



Get A GRIP

The Newsletter of the Gila Resources Information Project

PROMOTING
HEALTHY
COMMUNITIES
BY PROTECTING
OUR ENVIRONMENT
SINCE 1998

DECEMBER 2021



Freeport Submits Applications for New Open Pit at Tyrone

By Allyson Siwik, GRIP Executive Director

In October, Freeport-McMoRan submitted applications to the state for permits for a new mine unit at the Tyrone Mine. Located on the southeast side of Tyrone just to the west of Highway 90, the Emma Project will cover approximately 400 acres of disturbance, including construction of an open pit 600 feet deep. The project will require abandonment of the existing Tyrone-Thompson Road and development of a new road to access the Gila National Forest and the Burro Mountain Homestead. Additionally, a new haul road will be built to transport ore from the open pit to leach stockpiles at the Tyrone Mine and waste rock to new and existing waste rock stockpiles at Emma and Tyrone. With a 5-year mine plan, the project is estimated to add 3 to 5 years of mine life to Tyrone's operation.

During operations, the open pit will need to be dewatered since it will extend 200 feet below groundwater. The company says that the resulting cone of depression won't extend to residential wells, but its groundwater modeling does not incorporate the extensive fracturing of the underlying rock. At closure, a pit lake will form that will exceed state water quality standards posing a threat to wildlife.

Local residents, the closest living approximately a half mile to the south of Emma, are concerned about impacts to their groundwater wells, health from groundwater contamination and fugitive dust emissions, and property values from expanded mining operations. They have raised their concerns to Freeport as well as to the Grant County Commission given that some nuisance issues like lighting and noise are not regulated by the state Mining Act.

The company has responded by holding community information sessions and one-on-one meetings with adjacent property owners, conducting noise, lighting and viewshed studies, and developing a plan to address vibrations from blasting. Tyrone has installed metering on a residential well to collect baseline groundwater level data and monitor any impacts to residential water supplies. The company will be drilling a "sentinel well" between the Emma open pit and the Apache Mound Subdivision to detect changes to groundwater levels and water quality before any impacts can reach residential wells.

Despite these positive steps by the mine, residents want enforceable commitments from Freeport that they will be made whole for any impairment to their groundwater supplies. They also want enforceable requirements for nuisance lighting, noise, fugitive dust, and blasting impacts.

GRIP and local residents have requested a public hearing under the Mining Act, which has been granted by the state Mining and Minerals Division. The date and time still need to be set.

GRIP and its technical consultant, Jim Kuipers, will be reviewing in detail the application, reclamation plan and associated studies in preparation for the public hearing. We will continue to support local residents' participation in the permitting process.

For More Information About Our Responsible Mining Program visit
WWW.GILARESOURCES.INFO
.....

Diversion Defeated!

\$91 Million in NM Unit Fund Key to Building Resilient Water Supplies for Southwest New Mexico

By Allyson Siwik, Gila Conservation Coalition Executive Director

After 16 years of effort by the Gila Conservation Coalition, its partners and many supporters here locally and from around the state, the final nail in the coffin for the Gila River diversion was hammered into place during the 2021 legislative session. House Bill 200, sponsored by Representative Matthew McQueen, Representative Nathan Small, Senate Pro Tem Senator Mimi Stewart, and Senator Siah Correa Hemphill, was signed into law by Governor Michelle Lujan Grisham. The bill prohibits any spending on a Gila River diversion and fast tracks New Mexico Unit Funding to local water projects in southwest New Mexico.

After wasting \$15 million on a failed diversion project, it's a relief to finally be able to move forward with funding priority water projects in Grant, Luna, Hidalgo and Catron counties.

The legislation removed the NM CAP Entity from a consultative role in deciding how to spend millions of dollars of Arizona Water Settlements Act (AWSA) funding sitting in the NM Unit Fund. The Water Trust Board was named the successor to the Southwest New Mexico Water Study Group, and it will now advise the Interstate Stream Commission (ISC) on water projects for funding. The ISC retains authority over all NM Unit Fund expenditures.

The Governor appointed Southwest New Mexico Council of Governments Executive Director Priscilla Lucero to the Water Trust Board and the HB200 Subcommittee to assist with producing project recommendations for the ISC, including development of the project application process. During the recent public participation period, the Gila Conservation Coalition provided the Water Trust Board and state legislators with input on how to prioritize projects to protect the Gila River from any future diversion projects and ensure equity in allocation of water projects funding from the NM Unit Fund.

The AWSA funding comes not a moment too soon as the latest scientific predictions of climate impacts to the state's water supplies are "overwhelmingly negative." By mid-century, temperatures are estimated to rise by 5 - 7 degrees Fahrenheit, leading to decreased and earlier snowmelt runoff, increased aridity with associated decreased runoff and recharge, increased wildfire risk, vegetation changes, erosion, and degraded surface water quality.

GRIP and the Gila Conservation Coalition have provided public input to the ISC on how to improve water supply resilience for public water supplies, the mining sector, and watersheds and habitat for the Gila and Mimbres basins. Securing instream flows for the Gila River is a priority as river drying will get worse with predicted stream flow reductions due to climate change. The Grant County Regional Water Supply Project is critical to creating secure water supplies for Silver City and the Mining District.

As we figure out how to adapt to the impacts of a hotter, drier climate, we have a tremendous opportunity to secure resilient water supplies for everyone in southwest New Mexico with the \$91.2 million available in the NM Unit Fund. GRIP and the Gila Conservation Coalition will continue to stay on top of water planning efforts to build water supply resilience for our communities, rivers and watersheds.

The Gila Conservation Coalition is a partnership of three organizations - Gila Resources Information Project, Upper Gila Watershed Alliance and Center for Biological Diversity - that work together to protect the free flow of the Gila and San Francisco Rivers and wilderness characteristics of the Gila and Aldo Leopold Wilderness Areas.





**GILA RESOURCES
INFORMATION PROJECT**
Promoting Healthy Communities by
Protecting Our Environment Since 1998

BOARD OF DIRECTORS

Sally Smith, President
Harry Browne, Treasurer/Secretary
Michael Berman
David Rose
Eduardo Arguello
CarolBeth Elliot

STAFF

Allyson Siwik, Executive Director
Doyle Wrealli, Membership and
Program Coordinator
Leigh Jenkins, Silver City
Watershed Keepers Coordinator
Jody Norman, Communications
and Outreach Specialist

CONTACT

575.538.8078 office/fax
grip@gilaresources.info

ADDRESS

305A North Cooper St.
Silver City, NM 88061

Get A GRIP is the semi-annual publication of the Gila Resources Information Project, a nonprofit organization that promotes community health by protecting our environment and natural resources. Newsletter Design, Cris Uribe. Get A GRIP is printed on 100% recycled paper using soy ink.

