



## Agenda

Regular Meeting of the Water  
Conservation Committee  
August 19, 2025 at 4:00 PM  
Councilor's Conference Room,  
City Hall 200 Lincoln Avenue

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### Procedures for Water Conservation Committee Meeting

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Approval of Minutes
  - a. Request for the Approval of the June 10, 2025 Water Conservation Committee Meeting Minutes.
5. Presentations
  - a. General plan update (Heather Lamboy, Land Use Director, [hllamboy@santafenm.gov](mailto:hllamboy@santafenm.gov), 505-955-6598)
  - b. Santa Fe Watershed Association Annual Report (Julie Hasty, Director of Education of the Santa Fe Watershed Association, [julie@santafewatershed.org](mailto:julie@santafewatershed.org), 505-820-1696)
  - c. Water Conservation Program Update (Christine Chavez, Water Conservation Manager, [cychavez@santafenm.gov](mailto:cychavez@santafenm.gov), 505-955-4219)
6. Action Items
7. Discussion Items
8. Matters from Staff
9. Matters from the Committee
10. Matters from the Chair
11. Matters from the Public
12. Next Meeting: September 9, 2025

13. Adjourn

Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6521, five (5) working days prior to meeting date.

**Regular Meeting of the Water Conservation Committee  
June 10, 2025 at 4:00 PM  
Councilor's Conference Room, City Hall  
200 Lincoln Avenue  
MINUTES**

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1. Call to Order

4:02pm

2. Roll Call

Members Present:

Chair Councilor Carol Romero-Wirth

Member Bill Roth

Member Brandon Vella

Member Beth Kirby

Member Evan Ripley

Member Lori Rochelle

Member Abby Feldman

Member Robert Coombe

Member Navona Gallegos

Members Excused:

Member Autumn Leiker

Member Reese Baker

Others Attending:

Christine Chavez, Liaison Water Conservation Manager

Patricio Pacheco, Liaison Water Conservation Staff

Robert Wood, Water Conservation Staff

Alan Hook, Water Resources and Conservation Staff

Ramon Coriz, Water Conservation Staff

Mori Hensley, Santa Fe Watershed Association

Cora Cliburn, Santa Fe Watershed Association

Glenn Schiffbauer, Santa Fe Green Chamber

Stephen Schmelling, Water Policy Advisory Committee member

3. Approval of Agenda

Member Bill Roth moved, seconded by Member Brandon Vella, to approve the agenda as amended.

4. Approval of Minutes

- a. Request for the Approval of the May 13, 2025 Water Conservation Committee Meeting Minutes

Member Bill Roth moved, seconded by Member Beth Kirby, to approve the minutes as presented.

5. Presentations

a. Water Conservation Program Update (Christine Chavez, Water Conservation Manager, cychavez@santafenm.gov, 505-955-4219)

b. Next Generation Water Summit Roundtable (Christine Chavez, Water Conservation Manager, cychavez@santafenm.gov, 505-955-4219)

6. Action Items

7. Discussion Items

a. 10-year Water Conservation Plan Subcommittee Report Out (Christine Chavez, Water Conservation Manager, cychavez@santafenm.gov, 505-955-4219)

Removed item as amended committees did not meet this month.

8. Matters from Staff

9. Matters from the Committee

10. Matters from the Chair

11. Matters from the Public

12. Next Meeting: July 8, 2025

13. Adjourn

6:00pm

*christine chavez*

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Liaison

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Chair



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santafewatershed.org



## **Santa Fe Watershed Association Educational Programming Fiscal Year 2025 Report**

Work completed under Santa Fe's 20-year Municipal Watershed Plan approved by City Council September 2009 (Resolution No. 2009-87)

Munis Contract # 3203114

FY25 Purchase Order #22500319

*Report prepared by the Santa Fe Watershed Association – **June 28, 2025***

### **Summary**

The Santa Fe Watershed Association (SFWA) has been tasked with implementing education and outreach programs under the 20-year Municipal Watershed Management Plan in partnership with the City of Santa Fe, U.S. Forest Service, and The Nature Conservancy. **Since Fall 2010, the Santa Fe Watershed Association has served approximately 13,539 participants with nearly 48,605 contact hours of Upper Watershed education programming.**

Under the Sole Source Contract with the City of Santa Fe, the Santa Fe Watershed Association (SFWA) is responsible for carrying out water education on behalf of the City Water Conservation Department to meet their Scorecard Goal 1: Education, Outreach, and Communication. SFWA does this by collaborating closely with the Water Conservation Department and regular communication with the Water Conservation Committee, developing a strong partnership to reach the goals of all invested. SFWA programs are developed to deepen participants' understanding of water supply, management, and make connections to the "why" of water conservation in Santa Fe. Programming includes: the 5th grade My Water, My Watershed program; the 6th grade Mi Arroyo, Mi Tierra curriculum unit; teacher professional development workshops; Watershed Community Science and Monitoring education; Rainwater Harvesting curriculum; the NM Climate Masters course; and Municipal Watershed Adult Hikes. In addition, SFWA offers assistance and support of education programming and outreach to the City Water Conservation Department.

Water education and outreach are important tools that activate water conservation behavior changes, and the way people view their water use, instilling long term water conservation practices that help build resiliency in our water system. The Santa Fe Watershed Association has designed, implemented, and evaluated a variety of education programs and outreach materials. The goal of SFWA's programs is to increase awareness among a variety of audiences of all ages about local climate issues, forest management in the Santa Fe Municipal Watershed (Upper Watershed), water management in all areas of the watershed, best management practices that lead to water conservation practices benefitting all community members, successes and initiatives already underway, and

*Our River - Our Water - Our Future*

availability of local careers in water. SFWA also acts as the New Mexico host institution for Project WET and SFWA’s Director of Education is the New Mexico State Coordinator for the program. Project WET is a nationally recognized, curriculum-based organization that is advancing water education to understand global challenges and inspire local solutions. <https://www.projectwet.org>

SFWA is continuing to support the Water Conservation Department as it transitions into the Sustainability Division, focusing on the overlap between water conservation, sustainability, and public education.

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# Programs

## My Water, My Watershed 5th Grade Outdoor Education Programming

*My Water, My Watershed (MWMW)* is an experiential, science-based program that leads fifth grade students through an exploration of their local watershed. Led by SFWA education staff, the 3-day program aligns with New Mexico STEM Ready fifth grade science standards. The field trip includes a pre-classroom visit, a full day field trip into the Santa Fe Municipal Upper Watershed, and a post-classroom visit. Topics covered include the management of Santa Fe's drinking water system, water conservation, forest ecology, and the complex relationships between living things and their environment. Having a three-part program helps instill learning and deepens students' overall experience. More information is found at the following link:

<https://www.santafewatershed.org/education-and-outreach/mywatermywatershed/>

The MWMW program is offered to all 5<sup>th</sup> grade classes in the Santa Fe Public School District and is being expanded to include Montessori and charter schools. SFWA's goal is to provide an opportunity for every 5<sup>th</sup> grade student in Santa Fe to visit the Upper Municipal Watershed.

**The Nichols Dam restoration project began in the spring of 2024 and required SFWA staff to work in close collaboration with project engineers, contractors, and City staff in order to continue providing a safe and educational experience throughout construction. Visiting Nichols Reservoir during this time was a unique experience for students. Almost all visiting classes received a presentation about the project from one of the lead engineers. Students, chaperones, teachers, and volunteers were excited for the opportunity to ask questions about the project and to gain a deeper understanding of all the different roles and work that contributes to a functioning water system. During the fall field trips, the reservoir was almost fully drained, and classes were able to walk into the basin, viewing the Santa Fe River flowing down its original channel. We are grateful that this initial**



**Pinon Elementary students listen to Jackson, an AECOM engineer, speak about the dam project at Nichols Reservoir.**

**challenge turned into such an enriching field trip season.**

### **Pre-Field Trip:**

The pre-field trip classroom visit by SFWA education staff is 60-90 minutes long and includes the introduction of the students' science journals and information to help them prepare for their field trip. Students define what a watershed is and identify the parts of the Santa Fe Watershed, learn about Santa Fe's water sources, discuss how to make scientific observations, practice identifying different plant species, and brainstorm what qualities a healthy watershed embodies. Students also discuss how to be responsible stewards by Leaving No Trace and respecting the area they will be visiting.

