Eastern Bluebird (Sialia sialis)
To harmonize the needs of people and nature through our stewardship of rivers and land.

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Vision
INSPIRING ACTIONS FOR HEALTHY CREEKS AND RIVERS

Mission
COMMITTED TO SAFE, CLEAN, ENJOYABLE CREEKS AND RIVERS
It is remarkable how quickly life can change and how the things we took for granted a few months ago are now so deeply missed. The changes brought on by the COVID-19 pandemic are endless and when combined with the consequential long-term effect this has on our local and state economies, the impacts are even more profound.

The San Antonio River Authority (River Authority) is adapting to these changes and preparing as best we can to maintain our commitment to safe, clean, and enjoyable creeks and rivers. In this time when air travel and far away vacations are tenuous, people are turning to local attractions for their entertainment. The River Authority is playing a key role in both education and community enjoyment of our creeks and rivers. From jogging or biking down the Museum or Mission Reach in San Antonio to having a picnic at a downstream river park like Helton or Branch or kayaking the San Antonio River on the SASPAMCO paddling trail, experiencing these local attractions is a great alternative to being stuck at home watching TV.

Recently, the River Authority Board approved the next fiscal year budget. While most of the River Authority’s funding comes from other local agencies and project partners, a significant amount comes from local taxpayers through property tax collections. We recognize that the expenditure of public dollars at a time of economic uncertainty requires thorough consideration and scrutiny. As a result, the River Authority is working hard to do more with less. Fortunately, the River Authority has a solid financial foundation and our core mission will not be impacted, now or in the future. Your elected board and the great staff at the River Authority has its eye on the “big picture.”

This summer, the River Foundation is partnering with Southwest School of Art and Gemini Ink to offer two unique summer camps focused on Confluence Park and its connection to the San Antonio River. Each camp will explore the integration of science and art and provide ecological learning through creative expression in innovative and new ways. To ensure the safety of our campers and their families, both of these offerings are going virtual and will be completely free of charge!

Each virtual camp will include a mixture of live videoconferencing with instructors, pre-recorded activities, story times, video chats with science ambassadors, and virtual tours and treasure hunts at Confluence Park. Art supply kits will be available through curbside delivery at Confluence Park prior to the first week of camp. Camp dates are weekdays July 6 - 31 for elementary and middle school students.

In Response to the River
Campers will join Gemini Ink for a free creative writing camp inspired by Confluence Park. The workshop will explore, celebrate, and reflect on the San Antonio River and its role in our community and will integrate other creative outlets including photography and drawing. Together, students will produce a handmade zine (booklet) under the guidance of local poets.

Nature of Art
Campers will explore the natural environment through an artistic lens. Each day, campers will learn about a different theme tied to the river ecosystem and create artwork inspired by the natural world. Campers will use a variety of media such as clay, fabric, paint, and sculptural materials to fashion individual and collaborative pieces of art.

Interested in kid-friendly, virtual activities to enjoy at home? Call Park Program Coordinator Sara Ramirez at (210) 224-2694 or email sara@sariverfound.org for more information.
The San Antonio River Authority (River Authority) Board of Directors recently approved the budget for Fiscal Year 2021 (FY21). Each year, the staff at the River Authority conducts a thorough assessment of the projected goals and opportunities across the agency to create a comprehensive strategic plan and budget. The Board and staff scrutinized projects and operations within the organization to identify and prioritize initiatives that reflect our commitment to safe, clean, and enjoyable creeks and rivers. This was an especially rigorous process this year given the uncertainty of our revenue streams due to the COVID-19 pandemic. Several important projects were deferred or pared until more is known about the recovery of our South Texas economy.

In FY21, we will continue to fund key basin-wide projects such as floodplain remapping in the Leon, Salado, and Medina watersheds. Key southern basin projects include the Clean Rivers Program, our Low Impact Development Rebate Program, and several ecosystem restoration projects. In the southern basin specifically, we have designated funds to support our extremely successful Household Hazardous Waste collection events.

To learn more about our annual budget, please visit sariverauthority.org/budgets.

