our desert water. Niagara is asking for water we don't have. The "paper water" Niagara can lease from Public Service Company of New Mexico (PNM) that would "transfer" to the VLL wells is not wet water—there would be no actual physical transfer to the village to supply the company's demands.

As Niagara came back for more water, VWW got wind of New Mexico oil magnate Harvey Yates Jr.'s request for adoption of a Natural Resources Overlay Zone (NROZ) ordinance by the Valencia County Commission (VCC)—to make it easier and less costly to explore and potentially drill for oil and gas in the county. VWW went into full-court-press to oppose the ordinance. Multiple hydrogeologists told us (and testified at a commission hearing on July 14, 2022) that Valencia County lies in the Río Grande Rift, which is heavily faulted and fractured. Exploring and drilling for oil and gas there threatens our aquifer with contamination from oil and drilling fluids, and would potentially stir up the earthquake zone at the south end of Valencia County and into

VWW supports the water management recommendations from the governor and state engineer's Water Policy Task Force.

Socorro County. (Two earthquakes occurred in Socorro on Dec. 1, 2022, at 2.7 and 3.6 on the Richter scale.)

At the seven-and-a-half-hour public hearing on July 14 we gained another commissioner's vote in opposition to the ordinance.

But VWW did not stop the ordinance from being adopted—it passed 3 to 2. We did, however, with help from more than 200 supporters in attendance, convince the commission to insert additional and more stringent criteria from the existing Mineral Resource District (MRD) zoning code into an amended NROZ ordinance. The additional criteria requires that an applicant demonstrate the existence of a "sufficient quantity and quality of the resource to meet a market need," and also requires that cultural and archaeological studies be performed.

VWW also opposed the 2021 expansion of the Facebook Data Center in Los Lunas, as Facebook has been allocated 500 acre-feet per year of water from



Valencia Water Watchers ready for "Miracle on Main Street" Christmas in Belen. Photo by Liezel Taylor

Valencia Water Watchers made signs and a float for Los Lunas Christmas light parade.
Photo by Scott Jeansonne



the aquifer for its evaporative cooling system. That's 162 million-plus gallons each year. We testified during a Los Lunas Village Council virtual public hearing. Despite community opposition, the councilors voted to approve the expansion.

Harvey Yates has not yet applied to “exploit” (his word) the oil and gas resources in our county under the NROZ ordinance. But we are getting ready—lawyering up and raising money for expenses—in the event an application is submitted. We are grateful for assistance we have received from the UNM Law School Natural Resources, the New Mexico Environmental Law Center and many other supporters. People in New Mexico are concerned about soil aridification and dwindling water resources. Our mission statement resonates with many fellow New Mexicans: “VWW is a non-political, non-partisan grassroots coalition of local residents advocating for water conservation to ensure a sustainable and equitable future for generations to come.”

As part of our focus, VWW supports the water management recommendations from the governor and state engineer's Water Policy Task Force, to be published soon. Please join a webinar sponsored by the Middle Río Grande Water Advocates (MRGWA) addressing the task force recommendations and water management legislation proposed for the 2023 Legislature, on Jan. 11 at 6:30 p.m., focused on more equitable management of our water in a drying climate. You can register on the MRGWA website or at this link: [HTTPS://US02WEB.ZOOM.US/MEETING/REGISTER/TZYL-6SRZ8PHDDPCFNL5MBS6WAXVL4GMR1U](https://us02web.zoom.us/join/zoom/register/tzylf-6srz8phddpcfnl5mbs6waxvl4gmr1u)

We welcome people and organizations from across the state to support our work. Visit VALENCIAWATERWATCHERS.COM and sign up on our email list. Also find us on Facebook at and on Instagram at @valenciawaterwatchers. Email us at VALENCIA.WATER.WATCHERS@GMAIL.COM with comments, questions or for more information. ■



Ann McCartney is a retired attorney who has lived in Valencia County since 1977. She is co-chair of New Mexico and El Paso Region Interfaith Power & Light, board member of Middle Río Grande Water Advocates and core member of Valencia Water Watchers.

OP-ED: ENNEDITH LOPEZ

HISTORIC MOUNTAIN VIEW FILING

Cumulative Impact Regulation Will Help Ensure Youth of Color Have a Future



Fighting to Live by David Pecas Valencia. The 20-year-old artist said, “It’s about a young Chicano boy fighting to live in a world full of violence, poverty and pollution.”

The urgency of the climate crisis calls for an evaluation of our society, its daily functions and systemic changes needed to ensure a viable future. In New Mexico, due to racist policies, polluting industries have disproportionately impacted overburdened communities. Community-led initiatives are critical, today more than ever, to address intersecting concerns such as community health, preservation of the environment and climate crisis impacts.

Mountain View, located north of Isleta Pueblo, has traditionally been treated as a sacrifice zone. This neighborhood, where residents are mainly working class and people of color, has faced the brunt of decades-long toxic and hazardous pollution from industries in the area. According to Lauro Silva, Mountain View Neighborhood Association board member, the fight for environmental justice has been going on for more than 30 years. The Mountain View Coalition, developed over the past two years,

Industry wants to carry on with business as usual by continuing to pollute communities for generations to come.

includes the neighborhood association, along with Mountain View Community Action and Friends of the Valle de Oro National Wildlife Refuge.

Life expectancy in Mountain View is 10 to 24 years less than more affluent White

Mountain View, located north of Isleta Pueblo, has traditionally been treated as a sacrifice zone.

neighborhoods in the Albuquerque metropolitan area. Younger residents of color and other historically overburdened community members are particularly at risk. In addition, children and elders have a higher incidence of respiratory and cardiovascular diseases and cancer. Silva stresses the importance of recognizing the impacts pollution potentially carries for younger residents, as it poses a risk of altering their genetic make-up, making future generations more vulnerable to illnesses.

On November 21, 2022, the Mountain View Coalition and New Mexico Environmental Law Center (NMELC) filed a Health, Environment and Equity Impacts Regulation with the Albuquerque-Bernalillo County Air Quality Control Board, in an attempt to address these health disparities in Bernalillo County. The proposed regulation raises serious concerns. It would require the Albuquerque Environmental Health Department (EHD) and the Air Quality Control Board to evaluate the health, environmental and equity impacts of air emissions prior to issuing a permit to a new industry or business. If an emitting industry is to be located in an overburdened community, and potentially negatively impact the health of the residents, the application would be denied.

Maslyn Locke, staff attorney at NMELC, said that the regulation will require EHD to “meaningly consider the impacts of air pollution on low-income communities and communities of color.” The regulation would, in effect, make possible opportunities for a healthy environment with clean air, water and soil.



Mountain View Coalition members with NMELC attorneys and community members at a press conference.

Environmental Protection Agency (EPA) reports a 90-percent increase of global carbon emissions from fossil fuels and industrial processes. This has also contributed to an approximately 78 percent increase of total global greenhouse gas emissions. New Mexico does need economic mobility, but it is the responsibility of industry to institute clean, renewable practices.

The proposed regulation holds industries accountable and sets preventative measures to stop the contamination. Eric Jantz, senior staff attorney at the NMELC, said, “Externalizing pollution costs is facilitated by structural racism, since politically and economically marginalized communities are much easier to exploit than more advantaged communities.” The regulation reflects a community initiative that is people-centered and environmentally conscious.

During the Air Quality Control Board meeting, Silva said, “This permit regulation is to account for the cumulative impacts, not just of one company, but the entire amount of pollution that is taking place. We are not against business. We are for a clean industry.”

The regulation will positively impact all overburdened communities in Bernalillo County and become a preventative measure to the disproportionate spread of pollution. Overburdened communities like Mountain View deserve the opportunity for a clean and healthy environment and environmental justice. ■



Eneideth López, a Xicana born and raised in the International District of Albuquerque, has centered her studies and work to support BIPOC, low-income and marginalized communities in New Mexico. She is interning at the NMELC through an Institute for Policy Studies New Mexico Fellowship.

as a result of the industries’ economic development.

