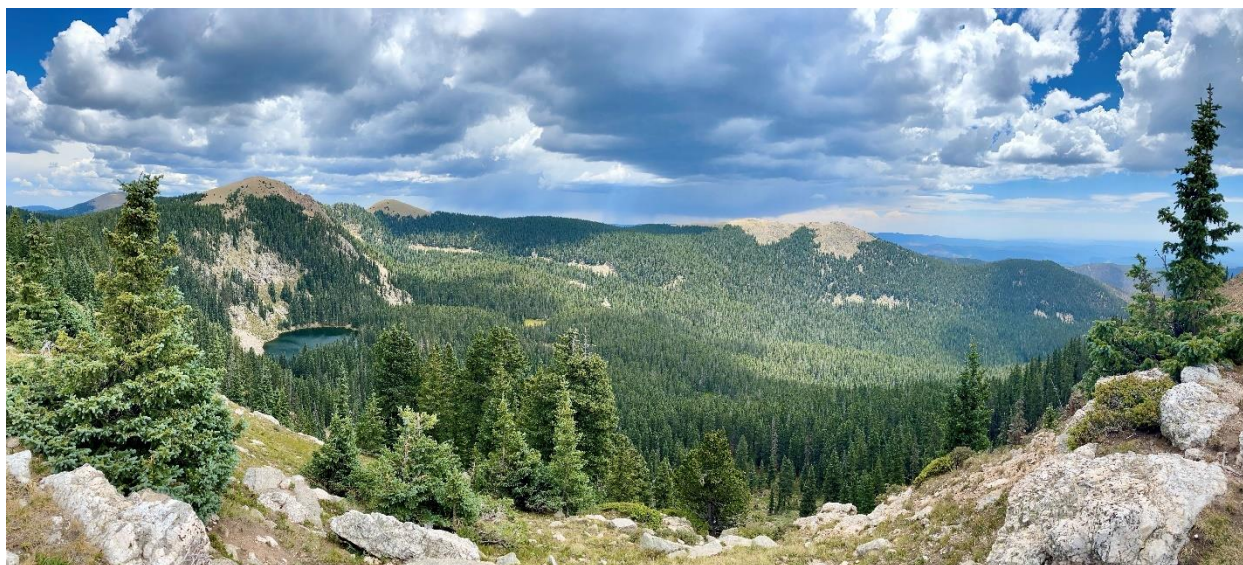


***Building and Sustaining Resilience in the Santa Fe River Watershed  
Santa Fe County, New Mexico***

Proposal to the  
WaterSMART Cooperative Watershed Management Program Phase I for Fiscal Years 2023 and  
2024  
Funding Opportunity Announcement R23AS00362



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## **Executive Summary**

Date: September 2, 2024

Applicant: Santa Fe Watershed Association

Applicant Location: Santa Fe, Santa Fe County, NM

Project Timeline: 3 years, completion September 30, 2028

The Santa Fe River Watershed is a sub-basin of the Rio Grande located almost entirely within Santa Fe County, New Mexico. The Santa Fe Watershed Association (SFWA), an established watershed group with a 27-year track record of collaboration with diverse stakeholders, is proposing to build upon the watershed planning efforts achieved in its previous Phase I CWMP project “Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed” and complete a watershed restoration plan. The stakeholder groups identified in the previous Phase I project included federal, state, county, city, and tribal governments, citizen stakeholder groups, national and local non-profit organizations, grazing associations, and individual citizens. Stakeholder priorities in the previous planning project identified across interest groups were: 1) planning for climate change, 2) protecting native species, 3) protecting water quality, 4) fire management planning in the Upper Watershed, and 5) planning with a greater emphasis on ecological justice and social equality. By incorporating diverse stakeholder values and emphasizing areas of common ground in the next step of planning watershed projects, SFWA will continue to push forward collaborative solutions to complex water supply issues and reduce future conflicts over water. The first goal for the SFWA is furthering watershed group development to include targeted outreach to underserved or represented stakeholder groups identified in the previous project, preparing informative and educational materials, and hosting an annual water conference. The second goal is continued watershed restoration planning tailored to reflect Best Management Practices (BMPs) and the highest priorities of a majority of stakeholders across a very diverse watershed culminating in a watershed restoration plan. The third goal is to identify three potential projects in the Upper, Middle, and Lower Watersheds and prepare site-specific designs to move them toward future implementation.

The project will not be located on a federal facility.

## **Project Location**

The proposed project will focus on the entire Santa Fe River watershed located in Santa Fe County New Mexico (Figure 1). The watershed lies within the Rio Grande Region (Region 13) of the USGS Hydrologic Unit Map (10-digit HUC ID:1302020101). The watershed drains approximately 285 square miles and has a total length of approximately 46 miles.