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MICHAEL W. LACKEY, P.E., BOARD MEMBER, BEXAR COUNTY, DISTRICT 3

A Sustainable Way To Manage Rainwater

MICHELLE E. GARZA, STORMWATER ANALYST

Have you considered collecting rainwater at home? One way to get started is to install a rain garden. A rain garden is a shallow, landscaped area designed to slow down, spread out, and clean stormwater runoff to reduce local flooding and protect stream health. By treating rainwater as a resource, we can turn our cities into stormwater sponges.

Did you know when rain falls on roofs, parking lots, and streets, it runs off picking up accumulated pollutants like heat, oil and gas, fertilizer and pesticides, animal waste, and sediment? This runoff is the leading cause of pollution in urban creeks and rivers, restricting swimming and occasionally causing fish kills after it rains.

City streets act as dry creek beds. When it rains, streets fill with stormwater runoff that is carried into storm drain networks and to our creeks and rivers. In San Antonio, that network is separate from the sanitary sewer network, so stormwater runoff pollutants aren’t filtered out at a wastewater treatment plant. This is why it is important to capture rain on our land, allowing it to soak into the ground where it can be filtered while recharging our creeks, rivers, and aquifer. San Antonio can hold onto its water like the precious natural resource that it is, instead of sending it into pipes like a waste product.

Catching rainwater at home can be as easy as directing downspouts to planted areas or installing rain gardens with native plants providing habitat for butterflies and other pollinators. You can also add rain barrels to capture rainwater from your roof and allow them to drain slowly into your rain garden or other green spaces. These best practices clean the stormwater and create healthy habitats that use the rainwater instead of treating it like a waste product.

To join us in making our cities stormwater sponges, visit the Sustainability Module at sariverauthority.org.
In the Fall of 2021, the second segment of San Pedro Creek Culture Park will open to the public. This new segment from Houston Street to Nueva Street includes the soon-to-be restored Alameda Theater, the new headquarters of Texas Public Radio, the Spanish Governor’s Palace historic site, and the new University of Texas at San Antonio downtown campus. Needless to say, it is a very culturally significant segment of the park! Further adding to the rich history of this area, recent construction unearthed the foundation and cornerstone of the first African Methodist Church in San Antonio, called St. James Chapel. This discovery, along with other industrial infrastructure like the Alamo Ice & Brewing Company, will provide ample inspiration for future programs and events.

In addition, this segment of the park will include two new public art projects. The first is an interactive sculpture that allows the viewer to activate lights and sounds on a 250 foot water wall. The second is a faux bois and mosaic mural spanning an entire block. Both projects are currently under design and will be unveiled next Fall.

In April, we conducted a full-scale mockup of the water wall that will become the interactive sculpture. Designed by artist Adam Frank, the sculpture consists of a cast bronze microphone with a live microphone inside. The live microphone is linked to the drivers that control the lights and will be activated when a person makes noise in close proximity. This allows the viewer to affect the light display in real time, turning the water wall into a monumental live sound visualizer. The artist was inspired by the musical and performative history of the Alameda Theater and feels his artwork, titled Stream, will be a venue for people to express themselves and provide an interactive backdrop for their own performance.

The recent onsite test was successful! It demonstrated not only how the lights interact with the water wall but also how the sound travels in the space. This information is key to fine tuning each element of the project so that the vision of the artist is realized.

To view a virtual construction tour or a behind the scenes look at Stream, visit the San Pedro Creek Culture Park Facebook page at facebook.com/SanPedroCreek.
On June 17th, the Board of Directors of the San Antonio River Authority (River Authority) adopted a $374.4 million budget for Fiscal Year 2020/21 (FY21), a decrease of $11.5 million from the FY20 amended budget. The budget is based on a proposed tax rate of $0.01858 per $100 of property value, a rate unchanged from FY20. The approved budget, which begins on July 1, 2020, supports projects and organizational goals that advance the agency’s commitment to harmonize the needs of people and nature through our stewardship of rivers and land.