### **Field Trip:**

During the field trip into the Upper Watershed with SFWA education staff and volunteers, students, teachers, and chaperones, and explore the dam at Nichols Reservoir to learn firsthand about one of our water sources and develop an ethos of stewardship and conservation. They learn about the history of the reservoirs and how the City of Santa Fe manages and cleans the water from the reservoirs. Students observe the ponderosa pine forest and discuss forest management regarding fire ecology, putting their observation skills into practice using a science journal to record all their findings. In the outdoor classroom above Nichols Reservoir, students identify benthic macroinvertebrates from the Santa Fe River as an indicator of water quality and overall watershed health. Students test the water quality to measure temperature, turbidity, dissolved oxygen, and pH and document the parts of the watershed they observe.



**Pinon Elementary students work to identify animal tracks.**

### **Post-Field Trip:**

During the post-field trip classroom visit by SFWA education staff, students discuss the observations they made when visiting the Upper Watershed, define "ecosystem" and discuss how the biotic and abiotic elements in the Upper Watershed affect each other, and synthesize their collected data to make a determination about the overall health of the Upper Watershed. Students discuss why it is important to conserve the water we use in our schools, homes, and community, and how they can contribute to the health of the watershed now and in the future. The post-visit is wrapped up with a discussion about fire ecology inspired by their observations in the Upper Watershed and a book read together in the classroom, "The Forest of Fire".

**In the 2024-25 school year, the MWMW program was funded through the City of Santa Fe and private donations. The FY2025 Scope of Work included funding for a Water Fiesta that was determined to not be the best use of funds. Due to shifting funding sources in the MWMW program, additional funding was shifted from the Water Fiesta to MWMW programming. The program cost is \$1,700 for each participating class including bus transportation and the City of Santa Fe paid for 28 field trips totaling \$47,600.**

**2024-25 School Year Program Participation**

Season	# of Schools	# of Students	# of Teachers	# of Classes	# of Parent Chaperones	# of Direct Education Hours
Fall 2024	12	581	20	20	74	140
Spring 2025	10	402	21	18	41	126
<b>Total</b>	<b>22</b>	<b>983</b>	<b>41</b>	<b>38</b>	<b>115</b>	<b>266</b>

Table 1. MWMW participation numbers for FY 2025. Participating schools included Acequia Madre Elementary, Amy Biehl Community School, Aspen Community School, Atalaya Elementary, Carlos Gilbert Elementary, Cesar Chavez Community School, El Camino Real Academy, EJ Martinez Elementary, Eldorado Community School, Gonzales Community School, Kearny Elementary, La Mariposa Montessori, Nava Elementary School, Nina Otero Community School, Pinon Elementary, Ramirez Thomas Elementary, Salazar Elementary, Sweeney Elementary, Wood Gormley Elementary



**Photos above: Volunteers learn how to measure turbidity during the volunteer training day (left). Amy Biehl students spend time nature journaling at the outdoor classroom (right).**

## Student Assessments

To gauge student learning during program participation, students are given a professionally developed online assessment both before the pre-classroom visit by SFWA staff and after the post-classroom visit. Students are also asked factual and short answer questions to measure their knowledge gain and level of understanding of our water resources and conservation.

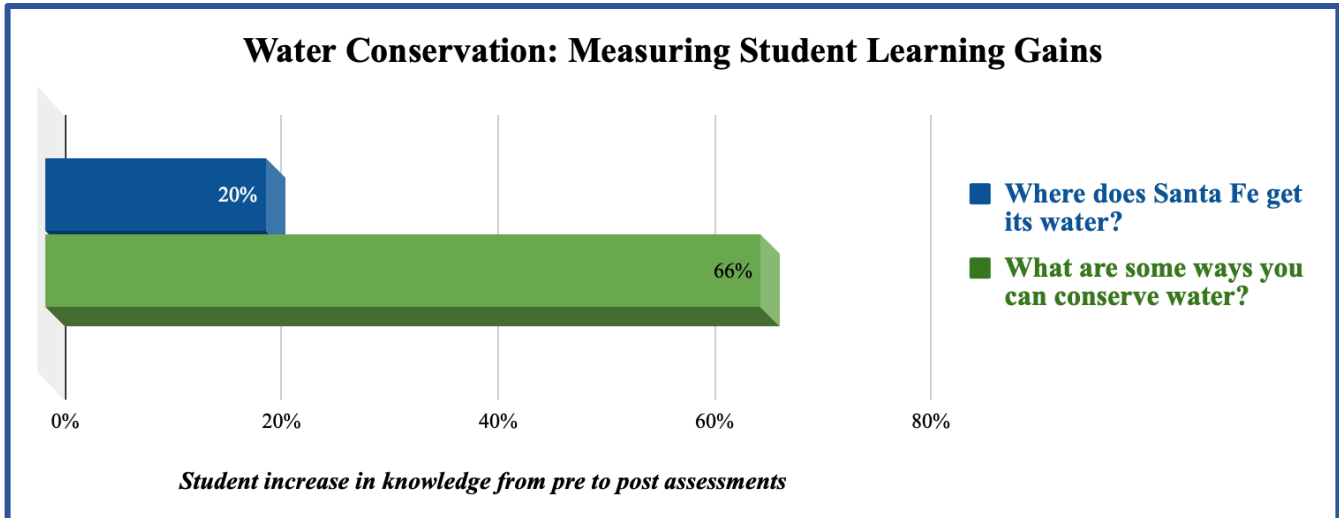


Fig 1. Students answered multiple choice and short answer questions related to water conservation and showed overall learning gains with each. \*

Examples of student responses to short answer questions related to water conservation:

### What would happen if less water came into the Santa Fe River Watershed over time?

- "Water prices would become higher, and we would also have to conserve more water"
- "If the Santa Fe Watershed got less and less water over time then Santa Fe would get less and less water meaning less water for showers, washing hands, and even drink water."

### What are some things you can do to conserve water?

- "We can use rain barrels to water plants use biyodigatidel sope and us your shower water to water things and when you are brushing your teeth you can turn off the water."
- "Turning the faset off when brushing teeth, washing dishes, taking shorter showers and not watering between 9:00 am and 6:00 pm."

Spending time in nature directly impacts mental health and wellness, so students are asked to rate their level of agreement with perception questions.

Perception Statements	Percent of students who agree or strongly agree post participation.
Humans are part of the natural world.	74%
Science is helpful in understanding nature and our role in it.	85%
We all play a role in managing our water resources and supply.	88%

Table 2. Students were asked to rate their level of agreement with the above statements from 1 (strongly agree) to 5 (strongly disagree).

Students are also asked factual and short answer questions to measure their knowledge gain and level of understanding of the health of the SF watershed, forest management, and water quality.

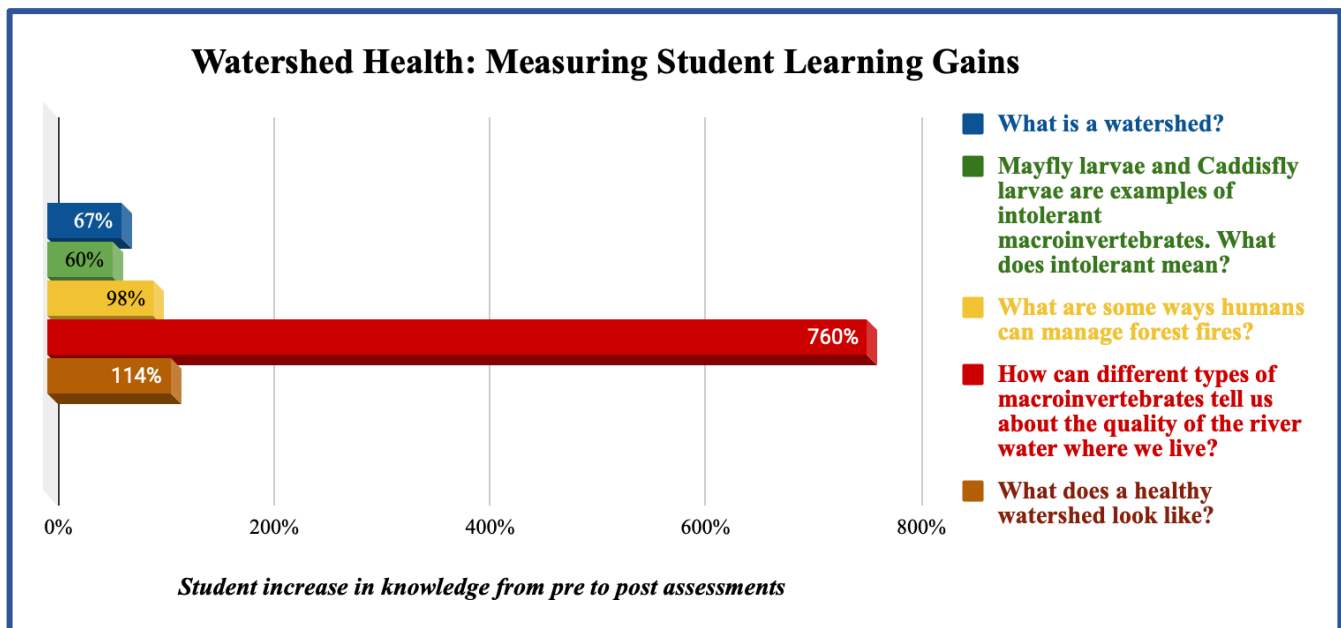


Fig 2. Students were asked to provide multiple choice and short answers to questions that gauge their level of understanding. Short answers were then assessed using an assessment rubric. Students showed overall learning gains with each. \*