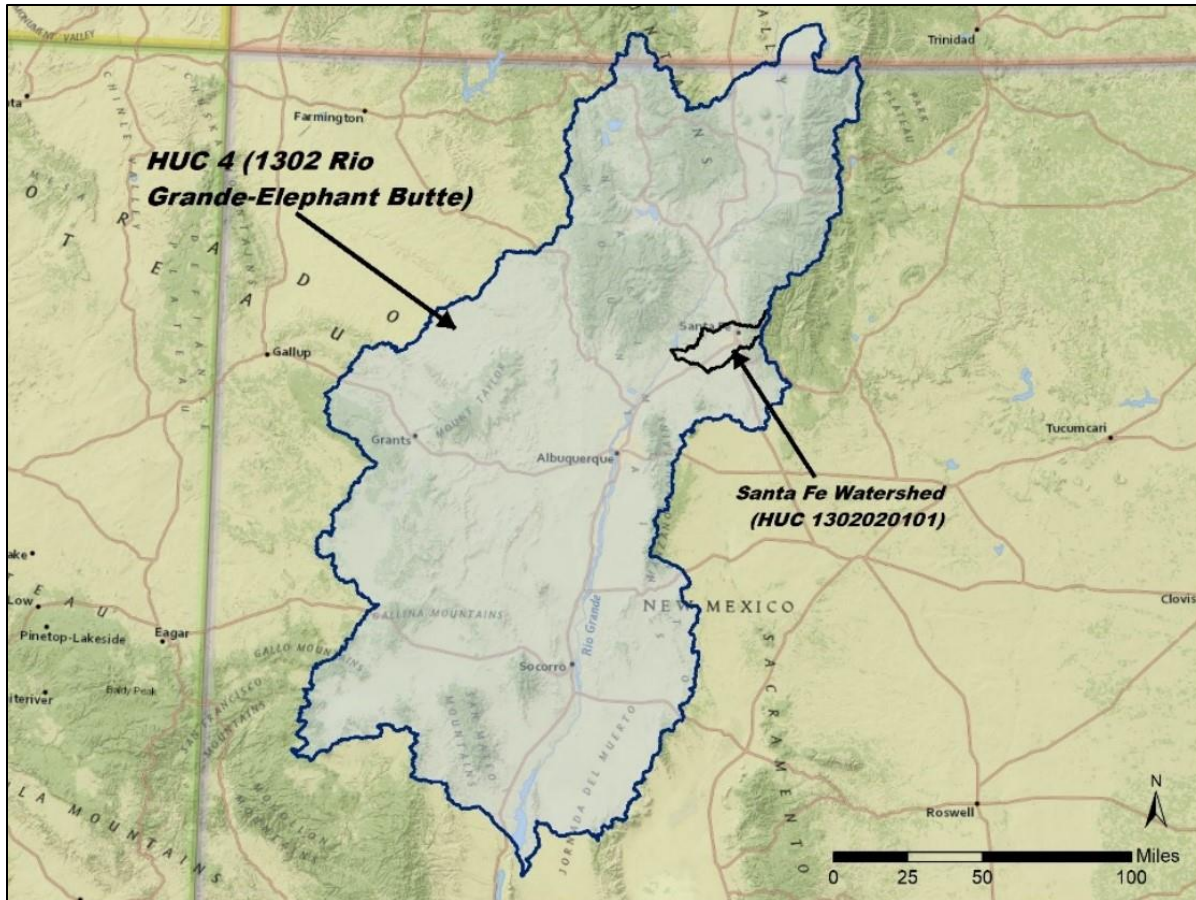


Figure 1. Map showing location of the Santa Fe Watershed (HUC 10) within the larger US Geological Survey Hydrologic Unit Map (HUC 4).

Land use in the Santa Fe watershed includes a mix of wilderness, urban-municipal, agriculture, and grazing. The watershed is often divided into three distinct geographies, the Upper, Middle and Lower Watershed (Figure 2). The SFWA represents the entire HUC 10 watershed and works with diverse groups who have a particular geographic focus. Most stakeholder engagement is observed in the Middle Watershed where most of the water is used for municipal purposes. Based on the stakeholder engagement report, an outreach emphasis to stakeholders in the Lower Watershed needs to be a priority. Outreach to private landowners which were largely absent in stakeholder participation needs to be a priority as well. The land of the Upper Watershed is almost entirely owned by the United States Forest Service (USFS) and has been closed to the public since 1932, while the water is owned and managed by the City of Santa Fe (title page photo). SFWA regularly engages with these two partners but also with communities downstream who are invested in management outcomes.



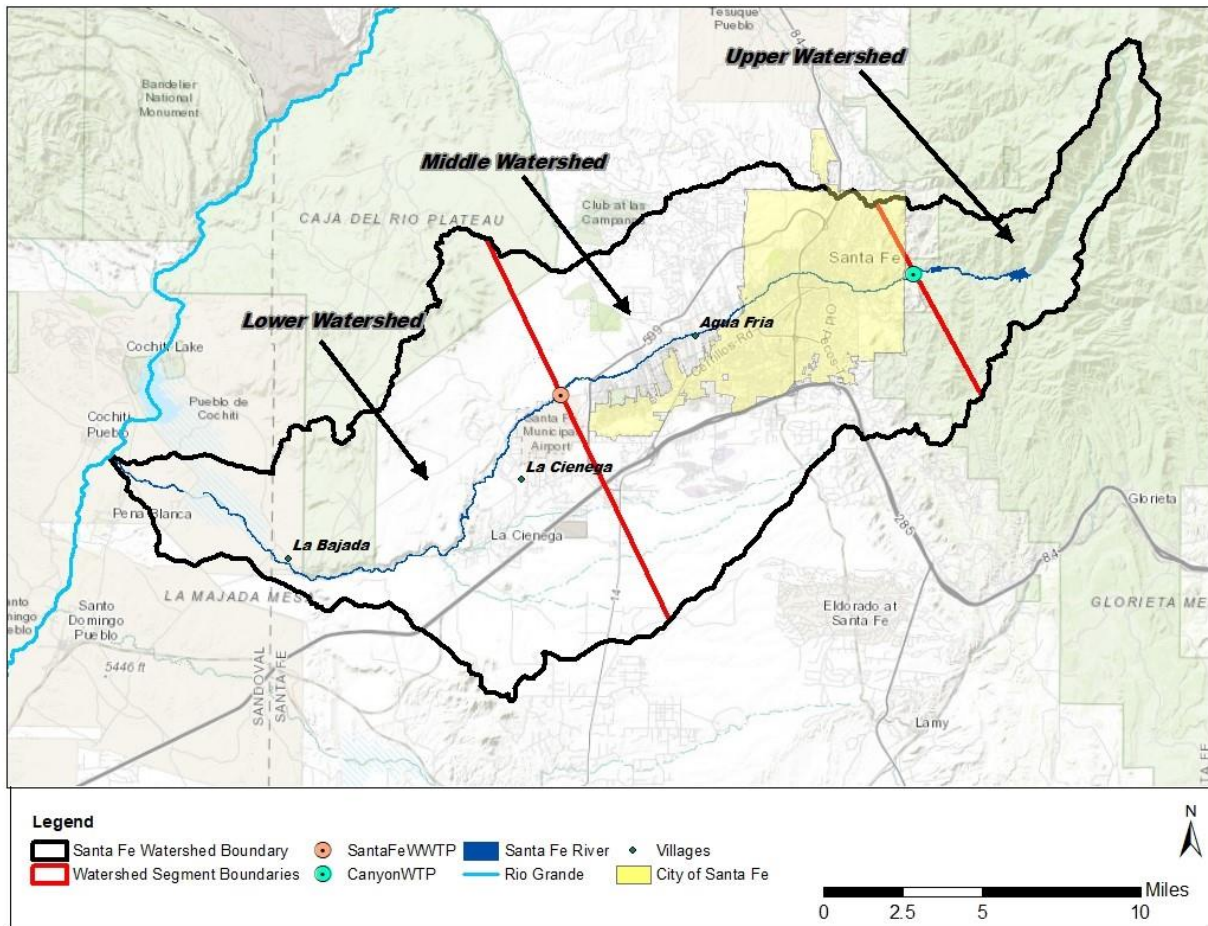


Figure 2. A map of the general Upper, Middle, and Lower Watershed sections.