Inside this Issue

Cover

Emma Project
Diversion Defeated

Page 2

Letter from the Executive Director
Remembering Sonnie Sussillo
Thank You to Our Funders
Connect with GRIP Online

Page 3

Dirty Mining and the Clean Energy Transition
Responsible Mining Program Update
Biden Administration Repeals Dirty Water Rule

Pages 4-5

Outdoor Equity Fund Awards Grant to Silver City
Watershed Keepers for Summer Camp Program
School Field Trips Teach Kids about Water and Health
Watershed Keepers Team Up with Silver City on
Pick It Up - Toss No Mas Anti-Litter Campaign
Silver City Watershed Keepers and Partners to Give
Big Ditch Park a Face Lift
Stream Stewards Trained in Watershed Monitoring
Using GIS to monitor the Silver City Watershed

Pages 6-7

New Mexico to Protect 30% of State's Land and
Water by 2030
Gila Earth Day scheduled for Saturday, April 23, 2022
A Conversation About Communications and Art
17th Annual Gila River Festival Celebrated Our
Connection to the Gila River
Senators Heinrich and Luján reintroduce Gila
Wild and Scenic Bill
GRIP and Health Council Discuss Future of Grant
County Coronavirus Update Project

Page 8

Calendar of Events
GRIP for the Future Society
Earth Matters

Reflections on 2021 Victories and the Road Ahead

By Allyson Siwik, Gila Resources Information Project Executive Director



The second year of living with the coronavirus is coming to a close. Despite the continuing pandemic, social upheaval and threats to our rights and democracy, and the increasing impacts of climate change, we have much to be grateful for this year. Together we achieved major victories in 2021 that will be felt long into the future.

Our years of legislative advocacy and ability to adapt to an online state legislative session paid off as House Bill 200 passed the House and Senate and was signed into law by Governor Lujan Grisham. State law now prohibits any expenditures for planning, construction or operation of a Gila diversion and removes the NM CAP Entity from a consultative role in how NM Unit Funds are spent on water projects in southwest New Mexico. We can breathe easy now that the main driver of the diversion project – millions of dollars in funding under the Arizona Water Settlements Act – is now unavailable to diversion proponents. Thanks to so many community members, partners, and elected officials who came together in common cause to ensure that the Gila River remains free flowing for future generations.

Collective action ruled the day as the Air Force announced in January that it would not expand Holloman Air Force Base military airspace over the Gila region. Hundreds of people attended public meetings and thousands submitted comments in opposition to the proposal for 10,000 F-16 training sorties a year including some at night and a fraction at supersonic speeds, and dropping of 15,000 bundles of chaff and 15,000 flares every year. By coming together as a community, we averted a major existential threat to our area. Thanks, everyone!

Other positive accomplishments include the reintroduction of the Gila Wild and Scenic legislation by Senators Heinrich and Lujan that will achieve long-term protection of the Gila River. Completion of the updated closure/closeout plans and \$435 million in financial assurance will ensure that the Chino, Cobre and Tyrone mines will be cleaned up and reclaimed when the mines are no longer in operation.

But we have our work cut out for us as we struggle to make real progress on reducing our carbon emissions to try to avert the worst impacts of climate change and prepare our communities for the consequences of a hotter, drier climate.

GRIP will be supporting codifying the Governor's climate agenda during the upcoming 30-day legislative session, and we'll continue to advocate for meeting the state's 30x30 goals to address the climate and extinction crises. We'll be actively involved in water planning efforts to ensure that NM Unit Funds are used to build a secure water supply for everyone in southwest New Mexico. We will continue to promote socially and environmentally responsible mining to make sure that dirty mining is not part of the clean energy transition. We are also excited for our stewardship, restoration, beautification and cleanup projects that build community while improving ecological resilience, environmental quality and liveability.

Thank you for your continued support of our efforts!

My very best wishes to you and yours for a safe and healthy holiday season!

Allyson Siwik

Remembering Sonnie Sussillo



We were saddened by the loss of our friend and colleague, Sonnie Sussillo, who passed away in March while hiking in the Gila National Forest with her friend, Pam, and her dog, Pumpkin.

Sonnie had been a valued and respected volunteer for GRIP and the Gila Conservation Coalition for years, facilitating monthly Gila coalition meetings, keeping us on track through the final years of the Gila River diversion campaign. In addition to helping us with our donor management, Sonnie was a stalwart Gila River Festival planning committee member. She stepped up to moderate presentations, lead field trips, coordinate speakers, and so much more.

Her love for the Gila drove her many contributions to Gila River protection and public lands advocacy with GCC and other organizations. Her photography and writing show her strong commitment to protection of our region's wild places.

We miss Sonnie's warm heart, infectious smile and cheerfulness, and her love for and dedication to the Gila and the wonders of Nature.

Thank You to Our Funders

| | |
|--|---------------------------------------|
| Lineberry Foundation | NM Humanities Council |
| 30 Something Grant | Just Woke Up Fund |
| NM Clean and Beautiful | McCune Charitable Foundation |
| Town of Silver City | Center for Health Innovation |
| New Mexico Office of Outdoor Recreation | United Way of Southwest New Mexico |

Website

www.gilaresources.info

Social Media

Facebook@gilaresources
 Instagram@gilaresources
 Twitter@gilaresources
 vimeo.com/user18439846

RESPONSIBLE MINING PROGRAM UPDATE

With the availability of COVID vaccines and the positive outlook for copper, Chino mine reopened in early 2021 and Tyrone pushed forward with its expansion plans at Little Rock and the new Emma Project. Proposals to explore for copper and other minerals in the area are moving forward in response to the projected increase in demand for critical minerals for renewable energy. Copper reached an all time high of \$4.80/pound in May given stagnant supplies due to COVID. At press time, however, copper prices on the London Metal Exchange were down to \$4.30/pound with news of the Omicron variant. Sustained high copper prices will fuel more exploration and expansion proposals in our area.