Those advocating for increasing industrial sites in the area also do not consider how their industry or business is directly harming younger New Mexicans’ futures by failing to acknowledge their industries’ contribution to the climate crisis. From the early 1970s until 2011, the U.S.

*Top: Los Jardines Institute members
Bottom: Lauro Silva, Mountain View Neighborhood Association*

OP-ED: MARIO ATENCIO

THE INDIGENOUS PEOPLE-LED PROTECT GREATER CHACO COALITION

Chapter houses are the Navajo Nation's smallest unit of local government, but in resisting the oil and gas juggernaut and fighting horizontal oil and gas drilling (fracking), they are among those that are courageously spearheading a global fight to protect sacred places. In so doing, these Diné have centered environmental justice and the climate-crisis mitigation movements.

On Dec. 7, 2013, the 31 chapters of the Eastern Navajo Agency Council passed Resolution No. ENAC 12-2013-03, which called on the federal government to enact a moratorium on horizontal well drilling so that potential health, cultural and resource impacts could receive due consideration.

In 2015, three Chapters of the Eastern Navajo Agency Council: Counselor, Ojo Encino and Torreon, passed resolutions: *"Requesting the New Mexico Congressional Caucus intervene on behalf of our citizens regarding the actions of the U.S. Bureau of Land Management on the leasing of certain parcels of public lands for horizontal drilling and hydraulic fracturing, by calling for a moratorium until the Resource Management Plan is revised or amended; ...to implore that the Bureau of Indian Affairs, Navajo Region, exercise due diligence trust responsibility to assure that the trust status rights of Navajo citizens who are allottees or heirs of allottees are protected; and related actions."*

Also in 2015, local citizens group Diné Citizens Against Ruining our Environment (CARE) partnered with the Western Environmental Law Center in filing a preliminary injunction against the federal government. They asserted that horizontal fracking had not been adequately considered in federal planning documents and violated the Nation Environmental Protection Act (NEPA) and the National Historic Preservation Act (NHPA). This case and subsequent challenges led to a 10th Circuit Court of Appeals decision in 2019 that the government had failed to analyze impacts that oil and gas wells have on greenhouse gas emissions (GHG) and water resources. As a result of this ruling, some oil and gas leases were vacated, something extremely rare during the "energy dominance"-focused Trump administration. This victory put the Diné resistors prominently in the global climate crisis mitigation fight.



Mario Atencio with U.S. Secretary of the Interior, Deb Haaland at Chaco Canyon

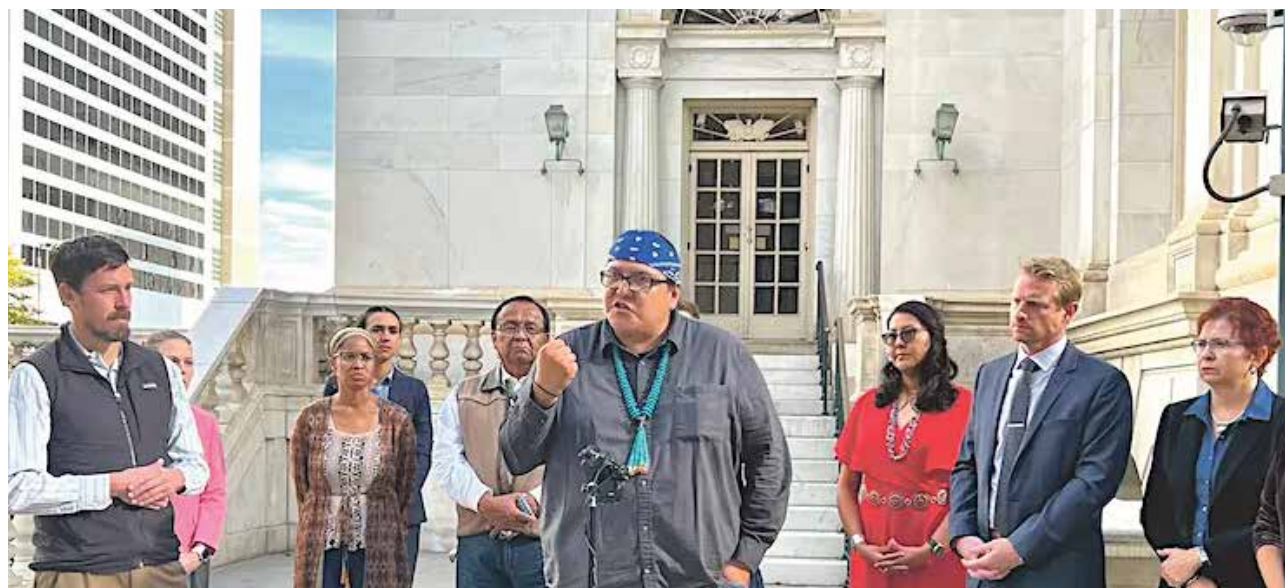
In 2019, then-Assistant Speaker Ben Ray Luján and then-Congresswoman Debra Haaland introduced the *Chaco Cultural Heritage Area Protection Act of 2019*. This would have stopped oil and gas leasing on federal lands within 10 miles of the Chaco Culture National Historical Park. The Protect Greater Chaco Coalition has been steadfast in claiming that there are a lot more sacred places beyond the 10-mile buffer zone that need protection.

In 2020, Joe Biden was elected. One of his campaign promises was to stop all oil and gas leasing on federal lands. After having opposed fracking and drilling for more than seven years, local organizers and leaders were hopeful that they would get some relief. But in federal court, the oil and gas giants won a decision that the administration did not have the authority to stop leasing on public lands. In 2021, however, Biden administratively authorized a 20-year withdrawal of oil and gas leases within 10 miles of the Chaco Culture National Historical Park and called for greater protection of the Greater Chaco landscape.

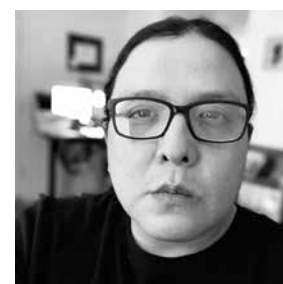
In November 2021, Debra Haaland, now the Secretary of Interior, following an executive order from the president, announced the start of the "Honoring Chaco Initiative." This is supposed to be a "...regional conversation to create a vision for a broader approach to managing cultural and natural values across the Greater Chaco Landscape."

These actions bring hope to frontline Indigenous communities, but in 2022, oil and gas drillers were still being awarded leases and are continuing to frack wells in the Greater Chaco landscape. Diné CARE and area residents are forced to file federal preliminary injunctions in federal court to stop drilling in the disputed lands. Local Chapters have filed resolution after resolution asking for forbearance from the apparently illegal processes that local offices of federal government agencies are following.

The fight has been ongoing for 10 years now. Navajo, Pueblo and Jicarilla peoples are still holding the line and are in great need of help. Interested people and organizations are invited to join the more than 200 local, regional, national and international organizations that comprise the Protect Greater Chaco Coalition. Visit www.frackoffchaco.org and www.dine-care.org. ■



Mario Atencio, an energy organizer for the Greater Chaco Coalition, is Hásht'úishnii; born for Tódichúinii. Táneezháanii are his cheis and T'laasch'í are his nális.



He became involved with Diné CARE while working on the ongoing Colorado River water rights issue. He became a Diné CARE board member in 2017.

MARIO.ATENCIO@DINE-CARE.ORG

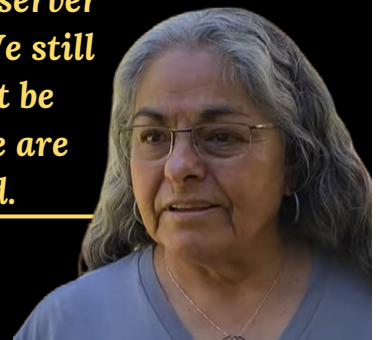


Winter in Santa Fe. © Seth Roffman

How do I love NMELC? Let me count the ways. When the Contra Santolina Working Group was going under, you threw us a life preserver and with your help we are still afloat. We still fight on. Without NMELC there might be houses in Santolina now. Instead there are jackrabbits and sagebrush and sand.