### Applicant Category

The Santa Fe Watershed Association is submitting this application as an Existing Watershed Group because we are an established, legally incorporated 501c3 entity that has done previous watershed planning and has previously been awarded a Phase 1 CWMP grant.

The mission of SFWA is to build a thriving, resilient Santa Fe River Watershed through collaboration, stewardship, and education that inspires us all to care for our land, water, and each other. From its inception in 1997, SFWA has championed collaboration and centering the Santa Fe River as the literal common ground beneath diverse communities and interests. We have maintained and expanded that reputation for over 27 years as the only entity that works across the entire Santa Fe Watershed to connect issues and communities.

Several of the earliest projects that laid the foundation for ongoing work were:

- The Santa Fe River Greenway and San Isidro Park, started in 1997 and completed in 2007, was made possible through SFWA's work with Santa Fe County and the Village of Agua Fria to close the gravel mine operating in the river bed, stop a US Army Corps proposal to dredge and pave the river for stormwater conveyance, and instead purchase the land and restore the channel through induced meandering and riparian plantings. The Greenway Project now connects to the City of Santa Fe's River Corridor Master Plan, continues to be expanded, and in 2024 received the Santa Fe Reporter's "Best Trail of Santa Fe" award.
- The 2002 Watershed Restoration Action Strategy (WRAS) for the municipal watershed played an essential role in convening the City of Santa Fe and the US Forest Service to begin strategic forest treatments. The WRAS later informed the 2010 Municipal Watershed Plan, which continues to guide treatments and public outreach, with which SFWA has been tasked. SFWA remains the unofficial chair of the municipal stakeholder group which meets quarterly to share updates and has expanded the group to include not just the plan's signatories but also Forest Stewards Guild and the Pueblo of Tesuque.
- The Adopt-the-River program, officially started in 2002 in collaboration with the City of Santa Fe, formed teams of volunteers to lead semi-regular cleanups along the Santa Fe River. Now in its 22<sup>nd</sup> year, the program has evolved into the Adopt Your Watershed program that works with hundreds of volunteers and numerous partners who annually collect thousands of pounds of trash out of the river and its tributary arroyos. Adopt Your Watershed has just recently expanded to offering monthly stewardship workshops and caring for rain gardens around the city as well. The program remains supported by the City of Santa Fe but receives supplemental support from Santa Fe County and numerous local individuals and businesses.

Other accomplishments and ongoing projects include:

- Led and organized stakeholder efforts to pass the *Target Flow for a Living River Ordinance* on February 29<sup>th</sup>, 2012. SFWA remains a strong advocate for a Living River through the Santa Fe River Commission and other collaborative spaces.
- Founding partner and 2024 chair of the Greater Santa Fe Fireshed Coalition
- Regular partner of the City Water Conservation Committee and co-sponsor of the 2020 City Water Conservation Plan
- Administrative support for the Santa Fe River Traditional Communities Collaborative
- Member of the City of Santa Fe's Citizen Advisory Working Group for the Land Development Code update, where we advocate for waterwise, place-based, green infrastructure to be incorporated into code wherever possible
- SFWA works with over 800 Santa Fe 5<sup>th</sup> graders per year (over 11,000 since 2011) in the *My Water, My Watershed* program, a three-day watershed education experience that includes a full day field trip to the municipal watershed (Figure 3).

- Founding member of the Santa Fe Outdoor Education Collaborative with Audubon Southwest and Santa Fe Botanical Garden that provides standards-aligned life science curricula to 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade students throughout Northern New Mexico
- Piloting a middle school life science extension, *Mi Arroyo, Mi Tierra*, which focuses on stormwater and nature “in our backyard”
- We offer numerous teacher trainings, workshops, and curricula support aligned with NM STEM Ready standards and ProjectWET guidelines, and serve as the New Mexico and US-regional representative for ProjectWET.
- Member of the City of Santa Fe’s TreeSmart initiative, focusing on green stormwater infrastructure and riparian plantings
- Regularly advocate for and construct rain gardens throughout the City of Santa Fe, which currently capture over 1 million gallons of stormwater annually (Figure 3)
- Completed previous Phase I CWMP grant: Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed in 2023
- Have a growing list of approximately 2,500 active e-newsletter subscribers, 1,900 followers on Instagram, and 2,100 followers on Facebook

The Santa Fe River Watershed has a distinctive challenge in that there exist numerous passionate stakeholders with diverse interests, but these interests often exist in isolation leading to more potential for conflict in pursuit of watershed restoration solutions. It is imperative that all stakeholder groups are informed and encouraged to seek collaborative solutions. The SFWA is uniquely positioned to serve as an bridging organization, providing reliable information, strengthening connections, and ensuring diverse stakeholders are equally represented in planning and implementation efforts.



Figure 3. Examples of SFWA's programming. Left: Fifth graders explore benthic macroinvertebrates in the Upper Watershed. Right: Workshop attendees learn about rain garden design and maintenance in the Middle Watershed.

### **Eligibility of Applicant**

The Santa Fe Watershed Association qualifies as an Existing Watershed Group because we are an established, legally incorporated 501c3 entity in Santa Fe, New Mexico that has done previous watershed planning and has previously been awarded a Phase 1 CWMP grant. We are committed to expanding our role as a convener of diverse stakeholders, interests, and geographies through this watershed planning process and establishing more formal gathering opportunities. This work can also be described as "sponsoring the development of a watershed group," as outlined in the Eligibility Criteria. Furthermore, as a community-based organization focused entirely on the Santa Fe River Watershed, we are significantly affected by the quality and quantity of water. Finally, we are capable of promoting sustainable use of water resources, as we have demonstrated through our numerous initiatives and partnerships over the last 27 years.

SFWA works with numerous collaborative forums, both formal and informal, throughout the watershed (e.g., City River Commission, County Water Policy Advisory Council, Santa Fe River Traditional Communities Collaborative, Greater Santa Fe Fireshed Coalition) that have specific interests or geographic constraints. What SFWA offers is the unique ability to connect these



different forums and lean on our trusting relationships with individuals and entities formed over many years.