The economic uncertainty that has resulted from the COVID-19 pandemic was in the forefront throughout this year’s budget process. Staff reduced operational expenses in the draft budget proposed to the board and then worked closely with the board to identify further reductions that can be made should tax revenues come in less than budgeted projections. As a result of this thorough deliberation, the River Authority Board approved a budget based on collecting the same amount of tax revenue as the previous fiscal year. With the district-wide property tax appraisal process finalized by the end of July, the board has identified projects and programs that could be delayed or eliminated should the tax revenue be less than projected in the budget.

The top priority for the FY21 budget is to ensure that the core service mission of the River Authority is achieved. The $374.4 million budget includes a capital fund of $188.6 million which is comprised of funding from the City of San Antonio, Bexar County, and other entities and enables the completion of major construction projects managed by the River Authority. The budget also includes $70.1 million in the utility fund comprised of funding from wholesale and retail customers rates and funds daily treatment and collection system operations and major capital expansions of two River Authority wastewater treatment plants that serve fast growing areas of Eastern Bexar County. The $48.8 million general fund, supported through property tax revenues, funds the agency’s river and park operations and maintenance as well as engineering and science-based projects and programs; this includes important Floodplain Remapping throughout the basin, Predictive Flood Modeling, and Watershed Master Plans. Completing the construction and initiating operation of the Escondido Creek Parkway project in Karnes County is also a focus.

The annual tax rate must be set at the same rate throughout the River Authority’s four-county district including Bexar, Wilson, Karnes, and Goliad counties and may only be used for planning and operations and maintenance activities. The Board of Directors will act on the final tax rate on September 16, 2020 after receipt of the final property valuations in late July. A public hearing will be held prior to adoption of the tax rate.

The complete budget document is available online at sariverauthority.org/budgets.
65% Capital Improvement Projects
7% Operating Expenditures
7% Personal Expenditures
15% Fund Balance
2% Debt Service
4% Transfers
ANGELA CAMARILLO, EVENTS SPECIALIST

One of the best things I love about my job as the Event Specialist for the San Antonio River Authority, (River Authority) is the opportunity to build relationships and engage with the community. As a natural extrovert, I enjoy meeting new people, networking, and making powerful connections. To be successful in the event planning industry, it’s important to build your own network of entertainers, vendors, artists, sponsors, exhibitors, community organizations, and members of the press, to name a few. I once heard a distinguished event planner say, “it isn’t what you do in this industry, but it’s about who you know.”

I have a strong passion for event planning and have enjoyed being in the industry for over fifteen years. Creating an event from planning to execution allows me to utilize my connections and express my creativity and innovation. Whether it’s a high-concept special event, an annual festival, or a recreational event on the river, I never tire from watching a planned event unfold and seeing the delight on people’s faces.

While my job has many logistical considerations, my key goals are to provide memorable experiences, offer fun recreational opportunities on the river, and to enhance the quality of life of our community. Amazing things happen when people meet; they learn, inspire one another, come up with new ideas, and sometimes they even change the world.

As someone who loves their city and the beautiful river that runs through it, I aim to be a good steward of our community and support the River Authority’s mission through thoughtful event planning. It is my hope that I can continue to plan events and activities that bring people together, for now in the figurative sense, create powerful experiences that inspire others to action, and build community support and stewardship for the river and its resources.

Employee Highlight

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WATER TRAVELS DOWN THE MAIN CHANNEL, CALLED THE ACEQUIA MADRE, TOWARDS A SLUICE GATE. WHEN THE GATE IS LIFTED, WATER FLOWS DOWN A SMALLER CHANNEL CALLED THE ACEQUIA MEDIO TOWARDS ITS DESTINATION.
The San Antonio River Authority (River Authority) is committed to safe, clean, and enjoyable creeks and rivers. It’s not just what we say, it’s our stated Mission. Our projects focus on reducing local flooding and improving the quality of the water in creeks and rivers. Over the last five years, the River Authority has funded rebates for Green Infrastructure projects throughout our four-county jurisdiction. The design and installation of Green Infrastructure meets our goals of reducing local flooding and improving water quality. Green Infrastructure is a group of design practices which function like green space and natural areas to slow, detain, and filter stormwater. Methods include vegetated filter strips, vegetated swales, bioretention, bioswales, permeable pavement, cisterns, wetlands, extended detention, and vegetated sand filters. To date, we have partnered with private developers, local governments, and school districts to complete 29 Green Infrastructure projects with 13 others currently in progress.

