

FIELD

NOTES

FOR MEMBERS OF THE NATURE CONSERVANCY IN ARIZONA

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Water Connects Us All

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COVER © John Fielder
THIS PAGE Christian Stumpf,
TNC Arizona's Director
of External Affairs, along
with TNC Arizona Trustee
Shanna Bowman and State
Director Dan Stellar, meet
with local farmers in Yuma,
Arizona to learn about their
commitment to water
efficiency. © Christian
Stumpf OPPOSITE PAGE
Upper Verde River Valley
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From the Director

Water Connects Us All



Our theme for this issue of *Field Notes* is a testament to the unifying force of water. As I reflect on my visits to the Colorado River's headwaters on the west side of the Rocky Mountains, I am continually inspired by its majestic power and the connections it fosters throughout Arizona and beyond.

My journey with water conservation began at Columbia University where I worked on domestic and international water issues. That journey has only deepened through my work with The Nature Conservancy in Arizona where water scarcity and water conservation take center stage. The collaborative efforts of our work and local on-the-ground expertise extend beyond borders, influencing conservation across the entire Colorado River Basin and the West.

As one of the hardest-working rivers in the West, it's fitting that a powerhouse team fuels The Nature Conservancy's Colorado River Program. In this issue you will hear from Taylor Hawes, the Colorado River Program director, as she shares insights into our collaborative efforts to safeguard this critical waterway. Additionally, I invite you to scan the QR code on page 9, which leads to a newly released video on the significance of the Colorado River.

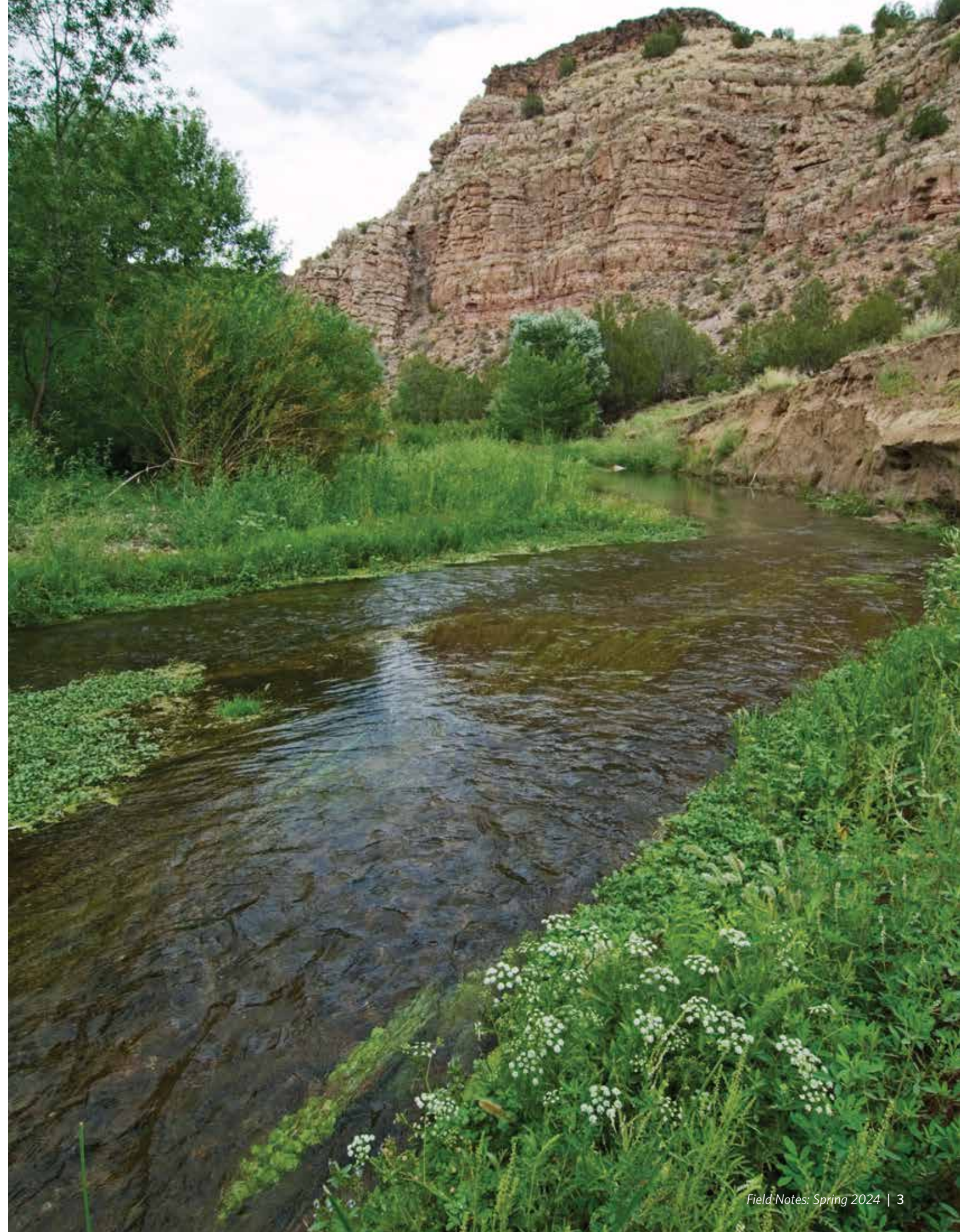
Closer to home, our focus is on the in-state tributaries of the Colorado River as well as statewide policy solutions. We focus on developing and implementing projects with a wide range of partners including Indigenous communities, agricultural producers and rural communities. We strive to find a balance where both people and nature can thrive with their water needs being met now and planning for the future.

These initiatives are deeply rooted in the needs and priorities of Arizona's communities, ensuring that every action taken is both meaningful and sustainable. Whether in Arizona or abroad, I've had the privilege to learn from generations of families. Water is a vital element for everyday life particularly in the arid Southwest.

TNC is unique in our ability to achieve impact at multiple scales, from individual farms and ranches to the entire Colorado River Basin. As we look to the future, your ongoing support empowers us to merge local action with far-reaching influence, solidifying our collective commitment to a world where water continues to connect us all.

Best,

Dan Stellar, *State Director*



Scaling Up Impact:

The Water Conservation Grant Fund

The Water Conservation Grant Fund was established in 2022 with an ambitious goal of awarding \$200 million to projects that help conserve Arizona's water supply by June 2024. Water is critical for economic development, food production and day-to-day use. Through this grant fund, Arizona is investing in our water future by directing funds to programs and projects that reduce water use across our communities. As of April 2024, the effort is on track having held 13 public meetings, processing over 200 funding applications and awarding 137 applications so far. These efforts allocated \$145 million, saving an estimated 3 to 4.6 million acre feet of water, with projects in every Arizona county.