The current proposal builds upon and does not duplicate the watershed planning efforts achieved in “Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed”. It furthers SFWA’s commitment to participants and other stakeholders and the previous investment of the WaterSMART program. After completion of the stakeholder process from the previous grant, SFWA is uniquely positioned to integrate stakeholder priorities into a watershed restoration plan. SFWA can become a clearinghouse or “faucet” for the well of information that exists across multiple stakeholder groups. We are committed to pursuing planning tasks that recognize a greater emphasis on ecological justice and social equality while addressing climate change adaptation strategies.

### **Project Description**

A watershed restoration plan will be completed through continued stakeholder engagement to further watershed planning efforts. The goals of the project are:

#### **Goal 1: Further Watershed Group Development (CWMP Task A)**

- a. Gather, organize, synthesize, and share planning documents and existing projects from different stakeholder organizations to provide a clearinghouse for stakeholders watershed-wide. Links and documents will be available on the SFWA website.
- b. SFWA will create and make available summary table showing the synergy between plans that address priorities identified by stakeholders. The same will be created for educational programs in the watershed and available Best Management Practices (BMPs). Summary tables and BMPs will be updated and shared on the SFWA website.
- c. SFWA will create at least three BMP documents that are specific to Santa Fe Watershed stakeholder needs.
- d. SFWA will continue to collaborate with watershed stakeholders through planning activities.
- e. SFWA will conduct targeted outreach to reach stakeholders who have felt left-out of the information loop. By investing in sustained relationships with stakeholder communities that typically receive less attention, the SFWA will ensure that all stakeholders have a place at the table.
- f. As part of this goal, the SFWA will convene two watershed conferences in order for stakeholders to participate in the planning process.

#### **Goal 2: Watershed Restoration Planning (CWMP Task B)**

- a. The SFWA will consolidate information from the previous goal into a watershed restoration plan.
- b. The plan will be informed by information gathering, stakeholder outreach and feedback, and on-the-ground assessments. Apply information obtained from activities in Goals 1

and 2, along with feedback from stakeholders to identify potential projects in the Upper, Middle and Lower Watersheds.

Goal 3: Watershed Management Project (CWMP Task C)

- a. Prepare site-specific project designs for three projects (one in each watershed designation) to move them closer to potential implementation (such as in Figure 4).

All goals are created based on the following recommendations for managers and community members in the *Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed* report. The report provides detailed analysis of data from the stakeholder survey and extensive interviews.

1. Emphasize the synergy across interests in watershed priorities such as water security and flow, climate change, stormwater management, and groundwater recharge (Goal 1).
2. Take time to understand the nuances in perspectives and priorities related to wildfire and forest management, water rights, water quality, and water infrastructure (Goals 1, 2 and 3).
3. Beware of assumptions of opposition across traditional interest groups (Goal 2).
4. Facilitate engagement across stakeholders early and throughout deliberation processes for input and collaboration (Goal 2).
5. Ensure proactive government-to-government dialogue and negotiations over water issues with Pueblos (Goals 1 and 2).
6. Provide and seek out cultural literacy training and information to support deepening interactional capacity (Goals 1 and 2).
7. Build interactional capacity for watershed resilience by catalyzing collaboration, taking time to build trusting relationships around shared goals, and integrating diverse ways of knowing (Goals 1, 2 and 3).



Figure 4. Volunteers help construct a rain garden along the Santa Fe River in the Middle Watershed.

To further watershed group development, SFWA will spend the first year of the grant gathering, organizing, synthesizing, and sharing planning documents, research, and existing projects from different stakeholder organizations to provide a clearinghouse for stakeholders watershed-wide. We envision creating a matrix that links planning documents to identified stakeholder goals. From this exercise it should be apparent where overlap and gaps occur. Documents will be available on the SFWA website. The same will be created for educational programs in the watershed and available Best Management Practices (BMPs). Using the matrix, SFWA will produce at least three BMPs for practices specific to the Santa Fe River Watershed and make these available to stakeholders and policymakers.

Ongoing efforts to engage established SFWA partners will continue, and concentrated efforts will be made by SFWA staff to meet with stakeholders identified in the previous project who often felt underrepresented such as Tribes, traditional communities, and individual private landowners. These meetings will occur face-to-face, at the stakeholders' choice of time and location. Finally, SFWA proposes to convene two watershed conferences in years 2 and 3 of the project to share draft watershed restoration plans informed by previous stakeholder meetings. The first conference will have a speaker from each watershed region (Upper, Middle, Lower) in

the morning, and breakout groups in the afternoon. The second conference will follow a similar format but focus groups will specifically solicit ideas for site-specific restoration designs.

Watershed restoration planning will occur in three phases. The first phase will consolidate information from Goal 1 and present a draft to stakeholders at the first conference. The second phase will be informed by stakeholder feedback and on-the-ground assessments and will result in a draft presented at the second conference. The third phase will be completed with a final watershed restoration plan incorporating stakeholder priorities coupled with information gained from on-the-ground assessments. The Upper and Middle watershed regions will be assessed in year 1 and the Middle and Lower regions will be assessed in year 2. The Middle Watershed includes the City of Santa Fe and has a complicated stakeholder and regulatory landscape. Therefore, SFWA has estimated more time will be spent on assessments in the Middle Watershed.

Based on stakeholder-identified potential projects from the water conferences, SFWA will work to prepare one site-specific restoration design for each watershed region. The goal will be to have project plans with sufficient design specificity, financial details, and community support to be ready to propose for funding and implementation.

## **Evaluation Criteria**

### **Evaluation Criteria A – Watershed Group Diversity and Scope**

#### **Watershed Group Diversity:**

Since 1997 the SFWA has been engaging with a wide array of stakeholder groups including, but not limited to Santa Fe Public Schools, various private and charter schools, various neighborhood associations, village councils, acequias, pueblos, non-profit organizations, and many federal, state and local government agencies and departments. There is no formal membership for the Santa Fe Watershed Association. The SFWA has a staff of 7 led by an Executive Director (ED). The ED and staff are overseen by a board of directors (BOD) who are chosen by the ED, board president, and a unanimous BOD vote. The SFWA receives funding from a mix of individual donations, foundation grants, government grants, and contracts. While the government agencies are focused on water quantity, quality, and delivery, many community members have a more nuanced interest in water issues that include ecological resilience and adaptation in the face of climate change. Ecological justice and social equality in water management are also important to many stakeholders in the Santa Fe Watershed. Letters of support from 24 partners accompany this proposal.