The River Authority has published a dynamic dashboard on our website of the Green Infrastructure completed projects and associated benefits including sediment and bacteria removal. Users can click on individual projects to find detailed information and project photos.

Treatment of stormwater runoff from impervious cover is important because runoff picks up non-point source pollutants such as sediment and bacteria. The volume of runoff and amount of pollutants increase as impervious cover increases. Pollutants, including nutrients, metals, and bacteria, attach to sediment and are deposited at the bottom where they can harm plants and animals. E. coli bacteria is used as an indicator of contamination with other pathogens and is measured in number of colonies as noted in the Green Infrastructure Dashboard. When bacteria levels are high, human contact can result in sickness. Additionally, reducing bacteria will help the river meet primary and secondary recreation regulations for activities like swimming and paddling.

Traditional stormwater infrastructure detains runoff but does not treat stormwater quality and often results in concentrated flow leaving a site at one point, usually a pipe, and directly into a local creek or river. Green Infrastructure methods however, are built to slow, detain, and filter stormwater runoff.

The River Authority Rebate Program provides incentives to encourage alternative stormwater treatment practices and to offset associated costs while providing education in the form of experiential learning on real projects. Architects, engineers, landscape architects, and contractors have learned design guidelines and construction practices through education the River Authority provides for design, construction inspection, and operations and maintenance of Green Infrastructure.

Green Infrastructure methods and design guidelines have been adopted by the City of San Antonio in the Unified Development Code (UDC). These design guidelines are available in the San Antonio River Basin Low Impact Development Technical Guidance Manual. This manual is available for free at sariverauthority.org.

“In addition to mapping the location of Green Infrastructure projects and providing the cumulative benefits of the features, the dashboard allows viewers to zoom in to neighborhoods and even to specific sites to see the benefits, which are automatically recalculated as viewers zoom in and out.”

– Karen Bishop, Sustainable Infrastructure
Volunteering During a Pandemic

MINNA PAUL, EDUCATION AND VOLUNTEER ENGAGEMENT COORDINATOR

Sheltering and still serving the San Antonio River.

Here are four ways you can enjoy the benefits of the outdoors, help the environment, feel connected, and volunteer with the San Antonio River Authority.

1. **Be a Citizen Scientist using iNaturalist.**
   Whether or not you know your plant and animal species, you can help! Download the free iNaturalist app on a smartphone at [inaturalist.org](http://inaturalist.org), make observations, and learn more about native plants and animals. Citizen scientist observations help researchers document species across the watershed and on restoration projects like the Mission Reach. You can do this in your yard, neighborhood, or along the river.

2. **Engage with the River Authority on social media channels.**
   - Make a difference through photography by sharing meaningful outdoor experiences and images on our social media channels like Facebook, Twitter, and Instagram. Your photos tell stories, inspire change for the better, and create well-being.
   - Like, tag, and share our educational content. @sanantonioriver #beriverproud
   - Share innovative ideas and contribute to thoughtful discussions.
   - If you have skill in video presenting, social media outreach, content writing expertise, or talent in music, art, and storytelling, help us tell our story and inspire sustainability action.

3. **Create your own neighborhood cleanup campaigns.**
   You can prevent non-point source pollutants like trash and dog waste from entering the storm drains and river. All you need are bags, gloves, trash grabbers, and to social distance. Don’t forget to recycle.

4. **Build rain gardens.**
   Learn how to use rainwater from your roof to beautify your property and prevent runoff from carrying pollution by visiting the Sustainability Module at [sariverauthority.org](http://sariverauthority.org).