At The Nature Conservancy (TNC) we know freshwater resources in Arizona like streams, springs and cienegas need resilient water supplies and these supplies are often connected to sources that people rely on. Investment in water infrastructure and conservation programs provide an opportunity for human water needs to be met more efficiently and often benefit the environment, two key elements as to why TNC supported the development of the fund. Kimberly Schonek, TNC Arizona's Water Program director, is currently chairing on the conservation grant fund committee that evaluates

each potential grant and provides recommendations to the Water Infrastructure Finance Authority Board (WIFA).

"TNC is thankful to engage in the Conservation Grant Fund Committee," says Schonek. "In this role we are able to expand the scope and scale of our impact beyond our project areas. I have been impressed by the projects brought forward by urban and rural communities that have meaningful water savings but would not be possible without this grant funding."

Projects funded have included advances in water metering technology, investments in irrigation systems and in artificial turf for schools as well as water recycling technology for firefighter training programs. TNC has been involved in multiple projects, including two projects with the Verde Natural Resources Conservation District (Verde NRCD). One of these provides funding to pipe sections of irrigation ditches in the Verde Valley and the other is to develop a soil moisture monitoring program to help small water users more precisely irrigate.

"Soil moisture monitoring is a simple, physical mechanism that we can use to show people when they actually need to irrigate," says Chip Norton, Verde NRCD Chairman. "You can place these

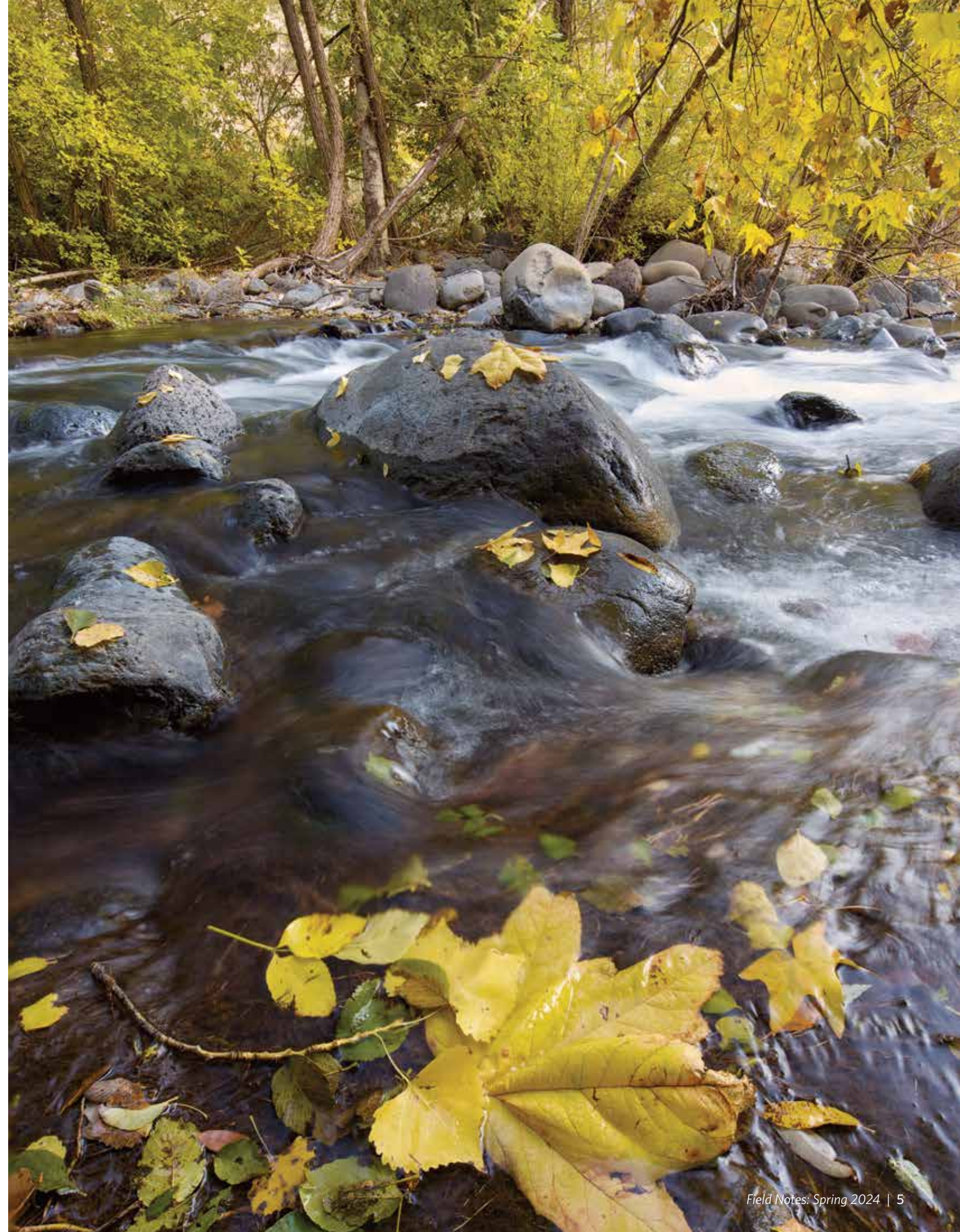
near the crop root zone, so you know exactly when the water is reaching the right depth in the soil."

The data will then be combined with the current irrigation techniques to provide landowners information on how to irrigate correctly for the health of their grass and how to not waste water. As the project continues, the Verde NRCD hopes to take the information they gather and use it to extend the program with educational tools for the public.

Water managers, state officials and conservation organizations are able to leverage lessons learned from successful projects like these to continue to secure a resilient water future for Arizona and the Conservation Grant Fund is just one of the ways that WIFA supports this resiliency.

About the Water Infrastructure Finance Authority in Arizona

WIFA is an independent state authority authorized to finance the construction, rehabilitation, acquisition, and improvement of water infrastructure throughout Arizona. Director Chuck Podolak says, "WIFA embodies an all-of-the-above approach to helping Arizona communities secure their water future - conserving water, making existing systems more reliable, and adding new supplies."





Q&A with Taylor Hawes



What is your official title and role at TNC?

My title is Colorado River Program Director and I lead our Colorado River work from headwaters to the Gulf of California and help coordinate all of our work across the region of the Colorado River and all of its tributaries.

What is the current status of the Colorado River's water supply?