\*Student learning gains were calculated using percent of correct answers post assessment minus percent of correct answers pre assessment divided by percent of correct answers pre assessment.

$$\left[ \frac{\text{post} - \text{pre}}{\text{pre}} \right] = \text{learning gains}$$

Examples of student responses to short answer questions related to watershed health:

### **What are some ways humans can manage forest fires?**

- *"Humans can have controlled burns, and firefighters could go up into the forest to take care of the fires."*
- *"we can prevent it get to the top of the trees and if it gets to the top of the trees a larger more higher five could start so we would like to keep it on the ground so more damage wouldend be done and it will also just stay in one area.(the cops and fire fighter will probely be on there way too)"*

### **What does a healthy watershed look like?**

- *A healthy watershed has lots of plants and animals. Deer, snakes, etc. Lots of different types of trees; Rocky Mountain Juniper, Pino Pine, etc. Also lots of different types of macroinvertabrates are good. That shows that the water is healthy."*
- *"A healthy watershed looks like a beautiful place with a bunch of animals and healthy, clear, clean water."*

### **What have you learned about taking care of our watershed that you will share with your friends and family?**

- *"Try to conserve water. Different macroinvertebrates are important for a heathy watershed. The watershed provides a home for many animals."*
- *"Ive learned so much about watersheds and im going to tell my family about how what differnt kinds of macroinvertebrates can tell you about the waters quality and when it snows or rains onto a high point it falls to low points because of gravity."*
- *"I will tell them that saving water is important and our water of Santa Fe is clean because it does not have trash, it's clear, and it has macroinvertebrates in it, and they fillter the water"*

## Teacher Program Evaluation

Teachers were sent a program evaluation after the post classroom visit to gather their feedback on their student’s learning and their experience with the program overall.

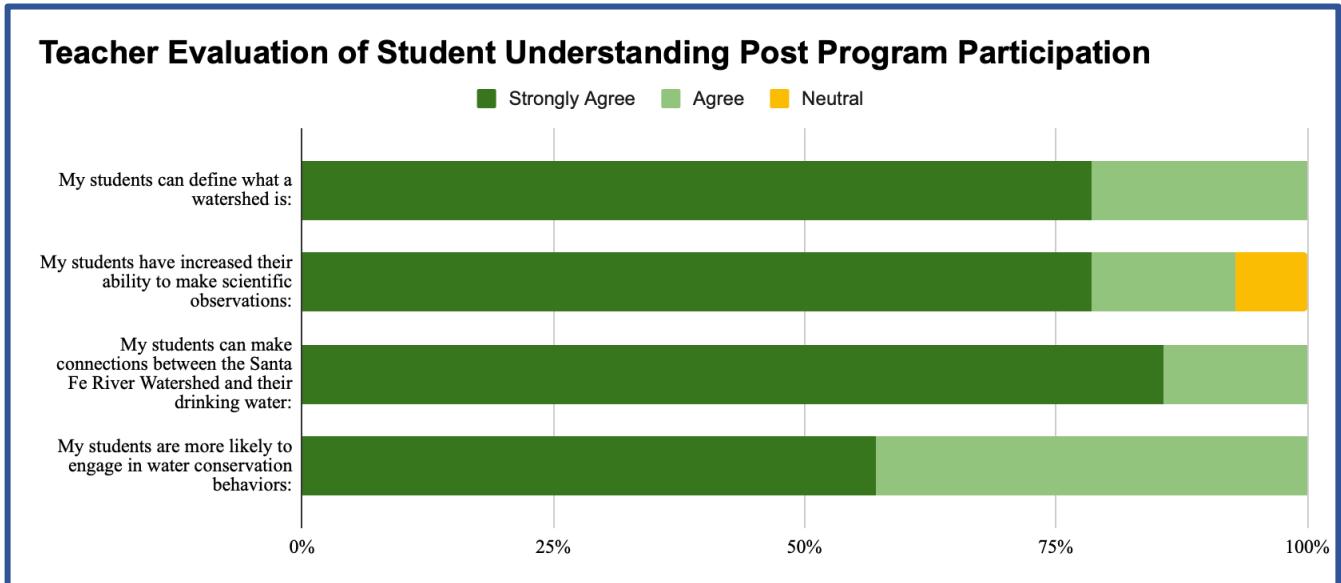


Fig. 3. Teachers were asked to evaluate their student’s understanding after participating in the program. Teachers were given response options of Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.

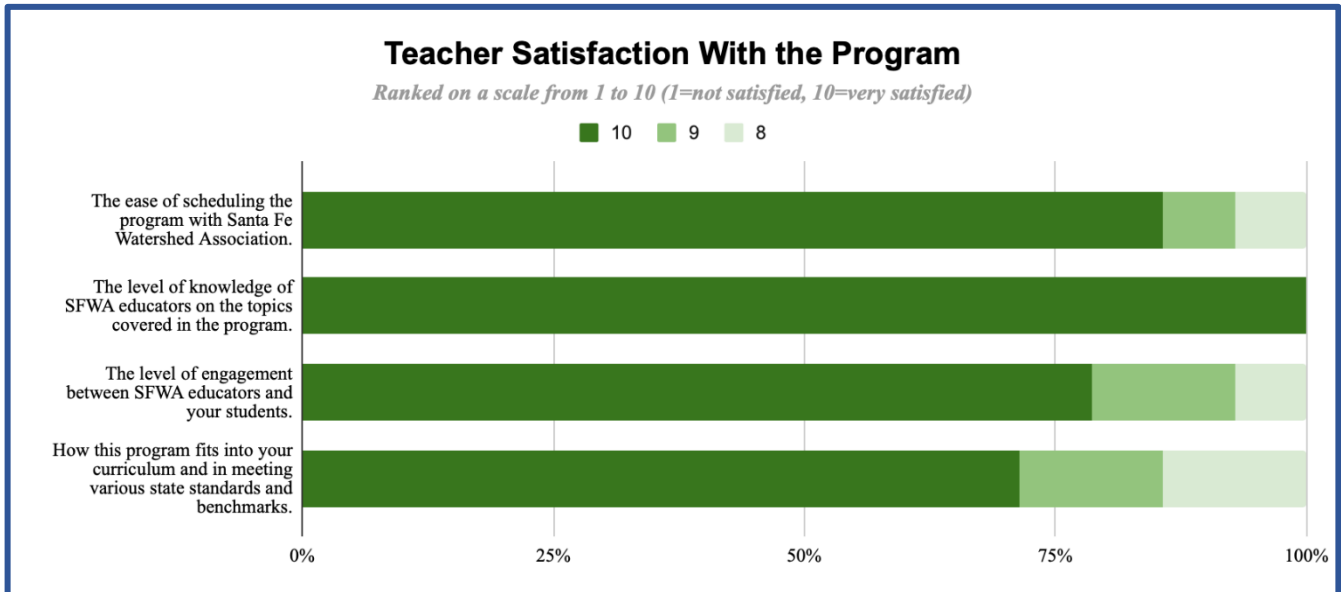


Fig. 4. Teachers were asked to rate their experience with the program on a scale of 1 to 10 with 1 being “not satisfied” and 10 being “very satisfied”.