Once we are able to gather again safely, we look forward to seeing you back at our many onsite volunteer events. Please visit our volunteer page at [sariverauthority.org](http://sariverauthority.org) to connect with us.
The San Antonio River Authority (River Authority) Environmental Sciences Department routinely monitors sites throughout the San Antonio River Watershed from as far north as Bandera County down to Victoria County. These monitoring sites are used to test water quality, stream conditions, aquatic life, and riparian assessments. This information is available to the public through the San Antonio River Watershed Water Quality Viewer, an online interactive map-based viewer.

In the viewer, the user can navigate through the watershed and zoom into areas of interest to find current and historical water quality data near river recreation areas. Each site contains information that includes a summary table with the most recent results for several water quality parameters along with a comparison to their corresponding water quality criteria, descriptive statistics, and photos. A graph of historical results for each parameter along with its pertinent information is also accessible. Users also have the option to download water quality data for their specific need by monitoring station, watershed, and county.

The data in the viewer reflects sites monitored under internal and collaborative projects such as the Clean Rivers Program which strive to maintain and improve the quality of water within each river basin in Texas. The data is used to assess waterbodies, identify water quality trends, support the development of water quality regulations, and develop plans and action programs that protect and enhance the San Antonio River Watershed.

Assessments from the biennial Texas Integrated Report published by the Texas Commission on Environmental Quality can also be found on the Water Quality Viewer. This report assigns integrated levels of support for a variety of water quality parameters based on data availability and analysis. Users can view integrated report assessments from the most recent integrated reports for the following uses: Recreation, Aquatic Life, General, and Fish Consumption.

In the summer months, River Authority scientists closely monitor stream flows, temperature, dissolved oxygen, and nutrient levels. Longer days, higher temperatures coupled with low stream flow, and elevated nutrient levels have the potential to create algae blooms which can create low dissolved oxygen levels that may have a negative impact on aquatic life.

As a result of the COVID-19 pandemic, the River Authority temporarily suspended water quality monitoring in March and April at stream sites throughout the watershed, however, monitoring resumed in May. Water clarity noticeably improved in the River Walk section of the San Antonio River during the coronavirus shutdown. Improvements to water clarity were attributed to lack of stormwater runoff into the river and the suspension of river barge traffic which stirs up sediment.

The Water Quality Viewer and other interactive tools can be found under Maps and Data at sariverauthority.org.
The public health and economic uncertainty we have all been through over the past several months has caused us anxiety, impacted our plans, and truly altered our lives in one way or another. Through these times, residents throughout the basin have found respite from the news of the day by enjoying the beauty and peace provided in nature. The tranquility of the outdoors, whether from the river, parks, and hike and bike trails, has provided an escape from the stress of the current times. More people have been seen enjoying a walk, run, bike ride, fishing, or even a paddle along the river. We are happy to see that our parks and trails have experienced a significant increase in use.

Data from our trail counters show that from the last week of March through the second week of June, the Museum Reach saw thousands more users each week as compared to this same time in 2019. Along the Mission Reach, the increase in trail usage was even more dramatic. For the month of April alone, the Mission Reach had nearly 84% more users than last April. We saw that level of increased use continue through May, only tapering off when the weather got hotter. Paddling along the river also grew exponentially as people (practicing social distancing) took to kayaking to get fresh air, disconnecting from virtual learning and remote work, to relax along the river.

Another interesting side note of the pandemic has been the observation that Stay Home, Work Safe orders had a positive effect on the health and clarity of the San Antonio River itself. Less people on the River Walk and decreased activity along roads and parking lots adjacent to river along with the suspension of the barge traffic resulted in less trash and clearer water allowing passersby to see fish and other aquatic animals more easily. Similar experiences were reported from the all over the world, including the canals of Venice, Italy, and along the River Seine in Paris.

Since mid-March, the San Antonio River Authority has adjusted work schedules both in the office and in the field to ensure the health and safety of our employees. We have continued to advance very important deadlines and projects while adhering to social distancing, sanitation, and wearing of masks. We have created several new virtual offerings to support our education programs and to engage with on social media. Although our employees have enjoyed being innovative, we do miss the direct interaction with members of the community. Stay safe and please enjoy the River Authority’s parks this summer! Visit our Parks and Trails page at sariverauthority.org.