The Colorado River crisis has been brewing for 20 years. There are a culmination of factors impacting the river. It's climate change, it's increasing usage, and it's laws and policies that have not kept pace with the changes we're seeing from climate change. The real factor with climate change is heat. We're seeing hotter temperatures that are causing drier soils and more evaporation to the point that we've seen a 20 percent reduction in flows in the Colorado River Basin since 2000. So in a pretty short period of time, we've seen a dramatic reduction in the flows of the river system.

The other challenge in this basin is that the (Colorado River) Compact and related laws have created a sense of entitlement throughout the region. There's an expectation of receiving a certain amount of water every year. In the Lower Basin states of Arizona, California and Nevada, there's an even a stronger expectation because for the last 90 years or so, they've always received their amount of water. Because of where they sit in the system, their water was always released out of Lake Mead. But at this point, we've allocated more water than the river is actually providing.

How is that impacting the seven states of the compact and Mexico?

It looks different in different parts of the Basin. In the Upper Basin, there is extreme variability every year, depending on things like hydrology, snow pack, wind, and soil dryness. Farmers often take shortages in a dry year. Tribal nations aren't always receiving their water supply. Cities are having to implement restrictions depending on the year.

In the Lower Basin states of Arizona and California, they've acknowledged that they have been using more than their allocations. Based on recent agreements between the seven states called the Drought Contingency Plan and a supplemental decision by the Bureau of Reclamation to require those states and Mexico to decrease their consumption, Arizona had to reduce its use first. Arizona has already taken shortages for the last few years. Bottom line, this has created a heightened sense of scarcity and because of this scarcity, each state is really anxious to hold on to the water

supplies that they have and every state would prefer another state or states reduce their water use. But everyone will have to reduce their use in this region to ensure that the Colorado River is sustainable into the future.

And one thing to point out, when we talk about the Colorado River Basin, it includes all the tributaries, which means the Verde, the Salt, the Gila, the San Pedro. Arizona is almost fully in the Basin. It's all part of the Colorado River system.

Solutions for the Colorado River need to come from large entities like the states themselves all the way down to individual landowners: how does TNC handle working from these vastly different approaches?

One of the benefits of having a Colorado River program is that TNC is able to work on those big policy issues like the new interim guidelines operational rules that are being developed or the amendments to the treaty with Mexico. In fact, because of the work we've done in the past, our agreement with Mexico has allowed us to provide water for the environment and I believe it is the only case in the world where environmental flows are built into transboundary river management agreement. We can work at that scale and because of our chapters, we're able to make changes that make sense state by state or in a particular community. Our north star is protecting the health of our rivers and the communities and stakeholders that depend on that river as well as wildlife. We work from the top down and the bottom up, because at the end of the

day, water is a local resource, and we need solutions that work for our agricultural partners that will also benefit nature and the health of our rivers. We work with tribal partners to do the same, so we work at every level. It's like playing three-dimensional chess.

Are you sensing that everyone is starting to see that these solutions need to be formed as long-term solutions rather than short-term band-aid fixes for any given year? Are people realizing that climate change isn't going away?

Yes, I would say there's a general recognition that climate change is here, it's changing our water supply, it's requiring we reduce our water use - to live within our means. That looks different depending on where you sit in the Basin. If you are a state official for one of the seven states negotiating these interim guidelines, you're just trying to hold onto as much water as you can for your state. If you're a farmer, a tribe, or a community, you've got to have solutions that work for you. That's an area where we have found great success, working with partners who want to find solutions that work for them and for the long-term resilience of this river system. Fortunately, there are lots of those partners who have realized that the way they farm or the way they allow water use in their community is no longer sustainable. They're willing to try new things. Those are the partners that we look for and then we work together to develop long-term solutions together.



And how does TNC support the local farmer or the local rancher who has decided to make some big changes to how they operate?

I will provide a few examples. Again, we work through our chapters, to build partnerships. Our team in the Colorado River program then provides financial support, fundraising, technical and legal expertise to support the work of the chapters.

Our work in the Verde is a great example of how TNC works. For example, if we meet a farmer who's willing to try crop switching, our role is to minimize or mitigate the risk that that farmer is taking in changing their crops. That's why the chapter invested in a local malt house because if we ask

a farmer to change the crop that they're growing, they have to have a market for the new crop or it won't work. You have to play it all the way out and I think that's where TNC can provide a lot of support: making sure that we've thought through the systems change necessary to make sure it works for the farmer.

Another example, from a different part of the Colorado River Basin, is large scale infrastructure project. There is a huge diversion in the Yampa River that used to pretty much sweep the river, diverting most of the flow. It was negatively impacting endangered fish and recreational users of the river, and a lot of water was unnecessarily diverted. TNC partnered with a big irrigation district and ended up being the project manager and fiscal sponsor

for a multi-million-dollar renovation to change the structure to modernize it, left more water in the river, created a safer boat passage, and let them divert only what they needed. It was a win-win-win.

As a third example, TNC sponsored an agricultural innovation program in Colorado. We provided funding to an agricultural organization in the state to do an "all-call" to their membership of farmers, asking them what kinds of innovations would work on their farms? Then we gave them seed money to try it. Farmers don't typically have money just to try things, like a city would. This kind of approach allows the farmers to lead while we support them financially as well as legally as well as technically to try new things.

Arizona's water allocations are such a complicated, messy thing. How is TNC working to change that attitude on both large and small scales?

I think of it as a three-pronged approach. We have to think about social science and changing hearts and minds about our relationship with water. We all have a responsibility to be good stewards of a scarce resource in the desert, so I think there's a critical education component. The second thing is to recognize that Arizona currently receives 36 percent of its overall supply from the Colorado River through the Central Arizona Project – and the amount available may be reduced. Groundwater and surface water from in-state rivers are managed under different rules than Colorado River water – increasing the complexity of decision making.

As we look to the future, we need to ensure sustainable management of our

water resources through investment in infrastructure and proactive state-based water policy. I think an important role for TNC is finding that balance between sustainable water use from rivers and groundwater and recognizing that those two are very much linked.

And the third prong is finding those local solutions like we have in the San Pedro with the groundwater recharge projects and the work we're doing in the Verde to find solutions that work for the irrigation companies. We must continue to foster resilience in the overall systems. We've got to work at multiple levels, and I think that's what makes TNC's role really unique and important is that we look at all of those things together, not just one or the other.

When the drought began in 2002, policymakers were still at that time thinking that we would have excess water and were negotiating how to dole that out. Has the speed at which everything has changed – and so drastically – affected perspectives around the Basin?