Chino, Cobre, Tyrone Updated Reclamation Plans and Financial Assurance Now Complete

With approval of the Tyrone reclamation plan and financial assurance in March, all three Grant County mines now have updated closure/closeout plans, permits, and financial assurance. These plans had been more than a decade out of date, and GRIP's pressure campaign succeeded in pushing state agencies and Freeport along to complete the updates. There is now \$435 million in financial assurance to cover the cost of cleanup and reclamation should Freeport go bankrupt. The financial assurance is held in cash trust, surety bonds, collateral, letters of credit and third party guarantees. Overall, approximately 30% of the total financial assurance is covered by third party guarantees by Freeport-McMoRan subsidiary, Freeport Minerals Corporation. Although the New Mexico Mining Act allows up to 75% of the reclamation cost to be covered by a third party guarantee, GRIP continues to oppose the corporation's subsidiary as the third party guarantor as it amounts to risky self-bonding. If Freeport were to default, it is likely that the third party guarantee would be worthless and the public would need to pick up the tab for cleanup and reclamation.

Chino Mine Back Online; Expanding Tailings and Leaching Capacity



Photo credit: Julie Dermansky/Earthworks

Chino Mine came back online in January at half capacity with 630 employees, down from 1100 pre-pandemic. Given high copper prices, Freeport can afford to operate at half capacity and take the time to do significant replacement of infrastructure in 2021-2022. Next year, Freeport will be applying for permits for a new 500-acre tailings pond on the northwest side of the existing Tailings Pond 7. The company has changed plans and instead of constructing the North Lampbright waste rock stockpile that was permitted in 2017 but never constructed, it will now build a new leach stockpile that will

extend to the north from the existing Lampbright Leach Stockpile that can be seen from Hwy 152. The company plans to install a liner system to ensure that all leach solutions are captured for processing.

Malone Bronco Exploration Project Approved by Gila National Forest and State



Photo credit: Dennis O'Keefe

The Gila National Forest and New Mexico Mining and Minerals Division (MMD) approved in July the Malone Bronco exploration project in the Burro Mountains. Drilling for copper, lead, zinc, gold and silver is proposed to take place on the east and west sides of Knight Peak, a popular recreation area between Silver City and Lordsburg. The project is estimated to disturb approximately 4.2 acres. Based on public comments, the Forest Service and MMD modified Bronco Creek Exploration's operating plan and moved proposed drill sites out of drainages and overland routes were kept to a minimum. The company will begin exploration in early 2022.

Copper Flat Discharge Permit Appeal and Water Rights Protest Still in Process

New Mexico Copper Corporation has proposed to reopen the Copper Flat Mine outside of Hillsboro. Quintana Minerals operated the mine for a few months in 1982, but it hasn't been open since. GRIP, Turner Ranch Properties, and Hillsboro Pitchfork Ranch have appealed to the NM Court of Appeals the Water Quality Control Commission's approval of the water quality discharge permit for the mine. GRIP, Sierra Club, Percha Animas Watershed Association and several water rights holders are protesting the water rights transfer from Santa Teresa to the Copper Flat Mine. The New Mexico Environmental Law Center is representing GRIP and others in these cases that are still in process.

Biden Administration Repeals Dirty Water Rule

New Clean Water Act Definition of Waters of the U.S. Proposed

By Allyson Siwik, GRIP Executive Director

Earlier this year, the Biden Administration repealed the Trump Dirty Water Rule that drastically shrank the number of New Mexico waters that are protected under the Clean Water Act.

GRIP, Amigos Bravos, and the NM Acequia Association had appealed the Trump rule last year as it eliminated protections for ephemeral streams and other waters. The New Mexico Environment Department had estimated that as much as 96% of the surface waters in the state could lose protection under the Dirty Water rule.

Because New Mexico's waters do not have state protections to fall back on, New Mexico is one of just three states that does not have delegated

authority from the Environmental Protection Agency (EPA) to regulate discharges of pollution into rivers, streams, and lakes. Under the Trump-era rule, New Mexico had no regulatory authority to manage existing discharges from wastewater treatment plants, mines, federal facilities, and other polluters that discharge into smaller streams. A river as important as the wild Gila was left unprotected by the Dirty Water rule.

With the Biden administration's repeal of the Trump rule and EPA's recent proposal to adopt the 1986 definition of waters of the U.S. along with the definitions resulting from Supreme Court decisions, it appears that the Gila River will again be protected under the Clean Water Act.

Dirty Mining and the Clean Energy Transition

By Allyson Siwik, GRIP Executive Director

In the drive to decrease our dependence on fossil fuels and shift to renewables, the "dark side" of the clean energy transition is often overlooked. The environmental impacts and social justice consequences of increased mining of copper and other metals needed for renewable energy will only increase if we don't dramatically change our approach to mineral production.

Scientists have been telling us for years that it's critical to move as quickly as possible to a renewable energy future and cut dramatically our carbon emissions to avoid the catastrophic impacts of climate change.

Given the importance of copper to renewable energy, Goldman Sachs estimates that copper demand will increase by 600 - 900% by 2030, with prices reaching as high as \$7.50/pound by 2025, spurring increased production.

But "we can't mine our way out of the climate crisis," Indigenous peoples said at the People's Summit for Climate Justice, held concurrently with COP26 in Glasgow. Increased global extraction of minerals for renewable energy must not come at the expense of indigenous peoples, frontline communities, mine workers, ecosystems, and the planet.

The Ecologist wrote earlier this year that "the climate impacts of biodiversity loss and destruction caused by mining could effectively cancel out any benefits in terms of the climate mitigation enabled by increased renewable capacity delivered through an unplanned, business-as-usual scenario of transition mineral mining expansion."

New Mexico In Depth and *The Guardian* recently looked at how communities in southwest New Mexico are being challenged by mining expansions at Freeport-McMoRan's Tyrone Mine and the potential reopening of the Copper Flat Mine in Hillsboro as copper prices reach historic highs and mining companies tout their importance to clean energy. The story featured GRIP's executive director and local residents. Read the article at: <https://tinyurl.com/dirtymining>

In order to achieve a just transition, GRIP will continue to say no to dirty mining by pushing mine operators to follow socially and environmentally responsible standards, such as the Initiative for Responsible Mining Assurance, and encouraging alternatives like recycling to meet increased demand for minerals.

Subscribe to GRIP's
Monthly E-News at
www.gilaresources.info

SUBSCRIBE



However, waters in closed basins may not be covered. GRIP has provided public input to EPA about the importance of regulating discharges to surface waters in closed basins like the Mimbres, given the dependence of Silver City, the Mining District and Deming on groundwater for drinking water. This groundwater is connected to surface water that receives discharges from the Chino Mine, wastewater treatment plants and other industrial facilities and should be regulated.

EPA is currently taking public comment on its proposed rule until February 7, 2022.

School Field Trips Teach Kids about Water and Health

By Leigh Jenkins, SCWK Coordinator

After months of online learning due to the pandemic, it was exciting for the Silver City Watershed Keepers (SCWK) to get outside this fall with students from Stout Elementary School in Silver City and Snell Middle School in Bayard.

