



Vol. 24 No. 1 Fall 2020

## From the Executive Director: The Big Picture In Sharper Focus

We are starting something new this year for our newsletters. We'll be sending you two newsletters per year — one in the Fall and one in the Spring. Our Fall newsletters will report on our accomplishments and the challenges that face our Santa Fe River watershed. The Spring newsletters will discuss our programs and their goals and budgets.

In the past, we have reported on our programs and their great successes. While we have advocated, since our inception in 1997, for the health of our river and watershed, we feel that it's time to discuss the increasingly complex, long-term and undeniable contexts within which we do our work. In this issue, we are going to talk about the challenges that face us as a watershed association and a community. Where is our water going to come from in the year 2055? And is our watershed going to be a functioning watershed in that year?

To address this, we have developed a new project called the Living Watershed Project. This new program treats all water – above ground, just below the surface, deep underground, from this watershed, and from distant watersheds – as one water. These sources are all related, and in fact, we behave as if water were one thing – we use the water all just the same.

This new project looks at three zones of our watershed:

- the Upper or Municipal Watershed,
- the Urban Watershed, and
- the Lower Watershed.

Wendell Berry gave us our mantra for these three reaches of the Santa Fe River: "Do unto those downstream as you would have those upstream do unto you."

How do we balance the needs of the human population of this community with the water available to us – not only from our watershed but also from the imported water that we rely upon so heavily?



Andy Otto, SFWA
Executive Director

How do we ensure that those who came before us in this watershed are not forgotten or ignored?

How do we determine the value of having a functioning watershed? We all believe that it has a lot of value, but we need to communicate that in a more forthright way.

## SFWA Receives State Grant to Improve River Health

In March 2020, the New Mexico Environment Department (NMED) River Stewardship Program awarded funding to the Santa Fe Watershed Association (SFWA) for projects to slow runoff along the Santa Fe River. The goals of the East Alameda Rain Gardens and Camino Escondido Zuni Bowls Project are: 1) to protect and improve water quality in the Santa Fe River, and 2) to assist in the restoration of the Santa Fe River watershed and its designated uses.

Each year, NMED funds projects that enhance the health of rivers by addressing the root causes of poor water quality and stream habitat. The New Mexico Legislature appropriates funds for the River Stewardship Program.

SFWA has been raising funds and coordinating the creation of rain gardens in Santa Fe for eight years. Since 2012, we have facilitated the installation of 45 rain gardens. This particular grant will fund the creation of up to three rain gardens along the Santa Fe River and two Zuni bowls below Camino Escondido. The project is expected to take approximately two years to complete.

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Zuni bowls are rock-lined basins that fill with running water, softening the erosive force of falling water, preventing a "head-cut" from "unzipping" an arroyo, and increasing infiltration.

## From the President: We Are Adapting to the Current Times

As New Mexico adjusts its health-emergency orders – lifting and reimposing them as necessary – we're all taking tentative steps out of the house when we can, to explore our hiking and biking trails, and to basically enjoy some fresh air. The COVID-19 pandemic is asking us to be adaptable.

The Santa Fe Watershed Association (SFWA) started the year, as usual, with some solid goals in mind. "My Water, My Watershed," is an education initiative for fifth-grade students enrolled in the Santa Fe Public School system – but our 2020 season ended before it started. In accordance with



Steve Hamp, SFWA Board President

Governor Michelle Lujan-Grisham's COVID-19 public-health order on March 27, the spring field trips that take students up into the watershed were cancelled. Instead, SFWA adapted and made educational videos of the outdoor classroom for the public school system to use as part of its online teaching effort. The videos gave students the opportunity to study and explore their watershed, learning about the complex relationships between living things and their environ-

ment. The effort was a tremendous success. These educational videos are also available to the public on our website.

Another educational opportunity that is supported annually by SFWA is the New Mexico Climate Masters program. That was postponed indefinitely due to the pandemic. We are hopeful that we will be able to offer it again next year.

Our three annual Community River Cleanup events got started on February 15 with "Love Your River Day." Community support was wonderful. By the time our June rivercleanup day came along, we had to adapt to COVID. Volunteers registered, read protocols, signed safety waivers, and chose reaches of the river and arroyos to clean – all online. A record number of people showed up, making our socially

distanced cleanup event the biggest summer river-cleanup day ever! Our next comunity cleanup is in October, and we now dare to imagine that Santa Fe will make the "Hunt for Red Roctober" an even bigger success.