The speed at which the situation has changed is critically important. When the states passed the 2007 Interim Guidelines, which are operational rules to manage for shortages, they expected those guidelines would hold up until 2026 without needing amendments. Time has proven that they weren't flexible enough to adapt to the changes Mother Nature had in store. We've had to put band aids on top of band aids on top of band aids. We've been living in a crisis mindset,



jumping from crisis to crisis to crisis. No one expected we would be in shortages in the Lower Basin several years in a row. That required the Drought Contingency Plan (DCP) to be passed and these ongoing shortages and the fact that the reservoirs kept dropping prompted the Commissioner of Reclamation to announce that all the state would have to cut 2 to 4 million acre feet of water. On the higher end, that's more than Arizona's total annual allocation. All of these things have kept the pressure on and have helped all the stakeholders and decision makers realize that we can't predict the future and that the future will not look like the past. That's about all we can be certain of. For TNC, we have focused on increased flexibility and recognition that we don't know what's coming, but we know have to adapt and be creative in that adaptation.

What do you hope to see in terms of positive change in the next five years, ten years? What possibilities are out there?

For one, I would hope that all of us depending on this river system come

to understand that the supply is shrinking and that we are going to have to have a different relationship with water. That also means that we can be leaders in finding solutions and being part of a long-term plan for resilience and sustainability for this region. Another thing I hope is that our communities value the role of nature and our rivers in their quality of life and in their livelihoods and the reasons they live in these communities. I hope people come to understand that yes, rivers are resilient, but we can't just expect them to continue to function and provide us with so many benefits without some support and dedication of resources. This region is water scarce which makes it so much more important to protect that resource and be good stewards. I hope we create enabling conditions and policies that prioritize and promote a sense of sustainability and resilience into the future. The last thing I would add is we're experiencing climate change, especially in terms of heat, faster than the rest of the lower 48 states, and we are just at the beginning of learning how to adapt to what we're experiencing. We need to look at this from a long-term perspective and make sure that we have the long-term funding to allow us to adapt and adapt quickly at times, because the situation is changing faster than any one of us expected.



Scan the QR code with your phone camera to access Colorado River video link.



Conserving Arizona's Lifeline: The Verde River and Big Chino Grasslands Initiative



The Verde River is a unique biological hotspot. It provides vital habitat for 13 native fish, otters, beavers and many species of wildlife. The river emerges from springs connected to aquifers under vast grasslands north of Prescott. These grasslands, known as the Big Chino Grasslands, are some of the healthiest and the aquifer under this grassland provides approximately 80 percent of the flows in the first 24 miles of the Verde River. The aquifer, the grasslands and the river are at risk if we don't take action.

In 2020, TNC Arizona gathered stakeholders to identify strategies to protect the Upper Verde River. We identified the need to increase public awareness, increase monitoring and modeling, increase aquifer recharge and reduce the amount of water being taken from the aquifer in the future. This effort has led to significant projects such as Del Rio Springs acquisition with Trust for Public Lands. It also highlighted the need to protect the Big Chino Grasslands

through conservation easements involving a collaborative group of stakeholders.

A conservation easement is a voluntary legal agreement between a landowner and another entity, typically a land trust, that places restrictions on the use of a piece of property in an effort to permanently conserve that land.

TNC recently received an \$11.5 million federal grant to secure conservation easements and implement watershed conservation actions. But this grant came with a challenge—a 50 percent nonfederal match. Partners rallied, their commitment unwavering, and together, they pooled resources—a total of \$23 million to protect the Verde River and the Big Chino Aquifer.

The timing of the funding was essential as Arizona's last flowing river ebbs at historic lows due to imbalanced water use, wildfires and drought. Yet, the Big Chino Aquifer, an underground reservoir, offers hope as it sustains life for fish, birds, mammals and nearly 5 million residents in the Verde Valley and Phoenix Metro Area.

"The ancestral lands of the Yavapai and Apache People include Big Chino Grasslands and Verde River both of



which run through the heart of our Reservation. The health and vitality of the Verde River and its springs remain critical to the Nation's culture and identity as well as the economic and farming lifeways of the Nation. This project will help ensure long-term protection of the river through collaborative conservation investments by many partners," said Yavapai-Apache Nation Chairwoman Tanya Lewis.

TNC will work with partners to secure conservation easements from willing, private landowners. Our partners in this program include Central Arizona Land Trust and Salt River Project. "We are thrilled to have received such a sizeable grant from the USDA NRCS to continue our conservation work on the Verde River, whose preservation is not only vital for wildlife but also for agriculture operations and Arizona communities downstream," said TNC Arizona State Director Daniel Stellar. "Our work along the Verde River has focused on innovative solutions with private industry, farmers and ranchers,

landowners, communities and government agencies, and this grant will bolster that work."

TNC has been successfully implementing conservation easements and other solutions along the Verde River since 2012. One of the first being a conservation easement agreement with Hauser and Hauser Farms. The agreement, funded through a Farm Bill grant and the Natural Resources Conservation Service (NRCS) RCPP, allowed Claudia Hauser and her family to keep a parcel as farmland in perpetuity, and to protect the natural corridor of the river. Since, TNC has acquired two more conservation easements for the farm, one of which was also completed through the RCPP and included other irrigation efficiency projects on the Hauser's and other local farms.

With local farmers, and the support of the Regional Conservation Partnership Program, together we are able to make significant strides in our rural conservation efforts as we address our

The timing of the funding was essential as Arizona's last flowing rivers ebbs at historic lows due to imbalanced water use, wildfires and drought.



community's water-related challenges, protect high-quality grassland habitats, enhance wildlife connectivity in the Upper Verde River watershed.

Footnote: TNC is grateful to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) \$1 billion Regional Conservation Partnership Program for this significant funding and to U.S. Senators Kyrsten Sinema and Mark Kelly for their support.

Preserving Arizona's History

Trust for Public Land and Partners Secure Land for State's Newest Park



From the lush ponderosa pine forests to the arid desert grasslands, The Nature Conservancy in Arizona stewards approximately 17,000 acres of protected land in the Apache Highlands. Moreover, beyond these Highlands boundaries, TNC stewards even more protected lands across the entire state of Arizona. The goal? To safeguard Arizona watersheds and wildlife.

But what about the land that TNC doesn't own or manage? Often, over the course of years, critical work unfolds. Enter TNC Arizona's collaborative land protection program, which actively engages with landowners and partners to safeguard places of immense significance to Arizona.

Recently, these collective efforts paid off when Trust for Public Land (TPL) acquired Del Rio Springs, a 734-acre ranch in Chino Valley. The land, now under ownership of Arizona State Parks and Trails (ASPT), will soon transform into a new state park. Its purpose? To protect the property's incredible historic, recreational, and ecological values and further connect the community to the Verde River.