A list of Santa Fe Watershed stakeholders within different geographic segments of the watershed is provided in Table 1, and a map showing land ownership across the HUC 10 watershed is provided in Figure 5. This list in Table 1 represents stakeholders with whom SFWA has collaborated or interacted with to varying degrees. It also contains stakeholders who require concerted outreach efforts as described in Goal 1.



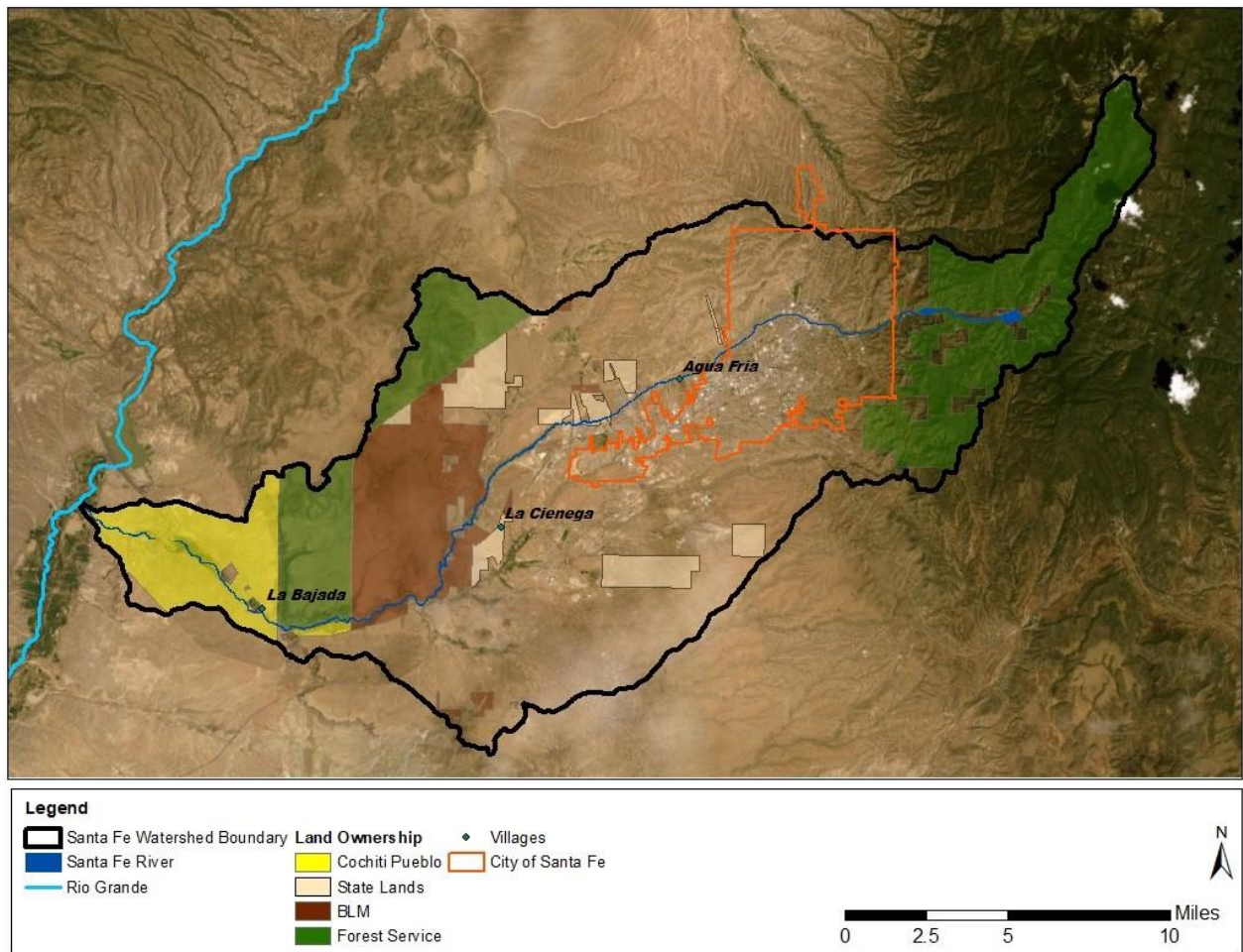


Figure 5. A map of major land ownership in the Santa Fe Watershed.

Table 1. Known Stakeholders Across Upper, Middle and Lower Watershed Regions

Upper Watershed	Middle Watershed	Lower Watershed
Canada de los Alamos Canyon Neighborhood Association Acequia del Llano Acequia Cerro Gordo Acequia de la Muralla Acequia Madre Greater Santa Fe Fireshed Coalition St. John's College UNM – Biology NM Forest and Watershed Restoration Institute	Canada de los Alamos Canyon Neighborhood Association Homeowners Associations Acequia del Llano Acequia Cerro Gordo Acequia de la Muralla Acequia Madre Greater Santa Fe Fireshed Coalition St. John's College Village of Agua Fria S3 Housing Initiative Santa Fe Fat Tire Society Santa Fe Metropolitan Planning Organization Santa Fe Public Schools Santa Fe River Commission Santa Fe Water Conservation Committee Private landowners	El Valle de La Cieneguilla Land Grant Village of La Cienega Village of La Bajada La Cienega Valley Association Acequia de la Cienega Acequia El Guicu Caja del Rio Livestock Association Caja del Rio Coalition El Rancho de las Golondrinas Ojo Santa Fe Santa Fe Girls School Santa Fe River Traditional Communities Collaborative Private landowners
Nonprofits (Forest Stewards Guild, National Forest Foundation, Audubon Southwest and Randall Davey Audubon Center, The Nature Conservancy, New Mexico Wilderness Alliance, WildEarth Guardians, Defenders of Wildlife, Xerces Society, Sierra Club, American Rivers, Santa Fe Conservation Trust, New Mexico Land Conservancy, New Mexico Acequia Association, Amigos Bravos, Rio Grande Return, Keep Santa Fe Beautiful, Santa Fe Watershed Association)		
Federal (US Forest Service, US Geological Survey, US Bureau of Reclamation, US Bureau of Land Management, US Environmental Protection Agency, US National Guard)		
State of New Mexico (State Land Office, NM Environment Department, NM Energy, Minerals, and Natural Resources Department)		
Tribal (Pueblo de Cochiti, Pueblo of Tesuque, Jemez Pueblo, Pojoaque Pueblo, Nambe Pueblo, Kewa Pueblo)		
Local Government (City of Santa Fe, Santa Fe County, Sandoval County, Pojoaque Soil and Water Conservation District)		

SFWA continues to connect with additional stakeholders across the HUC 10 watershed that would more fully round out the complement of perspectives represented within different watershed segments. Based on the previous stakeholder project (Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed), there is more work

to be done to interact with under-represented groups particularly in the Lower Watershed. Engaging with stakeholders in the Lower Watershed, including Tribal stakeholders, will take a concerted effort. In-person meetings and direct communications will be the best approach to build trust with under-represented groups.