For our second annual Wild & Scenic Film Festival, SFWA had planned to show two sets of films during the first weekend in May at The Screen. Instead, we held the event online, featuring a dozen short films that celebrate nature and illustrate how people can make a difference on behalf of the environment. We posted the first set of films on May 26 for five days. The second set of films went live on June 3 for another five days. The virtual presentations were very well received by our Santa Fe audience, but they were also seen by a wider audience outside the City. We still prefer to get us all together as a live audience, but having to adapt opened our doors to a wider audience – and that was a silver lining.

**Our 6th Annual Winter Watershed Benefit** will also have a different look this year. We are building the fundraising event around a photography contest open to professional and amateur photographers of all ages, with a focus on the Santa Fe River. We are planning to hold the benefit in the first week of December, as a virtual event, to celebrate the winners of the photography contest. The event will also feature a guest speaker, awards, prizes, and a "paddle call" (*a.k.a.* a Fund-a-Cause video appeal) to support SFWA programs. This is a special opportunity for all of us to show our support and spirit for the Santa Fe River. To learn more, for updates, and to join the fun, please see our website.

On another positive note, the Santa Fe River came alive this spring ,as the first spring pulse began to flow on April 23. The City released another spring pulse on May 14. These flows were released in compliance with the Living River Ordinance. SFWA was instrumental in getting the City Council to approve the ordinance in 2012. These releases help to maintain a healthy river system and recharge the underground aquifer, which becomes our primary source of water during droughts. A flowing, meandering, tree-lined stream is a greenway which all of us can enjoy. I hope you can get outdoors to enjoy the fresh air and to "Walk the River."

— Steve Hamp, SFWA Board President

THE MISSION of the Santa Fe Watershed Association is to protect and restore the health and vibrancy of the Santa Fe River and its watershed for the benefit of people and the environment. We achieve this through education, restoration, stewardship and advocacy.

From the river's headwaters to the Rio Grande, we honor the connection of people and the watershed.

# SFWA Receives Federal Funding for Watershed Planning

The U.S. Bureau of Reclamation has awarded \$2.8 million for 29 projects to improve watersheds across the West. \$300,000 is being shared among three New Mexico organizations – the Jornada Resource Conservation and Development Council, the Santa Fe Watershed Association, and the New Mexico Wilderness Alliance.

Building on a 2015 study of the Santa Fe basin, the Santa Fe Watershed Association is 1) developing a plan to address concerns about sustainability and reliability of surface-water supplies and 2) exploring ways to execute the plan.

## Santa Fe Has Water and Conserves Water - But For What?

#### by Stephen Wiman

The City of Santa Fe depends upon several sources of water. Its first-priority source is renewable surface water – from McClure and Nichols reservoirs in the Santa Fe Municipal Watershed, and from the Buckman Direct Diversion (BDD) facility adjacent to the Rio Grande northwest of the City. Much of the water that is available to the City from the Rio Grande actually comes from the west slope of the San Juan Mountains in southern Colorado – via 26 miles of tunnels and the Rio Chama.

The City's second-priority source of water is groundwater – from wells that tap into the Tesuque Formation aquifer and wells in the Buckman Well Field. Groundwater is replenished, *usually slowly*, by suface water.

Water conservation may also be considered a "source" of water, and treated effluent water is an important and increasingly valuable part of the mix.

#### So Far, We Have Surface Water

Climate change and drought pose uncertainties for our supply of surface water, particularly for the BDD on the Rio Grande. Water levels and rates of flow in the Rio Grande are seasonal. They are dependent upon precipitation in the San Juan Mountains and releases from reservoirs far north of Santa Fe. These releases are a function of downstream demand for irrigation water which also conveys water to the BDD.

In order to offset the volume of San Juan-Chama water that we pump from the Rio Grande, the City has proposed to build a 17.7-mile pipeline from the Paseo Real Water Reclamation Facility to return partially treated effluent water to the Rio Grande. This plan is not without controversy, but it was considered by the Water Division to be the highest ranking alternative in the 2017 Santa Fe Reuse Feasibility Study conducted by the City, Santa Fe County, Bureau of Reclamation, and Carollo Engineers, Inc.