Not only will the park enhance the headwaters of the Verde River, the Del Rio Springs, and offer increased outdoor recreation opportunities for mountain biking, horseback riding, and hiking, it also holds historical significance that resonates statewide. After the establishment of the Arizona territory in 1863, the property served as the first capitol of the territory before it was relocated to Prescott.

"Having the opportunity to protect such an important outdoor space like Del Rio Springs doesn't come around every day, and TPL is proud to have worked to support the creation and enhancement of diverse outdoor recreation, while maintaining community heritage and rural character and promoting economic opportunities in the Greater Chino

Valley area," said Michael Patrick, Senior Project Manager for Trust for Public Land.

The land also encompasses a significant portion of its namesake: Del Rio Springs. These springs hold immense historical importance, having once served as the sole source of drinking water for numerous northern Arizona communities. Railroad maps even pinpoint the "Puro" railroad stop on the property, where rail cars carried water from the springs to the neighboring towns of Ash Fork, Seligman, Williams, and the southern rim of the Grand Canyon.

In the early 1900's, the City of Prescott installed one of the Southwest's first steam-powered water pumps which transported drinking water via a 20-mile wooden pipeline from Del Rio Springs to Prescott. Today, Del Rio Springs lies within the newly acquired property owned by ASPT, alongside several parcels held by the Town of Prescott Valley and the City of Prescott, who are collaborating on this project.

"We are excited to bring a state park to the Prescott and Chino Valley area," said Bob Broscheid, executive director of Arizona State Parks and Trails. "We

will begin our long-term planning for this project with extensive public input and stakeholder collaboration, ensuring that this new park meets the needs of our residents, visitors, and partners."

The same spirit of collaboration extends to the heart of the project itself. A sizable portion of the funding - \$6 million - was allocated by the Arizona Legislature through a capital appropriation in this year's state budget with the goal of establishing a new state park at the headwaters of the Verde River. The initiative was spearheaded by Arizona Senator Sine Kerr and Representative Selina Bliss, with additional support from local state legislators Senator Ken Bennett and Representative Quang Nguyen.

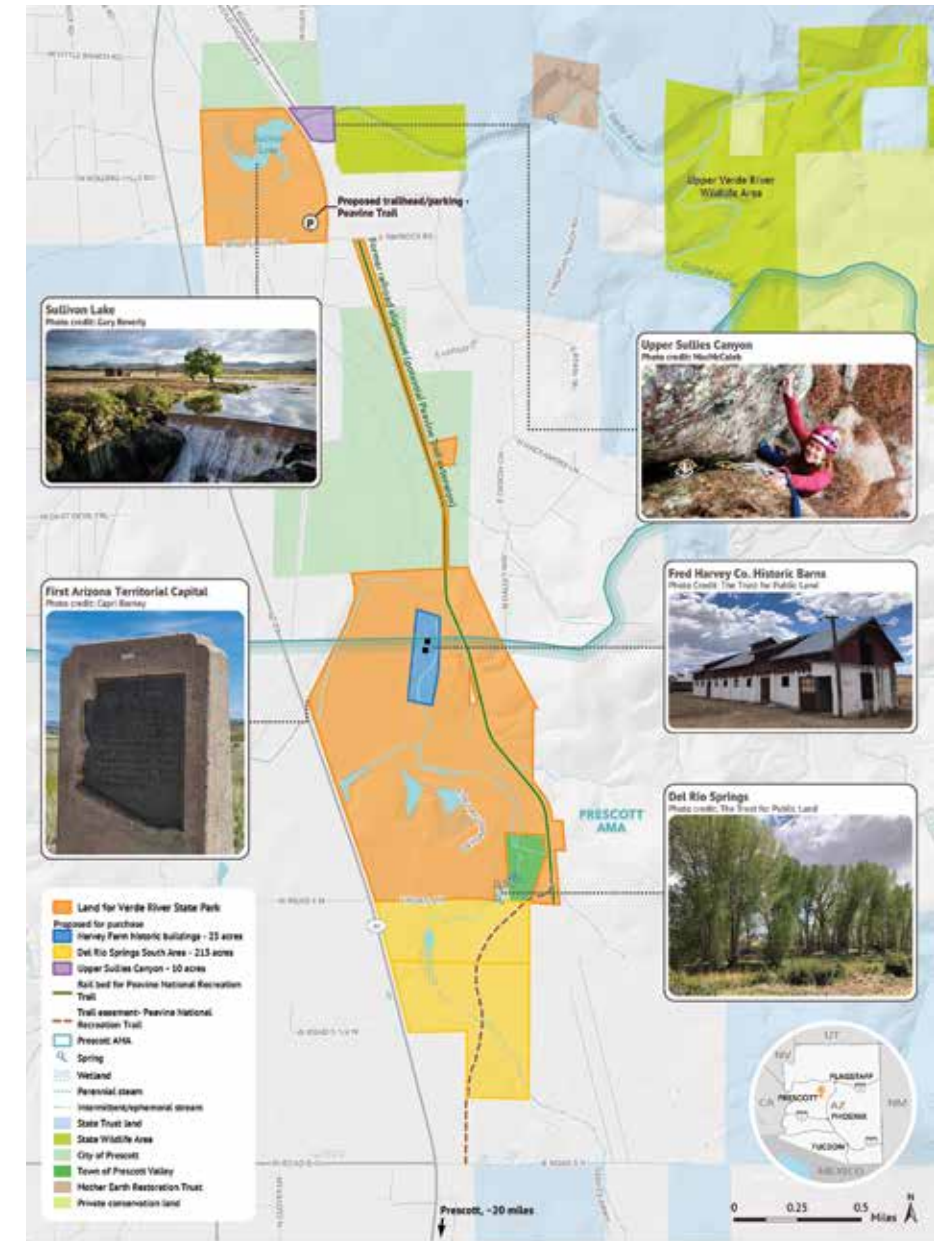
Given the importance of protecting the Verde River, TNC provided a \$500,000 grant to bolster the project and TNC partners, the Nina Mason Pulliam Charitable Trust, a key philanthropic supporter of the Verde River protection and restoration efforts, contributed a grant to Trust for Public Land, a pivotal factor in covering project costs. Yavapai County, another champion of this project, also contributed \$1.5 million to the acquisition.

"The protection of this land provides an opportunity for local families and visitors to learn more about the Verde River and our state's unique heritage," said Kim Schonek, a resident of Chino Valley and TNC Arizona's Water Program director. "I look forward to restoration of the headwaters of the Verde River and preserving open space within this rapidly growing community."