### Geographic Scope:

The Santa Fe River watershed is a sub-basin of the Rio Grande located almost entirely within Santa Fe County, New Mexico, with the westernmost end in Sandoval County and Pueblo de Cochiti (Figure 6).

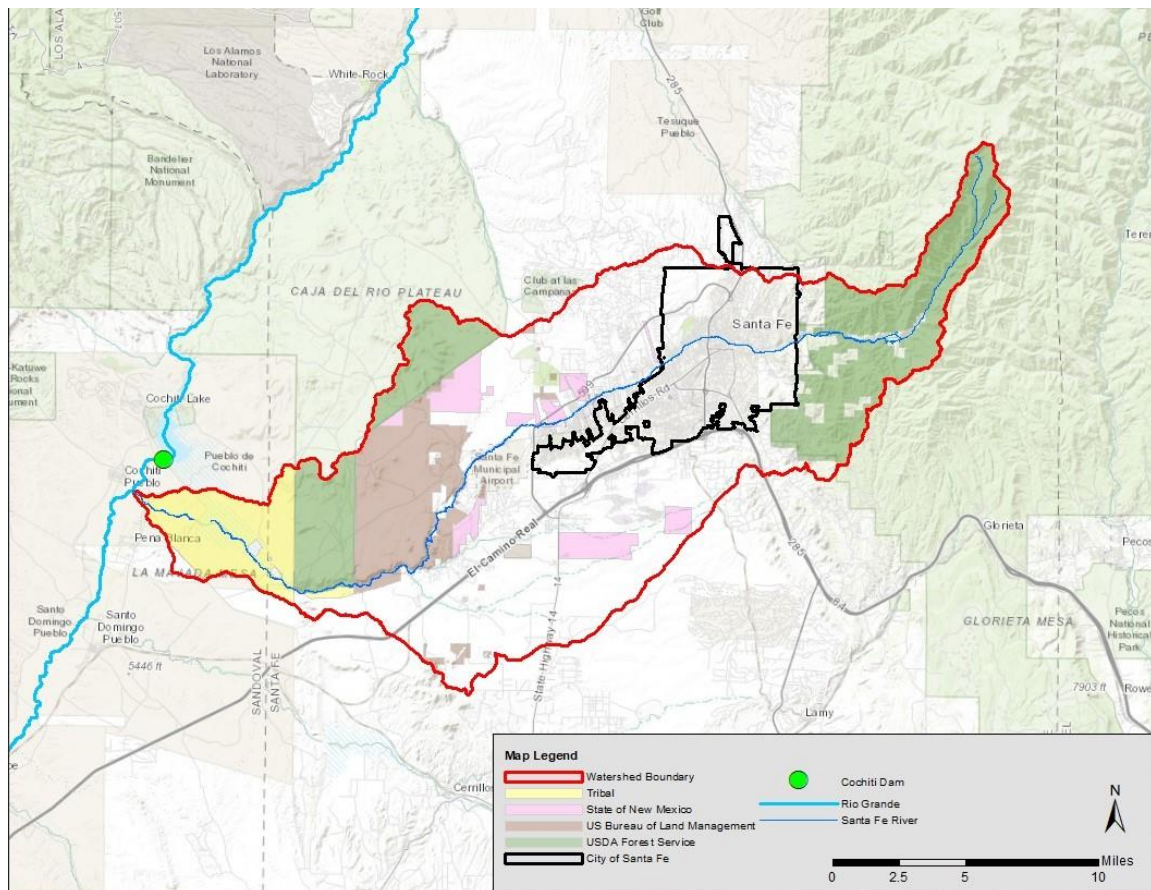


Figure 6. Location of the Santa Fe River Watershed.

Its headwaters are located on the eastern slope of the Sangre de Cristo Mountains near Lake Peak (elevation 12,409 ft) within the Santa Fe National Forest (SFNF). Below the mountains the Santa Fe River courses west/southwest through the City of Santa Fe (City), several small villages in Santa Fe County and eventually through the Pueblo of Cochiti before joining the Rio Grande below Cochiti Dam (elevation 5,227 ft). The watershed drains approximately 285 square miles. The total length of the Santa Fe River is approximately 46 miles. In many ways the Santa Fe

Watershed is an ideal model watershed because it encompasses so much diversity in a relatively small and contained area.

While a great deal of water planning has been focused within the boundaries of the City of Santa Fe, the SFWA strives to work with stakeholders from the high peaks in the Upper Watershed to the Rio Grande. As an established watershed group having relationships with many different communities and interest groups throughout the watershed, the Santa Fe Watershed Association is uniquely positioned to steward watershed planning discussions and provide support for the benefit of all affected parties. In this project, the SFWA would like to identify at least three site-specific project designs for improving ecosystem services to improve resilience in the face of climate change. Based on stakeholder input on the location of potential projects, the SFWA would like to have a shovel-ready design in each of the three watershed designations that could be implemented when funding becomes available.

#### Evaluation Criteria B – Developing Strategies to Address Critical Watershed Needs

##### Critical Watershed Needs or Issues:

The SFWA documented critical issues affecting the watershed in our previous Phase I CWMP grant, “Stakeholder Priorities, Water Management, and Adaptation Strategies in the Santa Fe River Watershed,” completed in 2023. The unifying issues mentioned across stakeholders and interest groups were planning for climate change, protecting native species, ensuring pollution standards compliance (improving water quality), greater emphasis on ecological justice and social equity, and fire management and planning in the Upper Watershed. Because the Greater Santa Fe Fireshed Coalition (GSFFC) focuses specifically on fire management and planning, that priority will not be addressed specifically in the watershed restoration plan. Even as we recognize its importance, the GSFFC is well positioned to lead this endeavor.