## Comments from teachers:

*"EVERYTHING about this program is important- connecting kids with nature, exploring the ecosystem and learning about healthy rivers, understanding what a watershed is and why it's important."*

*"(My Water, My Watershed is) more than a field trip but an entire science lesson given over 3 days and one that made a quality impact!"*

## Volunteers

Santa Fe Watershed Association continues to increase community volunteer participation in the My Water, My Watershed program. To ensure that volunteers understand protocols and best practices, a volunteer training day was held before the spring and fall field trip seasons. Not only do the volunteers help SFWA educators improve the quality of field trips and make them more cost-efficient, but they get to participate in hands-on learning of their own. While facilitating 5th-grade learning and serving as positive community role models, they visit the watershed and learn about the same important topics. **In the 2024-25 school year, 42 education volunteers filled 77 available volunteer slots, spending a total of 480 hours working with students in the Municipal Watershed at a monetary value of \$15,264.00. Many of the education volunteers have returned year after year because they believe in the importance of this program. A quote from one dedicated volunteer is, "It is a wonderful opportunity to learn more about our Santa Fe watershed while also contributing to the education of 5th graders. I always feel uplifted after returning from one of these trips."**



SFWA Education Specialist, Jaclyn Behringer (middle), with two of MWMW's dedicated volunteers, Megan (left) and Darlene (right).

## Chaperones

During the 2024-25 school year, 115 chaperones accompanied the 5<sup>th</sup> grade classes on the My Water, My Watershed field trips. Chaperones included parents, stepparents, grandparents, aunts, uncles, cousins, and older siblings of the students. Of the surveyed chaperones, the My Water, My Watershed field trip was the first opportunity most had had to visit the Upper Watershed. Most chaperones had grown up in Santa Fe, and many did not realize that Santa Fe had its own reservoirs before attending the field trip. Chaperones enjoyed learning about the water treatment process, and about the plants and wildlife that thrive in the Upper Watershed. They were also impressed by the measures taken to ensure the continued health of the Upper Watershed through forest

management and the construction to upgrade Nichols Dam and the added infrastructure around it. Being able to speak to engineers and project managers involved with the construction was beneficial in their understanding of what happens behind the scenes to provide a clean & reliable source of drinking water to Santa Feans.

The surveyed chaperones who were not from Santa Fe were enthusiastic to learn how the Santa Fe River and Upper Watershed is protected differently than in other parts of the country. Every surveyed chaperone was grateful to have had the opportunity to experience the field trip with their student, and to explore an area they wouldn't have had access to otherwise. A few chaperones (older siblings and cousins) had been through the My Water, My Watershed program themselves, and a few parents and grandparents had been a chaperone with another child in previous years. Those returning expressed their appreciation of the care for the environment close to our water source. Some chaperones even asked to be future volunteers with SFWA!

## **MWMW Teacher Workshop**

The My Water, My Watershed program includes an optional life science curriculum unit that includes five investigations, totaling 20 lessons. The unit was developed through the Santa Fe Outdoor Education Collaborative, a partnership with Audubon Southwest, SF Botanical Garden, and the Santa Fe Watershed Association. The SFOEC is funded through a grant from the LANL Foundation and from City of Santa Fe funding through its support of SFWA. Participating teachers are supported with professional development and classroom materials. The curriculum is designed to fulfill 5<sup>th</sup> grade life science standards and is a way to provide more robust context for the My Water, My Watershed program that teachers facilitate on their own. The full curriculum unit can be found at the following link:

<https://sfoec.org/5th-grade/>. A development workshop focusing on outdoor learning, the 5<sup>th</sup> grade curriculum, and Project WET activities was held June 9-11, 2025, at Ghost Ranch. It was attended by 18 teachers, including 15 Santa Fe teachers.



**Teachers doing the Sum of the Parts lesson at the June 2025 workshop, learning about the impacts that upstream river users have on downstream users.**

## Teacher Workshops

One of the goals of the Santa Fe Watershed Association along with the City of Santa Fe Water Conservation Department, is to bring water education to as many students in Santa Fe as possible. One of the most effective ways to accomplish this goal is to train teachers on high quality, hands-on activities and provide them with resources that they can take back to their own classrooms and educate their students. **Using Project WET curriculum, SFWA education staff held 4 teacher professional development workshops in the 2024-25 school year that trained 43 teachers with an estimated reach of 989 students.** In the fall of 2024, two workshops were held: a Foundations of Water Education



**SFPS teachers experimenting with the properties of water at the Getting Little Feet Wet workshop in February 2025.**

workshop for 3<sup>rd</sup>-6<sup>th</sup> grade teachers focusing on water conservation and a Healthy Water, Healthy People workshop for 6<sup>th</sup>-12<sup>th</sup> grade teachers focusing on water quality monitoring. In the spring of 2025, two additional workshops were held: as a part of Santa Fe Science Initiative Science Saturdays, a Getting Little Feet Wet workshop that focused on the properties of water and conservation for Pre-K thru 2<sup>nd</sup> grade teachers and, as part of the SFOEC teacher retreat at Ghost Ranch, a workshop was conducted on the Foundations of Water Education for Pre-K thru 6<sup>th</sup> grade teachers. Funding for teacher workshops is used for staff time, materials for the workshop, materials for teachers in the classroom including Project WET guides, and teacher stipends.

**The total cost for teacher workshops in the 2024-25 school year was \$7,000.**

## Mi Arroyo, Mi Tierra

The 6<sup>th</sup> and 7<sup>th</sup> grade Mi Arroyo, Mi Tierra curriculum unit uses the phenomenon of stormwater as a lens to study the impacts of erosion, infiltration, and pollution on the arroyo system specific to the Santa Fe area. The goal of the unit is to instill students with an understanding of why and how to use green stormwater infrastructure to build a resilient system that uses stormwater for our outdoor water use and conserve municipal water as we move into a more arid climate. The NM STEM Ready Science Standards aligned unit consists of 20 lessons containing an introduction, 3 mini-investigations, and concluding lessons. The full curriculum unit can be found at this link:

<https://www.santafewatershed.org/mi-arroyo-mi-tierra/>

The Mi Arroyo, Mi Tierra curriculum unit lessons are offered as a free resource to teachers and their students as well as an online professional development training that has been created for teachers to familiarize themselves with the lessons and deepen their understanding of the content. Teachers then implement the unit lessons in their classroom with materials being provided by SFWA. In the 2024-25 school year, SFWA education staff worked with 30 7<sup>th</sup> grade students at Aspen Community School, conducting an exploratory lesson along the Santa Fe River and a secondary arroyo.

**Funding in the 2024-25 school year was used to align the standards-based curriculum with SFPS 6<sup>th</sup> and 7<sup>th</sup> grade priority standards in order to effectively promote the program to principals, teachers, and the district. It was also used to work directly with students, maintain equipment, and update online materials.**

**The total cost of the Mi Arroyo, Mi Tierra program for the 2024-25 school year was \$4,000.**

## **Climate Masters**

Climate Masters was developed at the University of Oregon Climate Leadership Initiative and has been modified with their permission to focus on climate change in New Mexico and the locally relevant interrelated connections between water, soil, food production, consumption/waste, forest management, transportation, energy and the actions we take to build resiliency. Weekly, expert guest speakers provide in-depth presentations in each of the topic areas and empower participants to get involved locally. Water supply and conservation are always core themes of the course. (See topics and presenters by date in Appendix D.)

**The New Mexico Climate Master's course took place this spring with 12 sessions spanning 9 weeks from March 26 to May 21, 2025. 23 participants attended 31 hours of course time and then committed to a 30-hour climate related project or volunteer opportunity that connects them to the community. The total cost for the NM Climate Master's course for FY25 was \$12,000.**

The background and make-up of the Climate Masters cohort is broad ranging in occupation, area and level of education, age, and time here in Santa Fe. There are participants who have lived here most of their lives and want to deepen their knowledge of the environment and impacts of climate change. There are participants new to the area and want to understand Santa Fe more and how they can help build resilience in their new community. All participants come with a deep caring for the community and a willingness to learn more.