Along with our partner, Healthy Kids Healthy Communities Grant County, we provided outdoor field experiences to 120 middle school and 50 elementary school students. During the walking field trips, students learned about water conservation, water pollution, the use of water in agriculture to grow healthy foods, and the role the community plays in stewarding the environment and protecting human and wildlife health through litter cleanup.

Stout Elementary 3rd grade students from Nora Duarte's class and 4th grade students from Julie Dunning Farmer's class participated in a walking field trip along Pinos Altos Creek. Frequent stops allowed field trip leaders, teachers and students to discuss the issues of water quality, water conservation, and the importance of keeping our watershed pollution free.

Alicia Edwards, Coordinator of Healthy Kids Healthy Communities Grant County, discussed how "healthy food starts with clean water used to grow crops regionally and in our community". This program provides healthy snacks and gardening education to



Outdoor Equity Fund Awards Grant to Silver City Watershed Keepers for Summer Camp Program

By Leigh Jenkins, SCWK Coordinator

"I'm bored." As most parents can attest, this is a common complaint from kids everywhere during summer vacation. Unfortunately, here in Grant County, there are very limited opportunities for children to get outdoors during the summer school vacation when parents are working and kids are at home looking for something to do.

The Silver City Watershed Keepers Summer Camp Program intends to fill this void by providing low-income youth with summertime outdoor experiences that will foster stewardship and respect for our area's lands, waters, and cultural heritage.

Funded through a 2021 Outdoor Equity Grant from the New Mexico Outdoor Recreation Division, SCWK will provide four week-long summer camps for 80 – 100 children in Grant County, increasing campers' affinity for nature, the outdoors, and the area's cultural heritage through guiding of direct experiences in the Silver City and the Mimbres River watersheds, including San Vicente Creek in Silver City, the Mimbres River in San Lorenzo, and the Gila National Forest.

The summer camps will take place in both Bayard and Silver City in June of 2022.

If you'd like to get involved as a volunteer, please contact Leigh Jenkins at 575.538.8078 or silvercitywatershedkeepers@gmail.com

elementary schools throughout the district during Nuevo Thursdays where healthy snacks and produce are introduced to elementary students in the Silver Consolidated School District.

Students picked up trash along the creek and in the vacant lot adjacent to the Department of Health. Working in small teams, students sorted trash from recyclables and learned that litter and debris contribute to water pollution that can harm humans, as well as wildlife. SCWK coordinator Leigh Jenkins talked about the Town of Silver City Pick It Up - Toss No Mas program and students were given stickers to place on their reusable water bottles.

Led by science teacher Drea Cornwell, Snell Middle School students from the 6th and 8th grades were thrilled to get outside for their service learning extension of the Water Conservation Data Jam grant they received from the Asombro Institute. After studying Grant County water quantity data and trying to find water use trends from 1995 - 2015, SCWK's Leigh Jenkins guided students in testing water quality from different water sources: school drinking fountains, water bottle refill station, classroom fish tank and a neighborhood spring. The data trends were analyzed further in the classroom to determine the health of each of these water sources.

Students also spent part of their day cleaning up litter on their school campus. SCWK's Allyson Siwik guided students in sorting the litter by category -- plastic, paper, glass and aluminum/other metals - and making a physical bar chart in the parking lot using the collected trash. The students cleaned up over 100 pounds of litter and debris from the school grounds and then discussed why littering occurs and the ways in which it can be prevented.

Silver City Watershed Keepers and Partners to Give Big Ditch Park a Face Lift

By Allyson Siwik, GRIP Executive Director

The Silver City Watershed Keepers has received funding from New Mexico Clean and Beautiful and The 30Something Grant Program for restoration and beautification efforts in Big Ditch Park.

Enjoyed by locals and tourists alike, Silver City's Big Ditch Park is a unique riparian green space in the heart of downtown. However, it's in desperate need of a refreshing face lift. Much of the park's original non-native plantings have died due to lack of irrigation, crowding out by invasive species like Tree of Heaven, and insufficient maintenance. Several drainage problems are contributing to erosion on steep slopes and access roads, inoperability of the handicap access ramp, and flooding of sidewalks. Crumbling stone retaining walls add to the park's state of disrepair.

The SCWK worked with the Town of Silver City, Silver City MainStreet, Stream Dynamics, the Upper Gila Watershed Alliance (UGWA), and Lone Mountain Natives to develop a plan to re-establish plantings throughout the park using drought tolerant, native species that are beneficial to pollinators and birds and will help build a resilient and climate-adapted greenway; create color and visual interest through placement of clusters of large concrete planters with vibrant plantings, producing a welcoming effect at park entrances and in seating areas; address drainage issues that are causing erosion of steep slopes, access roads, and the handicap ramp by redirecting runoff into new berm and basin pollinator gardens; and provide additional seating with metal park benches and picnic tables.

Community involvement will be an important component of this project. By engaging students, Youth Conservation Corps members, and volunteers, we will create pride of ownership in the project that will be key to increased visitation and park usage,

as well as long-term community stewardship of the space. UGWA's Thinking on a Mountain youth climate program will develop educational signage for the Park.

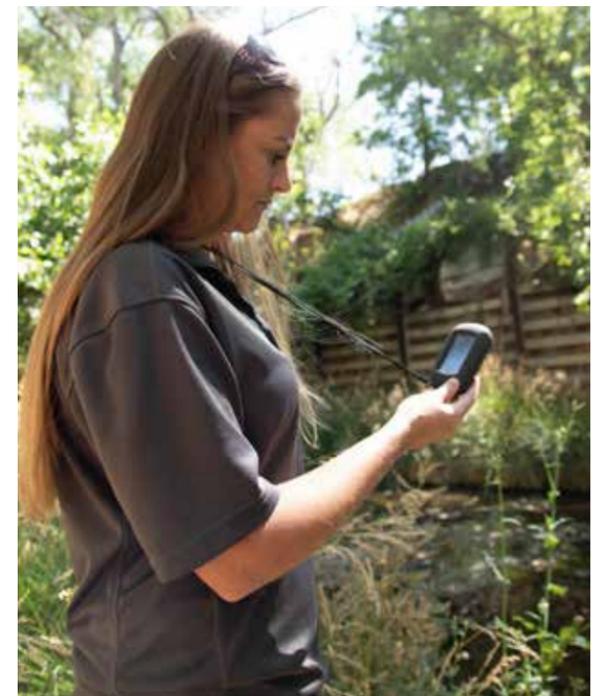
If you'd like to get involved, we'll be organizing volunteer events during World Water Day in March and Gila Earth Day in April to plant pollinator gardens and carry out other project tasks. Please contact the Silver City Watershed Keepers at 575.538.8078 or silvercitywatershedkeepers@gmail.com for more information.