Marcia Fernandez

Contra-Santolina Working Group



Please consider a donation to the New Mexico Environmental Law Center

 www.nmelc.org/donations

Your support is vital in helping us defend environmental justice across NM



The New Mexico Environmental Law Center has been defending environmental justice since 1987. It is our mission to work with New Mexico's communities to protect their air, land and water in the fight for environmental justice.

Study Trades and Sustainability at SFCC



Learn to build an adobe house. Discover the secrets of cultivating algae and creating biofuels. Study aquaponics and hydroponics. Prepare to work on the next generation of energy grids. Become a welder.

In the Trades and Sustainability Pathway at Santa Fe Community College, you can do all these things and more!



FIND OUT MORE.
SFCC.EDU/SUSTAIN | 505-428-1270



Congreso de las Acequias 2022

In December 2022, more than 250 people gathered at New Mexico Highlands University in Las Vegas, N.M. and online for the New Mexico Acequia Association's (NMAA) annual meeting of *mayordomos* (acequia stewards), *parciantes* (water rights holders) and advocates for the 600-plus historic irrigation channels that make agriculture and traditional culture possible.

There was an early-morning procession of farmers, *palas* (shovels) in hand, from the Gallinas River. After the *Bendición de las Aguas* (Blessing of the Waters), where water from acequias across the state was put in a large ceramic pot, U.S. Sen. Ben Ray Luján, U.S. Rep. Teresa Leger Fernández, State Sen. Pete Campos, State Engineer Mike Hamman and State Auditor Joseph Maestas delivered remarks.

Over two days, remembrances were shared of unprecedented fires and floods and efforts focused on building resilience to the ongoing megadrought and disasters. Community leaders who worked tirelessly to save their acequias were acknowledged. Stories were shared to help the community get through challenging times together. Federal Emergency Management Agency (FEMA) officials spoke reassuringly and listened to community members' concerns.

There were workshops, presentations by NMAA's Sembrando Semillas, and the Sembrando & Youth Leadership Institute, music and *teatro* celebrating the acequias' continued strength. A panel of local and statewide leaders discussed their experiences with adjudication, water-rights defense, water-sharing and infrastructure planning. Members discussed policies and voted on 10 resolutions and declarations.

The Hermit's Peak-Calf Canyon Fire decimated the area around Las Vegas, destroying and damaging an estimated 45 acequias. The Black Fire in southern New Mexico and the Cerro Pelado Fire near Los Alamos impacted 24 acequias. About 340,000-acres were subjected to fires and floods. Acequias are also under threat from land development and commodification of water.



Top: NMAA's Concilio calls the congreso to order; musician/cultural educator David García and rancher Virgil Trujillo; Leon and Beverly Tafoya receive "Acequia Community of the Year" award on behalf of the Assoc. of Community Ditches of the Río San Jose; Community members bring water from home acequias as part of the Bendición de las Aguas; Regional acequia leaders share stories and strategies; Sen. Ben Ray Luján (D-NM) addresses the gathering; Lara Manzanares performs. Page 29: State Engineer Mike Hamman; attendees applaud; Gilbert Sandoval, president of the Jémez River Basin Coalition of Acequias, receives Lifetime Achievement Award from Harold Trujillo; NMAA Los Sembradores farm apprentices Michelle Martínez and Alex Griffiths share their experiences. Photos © Seth Roffman





CONGRESO DECLARATION

In the year 2022, after numerous years of megadrought, our communities experienced the worst year on record for wildfires including the two largest wildfires in New Mexico history, the Hermit's Peak-Calf Canyon Fire and the Black Fire. Burned homes, forests and ranches have devastated the people of the burn scars.

The trees, plants, roots, soils and cloud patterns that were our source of water and our source of life will never be the same. Places of our ancestors for harvesting *remedios*, fishing, hunting and harvesting firewood, *latillas*, vigas and other building materials live only in our memories. Acequias, once flowing with clean, crystalline snowmelt from our beloved mountains, are clogged with ash and soils that eroded from the burned hillslopes.

Still, the land endures. Burned, scarred, wounded and eroded, our beloved land is still in our care.

The Congreso de las Acequias, as representatives from acequias throughout New Mexico, express our deep sadness at the loss of watersheds, forests and the headwaters in the burn scars from the 2022 fires.

We declare our resolve to heal our *Tierra Querida*, Beloved Land, and we envision some of the work that lies ahead for recovering communities to heal, rebuild and adapt to ongoing hardships and climate extremes. Our work is also important for communities that have not yet faced the catastrophe of megafires and flooding but are vulnerable.

1. Rebuild our acequias and community ditches ravaged by flooding by leveraging government programs but also by mobilizing communities and volunteers for communal work.
2. Heal our watersheds with massive investments for erosion control, river restoration and reforestation. Watersheds not yet burned need restoration through thinning and erosion control.
3. Learn from the 2022 disasters to better prepare other communities for future disasters.
4. Establish emergency seed banks that are protected from fires and floods.
5. Adapt to water scarcity by strengthening our customs and practices of water sharing.
6. Protect our land and water, keeping water rights tied to farmland and preventing depletion of our aquifers.
7. Dedicate more resources toward adaptive agricultural practices to support local food production with drought-resilient crops and livestock.

We resolve to build a stronger acequia movement that honors the contributions of the many volunteers who work tirelessly to keep water flowing to our lands, that supports leaders in our communities to be caretakers of the land and water, and that lifts up new generations of leaders to be defenders of our water, land and way of life.

Approved by the Congreso de las Acequias this day, the 10th of December, 2022

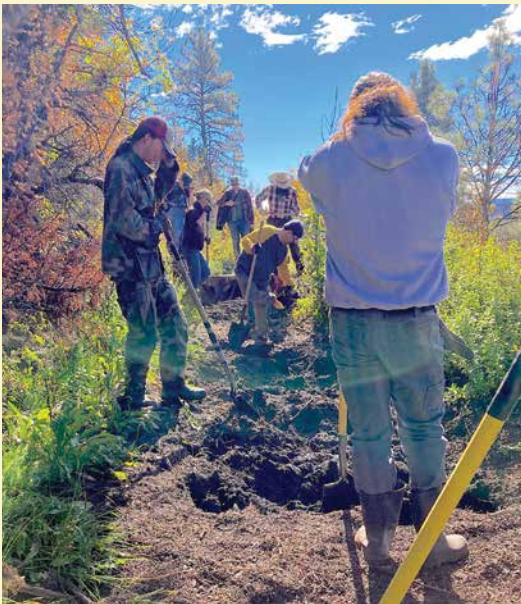
THANK YOU 2022 SPONSORS OF CONGRESO DE LAS ACEQUIAS