On the first day of class, different climate related statements were posted on paper hung around the classroom. Participants were given stickers and were instructed to indicate with the stickers where they fall, from disagree to agree, with their level of comfort and

understanding of each statement. At the end of the course, they revisited those same statements and assessed where they were, showing a significant shift in both comfort and understanding from beginning to end of the course. In addition, an online evaluation was given at the end of the course asking them to give overall perceptions of the class. **Feedback was resoundingly positive on the course content, structure, and organization. Participants were also given the chance to give feedback on improvements to the course they want to see. Results and feedback from the evaluation are below.**

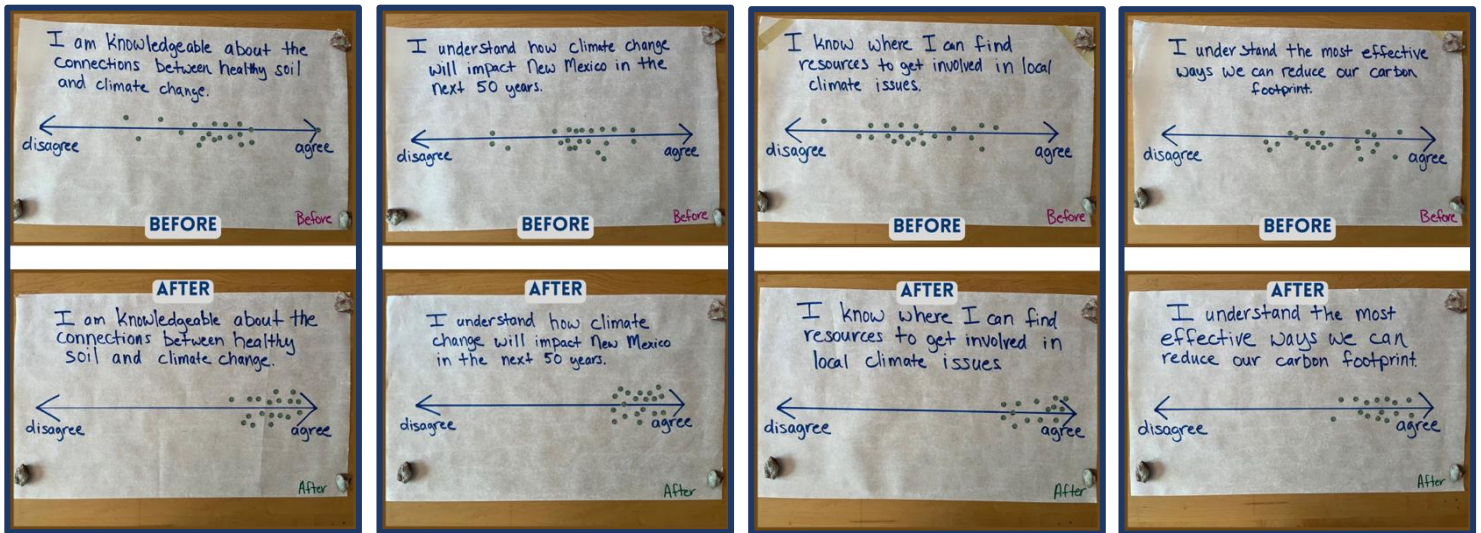


Fig. 5. When asked to self-assess their level of understanding and comfort with climate related statements, participants showed a significant shift toward understanding from before and after taking the course. Questions were presented on a Likert Scale with disagree to agree.

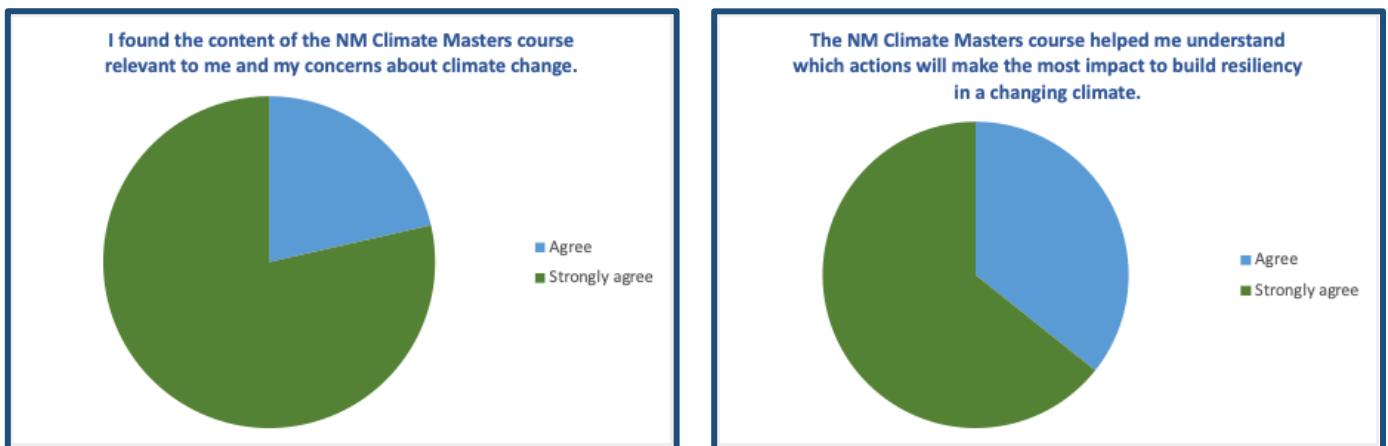


Fig. 6. Participants were asked to rate their level of agreement/disagreement with perception statements (strongly disagree, disagree, neutral, agree, strongly agree). No one rated below agree/strongly agree.

## Sample feedback from 2025 Climate Masters participants includes:

- *I found the breadth and depth of course content inspiring and motivating. I appreciated all the expertise and passion that each presenter brought to the table. Being a huge proponent of composting and compost toilets, I especially love how much emphasis was placed on soil health. It strengthened my resolve to keep plugging away at my work to change public perception of what waste truly is.*
- *Becoming aware of the many resiliency initiatives conducted by various NGOs, city and state agencies revealed a web of interconnected climate related actions ranging from political, education, agriculture, infrastructure, scientific and personal that could be undertaken to mitigate the negative impacts from climate change and global warming.*
- *Our presenters were clearly guided to lay out, not only the challenges we are facing in each area of climate-related concern and impact, but also to offer concrete suggestions for ways we can intervene in the trajectory of loss and change.*
- *Julie Hasty and Watershed staff have done a phenomenal job organizing the course and are to be commended for balancing and ordering the discussion topics and presentations. Kudos!! And thank you to all the presenters and supporters.*



Photos: (top left) Dr. Craig Allen, retired USGS, giving the course opening presentation at the Randall Davey Audubon classroom. (top right) Participants climbing a compost hill at Reunity Resources. (bottom left) Participants hearing from Allen Hook, City of Santa Fe, on Nichols Dam in the Municipal Watershed. (bottom right) Reese Baker, Raincatcher, showing participants one of his latest raingarden projects on Aspen Dr.

## Upper Watershed Hikes

The 2010 Municipal Watershed Plan tasks SFWA with organizing and leading four public hikes into the Upper Municipal Watershed in cooperation with the City of Santa Fe and US Forest Service annually. The goal of the hikes is to introduce the public to this area to learn firsthand about one of our water sources. Observing how the city manages the water and forest for quantity and quality helps develop conservation habits and overall support from community members. **In FY2025 SFWA expanded our organization’s access into the Upper Municipal Watershed eliminating issues with limited availability of city and forest service staff. In the future we will be able to offer more hikes with various topics and guest speakers.**

<b>FY 2025 Upper Municipal Watershed Hikes</b>		
<b>Date</b>	<b>Number of Participants</b>	<b>Audience</b>
July 13	20	Public
August 24	16	Public
September 28	4	Master Naturalists
October 5	22	Public/River Talks
October 26	21	Public
May 10	14	NM Climate Masters

Table 3. Hikes that took place in FY 2025.

**The cost for the Climate Masters hike is included in the Climate Masters section above. The cost for organizing and leading hikes in FY 2025 was \$5,000.**

**In the 2025 summer season, additional hikes are planned for July 26, August 23, September 20, and October 25. Hikes are limited to 25 participants and registration in July is currently at capacity. Registration for the other hikes will be opened on a rolling basis.**

## Watershed Community Science and Monitoring

To support community monitoring, a Leading-Edge survey has been developed using the Survey123 app and SFWA has been promoting ongoing data collection to the general public in FY2025. The app is a user-friendly platform for community members to record where the Santa Fe River is flowing along with other details about their observations. **In partnership with the Santa Fe Public Schools Sustainability Department, SFWA began planning implementation of the survey as a classroom engagement tool and as a part of the Safe Routes to Schools program for students whose schools are close to the river. Materials for teachers and program roll out will take place in the fall of the 2025-26 school year.** <https://santafewatershed.org/leading-edge/>

In December 2025, SFWA education staff facilitated a monitoring workshop using the "Healthy Water Healthy People" curriculum. The workshop's goal was to train educators about the connection between water quality and watershed health to water conservation and the burden on our water treatment system so they can implement the lessons with their students. The workshop was offered to formal and non-formal science educators and was held at the SFWA office. Participants explored the lessons and received a "Healthy Water Healthy People" Project WET guide.

**The cost of the Healthy Water, Healthy People workshop is included in the Teacher Workshop section above. The FY25 cost for Watershed Community Science and Monitoring was \$3,000.**

## **Educational Rain Gardens**

The Santa Fe Watershed Association identified a need for formal rain garden education for multiple ages in the Santa Fe Public Schools. In researching previously developed rain garden curriculum, SFWA found that the University of Arizona, Arizona Project WET's "Rainwater Harvesting Unit" aligns with our educational goals. These goals include increasing student's understanding of our local climate, connecting water savings with green stormwater infrastructure, Best Management Practices for rainwater and stormwater, the Engineering Design Process, and calculating rainwater collection and plant water needs. SFWA received permission to modify the curriculum unit to align with Santa Fe's unique systems and environment.