Using GIS to Monitor the Silver City Watershed

Interview with GIS Intern Nichole Bouvet

By Jody Norman, GRIP Communications and Outreach Specialist

I sat down with Nichole Bouvet at the end of her summer internship with GRIP's Silver City Watershed Keepers. Nichole is a senior at Western New Mexico University (WNMU) pursuing a Bachelor's degree in Forest/Wildlife and a minor in Geographic Information Systems (GIS). Our conversation has been edited for clarity and length.



GIS intern Nichole Bouvet takes GPS coordinates in San Vicente Creek

You completed several exciting projects during your four-month internship. What did you work on and how will it further the efforts of the Silver City Watershed Keepers?

Our first project was on San Vicente Creek and the trail, identifying areas for trash cleanup or restoration and native, legacy trees needing care and maintenance. We collected geo-referenced data points below the Highway 90 Bridge for non-native, invasive species like Tree of Heaven and Siberian elm, illegal dump sites, slash piles, downed trees and hazardous tree limbs. Using this data, we created several detailed maps that will help the Watershed Keepers and its partners restore the San Vicente Creek riparian area and address potential hazards along the trail system.

We moved on to create a web-based application, called the Silver City Watershed Keepers Reporter App, through ArcGIS Online [a Geographic Information System application]. Watershed Keepers volunteers can use their smartphone to identify locations of interest throughout the watershed and submit reports on trash and illegal dumping, downed trees, trail washouts, or watershed threats. The app then notifies the Silver City Watershed Keepers of those locations and cleanup efforts or trail maintenance can take place. It's a great way of getting the community involved in helping to monitor and manage the watershed.

I also created the mapping scheme for the Watershed Keepers' Adopt-A-Stream Program that will help connect volunteers with stream segments along Pinos Altos Creek, Silva Creek, and San

Vicente Creek. We measured out small segments of each waterway that are available for adoption by individuals and businesses to help manage those resources. The map is up on the Watershed Keepers website.

What did you learn during your internship?

I learned about the damage of human-caused erosion along waterways and the importance of restoration projects to address that damage. I also learned a lot in building the Reporter App in getting it to work properly for both GRIP and the commu-

nity. Working with GRIP staff and the public taught me that the app needed to be easily understood by anyone, not only for someone already knowledgeable in the subject.

And where would you like to take the skills that you learned?

I've been looking into career opportunities in GIS. It would be great to do a GIS-related project that reaches out to the community and shows the value of mapping. I would love to incorporate an environmental approach into my work as well.

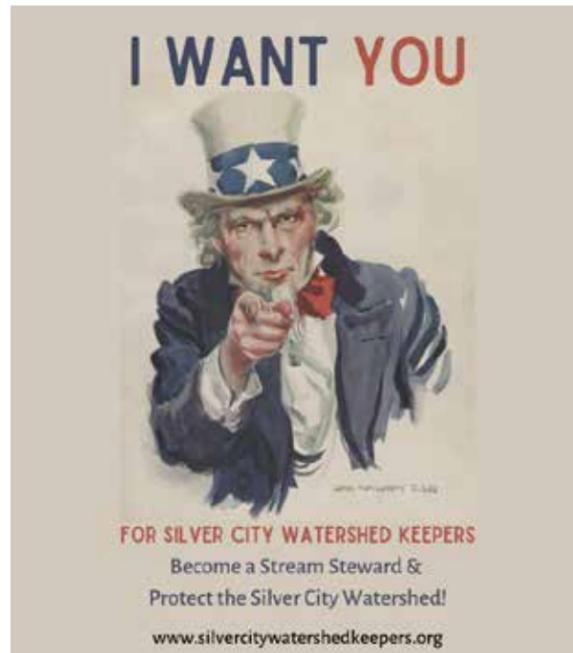


Stream Stewards Trained in Watershed Monitoring

By Leigh Jenkins, SCWK Coordinator

In August, the Silver City Watershed Keepers (SCWK) kicked off its Adopt-A-Stream Program with a Stream Stewardship Workshop in Big Ditch Park. The Adopt-A-Stream program empowers citizens to steward our waterways by monitoring environmental quality of streams, cleaning up litter, and restoring riparian areas. The Stream Stewardship Workshop trained participants in environmental quality monitoring of the watershed with an easy-to-use app that can be accessed on a smartphone.

Pollution from stormwater runoff, litter and illegal dumping, streambank erosion and non-native vegetation all threaten the health of the Silver City watershed. These problems affect our water resources, trails and open spaces, riparian ecosystems and wildlife. Participants in the program, either as individuals or organizations play an important role in protecting San Vicente Creek and its tributaries.



At the Stream Stewardship Workshop, participants learned how to become stewards of the Silver City watershed by adopting a stream segment along San Vicente, Silva or Pinos Altos creeks. In addition, participants were trained to use the new Silver City Watershed Keepers Reporter app created by Nichole Bouvet, a Watershed Keepers GIS Intern from Western New Mexico University. The Silver City Watershed Keepers Reporter app helps stewards report litter and illegal dumping, trail and streambank erosion, illegal motorized vehicle use, and other watershed issues that pose an environmental, health or safety risk. The data helps facilitate resolution of watershed threats in order to protect watershed health.

Want to access the Silver City Watershed Keepers Reporter App? Go to silvercitywatershedkeepers.org for the link to the web-based app and a guidance document on how to use the tool.

Watershed Keepers Team Up with Silver City on Pick It Up - Toss No Mas Anti-Litter Campaign



Photo credit: Gabriela O'Keefe

Around the country, littering and illegal dumping significantly increased during the pandemic. Keep America Beautiful estimated that there were about 207 million pieces of Personal Protective Equipment (PPE) litter on the ground in late 2020. The rise in single-use plastics, improper disposal of PPE like masks and gloves, and an overall lack of desire to clean up after oneself during long periods of social isolation have all been cited as contributors to more litter on the nation's streets.

Southwest New Mexico has not escaped the recent explosion of litter. During the early days of New Mexico's stay-at-home order, community members cleaned up over 2 tons of litter from major roadways in Silver City and the Mining District as part of Earth Day 2020 celebrations.

Trash strewn along roads in Silver City and the Mining District has been an unsightly welcome to residents and visitors entering the area on major roadways and recreating on Silver City's trails and open spaces. Moreover, the waste impacts our water resources by polluting streams and clogging drains and can harm public health and local wildlife.