PEONES DE SAN ISIDRO MUTUAL AID

BY PAULA GARCIA

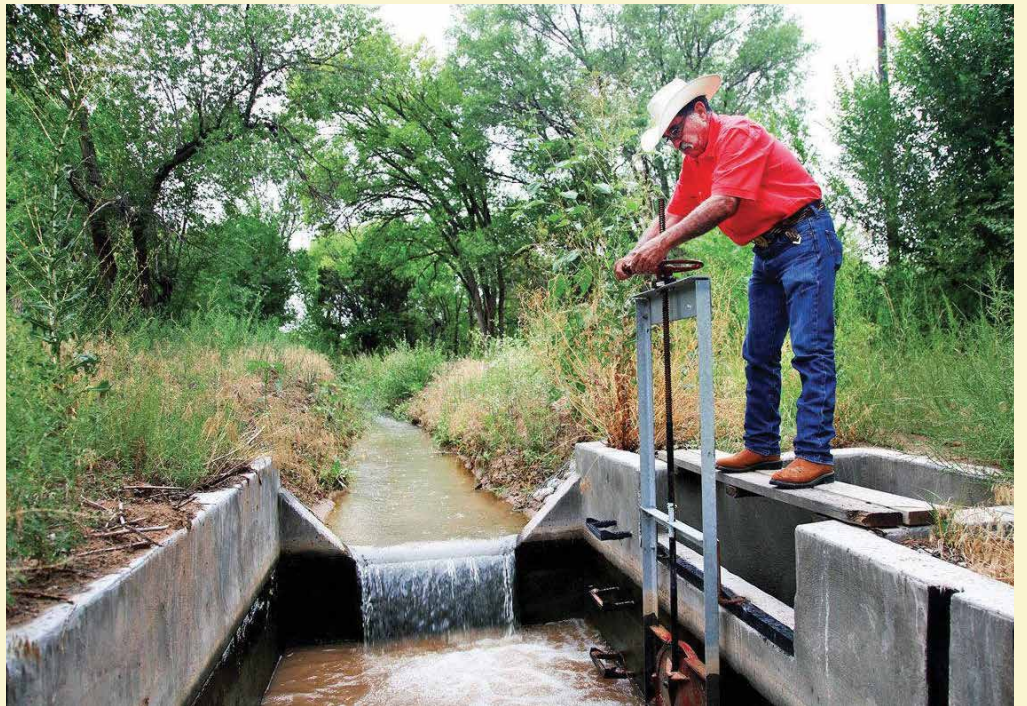
In the fall, we gathered our community to tend to our precious acequias. Since the fires, dozens of acequias have completely filled with sediment and ash from flooding runoff from the Hermit's Peak-Calf Canyon burn scar. The NMAA has been providing support for its members as communities work to *sacar la acequia* (restore and revive the ditches)—including mobilizing state resources so local contractors can excavate in places that are reachable by machinery. However, because many areas can only be reached by hand, we worked with local acequias to recruit volunteer *peones* (laborers) to supplement local crews.



This is a monumental effort, as significant as the work our ancestors accomplished when they first built/dug our acequias. This work must continue in the spring as soon as the ground begins to thaw in order to ensure that the water has somewhere to flow and can reach the fields that provide vital sustenance



Top left: *Parciantes* work to repair an acequia; Bottom: 2022 NMAA Art Contest first prize (adult): “*Acequeros Working the Land*” by Donatella Davanzo; mayordomo releases water from an acequia; Youth Photo Winner: “*Basket of Calabasitas*” by Zachary Nash Archuleta, Southside Acequia, Vadito



to so many of our families. In New Mexico, we lose our rights to the water if we do not use them.

We urgently need help restoring our acequias in order to mitigate further suffering and harm on top of the devastating losses in 2022. Given the loss of our forests and their role in maintaining the health of the watershed—keeping the soil intact and the waters running clean—we know this is going to be a recurring challenge. For years to come we will face flooding and will again have to restore our waterways. We are working to get resources to our acequias to assist in fortifying them—and we are also working on

strengthening the social networks that maintain our rich land and water stewardship traditions, as well as build collective power to prevent these disasters and adapt in the face of climate change. If you would like to support this effort, contact the NMAA at 505-995-9644 or visit WWW.LASACEQUIAS.ORG. ■



Paula García is executive director of the New Mexico Acequia Association.

ACEQUIAS/PUEBLOS WATER RIGHTS SETTLEMENT FINALIZED

Awaiting Congressional Approval

The Jemez River is the source of water for Jemez and Zia pueblos, as well as for several acequias along the river. The headwater/source area of the river begins at the Jemez Caldera. For almost 40 years, Jemez and Zia pueblos, the Jemez River Basin Coalition of Acequias (on behalf of several acequias) and other water users, have been involved in an adjudication relating to this tributary.

The Río San José, a stream off of the Río Puerco, a tributary of the Río Grande in the Río Salado and Río Puerco basins, is the source of water for Acoma and Laguna pueblos, the Association of Community Ditches of the Río San José (on behalf of several acequias) and other water users. Acequias and streams that once fed the Río San José, the lifeblood of these communities that has supported traditional agricultural practices, have been severely impacted, and in some cases, devastated, by mining and industrial development.

After decades of negotiations and collaboration between Pueblo and non-Pueblo water users including local, state and federal governments, the Jemez River Basin Coalition of Acequias and the Río San José and the Association of Community Ditches—two fully supported water rights settlement agreements have been finalized and await Congressional approval. They are the Pueblos of Jemez and Zia Water Rights Settlement Act; and the Pueblos of Acoma and Laguna Water Rights Settlement Act.

These settlement acts each create settlement Trust Funds for the pueblos, enable certain conditions for pueblo water leasing, provide state funds for acequia infrastructure and conservation improvements, and further enable pueblos and acequias to better mitigate the impacts of climate change and persistent drought.

These settlement acts end decades of litigation and provide much needed water supply for the pueblos and acequias, moving the region toward greater water equity and security. The acts protect the water rights of the acequias from possible pueblo priority calls and adverse impacts from any new pueblo water projects, while also providing for improvements to acequias' water supplies through \$12 million in state funding for acequia infrastructure and conservation projects.

The Congreso de las Acequias, which took place in December 2022, agreed on a resolution that fully supports Congressional approval of these acts. The congreso expressed appreciation to pueblo leadership and acequia leadership for the many years of negotiations, collaboration and patience involved in reaching the agreements.

This article was adapted from a resolution approved at the New Mexico Acequia Association Congreso, December 2022.

ESPAÑOLA VALLEY ECOSYSTEM RESTORATION PROJECT

Santa Clara and Ohkay Owingeh pueblos have signed a design agreement with the U.S. Army Corps of Engineers Civil Works Project to restore a stretch of the Río Grande closer to what it was before federal agencies straightened it decades ago in an effort to control flooding by increasing the river's velocity and reducing sediment buildup. That deprived the bosque of water for trees, vegetation and wildlife habitat.

The \$100-million Española Valley Ecosystem Restoration Project will restore 958 acres of aquatic and riparian habitat along the river and its tributaries within the two pueblos. It will reconnect floodplains to the river, benefiting farmers challenged by climate change. It will also benefit non-Native communities downstream, as well as the greater Río Grande ecosystem.

Federal funding will cover 80 percent of the project; the pueblos will cover about 12 percent, some of which may be covered by waivers. The design phase is expected to take two or three years. Construction will likely start a year after that and could take 10 years to complete. The two pueblos north of Santa Fe, which worked with the U.S. Army Corps of Engineers in the aftermath of the 2011 Las Conchas Fire, will be in charge of their respective sections. The project will include the creation of nature trails and information kiosks to help tribal residents, children and visitors understand the importance of the bosque and its cultural significance.

A statement released by Michael Connor, assistant secretary of the Army for Civil Works (and a citizen of Taos Pueblo) says, "This particular environmental restoration project is the first major army civil works project...to be developed, authorized and now funded solely to benefit the natural and cultural resources of tribal entities."

Tribal council members, officials and staff from each pueblo, representatives from Sen. Ben Ray Lujan's and Sen. Martin Heinrich's offices and leadership from the U.S. Army Corps of Engineers' Albuquerque District attended the signing ceremony.



L-R: Gov. J. Patrick Aguino of Ohkay Owingeh Pueblo and Gov. J. Michael Chavarria of Santa Clara Pueblo, along with Assistant Sec. of the Army for Civil Works, Michael Connor, during signing ceremony at the Ohkay Owingeh Tribal Lakes. Photo by Elizabeth Lockyear

ADDITIONAL \$1.45 BILLION FOR NEW MEXICANS IMPACTED BY HERMIT'S PEAK-CALF CANYON FIRE

On Dec. 20, 2022, members of New Mexico's Congressional delegation announced an additional \$1.45 billion to fund the Hermit's Peak-Calf Canyon Fire Claims Office. The funding is part of the disaster supplemental section in the appropriations bill. Moreover, the omnibus bill includes separate streams of \$925 million for the Emergency Forest Restoration Program and \$27 million for the Emergency Watershed Protection Program.

In total, this additional funding will provide \$3.95 billion for FEMA to better meet the expected costs to fund the Hermit's Peak-Calf Canyon Fire Assistance Act. The bill includes language to allow for repairs or replacement of the water treatment facility in Las Vegas, N.M. Earlier this year, New Mexico's Congressional Democrats successfully passed the act enabling \$2.5 billion for New Mexico families and businesses. The act is led by Rep. Teresa Leger Fernández and Sen. Ben Ray Luján, and co-sponsored by Sen. Martin Heinrich and Rep. Melanie Stansbury.