**In FY2025, SFWA completed the 10-lesson curriculum unit including updating each lesson plan, the accompanying in-class power point presentation, and any additional materials developed for each lesson.** The lessons are aligned to NM Stem Ready science standards and are available to teachers on the SFWA website. SFWA education staff are working with the SFPS Sustainability Department to offer the curriculum to SFPS teachers and their classes. SFPS currently has raingarden infrastructure implementation funding and the goal of SFWA in the 2025-26 school year is to recruit teachers that will implement the lessons with their students and the district will fund student's passive rainwater harvesting system designs to be installed at their schools. <https://santafewatershed.org/education-and-outreach/rainwater-harvesting-curriculum/>

In addition to curriculum development, SFWA conducted tours of rain gardens to various groups to reinforce the importance of mitigating stormwater runoff to the river and groundwater recharge.

**In FY25, the cost of educational raingardens was \$4,000.**

## Assist and Support Education and Outreach at City Water Conservation Department and other Community Outreach

SFWA conducts ongoing communication with the City Water Conservation Department and the Water Conservation Committee to provide consultation for water and education related issues. The City Water Conservation Department and SFWA staff consult monthly to explore education planning and outreach opportunities. SFWA also supports the ongoing marketing of the city partnership, promotion of the city NGWS, and other city initiatives. SFWA is committed to continuing our partnership as the Water Conservation Department transitions into the larger Sustainability Division and broadening the education offerings to meet the goals of the new division. This growth is an opportunity to bring together the overlapping education threads of water conservation, urban beautification and resiliency, waste diversion, and sustainable best practices in the Santa Fe community. We are currently working on a new 4-year RFP but have already started our work for FY26.

Through support from the City of Santa Fe Water Conservation Department, SFWA has become the host institution for Project WET USA in the state of New Mexico and Julie Hasty, the Director of Education, is the New Mexico Project WET Coordinator and sits on the Project WET Council representing Region 4. As a direct result of this, Santa Fe has been selected to host the Project WET Conference in May of 2026. The conference will be an opportunity for the Water Conservation team to connect with water educators from across the U.S. and share Santa Fe's water conservation success.

<https://www.projectwet.org/>

Support from the City also deepens the connections between SFWA, the Water Conservation Department, and other organizations in Santa Fe in order to cultivate a holistic education approach to youth, educators, and the broader community. SFWA participates in the Community Educators Network (CEN), a collection of educators from various non-profit organizations who collaborate to bring experiential education opportunities to teachers and their classes in Santa Fe and hosts a Teachers Night Out each school year to share these opportunities. SFWA is also one of the three partners that make up the Santa Fe Outdoor Education Collaborative referenced above in the My Water, My Watershed and Teacher Workshops sections. SFWA facilitates education activities at various student and public events, often alongside the Water Conservation Department staff, such as schools' Science Nights, the city hosted Arbor Day event at Ragle Park, and at our own Love Your Watershed Day. Through CEN's partnership with the City of Santa Fe, SFWA education staff trained City Summer Camp Counselors and participated in camp activities with students in the summer of 2025.

During FY2025 and into FY2026 SFWA is collaborating with the Nichols Dam restoration project manager, city staff, and an ecologist to include Santa Feans in the restoration of the riverbank below Nichols Dam that had been disturbed by the construction. Volunteers have been able to visit the site, cut willow and cottonwood branches, and root them in pots stored upstream of Nichols Reservoir in order to be planted along the disturbed riverbank once construction in that area is complete. The ongoing partnership and support of the City of Santa Fe Water Conservation Department allows SFWA to have a presence and participate in education endeavors throughout our city to support our whole community.

**The costs for hours toward support and outreach in FY25 was \$10,000.**

Educating the public and youth about our local water systems is integral to building long lasting water conservation values and preparing the next generation to take the lead in water management. The Santa Fe Watershed Association is deeply grateful to be able to provide ongoing watershed education to the community and students of Santa Fe. We thank the City of Santa Fe, particularly the Water Conservation Department, for their continuing support.

Sincerely,



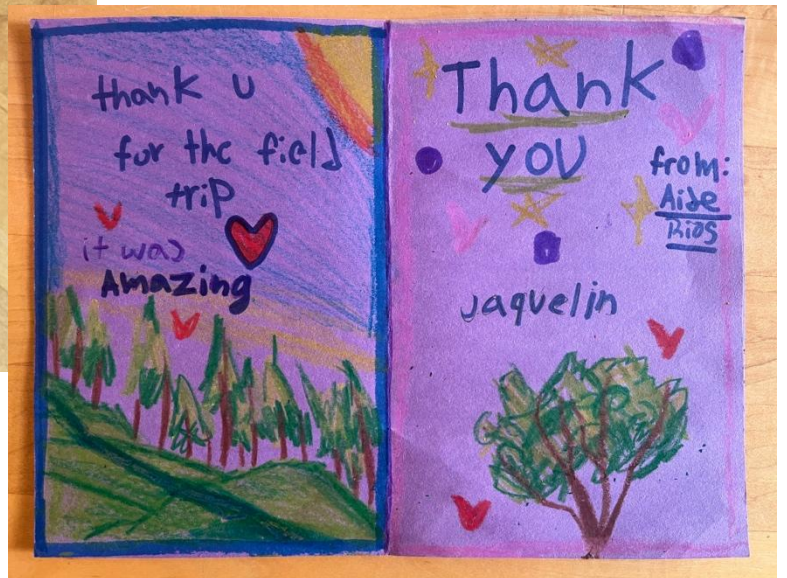
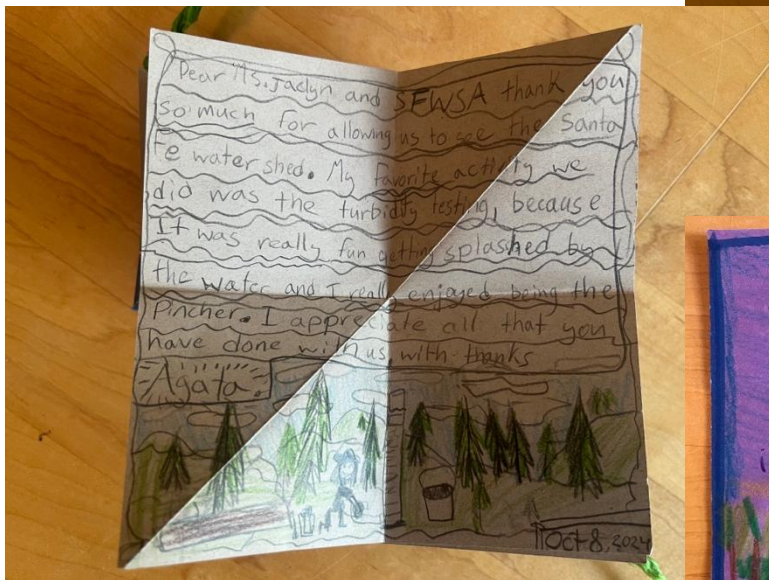
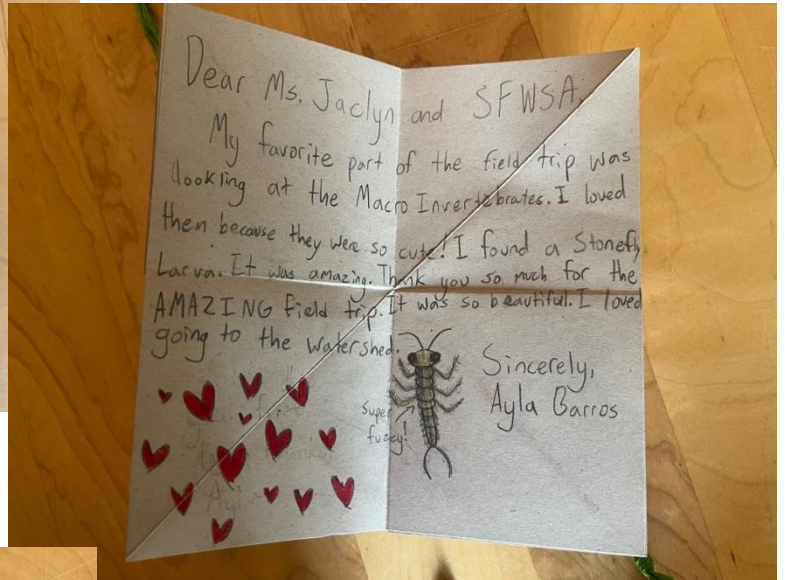
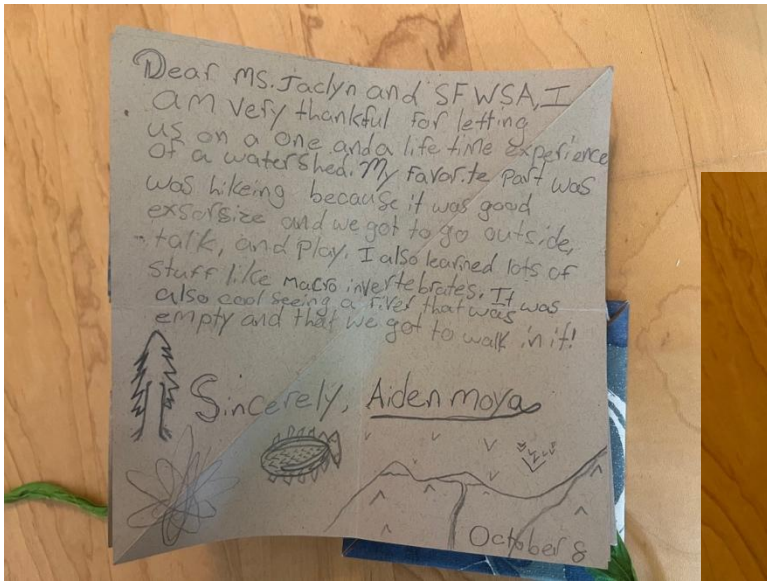
Julie Hasty  
Director of Education