To address the litter problem, the town of Silver City and GRIP's Silver City Watershed Keepers have teamed up to restart the anti-litter program

Pick It Up - Toss No Mas, initiated by Silver City Mayor Ken Ladner in 2018. The campaign brings volunteers together once a month to help make Silver City a clean and beautiful place to live by keeping our roads and waterways litter-free.

The program kicked off in October with a Trash Bash Community Cleanup. To date nearly 100 volunteers have picked up over 2 tons of trash and recyclables from Silver City's roads and creeks.

Please join us on the third Saturday of every month for Pick It Up - Toss No Mas community trash cleanups. Consider signing up to adopt a roadway zone or stream segment and make a commitment to regular monitoring, cleanup, and beautification of our roads and waterways. Contact the Silver City Watershed Keepers at 575.538.8078 or at silvercitywatershedkeepers@gmail.com



Photo credit: Gabriela O'Keefe

Pick It Up - Toss No Mas community cleanup events are partially funded by a grant from New Mexico Clean and Beautiful and are sponsored by the Town of Silver City, Silver City Watershed Keepers, Silver City Recycles, Silver City MainStreet, SWNMACT, Southwest Solid Waste Authority, and New Mexico Department of Transportation's Toss No Mas Program.

Help us Protect
Community Health
and
Our Environment

**Become a
GRIP Member**

We depend on your contributions
to continue our work to protect
our land, air and water.

Make a one-time donation
or become a monthly donor
at www.gilaresources.info

Or you can send a check
made out to GRIP to:
GRIP
305A N. Cooper St.
Silver City, NM 88061

Thank you for your support!



New Mexico to Protect 30% of State's Land and Water by 2030



Photo credit: Dennis O'Keefe

GRIP and a broad coalition of advocacy groups applauded Governor Michelle Lujan Grisham's new executive order released in August outlining her administration's commitment to protecting 30% of the state's land and water by 2030. This effort is urgently needed to address the climate and extinction crises, ensure that our state's treasured wild places like the Gila can be enjoyed by future generations of New Mexicans, while also building thriving local outdoor recreation economies.

At last year's Gila River Festival, former Senator Tom Udall spoke about his 30x30 resolution introduced in the Senate and co-sponsored by Senator Martin Heinrich. A companion was introduced in the House by former Representative and now Interior Secretary Deb Haaland. In January, President Biden signed an Executive Order that commits the federal government to protection of

30% of the nation's land and water by 2030. The E.O. was followed by the America the Beautiful Report that outlines the federal government's path to achieving 30x30.

State action is critical to meeting the 30x30 goal across the country. New Mexico's 30x30 Executive Order demonstrates the state's "commitment to conserving the Land of Enchantment as we build resilience to live with the impacts of a changing climate." A state agency task force will identify areas of protection throughout New Mexico to meet the goal of 30% of all lands protected by 2030 consistent with the federal America the Beautiful initiative.

GRIP is a member of the New Mexico Conservation Coalition advocating for implementation of 30x30 goals in the state.

A Conversation About Communications and Art Interview with Advocacy Intern Yen Chu

By Jody Norman,
GRIP Communications and Outreach Specialist



Photo: WNMU

I met with Yen Chu at the conclusion of her internship with GRIP and the Gila Conservation Coalition. Born in Taichung, Taiwan before she and her family immigrated to the US, Yen grew up in Kansas, where she spent most of her time outdoors or at the public library, discovering a passion for the sciences, literature, and the arts. In 2011, she moved to Silver City. She is currently pursuing a Bachelor of Fine Arts degree with an emphasis in Ceramics alongside a minor in Literature and Cell and Molecular Biology at Western New Mexico University. She seeks to promote environmental conservation through her art, as well as encourage others to reconsider their relationships to each other and the natural world. Our conversation has been edited for clarity and length.

Tell me more about the digital advocacy projects you worked on for GRIP's Silver City Watershed Keepers and the Gila Conservation Coalition's Gila River Festival.

My major work for GRIP and GCC was social media marketing and graphic design. I created posts like calls for volunteers for Silver City Watershed Keeper cleanups, teasers for the Gila River Festival, and other events. For the Gila River Festival, I also designed a rack card, poster, and advertising graphics.

You have talked about how you would like to use your art to start a conversation with people about the environment. How did your work at GRIP help to advance your art career?

Learning about the status of the Silver City watershed and other environmental issues that GRIP has worked on, I think that knowledge will inform my own work in the future as I focus on environmental projects.

I learned a lot of technical skills, especially about online marketing and social media, and I think I'll be able to use a lot of that information to promote my own work in the future. I also learned a lot about graphic design, in particular how to stick to a certain brand and then making visuals that are cohesive and yet also offer a variety that can be engaging to the public.

Where would you like to take the skills that you learned?

The skills I learned in meeting new people -- marketing and trying to engage them over the internet and the like -- a lot of those skills will come in handy in the future when I need to promote myself as an artist and talk about my work. And a lot of what I learned about graphic design I've been able to use in designing other things.

Save the Date!

*Gila Earth Day scheduled for
Saturday, April 23, 2022*

By Doyne Wrealli,
GRIP Membership and Program Coordinator

Mark your calendars for Gila Earth Day on Saturday, April 23, 2022. Earth Day inspires billions around the world to fight for a clean environment and demand action on climate change. Gila Earth Day will continue the annual celebration here locally with family-friendly, fun activities to help you do your part to protect our planet.

Depending on the status of the pandemic, we hope to return to Gough Park this year with local organizations and vendors. This is an opportunity to get plugged into local groups who are working hard to protect our environment and wild places.

Volunteers can participate in Covid-safe Earth Day projects, such as a community-wide trash cleanup and planting projects in Big Ditch Park. Keep your eyes peeled for more details!

Additionally, we are organizing a Found Object Art Contest for area students, elementary through high school. The found objects may be man-made or from nature, and works of art can be in any form, but will preferably be portable. Contestants may have their artwork shown on the GRIP website and/or in social media posts, as well as displayed at the Gila Earth Day celebration. Prizes will be awarded to the best elementary, middle school, and high school submissions, decided by a panel of judges.

**Gila Earth Day is
Calling
Student
Artists!**

**Found Object Art Contest
April 2022**

Accepting submissions from
Elementary, Middle School, and
High School students

More information: Doyne Wrealli
earthendoyn@gmail.com
Facebook @GilaEarthDay

We invite you to join us to help plan this year's festivities. The planning committee meets once a month, and we'll have our first meeting on Friday, January 14 at 2pm.