Additionally, the project, championed by County Supervisor Craig Brown, holds the promise of economic benefits and job creation for both Chino Valley

and Paulden. The Town of Chino Valley supports the project, recognizing its potential to enhance tourism and attract new businesses. Furthermore, the sellers also made significant contributions to the success of this transformative project.

But the story doesn't end here. Trust for Public Land has its sights set on acquiring additional adjacent land, complete with historic buildings, as phase two of the project, ensuring increased preservation for years to come.



Verde River Headwaters State Park TOWN OF CHINO VALLEY, ARIZONA

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Broadening our Conservation Canvas:

Nurturing the Patagonia-Sonoita Creek Legacy



in the mountains, you push around through some bushes and sure enough, there's a little wet spot on the ground that's barely seeping out. That's not at all the case here. These springs gush water."

Currently, both Cottonwood Spring and Monkey Spring are being diverted for agricultural use, but if acquired and returned to a natural state, they could create perennial surface water that would lead to opportunity for "restoration work, improving habitat, improving water availability to wildlife and ultimately, creating a better ecosystem for everything that utilizes these places naturally," Mrotek says.

Damian Rawoot, TNC's Land and Water protection manager explains that acquiring this land is "a no regrets strategy. The site itself has a lot of value anyway, but being able to control all of the water is the really big prize. We can do restoration, we can file instream flow rights to make sure the ecological flows are protected, and therefore the whole system is more protected."

And then there's the endangered Gila topminnow. There are approximately 30 meters between where the water comes up at Cottonwood Spring and where the diversion box takes the water away for agricultural use.



One of the biggest projects on the horizon is the acquisition of two parcels of land, each with very high conservation value due to some unusually productive springs. As Aaron Mrotek, manager of Patagonia-Sonoita Creek Preserve explains, "In my experience in Arizona, when you go to a spring

That's where the Gila topminnow live. "That's actually the endangered species habitat," Rawoot says. "It's just this tiny canal between the spring and the diversion. It's a little bit wild," he laughs.

Mrotek explains that the Gila topminnow is a very particular fish when it comes to their habitat. "There are several factors that go into it. It might be temperature, it might be speed of flow, it might even be the slope of the watershed. Because of land development, land use, and in some cases, degradation to the water quality, Gila topminnow have faded in other areas of the region and have become endangered."

"The Fish and Wildlife Service has the Recovery Land Acquisition Grant Program, which is a funding source meant for states and their partners like TNC to protect habitat that is specifically in a recovery plan for a given endangered species, like Gila topminnow," Rawoot says.

A partnership with another conservation group in the area, Borderlands Restoration Network, has also been successful in its work to protect the region. "We sit right in the middle of one of the most important wildlife corridors," Mrotek says, which includes the preserve as well as the larger watershed.

Mrotek continues, "Borderlands has been a great partner the last several years. We've done a lot of work with them strategizing on what pieces of land are the most important for the corridor. When you have two organizations working together with different strengths but similar goals, you're able to achieve some really positive environmental outcomes."

In another project last year, the Borderlands Earth Care Youth Group, a student internship program spent several weeks experiencing hands-on conservation education in the watershed. "This is a group of high-school aged students getting in touch with an area that most of them have lived in their whole lives. Many



of these kids come from ranching backgrounds, which isn't necessarily in conflict with conservation, but working here gives them a much different lens with which to see the landscape and I'm happy to be able to provide that for them."

"I really tried to impress upon them that this was a group effort and they're part of a larger story, which is ultimately their environmental heritage."



Restoring Water Flow:

The Mason Lane Ditch Project



In Arizona, agriculture accounts for approximately 70 percent of the water use – this aligns with water use across the West. Agriculture produces the food and fiber that fuels our daily lives and our economy and Arizona agriculture contributes an estimated \$23.3 billion to the state’s economy according to the Arizona Farm Bureau. Grass raised beef, sweet corn and malt barley are just a few examples of agricultural products found in the Verde Valley. Across Arizona, agriculture is investing and innovating in water management. In the Verde Valley, TNC is excited to continue partnering with agricultural producers in making sure water needs are met for people and nature.

Water in the Verde River and its tributaries, including Oak Creek and West Clear Creek, are diverted to irrigate a wide range of crops and pastures. This irrigation began nearly 50 years before Arizona was a state in the early 1860’s. This provided food for miners, the military and settlers. Today, about 40 ditches provide water to agriculture and homes – these ditches are aging and need improvements to meet water needs of their users and leave more water in the creeks and river. Mason Lane Ditch, the largest on Oak Creek, reached out to TNC for help solve their water loss challenges. They were losing up to 30 percent of the water they diverted due to leaks in their aging, dirt canal system.

John Ford, agricultural projects manager for The Nature Conservancy in Arizona describes Oak Creek as a vibrant ecosystem supporting large cottonwoods and willows along the cool, clear waters. “Working with the Mason Lane Ditch gave us an opportunity to improve flows in Oak Creek while making sure water users needs were met. With this project we installed HDPE pipe that will last a very long time.”

The project is just one of the many projects that TNC is working on to improve flows and we are not the only ones to see the importance of this work. Arizona Game and Fish identified collaborating with private landowners to improve flows in their recent Arizona Wildlife Conservation Strategy.

Why? Oak Creek is a ribbon of green connecting the Colorado Plateau and Sonoran Desert that supports exceptional riparian habitat. As a result, it supports migrating and resident birds, native fish, and mammals such as otters and beavers. These characteristics are directly threatened by additional development and water diversions.

“Efficiency projects like these are ultimately mutually beneficial for all the parties involved,” says Ford. “For those who live on that river, they have that connection to the land and they want to do what’s right. They want to keep the water in the river just as much as we do, but they also have their livelihoods to protect.”

At TNC, we are fortunate to bring resources and expertise to our partnerships with agriculture to continue improving water management for a resilient water future.



Nina Mason Pulliam Charitable Trust: Transforming the Verde River

The Nina Mason Pulliam Charitable Trust is synonymous with Verde River conservation, and this issue of *Field Notes* would be incomplete without them. A longtime partner, funder and advocate for conservation, the Trust has made a transformational impact for people and nature.

Since making the Verde a strategic funding priority, the Trust has provided more than \$10 million to The Nature Conservancy in support of Verde River projects ranging from conservation easements to protect miles of river habitat, to irrigation efficiency projects that keep farms in production while leaving more water in the river, to policy and planning efforts that bring communities together around river health. Projects funded by the Trust have saved billions of gallons of water—and counting—and benefited the economies, communities, habitats and wildlife that depend on a flowing Verde.