Perhaps the most significant critical issue identified by the previous Phase I CWMP project was that the watershed community as a whole demonstrated “low interactional capacity,” meaning that even when there are points of agreement among diverse stakeholders, they are not interacting, not collaborating, and are often assuming strong opposition from other interest groups. This low interactional capacity means that the watershed community is less resilient and there is an unproductive duplication of efforts due to lack of communication and trusting relationships. This is the primary critical issue SFWA is trying to address with this proposal because we believe no other issue can be genuinely addressed without more genuine interaction and collaboration among diverse stakeholders.

Improving interactional capacity in the watershed is more urgent than ever, because there are numerous, interconnected issues that will require diverse community partners to address.

- In the Upper Watershed, issues include:
  - Fire and post-fire risks
  - Community concerns about forest management and prescribed fire



- Incorporating slope and riparian wetland health into forest treatments
- Questions of access and recreation opportunities
- Habitat connectivity
- Community priorities of (sometimes opposing) ecosystem services
- In the Middle Watershed, issues include:
  - Stormwater, water conservation, and outdoor irrigation
  - Urban heat island
  - Invasive species (vegetation)
  - Erosion and soil degradation
  - Adaptation and management of the Living River Ordinance
  - Habitat and recreational connectivity
  - Housing, population, and urbanization
- In the Lower Watershed, issues include:
  - Water quality (Forever chemicals, effluent, septic systems, stormwater, erosion and sedimentation)
  - Water scarcity
  - Wetland degradation
  - Stakeholders being left out of larger planning efforts

There are numerous plans in place or being developed to address some of the issues listed above, but they are not necessarily consistent or connected and may be duplicative or even contradictory. Examples of such plans include: the City of Santa Fe General Plan Update (underway, starting with Land Development Code), City of Santa Fe Stormwater Plan, City of Santa Fe Water2100 (underway), 2010 Municipal Watershed Plan, 1995 Santa Fe River Corridor Master Plan, Santa Fe County Sustainable Land Use Code, and Santa Fe County's community development plans (underway). These planning processes all will likely impact the watershed and the issues it faces, so this is a critical time to support consistency and strategic management through a comprehensive watershed restoration plan. Similarly, studies underway in academic spaces that could help inform planning and management are not effectively reaching stakeholders and policymakers.

The guiding document for City and County water supply planning remains the 2015 Santa Fe Basin Study, funded by the US Bureau of Reclamation. The Study culminated in a series of adaptation strategies and management recommendations including: direct/indirect reclaimed water reuse; water conservation; direct injection for aquifer storage and recovery, infiltration for aquifer storage and recovery in the Santa Fe River, and additional surface water rights. Embedded within each of these are a variety of individual issues and challenges that need to be explored with genuine from impacted stakeholders who often hold conflicting values and concerns. Genuine and productive stakeholder engagement remains a challenge for the City and County. Having the support of community partners, clear BMPs, and a cohesive watershed plan to build from could prove vital. Creating a community framework that builds toward shared goals will help reduce the potential for future conflicts over water quality, quantity, and

equity. Unsurprisingly, no new sources of water are expected to materialize, making it all the more important to build upon existing efforts that ensure resilience is at the forefront.

### *Project Benefits*

To improve the interactional capacity and collaboration of stakeholders in the Santa Fe River Watershed, the SFWA would like to prepare a watershed restoration plan that incorporates strategies for management for the most commonly mentioned water issues and concerns expressed across all stakeholder interest groups. Infrastructure and water delivery issues will be left to the purview of government agencies. Fire management and planning will be left to the Greater Santa Fe Fireshed Coalition. The SFWA plan will address stakeholder concerns about water quality and ecosystem health. Beyond the common issues of water flowing in the river and having healthy habitat and ecosystems, recognizing stakeholders from the Lower Watershed and ensuring that their voices are heard is essential for creating a plan for future watershed resilience.

To support interaction, understanding, and collaboration across the watershed, SFWA strives to be a reliable source of information for all watershed dwellers from the mountain peaks in the Upper Watershed, through the urban Middle Watershed, to the confluence with the Rio Grande in the Lower Watershed. An online system where any stakeholder can understand how the different plans of stakeholder groups address their specific concerns will be established, as well as a clearing house of educational activities for the community and Best Management Practices (BMPs). A water conference will be held in the second and third years of the project to engage stakeholders and solicit their thoughts about watershed planning efforts and potential projects. Finally, to demonstrate that the watershed planning efforts are for the purpose of moving onward to on-the-ground improvement projects, SFWA will design a project in each of the watershed areas that could be implemented with future funding from the BOR Implementation grant program.

Three potential projects would be designed by SFWA technical staff in collaboration with stakeholders, as outlined in Goal 3 (CWMP Task C). The most likely project in the Upper Watershed will be focused on slope wetland health as a means to improve ecosystem services in the mountains above Santa Fe. Location of the potential project would be based on input from stakeholders and a baseline assessment of potential project sites. The project in the Middle Watershed would likely focus on recreational activities in the urban watershed with an emphasis on protecting water quality (Figure 7). The third project in the Lower Watershed will, by necessity, be informed by engaging stakeholders in that area and listening to their ideas. Potential projects could be anything from modifying existing livestock use to working to restore or enhance endangered cienega wetland habitat.

Stakeholders will benefit from the engagement, education, collaboration, and identification of potential implementable projects in their portion of the watershed. The watershed plan and associated educational components will act as a catalyst for stakeholder activities that

positively impact watershed health and resilience. An abundance of small projects initiated by stakeholders following BMPs can have a significant collective positive impact.



Figure 7. Santa Feans enjoying the Santa Fe River Trail near Frenchy's Field in the Middle Watershed.