For more information or to get plugged into this year's Earth Day planning, please contact Doyne Wrealli at earthendoyn@gmail.com or through Facebook@GilaEarthDay.

17th Annual Gila River Festival Celebrated Our Connection to the Gila River *Presentations Available Online for Free*

The Gila Conservation Coalition organized a fantastic 17th annual Gila River Festival in September. The in-person and virtual event titled “(Re)Connect with the River” explored our connection to Nature, how the environment shapes human identity, and celebrated our connection to one another and to the Gila River watershed. Speakers included philosopher Kathleen Dean Moore, New York Times best-selling author Doug Tallamy, nature/science writer Sharman Apt Russell, poet Michelle Otero, and UNM’s Subhankar Banerjee. Gathering At the River closed the festival with Apache elders from the Chiricahua Apache Nation, performances by Borderlands Ballet and readings by Silver City poet laureate emerita Eve West Bessier and author and WNMU professor JJ Amaworo Wilson. Gila/Mim-

bres Community Radio’s Jamie Newton moderated the event. Nearly 200 people participated in more than 20 Covid-safe field trips and workshops.

The online presentations and video of Gathering at the River are available for free thanks to a generous grant from the New Mexico Humanities Council and the National Endowment for the Humanities. Visit www.gilariverfestival.org to watch the video presentations.

Join the Gila River Festival planning committee and be a part of efforts to connect people to the Gila River. Planning for the 18th annual festival kicks off on January 13th at 10 am. Get in touch at gilariverfest@gmail.com



GRIP and Health Council Discuss Future of Grant County Coronavirus Update Project

Born in the early days of the pandemic of the need to disseminate accurate and trustworthy real-time information to our local community, the Grant County Coronavirus Update Project, coordinated by GRIP in partnership with several local nonprofits, continued its work through 2021.

The project has provided COVID health and economic relief information to more than 20,000 people since its inception in March 2020 through its weekly updates, website (www.grantcountycoronavirusupdate.org) and Facebook page (@grantcountycoronavirusupdate). The project’s weekly radio program coordinated by Gila/Mimbres Community Radio KURU 89.1 FM Silver City has broadcast updates and interviews with health experts providing a detailed understanding of a range of important COVID topics from how to stop community spread of the virus to vaccine safety. The United Way of Southwest New Mexico has disseminated the weekly updates to its list of local nonprofits, community leaders and other interested people.

The Project has also updated the Grant County social services resource list and distributed it online and through local food pantries, libraries, and thrift stores to help people connect to food security, medical and economic relief assistance. A COVID-related resource list was also developed and updated to provide the latest information on local COVID testing and vaccination resources. Through a grant from the Center for Health Innovation, digital display boards were set up at local libraries, El Refugio, and thrift stores to connect people with the latest COVID health and economic relief information. Dr. Ken Sexton has provided an impressive amount of volunteer effort to distribute and set up the devices.

Our work decreased thanks to the availability of vaccines, but the dramatic uptick in COVID cases this fall and emergence of the Omicron variant underscore the need to continue to provide critical information to our community to help people protect themselves. GRIP is discussing with the Grant County Community Health Council how to continue the project into the new year.

Thank you to all of the unsung heroes that have made the Grant County Coronavirus Update project a success over the past 20 months: Alicia Edwards, Stacey Cox, Jody Norman, Allyson Siwik, Jamie Newton, Andrea Warner, Marcus Hanson, Amanda Morales, Ken Keppeler, Dr. Renee Depres, Dr. Ken Sexton, Anne Barraza, Sabrina Pack, Michele Giese, Paul Hotvedt, and Cris Uribe.

We are grateful for the financial support provided by United Way of Southwest New Mexico, Con Alma Health Foundation, Grant County Community Foundation, Give Grandly, and the Silver City Food Co-op Roundup Program.

Senators Heinrich and Luján reintroduce Gila Wild and Scenic Bill

In November, Senators Martin Heinrich and Ben Ray Luján reintroduced the M.H. Dutch Salmon Greater Gila Wild and Scenic Rivers Act to protect segments of the Gila and San Francisco rivers and their tributaries as Wild and Scenic.

GRIP and the Gila Conservation Coalition join with conservation groups from around the state to commend Senators Heinrich and Luján for their leadership and dedication to long-term protection of New Mexico’s last wild river.

First introduced in May 2020 by Senator Heinrich and former Senator Tom Udall, the legislation is possible due to the broad base of support for protection of the Gila from local community members, Tribes, sportsmen and women, veterans, small business owners, faith and civic organizations, local governments, and outdoor recreation and conservation organizations.

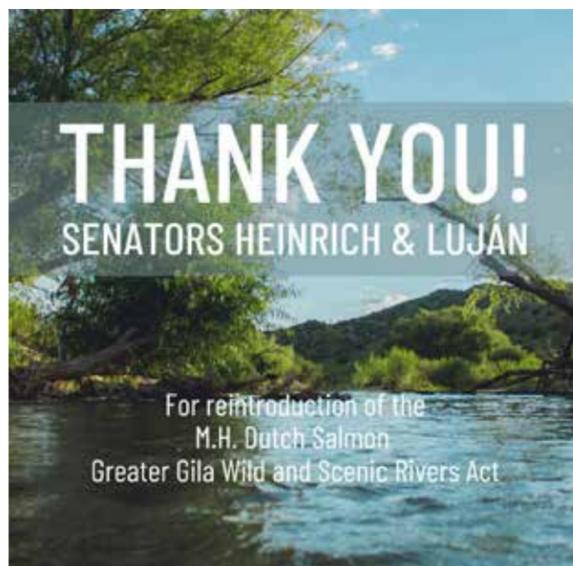
“After a nearly 20-year battle to protect the Gila River from the Gila Diversion, it’s fitting that the M.H. Dutch Salmon Wild and Scenic bill will finally protect the river once and for all,” said Todd Schulke, co-founder of the Center for Biological Diversity.

“We are so thankful for this opportunity to protect for all time the nation’s first wilderness river, the Gila, with headwaters deep in the Gila Wilderness,” said Donna Stevens, Executive Director of the Upper Gila Watershed Alliance.

“As we struggle to mitigate the ecological impacts of the climate and extinction crises, Wild and Scenic designation will ensure long-term protection of the Gila’s riparian ecosystem and its threatened and endangered species, while also protecting clean water for irrigation and our outdoor recreation economy,” said Allyson Siwik, Executive Director of GRIP and the Gila Conservation Coalition.