"This additional funding is what justice looks like—the federal government is taking responsibility for the harm it caused and answering the stories, voices and calls for help to rebuild," Leger Fernández said. "We must do everything possible to make families whole again," said Luján. "I look forward to working with my colleagues to get this bill across the finish line." "The fire destroyed hundreds of homes and businesses and displaced thousands of New Mexicans," said Heinrich. "Their resilience and willingness to serve their neighbors in such a difficult time embodies the best of what it means to be New Mexican." "We know that nothing can replace what has been lost, but are grateful federal agencies are stepping up and that this funding will help our communities and families rebuild," said Stansbury.

NIHI K'É BAA' "LOVE ON THE LAND"

BY KIMBERLY SMITH

Nihi K'é Baa' (NKB) is a collective of grassroots Diné organizers working to remediate our homelands and create a healthy, sustainable and viable future rooted in ancestral knowledge. Our mission is to build sustainable infrastructure while healing our land and bodies through reclaiming Indigenous autonomy and ancestral lifeways. Our goals focus on comprehensive healthful solutions to the intersecting problems of: climate change, poisoning of land and people by extractive industries and lack of healthy food access, shortage of housing and cultural hubs for traditional wisdom reclamation and ceremony, lack of infrastructure essential for mutual aid and healthy community networks. Some

Our mission is to build sustainable infrastructure while healing our land and bodies through reclaiming Indigenous autonomy and ancestral lifeways.

of the sustainable and regenerative solutions we have engaged in toward these goals include ancestral food reclamation and distribution, watershed restoration, bioremediation, community skill building, herbal medicine reclamation, climate change response through forest and land stewardship, and direct support of unhoused relatives.

We are firm believers that how we treat the land is how we treat ourselves. When we heal the land, we heal ourselves. We yearn for that healing and we continue to create innovative ways to heal for our ancestors and for future generations. We are currently engaged in a development phase,

strategically focused on building sustainable and regenerative infrastructure for housing in the form of a building society. Our clans have always had different societies. Our hope is to reintroduce these societies as a means to draw our people home in order to shift power and build land-centered solutions. More Diné people moving back to our homelands means more people to defend our land and sovereignty against continued desecration and theft by extractive industries and federal colonial entities. In turn,



this regrowth of community on our homelands offers more opportunities to decolonize through connection to land, culture and traditional lifeways. Traditional lifeways that are based on sustainable tiny home living and living off the land. Our ancestors have always lived "green."

Our building society is a solution to the lack of infrastructure and sustainable housing in our community and our community's need for safe spaces in which to gather for ceremony, networking,

Fifty people from the community and around the country joined Nihi K'é Baa's weeklong strawbale build workshop in the spring of 2022 on the Navajo Nation. They also learned about the vision for the community space and Nihi K'é Baa's work.

Photo © Chelsey Johnson



Nibi K'é Baá lead organizers Makai Lewis and Kim Smith (with their nephew Keaton Adolph) placing the first straw bale in the community kitchen.
 Photo © Timbo Scursso

We are not creating something new but reconnecting to regenerative and ancestral Diné values and principles.

mutual aid and ancestral teaching. Decades of fossil fuel and uranium extraction have contaminated our lands. The limited infrastructure that exists in the area was developed to facilitate extractive industry's presence—creating a shortage in housing and a reliance on bordertown economies. Local community members are expected to move off the land into the cities or work for industry. Local food systems were destroyed as part of the process of colonization, and though many of us have maintained our agricultural traditions, contaminants in the soil and water threaten our ancestral way of life. Working at the frontlines of colonization and extractive industry, our interaction with the land and community while building this sustainable infrastructure offers an emergent practice in which the land guides us to generate solutions for healing that support autonomy and ancestral lifeways and that allow us to decolonize ourselves in spirit, mind and body. In this way the land itself is teaching us how to decolonize.

Our hope is to draw our people home in order to shift power and build land-centered solutions.



Nibi K'é Baá "Love on the Land" landfill cleanup and watershed restoration. Aside from the natural building projects we have been cleaning up illegal landfills started years ago by the first settlers (trading posts, Catholic Church and U.S. military) in our territory. After the cleanup, we planted plants that detoxify soil throughout the area. We want to relate to our homelands the way our ancestors did, and re-experience it by re-stewarding and regenerating that deep love for land and life... to regenerate kinship and culture. Photo courtesy Nibi K'é Baá

Over the past two years, our cohort of community members, organizational leaders, indigenous comrades, teachers, elders and allies has cleaned up a total of five acres of illegal trash dump sites, cleared and remediated a building site, built a 1,400-square-foot community kitchen and collective office space (out of strawbale), built leadership capacity by attending sustainable building technique trainings, and facilitated local workshops and trainings in straw bale and adobe construction, watershed restoration, and soil and plant identification. All while maintaining distribution of healthy ancestral foods and supplies to fulfill basic needs of isolated and unhoused community members and Covid-positive households throughout our region.

The next phase will be to build ancestral hogans (Diné' ancestral homes) using each of the sustainable techniques we have learned. This pilot project will help us identify costs and a blueprint to build manageable and affordable hogans with and for our comrades and community moving forward. This is *landback* in its truest form. Defending and carrying on the work of our ancestors at a pivotal moment when the climate is changing and our rights are being stripped from us. We are not creating something new but reconnecting to regenerative and ancestral Diné values and principles.

Aside from the building project, we will continue to report back to our local Indigenous community on the state and federal government Environmental Justice policies and our research and findings on the fossil fuel contamination of the land, air and water. It is vital that we educate our communities in our language while acknowledging that as a sovereign nation we have other governments (state and federal) that we have to hold accountable. We are currently working with a group of Diné elders to create a Diné climate change toolkit. We will also highlight our "Love on the Land" initiative as one example of place-based solutions.

Our Love on the Land Initiative builds bridges, bonds and supports new engagement with real-time climate solutions by creating accessible toolkits and replicable building plans for sustainable living. These



free resources foster abundance in collective knowledge and skills as the perfect antidote to the rapacious and extractive dynamics of capitalism. The finished homesteads serve as pilot structures, safe, grassroots, community spaces in which to develop, organize, learn, teach and hold ceremony. Homesteads address burnout in our organizing communities by providing our comrades with an ancestral place to dwell on our homelands and a rooting to land and community that is critical to building strong organizers to defend and carry on the work of our ancestors.

When we heal the land, we heal ourselves.

Sites for our pilot homesteads are chosen based on community need as well as our personal relationship to local community, family, and land. Our deep listening practice in relationship to both land and community informs our solutions at every step. Direct community engagement in workshops, ceremony

Photo courtesy Nibi K'è Baá

and continued mutual aid efforts affirms this practice. We witness growth and change as our community members show up to work and sweat alongside us at each build. Spending hours together on the land working, sharing food, skills, challenges and laughter is a safe and decolonial way for our community to reconnect with the land and invites the generation of new ideas for transition and resilience through increased trust and understanding.

This initiative is designed to be replicable and scalable with the objectives of remediating land and creating sustainable homes.

Moving beyond local community engagement, this initiative is designed to be replicable and scalable with the objectives of remediating land and creating sustainable homes and building knowledge for different terrains and ecosystems. Throughout the past few years, we have been told we are wrong, crazy or too radical or that these extractive industry developments on our homelands are “safe” or “green.” Everything we do is in defense of the land and water. This is us, reclaiming our #landback. As Diné agitator Klee Benally once said, “Land back is the healing and restoration of

mutuality with the land. It is the liberation of occupied stolen land. It is the unsettling and abolition of colonialism.” Our hope is that our work can be an inspiration and impactful in a global context of climate justice and Indigenous self-determination.