We thank the Trustees and staff who lead the Trust’s investments in river health. Because of their confidence in The Nature Conservancy, we have been able to pursue innovative projects thanks to their understanding that “projects require people”—and sometimes a little risk.

TNC Arizona State Director Dan Stellar, Arizona Water Program Director Kim Schonek and TNC Arizona Board Chair Jacob Tetlow honor Carol Peden Schilling and Robert Berger of the Nina Mason Pulliam Charitable Trust with the prestigious Oakleaf Award. © TNC Arizona

Meet the CHAMPIONS OF WATER CONSERVATION

In the heart of environmental stewardship lies a passion for water. Particularly in the arid Southwest, it represents a commitment to safeguarding our planet's most precious resource. Meet five members of our water program team, a group of dedicated professionals as they share their inspirations and experience, shedding light on their remarkable path toward sustainable water management and a transformative journey with TNC.



LEFT TO RIGHT Water Program Team front row: Haylee Short, Bailey Winston, Erin Kaczmarowski, Kim Schonek, Selena Pao, Travis Buck. Back row: Tom Stitt, Steffen Lewis, Scott Deeny, John Ford.
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KIM SCHONEK

Water Program Director

YEARS AT TNC: 15

Kim Schonek, with 15 years of experience at The Nature Conservancy in Arizona, has dedicated her career to water management and planning. As the Water Program director, she combines her passion for rivers, streams, springs, farms and community well-being.

Growing up in Southern Oregon, Kim's connection to water started early with science class field trips and an after school job at the U.S. Forest Service. Hydrology fascinated her, and she

learned to measure stream flow and process water quality samples. One standout project involved walking the length of the North Umpqua River in southwestern Oregon, counting large woody debris using an early GPS unit. Kim's journey continued as she transitioned paper maps to digital formats using ArcGIS.

Kim's commitment to both people and nature defines her work. She

navigates complex water management challenges, seeking solutions that benefit rivers, streams and communities. Her upbringing in a timber family during mill closures taught the importance of balancing environmental needs within social and economic systems.

Kim pursued a master's degree in environmental management with an emphasis on hydrology. Her work with the U.S. Forest Service, National Park Service, Portland Water Bureau and Oregon Water Trust provided opportunities to learn about many aspects of water management.

Kim emphasizes that TNC's work extends beyond water conservation. It's about water management and planning. Her favorite project? Always the next one. She successfully partners with diverse groups from the Salt River Project to Audubon Southwest to the Yavapai Apache Nation, all with the same collective goals.

As chairperson of the Water Infrastructure Finance Authority Conservation Grant Fund Committee, Kim tackles grant applications to enhance water management across Arizona. Quantifying water savings and return on investment is no easy task, but the group's dedication ensures progress.

Kim's work and the efforts of her team contribute to shaping a sustainable water future - one where thriving natural areas coexist with thriving communities.

IN HER WORDS

"My motivation to work in water is to find solutions to complicated water management challenges that allow for rivers and streams to thrive while the people connected to them also thrive."



JOHN FORD

Verde River Project Manager, Agriculture

YEARS AT TNC: 8

Growing up in Northern California, John Ford has spent his life immersed in the natural world. His childhood exploration along creeks and rivers ignited a passion for water conservation that continues to drive his work today.

IN HIS WORDS

“Our agricultural partners not only rely on the river for their livelihoods, but they also cherish the rivers and want them to be healthy, just as we do.”



Over the past eight years with TNC, John has cultivated strong relationships with local farmers and community members. His mission? To protect the health of the Verde River and support the community agricultural traditions of the Verde Valley. In water-scarce Arizona, this is no small feat.

What began as modest initiatives has blossomed into significant projects. From irrigation ditch improvements (see pages 16-17 on the Mason Lane Ditch) to cropland projects like sprinkler irrigation systems and crop switching, John and his team consult on a variety of projects that restore more flow to the Verde River.

Additionally, John collaborates with TNC partners, such as the Verde Natural Resource Conservation District to enhance water management. His efforts benefit everyone from small property owners to large-scale farmers. As projects scale up, so does awareness at the legislative level, ensuring that water conservation remains a statewide priority.

John’s proudest achievement, however, is his work with the Yavapai-Apache Nation (YAN). As the second-largest water user in the Verde Valley and the second-largest barley producer for Sinagua Malt, YAN’s commitment to sustainable practices has grown. Their tribal-wide goals align with TNC’s environmental goals, and the two groups continue to work hand in hand.

For John, witnessing this project and partnership evolve over the years and then be able to step back and see it working seamlessly - that’s an immensely rewarding feeling.

SELENA PAO

Verde River Project Manager, Rural Communities

YEARS AT TNC: 12

Selena Pao’s dedication to water conservation has been part of the fabric of The Nature Conservancy in Arizona for an impressive 12 years. As Arizona’s Verde River Project Manager, Selena focuses on rural communities, underscoring her commitment to environmental stewardship.

Raised in Orange County, California, Selena’s passion for environmental conservation began early. Armed with a Bachelor of Science degree from the University of California, Riverside, Selena embarked on a journey that would shape her career.

In 2010, Selena secured a TNC internship with the Maine Chapter. Later, she transitioned into an AmeriCorps volunteer with TNC Arizona, further demonstrating her commitment to conservation. After two years, Selena officially joined the Arizona Chapter and became a vital part of the Water Program

Team. Her work involves collaborating with rural communities, ensuring their voices are heard.

One current collaboration is with the Yavapai-Prescott Indian Tribe (YPIT). Together, they are designing and implementing a restoration project on Granite Creek. This creek holds immense historical and cultural significance for the tribe, serving as a

critical water source and natural habitats for wildlife.

The project aims to restore the riparian habitat, reduce erosion in the area, and increase recharge opportunities. Selena thoughtfully engages with partner organizations, the tribe and its Board at every step, seeking approval for recommended strategies. By aligning community priorities with TNC’s

IN HER WORDS

“It is exciting to start a new project with a new partner and to forge a long-lasting relationship as we steward the lands together.”



BAILEY WINSTON

Water Project Manager, Southern Arizona

YEARS AT TNC: 1

Bailey’s influence extends far beyond the past year she has been with TNC. She has wholeheartedly immersed herself in water management complexities, bridging gaps and fostering resilience amongst TNC stakeholders.

Bailey’s roots trace back to Hudson Valley, New York. She developed an innate connection to nature – a bond that would shape her future endeavors - while working at a bookstore in high school. She stumbled upon a book detailing the global freshwater crisis which piqued her interest in the intricate balance of water scarcity and equity.