The M.H. Dutch Salmon Greater Gila Wild and Scenic Rivers Act is named after Gila Conservation Coalition chairman and GRIP board member Dutch Salmon who worked tirelessly for more than three decades to protect the free flow of the Gila and San Francisco rivers, defeating the ill-conceived Conner Dam and Mangas diversion proposals of the 1980s, successors to the failed Hooker Dam.

The Gila and San Francisco and their tributaries make up one of the largest undammed watersheds in the Lower 48 states. Their natural flows support seven threatened and endangered species, such as the loach minnow and spike dace, some of the last intact cottonwood-sycamore bosque in the Lower Colorado River Basin, and more than 350 species



of birds. The Gila is the centerpiece of the local outdoor recreation economy and its clean waters provide farmers with water for irrigation.

This legislation comes out of a community-led proposal and protects nearly 450 miles of the Gila and San Francisco as Wild and Scenic Rivers, ensuring that these reaches continue to provide for traditional and current use of the rivers, critical wildlife habitat, and our outdoor recreation economy.



We're on break!

EARTH MATTERS

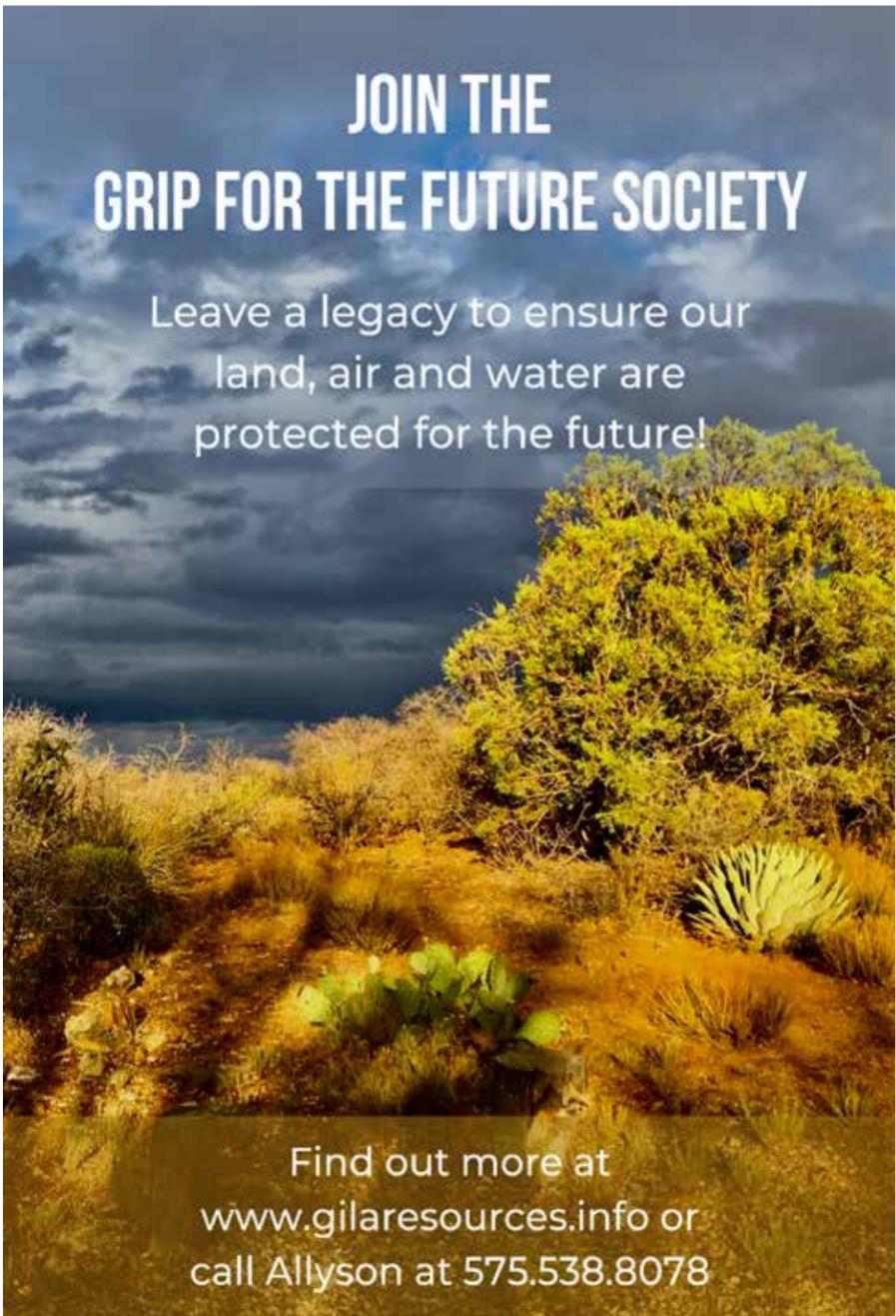
with Gila Resources Information Project and Upper Gila Watershed Alliance



New show format coming in 2022!
TUESDAYS & SUNDAYS @ 10 AM
 Gila/Mimbres Community Radio
 89.1 FM Silver City | gmcr.org

JOIN THE GRIP FOR THE FUTURE SOCIETY

Leave a legacy to ensure our land, air and water are protected for the future!



Find out more at
www.gilaresources.info or
 call Allyson at 575.538.8078



RENEW YOUR MEMBERSHIP TODAY

STAY SAFE EVERYONE!
 THANK YOU FOR YOUR SUPPORT

HAPPY HOLIDAYS AND BEST WISHES FOR 2022

WWW.GILARESOURCES.INFO



Gila Resources Information Project
 305A North Cooper St.
 Silver City, NM 88061

Return Service Requested

**Nonprofit Org.
 U.S. Postage
 PAID
 Silver City, NM**

Permit No. 4

CALENDAR OF EVENTS 2022

New Mexico 2022 Legislative Session

January 18, 2022- February 17, 2022
Nmlegis.gov

.....

2022 Pick It Up - Toss No Mas Community Trash Cleanups

January 22, February 19, March 19,
 April 23, May 21, June 18, July 16,
 August 20, September 24
silvercitywatershedkeepers.org

.....

Gila River Festival Planning Kick-off Meeting

Thursday, January 13 at 10 am
 Online
gilariverfest@gmail.com

.....

Gila Earth Day Planning Kick-off Meeting

Friday, January 14 at 2 pm
 Online
earthendoyne@gmail.com

.....

World Water Day 2022

March 26, 2022
silvercitywatershedkeepers.org

.....

Gila Earth Day 2022

April 23, 2022
 Gough Park
[Facebook@GilaEarthDay](https://www.facebook.com/GilaEarthDay)

.....

18th Annual Gila River Festival

September 16 - 18, 2022
www.gilariverfestival.org