#### We Are Good At Conserving Water

Santa Fe is widely recognized as a regional leader in water conservation. From 1995 to 2019, we reduced our total water consumption by nearly 50% (from 168 gallons per capita per day [gpcd] in 1995 to 87 gpcd in 2019). The Water Conservation Department (part of the Water Division) encourages us to conserve and observe watering regulations and hours, and reminds us of the various conservation programs and incentives – including rebates for indoor use, outdoor irrigation, and storage systems.

#### **But Santa Fe Is Still Growing**

Most of us agree that conserving water in the arid Southwest is simply the right thing to do. We are reading about climate change and drought threats to our water supply, and the City is reminding us to conserve water – but all the while, new buildings and developments are under construction all around the City.

The City of Santa Fe's growth rate is actually a rather modest 1%, and the City has an exemplary Green Building Code. Since 2010, the City's building code has required a builder to offset the projected water usage of the building or project, so that there is no net increase in water demand. One way that a builder can offset the projected water use is by buying water rights from the City's "water bank" — water rights that the City has purchased or transferred from elsewhere. What is little known is that the water bank also includes water conserved by residents participating in conservation programs (various rebates and the toilet-retrofit credit). The water bank is, therefore, a mechanism whereby water conservation is actually *enabling* growth.

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#### Do We Have a Plan?

Is there a City of Santa Fe master growth plan or a regional growth plan that integrates water supply, the uncertainties of drought and climate change, and our successful water-conservation program? Is the City working with Santa Fe County to achieve common objectives in the greater Santa Fe area? And just because we have water and builders and financing now, is the growth we are experiencing the growth that our community members want and need to sustain and enhance our quality of life?

Do we have a plan, or is growth on auto-pilot? These are questions that should be posed to our Mayor, City Councilors and County Commissioners.

Stephen Wiman, Ph.D. is a retired geologist who served on the City of Santa Fe's Water Conservation Committee for more than twelve years and is a past board member of the Santa Fe Watershed Association.

## Santa Fe Watershed Association

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## Thank You, Southwest Plastering — You Have Raised the Bar!

We're sending a huge SHOUT OUT to our friends at Southwest Plastering Company who went above and beyond to help care for the Santa Fe River. This team of



Employees of Southwest Plastering Co. turned an average work day into an extraordinary clean-up effort this summer. They removed 50 (!!) 30-gallon bags of trash and two truckloads of oversized items from a reach of the river in the heart of Santa Fe.

volunteers spent *six* hours cleaning the river from the St. Francis bridge to the Sandoval bridge – a distance of roughly two-thirds of a mile in the heart of Santa Fe. They removed *fifty* 30-gallon bags of trash and two truckloads of oversized items. They even brought their own flatbed truck!

Michael Roybal, President of Southwest Plastering Company, wrote: "I walk my dog every morning along the riverside. I see the hardship for the City and SFWA keeping the areas clean from debris. I started taking a trash bag with me every morning on our walks, but I filled them so quickly. So, I went to work one morning to send the crews out, and I mentioned to Brenda, my office manager, if she could look into getting us on the river to do a clean-up. Well be careful what you say to a smart woman, because the next day she had us signed up. I thought my crew was going to be reluctant with my request for the day of work, but much to my surprise, I was met with optimism and glee. We enjoyed the hard day of work, and several of the crew members were elated with the value to our beautiful environment. Thank you."

Way to go, Southwest Plastering Company! We deeply appreciate your hard work and dedication to our community.

### Rain Gardens and Zuni Bowls (cont. from page 1)

Collaborating in this project are Watershed West Engineering and The RainCatcher Inc., both of which have been instrumental in the design and installation of our rain gardens since 2012. SFWA Adopt-the-River Steward teams will also be involved in water-quality monitoring and ongoing maintenance.

"This is an incredible opportunity," said SFWA Executive Director Andy Otto, "to create a demonstration site for the residents and visitors to Santa Fe. These rain gardens are so very important for our watershed by slowing water runoff and then infiltrating it back to the Santa Fe River and its riparian aquifer. Every gallon saved now is a gallon that our grandchildren will get to drink in the future."

For more information, please contact SFWA Program Coordinator Mori Hensley (505/820-1696, mori@santa fewatershed.org).