Morika Vorenberg Hensley  
Executive Director

## Appendix A

### Samples of Student Thank You Notes



# Appendix B

## SFWA Education Programming Flyers

**Teachers, bring water conservation activities into your classroom!**

Join the Santa Fe Watershed Association for a day of learning, sharing, and fun while we explore water conservation and management activities from the new Project WET Foundations of Water Education guide.

**Details:**

- October 19, 2024 from 9:00am to noon
- Workshop will take place at the Randall Davey Audubon Center in the pavilion
- Breakfast, coffee, and snacks provided
- Lessons are appropriate for 3-5 and MS grade bands with adaptations for HS
- Participants will receive a **Foundations of Water Education** guide including 12 NGS aligned lessons that provide students a foundation to build water literacy.

Register at [www.santafewatershed.org/product/project-wet-water-conservation-workshop/](http://www.santafewatershed.org/product/project-wet-water-conservation-workshop/)

Have Questions? Contact Julie Hasty at [julie@santafewatershed.org](mailto:julie@santafewatershed.org)

Thank you to the City of Santa Fe for their sponsorship of this workshop.

**Attention Teachers and Non-formal Educators, join SFWA for a FREE Water Quality Monitoring Workshop!**

Expand your knowledge of water quality testing parameters and best practices to engage students while diving into Project WET's Healthy Water, Healthy People monitoring activities!

When: December 7, 2024, 8:30am-12:15pm  
Where: SFWA office, 1413 Second Street

Register with the QR code or at [www.santafewatershed.org/product/water-quality-monitoring-workshop](http://www.santafewatershed.org/product/water-quality-monitoring-workshop)

Register Here

Participants will receive the Healthy Water, Healthy People Water Monitoring Guide with 25 lessons for 6th to 12th grade students. For more information contact Julie Hasty at [julie@santafewatershed.org](mailto:julie@santafewatershed.org)

Thank you to the City of Santa Fe for their support of this workshop.

in collaboration with

2024	SFSI SATURDAY SCIENCE WORKSHOPS	2025
<p><b>Location:</b> This year our workshops will include both in-person and zoom sessions. <b>Confirm your registration</b> by clicking the SFSI hyperlink below. You will receive an invitation via email one week before the workshop. All workshops will begin promptly at 9:00 a.m. and end at 12:00 noon.</p>		
September 21	In Person "Land Art Workshop: Connecting People and Nature through Art" Explores how art, science, and the environment are intertwined in this hands-on workshop focused on land art and the skills that create their works. <a href="#">REGISTER HERE</a> Instructors: <b>Mollie Pappas</b> - Educator, Celta Consulting <b>Melissa Kiehl</b> - Artist & Art Teacher	Gr K-12
October 11	In Person "Native Pollinators of New Mexico" Exploring samples of insects, especially pollinators, and the environment are intertwined in this hands-on workshop, through observation and documentation, modeling, and hands-on exploration. <a href="#">REGISTER HERE</a> Instructor: <b>Chitra Carr</b> - Educator / SFSI Consultant	Gr K-6
November 09	In Person "Science Literacy - Critical Thinking and Comprehension of Science Concepts in Non-Fiction Text" Engaging students with non-fiction science text - using Text Structures to understand and write about science concepts. <a href="#">REGISTER HERE</a> Instructor: <b>Dilone Garber</b> - Educator and EA Consultant	Gr K-6
January 25	TBA "Schoolyard Birding" Learn about some of the common bird species found in Santa Fe, how to identify and observe birds at home and at school and collect and use observational data in your classroom. <a href="#">REGISTER HERE</a> Instructor: <b>Katie Weaks</b> - Director of Education, Audubon Southwest	Gr K-6
February 08	In Person "Setting Little Feet Wet - Project Wet" This workshop provides action and science-focused water education using diverse water topics to inspire educators to teach young children through objective, experiential activities that support a water sustainable future. <a href="#">REGISTER HERE</a> Instructor: <b>Julie Hasty</b> - Director of Education, Santa Fe Watershed Association	Gr PK-2
April 24	In Person "Garden Adventures with Mollie & Marta" Get outside with your little ones! Learn how to combine hands-on garden activities with the science curriculum. <a href="#">REGISTER HERE</a> Instructor: <b>Mollie Pappas</b> - Educator, Celta Consulting <b>Marta Garret</b> - Consultant, Coordinadora, Acequia Madre	Gr K-6

If you have any questions, please don't hesitate to contact SFSI (Summer Workshops) at: [email\\_subscription@santafewatershed.org](mailto:email_subscription@santafewatershed.org) or: 505-251-5493

**MI ARROYO, MI TIERRA**

Teach your students about Santa Fe's arroyos and be a part of a unique 6th, 7th, and 8th grade outdoor learning opportunity!

The MAMT program is for 6th, 7th, and 8th grade teachers and their students in the 2024-25 school year. This is a hands-on learning opportunity for teachers interested in place-based outdoor education using the local arroyo closest to your school. The curriculum unit looks at arroyos through the lens of stormwater while exploring erosion, infiltration, and pollution with activities that are aligned with NM STEM Ready Science Standards.

**What is included in the program?**

- Participating teachers will complete a self-paced online professional development course to receive curriculum and lesson materials.
- To kick off the curriculum unit with students, SFWA education staff will visit your class to lead an arroyo walk.
- During the unit, teachers will receive lesson materials.
- At the end of the unit, SFWA staff will again visit your classroom to reinforce student learning and explore connections to their own lives and the nature around them.

Teachers that complete the professional development and teach the curriculum in the classroom receive a \$400 stipend.

If you are interested in participating, please contact Julie Hasty at [julie@santafewatershed.org](mailto:julie@santafewatershed.org)

<https://www.santafewatershed.org/mi-arroyo-mi-tierra/>

**SANTA FE OUTDOOR EDUCATION COLLABORATIVE**

**2025 Outdoor Teaching Summer Institute** June 9, 10, & 11th

**A FREE 3 day/2 night retreat!** Our retreat will take place at the beautiful Ghost Ranch

The retreat will include:

- hands-on learning sessions
- nature walks
- movement/mindfulness sessions
- educator mixers
- your room and meals

**REGISTER HERE!** <https://sfoc.org/sfoc-teacher-summer-retreat/>

OR HERE <https://sfoc.org/sfoc-teacher-summer-retreat/>

Teachers who work in Los Alamos, Mora, Rio Arriba, Santa Fe, Sandoval, San Miguel, or Taos counties, and those in Quetta, tribal communities, or Nations will receive a \$400 stipend.

Non-formal educators and teachers from other counties must pay their own room and meals.

**Join the 2025 NEW MEXICO CLIMATE MASTERS**

A nine week course that explores the changing climate in New Mexico, and how to build resiliency and become empowered to take action in your community

**Register today!**

For questions or more information, contact Julie Hasty at [julie@santafewatershed.org](mailto:julie@santafewatershed.org)

Thank you to the City of Santa Fe for their support in making this program possible.