We would also like to acknowledge and give much gratitude to our dear allies, accomplices and relatives that truly show up for us. Thank you for being an important part of our story. A special shout-out to SURJ-Northern NM chapter, Earth Care/YUCCA, Quivira Coalition, the New Mexico Foundation and the NDN Collective. *Abéheé!* ■

Kimberly Smith is an activist, organizer and citizen scientist from the Diné Nation. She is the founder of Indigenous Goddess Gang, an online magazine curated to reclaim traditional and healing knowledge from an Indigenous feminist lens.

OP-ED: JACOB VIGIL

NM LEADS THE WAY FOR BRIGHTER FUTURE FOR YOUNG KIDS

As an advocate for child well being, I often think and talk about the future. How can we ensure that our state and our communities—today’s children—have the best opportunities to be healthy and thrive? An equally important question is what kind of world are we leaving our children? Climate change is increasingly harming the health of New Mexicans as extreme weather events such as heat waves, drought and flooding—along with wildfires and air pollution—are quickly accelerating. While these impacts are well known and increasingly visible, the urgency of the need to respond cannot be taken for granted.

The same is true about the challenges young children face. Years of institutional and structural inequities have resulted in high child poverty rates throughout the state. In 2022, New Mexico ranked 50th in the national KIDS COUNT Data Book.

“Voting is the expression of our commitment to ourselves, to one another, this country and the world,” said author Sharon Salzberg. The 2022 election tells us a great deal about how committed New Mexicans are to our children and their families. Voters overwhelmingly passed a ballot measure, Constitutional Amendment 1, allowing early childhood education to be funded through the (\$24 billion) Land Grant Permanent Fund (LGPF). New Mexicans want the highest quality early care and education programs fully supported and available to all.



Voters also voiced support for many policies lawmakers enacted in recent years. These include statewide paid sick leave so parents can care for a sick child, the expansion of health care coverage for new mothers, and a historic expansion of child care assistance that will allow parents

to leave their children in beneficial, affordable environments while they work. We continue to seek more support for teachers and classrooms, common sense gun safety, environmental protections, a new state-level child tax credit and expansion of tax credits that help improve racial and gender equity.

Above: Wilhelmina Yazzie, namesake of the Yazzie-Martínez court case, which laid a foundation for transforming New Mexico’s education system Photo by Nathaniel Paolinelli



Election night party for the Permanent School Fund resolution win at Hotel Andaluz in Albuquerque, Nov 8, 2022. Photos by Nathaniel Paolinelli

Constitutional Amendment 1, however, stands as a unique and remarkable step forward for kids in New Mexico and for the kind of future we hope for them. It allows an additional 1.25 percent to be drawn from the LGPF, 60 percent of which will go toward early childhood education and 40 percent to K-12 education. One hundred and fifty million dollars will be allocated annually to early childhood programs. The LGPF, created in 1912, when New Mexico became a state, is one of the largest such funds in the nation. Its revenue comes from leases and royalties on oil and gas production and returns on invested capital. Currently, annual withdrawals are limited to 5 percent of the fund's total value, and most of the beneficiaries are public schools and universities. Following the historic vote, investments in children under 5 are now allowed.

Rather than mostly enriching oil companies and Wall Street investors, this wealth should fund living wages for early educators and teachers, continued affordable child care, universal pre-kindergarten and better classroom resources. Voters are celebrating an incredible victory for New Mexico's children.

Reflecting a movement that started 10 years ago, led by advocates such as New Mexico Voices for Children, 70 percent of voters expressed their approval. Policymakers in recent

years have recognized the importance of the early years. A new early-childhood department was established, an Early Childhood Trust Fund was created, and wages increased for early-childhood workers.

But the work is not done. Oil and gas extraction and use are significant drivers in the climate crisis and have adverse impacts on communities. A better future also requires a sustainable economy that is less dependent on fossil fuels. We must continue to raise our voices for children, families and communities and work toward a brighter future. Demanding that future is something voters and lawmakers can do. We can make New Mexico a leader in what policy looks like when we put kids at the heart of it. Our state is just getting started. ■



Jacob Vigil is a senior research and policy analyst with New Mexico Voices for Children. He works on anti-poverty initiatives, including economic security, safety net and early care and education policies. Vigil has a B.A. in Latin American History from Pomona College and a master's in social work from Loyola University.

BIDEN-HARRIS ADMINISTRATION INVESTS \$84 MILLION IN 36 DROUGHT RESILIENCY PROJECTS

On Dec. 22, 2022, the U.S. Department of the Interior announced an \$84.7-million investment from the Bipartisan Infrastructure Law to help 36 communities throughout the West prepare and respond to the challenges of drought. The selected projects will help bring clean, reliable drinking water to communities, farmers and wildlife through innovative resilience efforts, such as groundwater storage, rainwater harvesting, aquifer recharge, water reuse, ion exchange treatment and other methods to stretch existing supplies.

The Law allocates \$8.3 billion for Bureau of Reclamation water infrastructure projects over the next five years. The funding will be used to repair aging water delivery systems, secure dams, complete rural water projects and protect aquatic ecosystems. The announcement is part of \$1 billion provided for the WaterSMART program, which supports states, tribes and local entities as they plan for and implement modernizing existing infrastructure and avoid potential water conflicts.

The projects selected for funding in New Mexico are:

- City of Gallup, Drought Resiliency Groundwater Well, \$5,000,000
- New Mexico Acequia Association, Regions of New Mexico with Acequia Water Distribution Systems: Tools to Adapt to Water Scarcity and Guide Implementation of Strategies to Increase Acequia Community and Water Resilience, \$1,464,685

COLORADO RIVER SHORTAGE WHAT IT MEANS FOR ARIZONA

*An excerpt from a report by Arizona State University's
Kyl Center for Water Policy at Morrison Institute*

The Colorado River is in decline. The river is “over-allocated,” meaning that the total volume water users are entitled to on paper each year nearly always exceeds the physical amount the system produces. Over two decades of drought have compounded the problem. Many experts believe that climate change will cause long-term reductions in the river’s flows. According to the U.S. Geological Survey, every temperature increase of 1 degree Celsius (1.8 degrees Fahrenheit) in the Upper Basin results in a 9.3 percent reduction in flows.

Today, this river system supplies water for 40 million people in seven western states and México and irrigates more than 5 million acres of farmland. In recent years, agriculture has accounted for around 70 percent of Colorado River water consumed for human purposes and around 26 percent for municipalities and industry.

Lake Powell and Lake Mead are large reservoirs that store Colorado River supplies for water users in the Lower Basin (Arizona, California, Nevada and México). In the last two decades water levels in these reservoirs have significantly declined. Over time, the Colorado Basin states and México, along with the U.S. government, have entered into

various agreements to try to prevent levels in these reservoirs from falling to critical levels. Arizona, along with California, Nevada and México, have agreed to take increasingly large cuts in water deliveries should Lake Mead’s levels continue to fall. The agreements also establish rules to incentivize water conservation in Lake Mead.

Because Colorado River water users in Central Arizona have lower priority right than users in Western Arizona and California, they take the largest cuts.

Lake Mead is projected to fall to 1,046 feet this month (January 2023), triggering the declaration of deep shortages in Arizona. The shortage will be a “Tier 2a” shortage, resulting in a cut of 592,000 acre-feet of water to Central Arizona. In all, a Tier 2a cut equals about 21 percent of Arizona’s Colorado River water and 40 percent of the water delivered through the Central Arizona Project (CAP) canal. That’s a lot of water, especially considering Arizona relies on the Colorado River for a little more than one-third (36%) of its supplies. Other Arizona supplies come from groundwater (41%), in-state rivers (18%) and reclaimed water (5%).

While the actions taken to shore up reservoir levels have helped, it is clear that they will not be enough. Water levels at lakes Powell and Mead have reached critical levels. In June 2022, the Commissioner of the U.S. Bureau of Reclamation called for cuts of 2 to 4 million acre-feet to protect reservoir levels and threatened to take unilateral action if no collaborative agreement to reduce water uses could be

IF YOU LOVE IT, KEEP IT FLOWING

NEW MEXICO'S ONLY NEWS-MAGAZINE DEDICATED
TO SUSTAINABILITY — COMMUNITY, CULTURE,
ENVIRONMENT AND REGIONAL ECONOMY —
NEEDS YOUR HELP.