Today, her work transcends the confines of an office space, reaching into the heart of rural communities across Southern Arizona. From revitalizing riparian areas to promoting sustainable water usage, she excels at fostering meaningful relationships, actively engaging with local stakeholders, and identifying strategic opportunities for scalable impact.



organizational goals, Selena, her team and TNC partners uncover co-benefits - where efforts ensure that conservation benefits both people and nature.



Collaborating closely with local communities, government agencies and fellow organizations, Bailey and her team map out watershed strategies. This approach involves a deep understanding of historical efforts, current needs and regulatory landscapes ensuring that TNC’s expertise resonates with the pulse of the region.

As one example, just a few months after Bailey joined TNC she helped mobilize more than 100 volunteers and partners, alongside TNC Mexico, for the 25th year of wet-dry mapping the San Pedro River. Extending from the San Pedro River headwater streams in Mexico to its confluence with the Gila River, a key tributary of the Colorado River, teams equipped with GPS technology, cameras and plenty of water, mapped 255 miles of the San Pedro River mainstem and tributaries noting where the river has water and where it doesn’t at the hottest time of the year. Given the prolonged drought, it is more important than ever to gather data to assess how water supplies are holding up.

IN HER WORDS

“Through this work, I am able to focus on partner collaboration to further our strategic priorities, ensuring the support of healthy, connected and functioning watersheds for years to come.”



STEFFEN LEWIS

Water Program Policy Specialist

TIME AT TNC: 7 MONTHS

Steffen joined TNC less than a year ago, stepping into the role of Water Program policy specialist. Despite being new to the team, he has already made significant contributions to TNC's mission of conserving the lands and waters on which all life depends.

Raised mostly in the Roaring Fork Valley, Steffen's inspiration flows from his family's agricultural roots and a childhood filled with outdoor education programs and adventurous rafting and hiking expeditions. Those experiences, along with his formative years split between the diverse landscapes of Arizona and Connecticut, instilled in him a deep appreciation for the interconnectedness of land, water and livelihood which fueled his desire to protect local agriculture while promoting water conservation.

Steffen's curiosities also fueled his quest for knowledge leading to two degrees from Arizona State University, an undergraduate degree in Political Science and a Juris Doctor (JD), as well as an Environmental Law Master of Law (LLM) from the University of Colorado – Boulder. But his journey was not confined to courtrooms, it took him to the heart of political action.

Before dedicating himself to water conservation, Steffen worked on Senator

John McCain's staff during and after his undergraduate years. It was his involvement in McCain's 2008 presidential campaign that provided firsthand insight into the intricacies of policy-making and the power of advocacy.

His appetite for advocacy led to practicing water law in Colorado. His work intersected the delicate balance between urban development, agriculture and environmental preservation. Not content to sit behind a desk all day, Steffen served as a captain and judge advocate in the U.S. Marine Corps which simply reinforced his commitment to safeguarding natural resources.

Before his time in the Marine Corps, Steffen experienced a pivotal moment – the aftermath of a previous settlement attempt on the Little Colorado River. As a policy insider, he witnessed how delicate the balance between stakeholders, legal intricacies and environmental imperatives is.

IN HIS WORDS

"It's well worth remembering how critical it is to have honest communication underwritten by trust, if we are to build the smart consensus it takes to move nuanced water discussions forward."



WAYS YOU CAN GET INVOLVED

Connect Locally - watershed partnerships across the state work to support education and conservation of their local streams and rivers - chances are, there's a group near you!

Volunteer - whether its stream cleanups or habitat restoration, roll up your sleeves and take part!

Stay Informed - Dive into water-related issues in order to understand the challenges and solutions so you can make informed decisions.

TOP TO BOTTOM © Steffen Lewis; The Verde provides irrigation water for farmers and drinking water for nearly three million people in the metropolitan Phoenix area. © Erika Nortemann/TNC; Volunteers and TNC staff mapping wet and dry reaches of the San Pedro River in southern Arizona. © Bretta Nelson/TNC

LEGACY CORNER



Dr. Kendra Gaines



My parents both had jobs in downtown Chicago, so during the winters, I was at school in an old brick building with wire fencing and lots of concrete everywhere. In the summers, however, we would leave the city for a tiny country house located in terminal moraine—the end of a glacier, with rolling hills and forest—and alfalfa fields.

I had my own pet animals to care for, but all around us was abundant wildlife, free to wander at will without housing developments in the way. My friend Sue and I would spend all day walking through woods and fields, encountering deer, opossum, pheasants, red foxes and other assorted critters. We loved it. We were free, happily dirty, breathing clean air, and—incredible in this day and age—safe.

Over time, with travel and life experiences, I came to understand that the country was where I felt most healthy and happy. The city had its benefits, but clean air and freedom to roam were not included, and that was what I truly loved.

WHAT'S YOUR STORY?

We'd love to hear from members about why they are passionate about nature and why they decided to include the Conservancy in their estate giving plans. Please send your story to **Mark Ryan** at mdryan@tnc.org

In due course, I arrived at Northwestern University in Evanston, Illinois, to pursue my Ph.D. And one memorable day, I read in the newspaper about the opening of a new office for some organization called The Nature Conservancy. I believe it was 1973, and as soon as I read the article, I headed for their office. It had become all too clear to me that "progress"—and the accompanying profits—was associated with lots of building, which meant destruction of nature. The one guaranteed way to save irreplaceable places was to buy the property and protect it from development—just the thing The Nature Conservancy did so well. I paid my dues at the new office and would visit there from time to time to hear the latest conservation news. They came to know me rather well over several years!

Time has indeed gone by and has brought innumerable changes to the world, many of which I frankly deplore. But time has not dimmed my love for natural, open spaces where wildlife can roam free and feel safe. I am proud to say that my late husband and I were partly responsible for TNC's purchase of land in the San Rafael Valley here in Arizona—land that had been under threat of so-called development which, thanks to TNC, is now protected.

As I am now older, I am conscious that these threats to nature are not about to go away, and including The Nature Conservancy in my trust was the ideal thing for me to do. Being a Legacy Club member means I can have peace of mind that my money can be used to protect what, as a child, I learned to love most—nature.

TOP TO BOTTOM The rolling short-grass prairie of the San Rafael Ranch and San Rafael Ranch Natural Area © Mark Godfrey/TNC; © Dr. Gaines



CLOCKWISE © Erika Nortemann/TNC © Tana Kappel/TNC; © istockphoto/Paul Hobday

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