Evaluation Criteria C – Readiness to Proceed

Table 2. Project Schedule and Milestones

	2025	2026				2027				2028		
Project Components	Q4	Q 1	Q2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3
<b>1. Project Administration</b>												
a. Quarterly Financial Reports (MH)												
b. Quarterly Progress Reports (MW)												
c. Performance Reports (MW)												
d. Final Report (MW/MH)												
<b>2. Further Watershed Group Development</b>												
a. Outreach (MH)												
b. Field Meetings (MW/MH)												
c. Annual Gathering (All SFWA Staff)												
d. Assemble Existing Plans and Materials (MW/MH)												
e. Prepare Existing Plan Matrix (MW/MH)												
f. Prepare Education Material Matrix (JH)												
g. Prepare BMP Matrix (MW/MH)												
h. Produce 3 Needed BMPs (MW/MH)												
i. Produce Watershed Plan (MW/MH)												
<b>3. Watershed Restoration Planning</b>												
Identify Stakeholder Projects (MW/MH)												
a. Upper Watershed												
b. Middle Watershed												
c. Lower Watershed												
<b>4. Watershed Management Project</b>												
Design 3 Implementation Projects (MW/MH/ Contract Hydrologist)												

Blue = Work ongoing

Green = Milestone achieved

MW = Mollie Walton; MH = Mori Hensley; JH = Julie Hasty



New policies and/or administrative actions may be required to implement the plan based on project locations. Land ownership will dictate necessary administrative actions that must be considered prior to any implementation on the ground. For example, depending on the project goals, these could be archaeological surveys, wetland delineations, and United States Army Corps of Engineers (USACE) permits.

#### Evaluation Criteria D – Presidential and Department of the Interior Priorities

##### Climate Change

Stakeholders expressed a desire to engage in watershed planning to address climate change. There are many avenues of addressing climate change in the watershed that include education, such as making available to stakeholders implementable Best Management Practices for land and water management. These BMPs are scalable for different ownership parcels including private land. A baseline assessment of potential wetland and stream restoration projects will address resiliency of these ecosystems in the face of climate change. Holding water in the landscape longer through restored wetland function can reduce wildfire risks and provide climate refugia for wildlife species. In urban areas, more greenspace and heat island mitigation is possible through implementation of green infrastructure. Improving recreation and connectivity in the urban watershed, especially around natural corridors such as the river and arroyos, improves awareness of water and water quality. Reduction of wildfire risk directly impacts the climate by keeping forest carbon sequestered and out of the atmosphere. Improved stakeholder interaction and collaboration across the watershed will improve community resilience and shared response to challenges that become more likely as the climate continues to change.

##### Benefits to Disadvantaged, Underserved, and Tribal Communities

Land ownership in the Upper Watershed is USFS and does not qualify as an underserved community; however, long before the Upper Watershed was part of the Santa Fe National Forest it was stewarded and occupied by Tewa, Keres, and Towa Pueblos. These tribal partners remain invested to this day, and SFWA sees their involvement as an essential component of present and future management of the Upper Watershed. Furthermore, land conditions in the Upper Watershed impact communities lower in the watershed. In particular, any actions that reduce wildfire risk in the forested watershed and improve water-holding capacity in the face of reduced snowpack will positively impact the surrounding communities.

In the Middle Watershed, significant tracts are considered disadvantaged, low-income communities at high risk for wildfire (>90<sup>th</sup> percentile). Other environmental justice issues communities in the Middle Watershed face are worsening air quality, stormwater impacts, urban heat island, and access to greenspace. Community engagement and an emphasis of green stormwater infrastructure and recreational projects will benefit these communities through improved connectivity and climate-resilient greenspace.

In the Lower Watershed, there are communities that are low-income, subject to very high wildfire risk, and which are additionally at high risk for agricultural losses (97<sup>th</sup> percentile). Furthermore, Lower Watershed communities including a traditional Land Grant community, Acequias, and the Pueblo de Cochiti, face water quality impacts from the City of Santa Fe's wastewater treatment plant, stormwater conveyance, septic leaching, and a forever chemical plume at the National Guard facility. Prioritizing greater interaction and inclusion of Lower Watershed stakeholders will benefit a more holistic approach to watershed management that does not just send problems further downstream. Focusing on wetland restoration, for example, can provide tangible benefits to water quality and ecological resilience.

Best Management Practices that can be implemented on a small scale and replicated across the watershed can have a significant impact on water quality and quantity and also mitigate the risk of wildfire. There could also be some job creation as people are trained to implement these practices (such as erosion control and water harvesting structures).

#### *Tribal Benefits*

Engaging with Tribal stakeholders is a focus of project outreach. Trust building is imperative, as is listening to Tribal priorities for watershed planning and project implementation. Until SFWA is successful in initiating a sustained dialogue with the Pueblo stakeholders, it is not possible to know if proposed projects will support Reclamation's Tribal trust responsibilities or a Reclamation activity.

#### **Environmental and Cultural Resource Compliance**

This proposal is for planning and assessment and is therefore not applicable to the impacts listed below.

- The proposed project will not directly impact the surrounding environment through earth disturbance.
- No endangered species will be directly affected by the proposed project.
- It is unclear whether the wetlands in the Santa Fe River Watershed are still considered Waters of the US after the Sackett decision, but they will not be directly affected by the proposed project regardless.
- The Santa Fe River Watershed has numerous water delivery systems constructed at various time between 1610 and 2024, but none will be directly affected by the proposed project.
- The proposed project will not result in any modification or effects to any irrigation system.
- There are numerous structures and sites in the project area that are on the National Register of Historic Places, but none will be directly affected by the proposed project.
- There are numerous known archaeological sites in the project area that are on the National Register of Historic Places, but none will be directly affected by the proposed project.

- The proposed project will not have a disproportionately high and adverse effect on low income and minority populations. Rather, the hope is this planning effort will prioritize centering and benefiting low income and minority populations through improved community outreach practices and resulting projects that will support better water quality and quantity among other watershed benefits.
- The proposed project will not limit access to, and ceremonial use of, sacred sites or result in other impacts on Tribal lands. Rather, the hope is that this planning effort will encourage more respectful engagement and collaboration with Tribes and sacred sites.
- The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area. Rather, the hope is this planning effort will support future efforts to restore native ecosystems and remove invasive species wherever possible.

### **Required Permits or Approvals**

The Santa Fe Watershed Association will seek permission from landowners to be on site. Because this is a planning project, no permits or approvals should be required.

### **Overlap or Duplication of Efforts**

An overarching goal of this project is to identify efforts of different stakeholder groups in the watershed and to reduce overlap of efforts and to eliminate duplication of efforts across the Santa Fe River Watershed's many stakeholder groups.