GREEN FIRE TIMES

News & Views from the Sustainable Southwest

Green Fire Times and GREENFIRETIMES.COM serve a diverse, loyal readership in north-central New Mexico and beyond. During this particularly challenging time for independent publications, GFT is publishing every other month. If you value the unique contribution GFT provides to New Mexico’s media landscape, please consider a donation, or advertise. GFT is now part of Southwest Learning Centers, Inc., a non-profit, educational organization (est. 1973).

WWW.GREENFIRETIMES.COM • INFO@GREENFIRETIMES.COM

Rio Embudo, Northern New Mexico



Photo provided by the International Space Station Crew Earth Observations Facility and the Earth Science and Remote Sensing Unit, NASA Johnson Space Center.

reached. Since then, no agreement has been achieved and the Secretary of the Interior, who serves as the Watermaster of the Colorado River, has not imposed additional cuts. Colorado River water users in Central Arizona are experiencing deep uncertainty regarding water availability in 2023 and beyond. There will be a Tier 2a cut, but whether deeper cuts will be imposed is unknown.

To read the full report, visit [HTTPS://STORYMAPS.ARCGIS.COM/STORIES/A1A782CE054D4AD28A0D7D0845E6C03D](https://storymaps.arcgis.com/stories/A1A782CE054D4AD28A0D7D0845E6C03D)

THE COLORADO RIVER CUTS A CANYON

Have you ever wondered what the Colorado River and a portion of the Navajo Nation look like from the International Space Station? “An astronaut onboard the International Space Station took this photograph on July 4, 2022 of the river in southeastern Utah. The Navajo Nation is located in the bottom left corner on the eastern side of the San Juan River.

The Glenn Canyon National Recreation Area in both Utah and Arizona is characterized by high-desert with white to reddish-brown sandstone cliffs of interbedded limestone, which is common in the Southwest. About five million years ago, the river began carving into these sedimentary rocks, exposing bedrock that dates back approximately 300 million years. This carving, or fluvial erosion, occurred simultaneously with tectonic uplift (the rising of the landmass).

Massive projects like Lake Powell and the Glen Canyon Dam were engineered for a climate that no longer exists. The aridification of the region, driven by fossil fuel extraction and overconsumption, reflects the new normal around the world, underscoring the need for urgent climate action.

WHAT'S GOING ON

ALBUQUERQUE / Online

THROUGH JAN. 29

WIT, HUMOR AND SATIRE

Albuquerque Museum, 2000 Mountain Rd. NW
More than 50 artists. Photography, prints, painting, ceramics and sculpture from the permanent collection. ALBUQUERQUEMUSEUM.ORG

FEB. 4–MAY 6

ARTISTS AS KNOWLEDGE CARRIERS

516 ARTS, 516 Central Ave.
NM art professors (NMSU, UNM, CNM, IAIA, SFCC) as mentors of the next generation of artists. Plus a season of in-person and livestreamed programs and workshops. Feb. 4, 6–8 pm public opening. 505-242-1445, 516ARTS.ORG

THROUGH FEB. 12

NICOLA LÓPEZ AND PAULA WILSON: BECOMING LAND

Albuquerque Museum
Contemporary interpretations of NM desert landscapes that embody an ecological perspective and emphasize relationships between humans and their environment. ALBUQUERQUEMUSEUM.ORG

THROUGH JANUARY 10, 2024

CONVERSING WITH THE LAND

Maxwell Museum of Anthropology, 500 University Blvd. NE
Native North American Baskets and “We Were Basket Makers Before We Were Pueblo People” exhibits. 505-277-4405, MAXWELLMUSEUM.UNM.EDU/

APRIL 17–21, 2024

77TH ANNUAL INTERNATIONAL SOCIETY OF ARCHITECTURAL HISTORIANS CONFERENCE

Albuquerque Convention Center
Architectural and art historians, architects, museum professionals, preservationists and those working in allied fields will share research on the history of the built environment. Paper sessions, keynote talks, social reception, tours. WWW.SAH.ORG

TUESDAY–SUNDAY, 9 AM–4 PM

INDIAN PUEBLO CULTURAL CENTER

2401 12th St. NW
“Gateway to the 19 Pueblos of N.M.” Museum galleries, exhibits and restaurant. Tickets \$10/\$8/\$7. 505-843-7270, WWW.INDIANPUEBLO.ORG

SANTA FE / Online

THROUGH JAN. 6

INSPIRED CREATIONS, ART WE ENJOY

Poeh Cultural Center, 78 Cities of Gold Rd.
Featured works selected by PCC staff. 505-455-5041, POEHCENTER.ORG

JAN. 12, 5:30–6:30 PM

FRONTIERS IN SCIENCE: WILDFIRE, WATER AND CLIMATE CHANGE

NM Museum of Art, 107 W. Palace Ave.
Presentation by Adam Atchley. Learn about tools such as 3D fire, hydrologic and ecosystem modeling, atmospheric forensics. Free. [HTTPS://WWW.MUSEUMFOUNDATION.ORG/EVENTS/](https://www.museumfoundation.org/events/)

THROUGH JAN. 15, 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

JANUARY 16, 4:30-7 PM

MLK DAY CLIMATE JUSTICE & ENERGY DEMOCRACY WEBINAR

Hosted by YUCCA. Visit WWW.YUCCANM.ORG to register.

JAN. 17, 12:30 PM

RALLY & CLIMATE ACTION AT THE 1ST DAY OF THE LEGISLATURE

Roundhouse (Eastside)
Info: YUCCANM.ORG

JAN. 26, 9 AM–12 PM

NM FOOD & FARMS DAY

State Capitol Rotunda
9 am awards ceremony. ADMIN@NMFOODPOLICY.ORG

JAN. 26, 5 PM APPLICATION DEADLINE

“ART IS THE SOLUTION: WATER & DISPLACEMENT”

Ten \$5,000 grants will be awarded to art projects that address water resources and its impact on Santa Fe—displacement that results from scarcity. Projects must conclude by June 30. ARTSCOMMISSION@SANTAFENM.GOV

FEB. 3

AMERICAN INDIAN DAY AT THE LEGISLATURE

State Capitol Rotunda
SHERRIE.CATANACH@IAD.NM.GOV

FEB. 19, 10 AM–3 PM

DEVELOPING YOUR PERMACULTURE PRACTICE

Madrid/Cerrillos area
Study permaculture at a developed site. \$60–\$80. [HTTPS://AMPERSANDPROJECT.ORG/](https://ampersandproject.org/event/developing-a-permaculture-practice/)
[EVENT/DEVELOPING-A-PERMACULTURE-PRACTICE/](https://ampersandproject.org/event/developing-a-permaculture-practice/)

MARCH 8–APRIL 20

JAZZ WORKSHOPS, PERFORMANCES

Institute for American Indian Arts
Delbert Anderson presents music, comedy, special guests. DELBERTANDERSON.COM

THROUGH MAY 29

GROUNDED IN CLAY

Museum of Indian Arts & Culture, 710 Cam. Lejo
60-plus members of tribal communities chose unique pots spanning 1,000 years. Exhibition will move to the Metropolitan Museum of Art in NYC. [HTTPS://GROUNDEDINCLAY.ORG](https://groundedinclay.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/\$3/1 & under free. 505-989-8359, SANTAFECHILDRENSMUSEUM.ORG

SPRING SFCC CLASSES

Feb. 11: Simple Greywater Systems; Feb. 25: Arid Land Restoration; March 11: Backyard Composting. 505-428-1676, WWW.SFCC.EDU/OFFICES/CONTINUING-EDUCATION/

ONGOING

HERE, NOW AND ALWAYS

Museum of Indian Arts and Culture, 710 Cam. Lejo
Admission \$12 with discounts available. INDIANARTSANDCULTURE.ORG

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

THROUGH JAN. 29

“SOUTHWEST REFLECTIONS: IN BETWEEN SHADOWS OF THE LAND”

Millicent Rogers Museum
Nine NM artists as documentarians of the land. A diverse exploration of environmental relationships conveyed through shadows, reflections and movements.

HERE & THERE / Online

JAN. 9 APPLICATION DEADLINE

NM ENROLLMENT IN EMERGENCY CONSERVATION AND FOREST RESTORATION PROGRAM

Cost-share assistance from the USDA. The Farm Service Agency offers ECP and EFRP to assist landowners and forest stewards impacted by the Hermit's Peak-Calf Canyon wildfire with financial and technical assistance for recovery. Contact your local FSA county office asap.

THROUGH JAN. 13

FIRE ASSISTANCE ACT PUBLIC COMMENT PERIOD

FEMA seeks public feedback on the Hermit's Peak Fire Assistance Act. The agency is proposing a method to distribute the \$2.5 billion approved by Congress to compensate families impacted by HP/CC fire and floods. [HTTPS://WWW.FEMA.GOV/DISASTER/CURRENT/HERMITS-PEAK](https://www.fema.gov/disaster/current/hermits-peak)

JAN. 13 APPLICATION DEADLINE

YOUNG FARMERS GRANTS

Support for building careers in agriculture. National Young Farmers Coalition. [HTTPS://WWW.YOUNGFARMERS.ORG/YOUNGFARMERGRANTS/](https://www.youngfarmers.org/youngfarmergrants/)

JAN. 17 APPLICATION DEADLINE

LANL FOUNDATION'S 4-YEAR SCHOLARSHIPS

Open to northern NM students pursuing a BA degree in any field of study. [HTTPS://LANLFOUNDATION.ORG/SCHOLARSHIP/4-YEAR-UNDERGRADUATE-SCHOLARSHIPS/](https://lanl.foundation.org/scholarship/4-year-undergraduate-scholarships/)

JAN. 20 APPLICATION DEADLINE

FRONTIER & NATIVE AMERICAN COMMUNITIES AND URBAN COMMERCIAL CORRIDOR INITIATIVES

Rural stakeholders with local governing bodies identify economic development projects they want support to implement. Must demonstrate job creation, business development or enhancement of economic development. Communities receive professional services and tech assistance from NM MainStreet. [WWW.NMMAINSTREET.ORG/NMMS/PROGRAMS/FRONTIER-COMMUNITY-INITIATIVE/](http://www.nmmainstreet.org/nmms/programs/frontier-community-initiative/)

FEB. 1 APPLICATION DEADLINE

NATIVE LAUNCHPAD PROGRAM

Financial support, strategic promotion and professional development for Indigenous artists. Program deepens connections to arts presenting and management. [WESTARTS.ORG/NATIVE-LAUNCHPAD](http://westarts.org/native-launchpad)

FEB. 7 APPLICATION DEADLINE

YOUTHBUILD

Grants to organizations providing pre-apprenticeship services that support education, occupational skills training and employment services to youth-at-risk ages 16–24, while performing meaningful work and service to their communities. [WWW.GRANTS.GOV/WEB/GRANTS/VIEW-OPPORTUNITY.HTML?OPPID=343870](http://www.grants.gov/web/grants/view-opportunity.html?oppid=343870)

FEB. 10 APPLICATION DEADLINE

CHAMIZA FOUNDATION GRANTS

Proposals accepted from NM's 19 Pueblos, Ysleta del Sur, Pueblo community leadership, non-pueblo organizations that serve Pueblo communities (with letter of support from a Pueblo governor). [HTTPS://WWW.CHAMIZA.ORG/APPLICATION/](https://www.chamiza.org/application/)

FEB. 10 APPLICATION DEADLINE

TRIBAL AGRICULTURE FELLOWS

Opportunities for Indigenous students to advance their education in agriculture, increase specialized knowledge and preserve the legacy of agriculture in tribal communities. [HTTPS://WWW.GRANTINTERFACE.COM/HOME/LOGON?URLKEY=TRIBALAG](https://www.grantinterface.com/home/logon?urlkey=tribalag)

MARCH 6 APPLICATION DEADLINE

AGRICULTURE INNOVATION CENTERS GRANT

Grants to provide technical and business development assistance to producers developing and marketing value-added agricultural products. [WWW.GRANTS.GOV/WEB/GRANTS/VIEW-OPPORTUNITY.HTML?OPPID=344750](http://www.grants.gov/web/grants/view-opportunity.html?oppid=344750)

MARCH 12–18

SOUTHWEST TRIBAL CLIMATE CAMP

Ghost Ranch, Abiquiu, NM

Tribal leaders, climate change coordinators, planners and program managers will build skills, gather info and develop tribal plans and policies needed to address climate change impacts. [HTTPS://ATNTRIBES.ORG/CLIMATECHANGE/TCC/](https://atntribes.org/climatechange/tcc/)

MARCH 14–15, 2023

HEALTH & ENVIRONMENTAL RESILIENCE AND LIVABILITY IN CITIES

Online

2nd international conference on sustainable urban systems design, livability at the heart of a city's urban planning, environmental quality, wellbeing and comfort, innovations in Smart Cities. [HTTPS://LNKD.IN/DA4FAJRX](https://lnkd.in/DA4FAJRX)

MARCH 31 APPLICATION DEADLINE

FUNDING TO CLEAN UP LEGACY POLLUTION

Bipartisan Infrastructure Law funding available to catalyze economic opportunity by reclaiming abandoned coal mine lands. Open to state and tribal governments and some organizations.

[HTTPS://WWW.OSMRE.GOV/SITES/DEFAULT/FILES/INLINE-FILES/BIL_NOFO.PDF](https://www.osmre.gov/sites/default/files/inline-files/bil_nofo.pdf)

MAY 2–4

CROSS-BOUNDARY LANDSCAPE RESTORATION WORKSHOP

CSU Campus, Ft. Collins, Colo.

Adapt to a climate-altered West. [HTTPS://CONFERENCEREG.COLOSTATE.EDU/CROSS-BOUNDARY23](https://conferencereg.colostate.edu/cross-boundary23)

MAY 4–5

WESTERN AGRICULTURAL AND ENVIRONMENTAL LAW CONFERENCE

Reno, Nevada

Hosted by the National Agricultural Law Center. [HTTPS://NATIONALAGLAWCENTER.ORG](https://nationalaglawcenter.org)

JUNE 28–JULY 1

SAN JUAN JAZZ SOCIETY 2ND JAZZ FESTIVAL

Farmington Civic Center, Farmington, NM

A family event. Concerts and workshops will uplift the area's Indigenous and Latin cultures. [HTTP://NWNMAC.ORG](http://nwnmac.org)

CLIMATE INNOVATION CHALLENGE

CAVU's free STEAM program built on a six-lesson science and storytelling curriculum designed to cultivate student leaders who think innovatively and communicate about adapting to our changing climate. Cash prizes in annual competition. May 10 student showcase. [CLIMATEINNOVATIONCHALLENGE.ORG](http://climateinnovationchallenge.org)

SUSTAINABLE BUILDING TAX CREDITS

NM residents can apply for tax credits to make homes and businesses more energy efficient. There are extra incentives for upgrades that reduce energy use and lower utility costs in affordable housing or homes occupied by low-income residents.

[HTTPS://WWWAPPS.EMNRD.NM.GOV/ECMD/ECPSUBMISSIONS/](https://wwwapps.emnrd.nm.gov/ecmd/ecpsubmissions/)




Repair
Regenerate
Re-use

Sustainable
non-surgical
spine and joint
regeneration

NMPM

New Mexico
Pain Management
www.NMPM.com
800-702-NMPM

NAVIGATE a life with **LESS WATER**

 savewatersantafe.com



Reduce your water footprint in the City Different!

BECOME A Certified Waterwise Business

by the City of Santa Fe

Pilot project participants include 71 restaurants, 5 hotels, 19 small businesses, one shopping center and one museum that have become Certified Waterwise by the City.

Since 2018 the City's Certified Waterwise pilot project saved 2.1 million gallons of water each year. Now a permanent program, it's estimated that tens of millions more can be saved by Santa Fe businesses who choose to participate in the free water usage assessment.

savewatersantafe.com/waterwise-business