**UPPER WATERSHED HIKE**

SUMMER 2024 DATES: JULY 13, AUGUST 24, OCTOBER 26

Join a FREE, 5-mile hike into the Upper Santa Fe Watershed, past Nichols Reservoir to Agua Sarca. Enjoy the company of our knowledgeable guides and explore the ecology, management, and conservation of the watershed, an area that has been closed to the public since 1932.

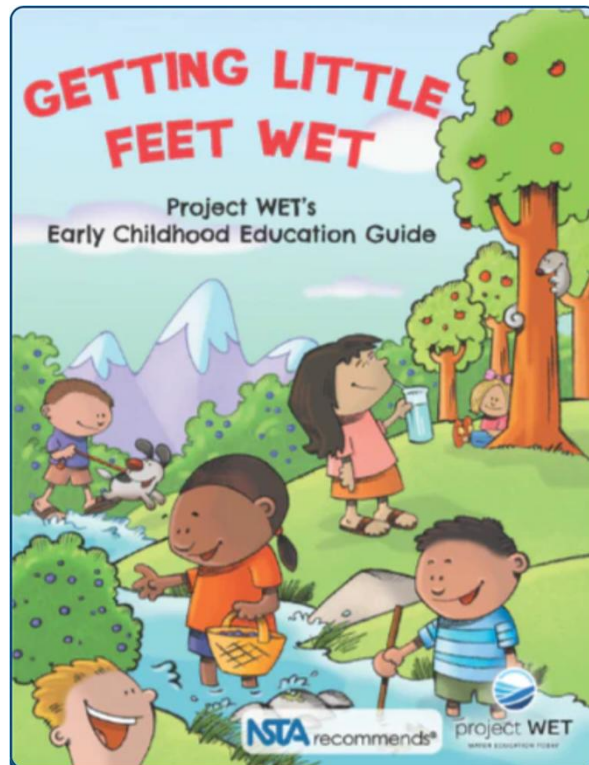
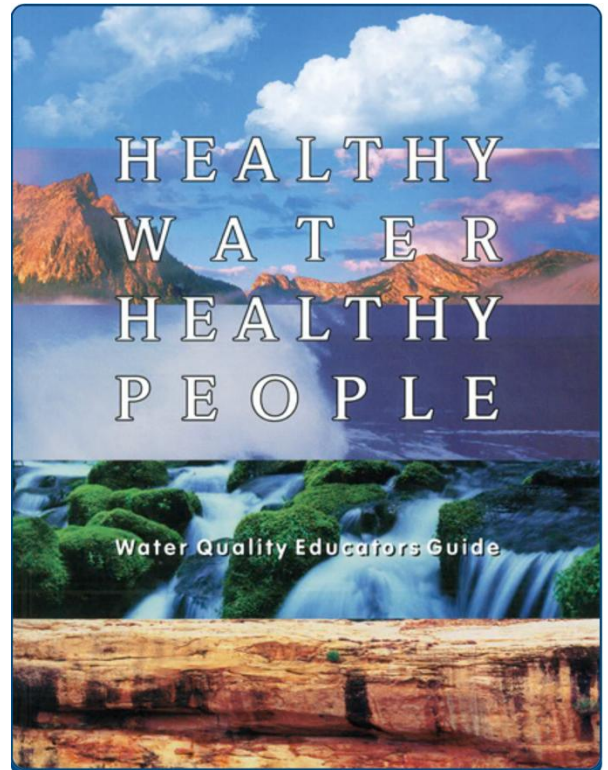
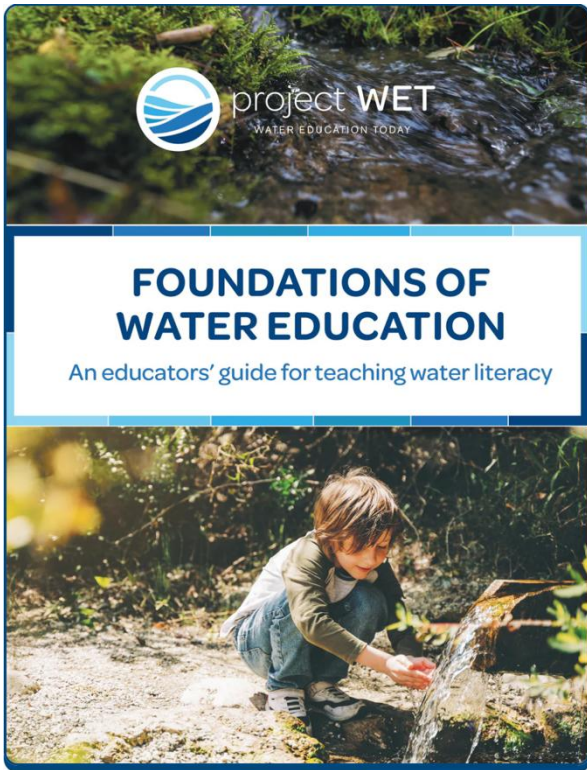
When: 9:00 am to 2:00 pm  
Where: We will meet at the Dale Ball Trails parking lot between Cerro Gordo Road and Upper Canyon Road

Participants must pre-register at the link below. Space is limited to 20 people.

Go to [www.santafewatershed.org/HIKE](http://www.santafewatershed.org/HIKE) to sign up

Have questions? Please contact Julie Hasty, Director of Education, at [julie@santafewatershed.org](mailto:julie@santafewatershed.org)

## Appendix C Project WET Education Guides



*Our River - Our Water - Our Future*

## Appendix D

### Climate Master’s Session Topics and Presenters

DATE	TOPIC	PRESENTERS
Wednesday, March 26	Class Introduction and Overview	<ul style="list-style-type: none"> <li>Joanne Feinberg (previous NM Climate Master and documentarian)</li> </ul>
Wednesday, April 2	Climate Change in New Mexico	<ul style="list-style-type: none"> <li>Dr. Craig Allen (USGS, retired)</li> </ul>
Wednesday, April 9	Building Resilience - Climate	<ul style="list-style-type: none"> <li>Claudia Borchert (Climate Change Bureau Chief, NMED Climate Change Bureau)</li> <li>Becky Smith (Community Engagement and Support Program Manager, NMED Climate Change Bureau)</li> </ul>
Wednesday, April 16	Building Resilience – Water and the Built Environment	<ul style="list-style-type: none"> <li>Christine Chavez (Water Conservation Manager, City of Santa Fe)</li> <li>Anne Ruthstrom (Senior Water Planner, NM Interstate Stream Commission, Office of the State Engineer)</li> <li>Zoe Isaacson (River and Watershed Manager, City of Santa Fe)</li> </ul>
Wednesday, April 23	Building Resilience – Water and the Natural Environment	<ul style="list-style-type: none"> <li>Aaron Kauffman (Hydrologist, SW Urban Hydrology)</li> </ul>
Wednesday, April 30	Building Resilience – Energy	<ul style="list-style-type: none"> <li>Mariel Nanasi (Executive Director, New Energy Economy)</li> <li>Alysha Shaw (Campaign Director, Public Power New Mexico)</li> </ul>
Wednesday, May 7	Building Resilience - People	<ul style="list-style-type: none"> <li>Shelley Mann-Lev (Executive Director, Healthy Climate New Mexico)</li> <li>Wendy Johnson (Healthy Climate New Mexico)</li> <li>Robert Gomez (Resilience Coordinator, Sustainability and Resilience Program, NM EMNRD)</li> </ul>
Saturday, May 10	Building Resilience – Fire and Source Water Protection	<ul style="list-style-type: none"> <li>Porfirio Chavarria (WUI Specialist, Santa Fe Fire Dept)</li> <li>Jacob Key (Fireshed Coordinator, USFS)</li> <li>Alan Hook (Water Resources Coordinator, City of Santa Fe)</li> <li>Peter Gowen (Board President, SFWA)</li> </ul>
Wednesday, May 14	Building Resilience – Our Communities	<ul style="list-style-type: none"> <li>Laila Attalla (Senior Associate, RMI)</li> <li>Erick Aune (Director, Santa Fe Metro Planning Org)</li> </ul>

		<ul style="list-style-type: none"> <li>• Carl Davis (Real Estate Development Construction Manager, Homewise)</li> </ul>
Thursday, May 15	Building Resilience – Agriculture and Waste	<ul style="list-style-type: none"> <li>• Juliana Ciano (Program Director, Reunity Resources)</li> </ul>
Tuesday, May 20	Building Resilience – Raingardens and Backyard Permaculture	<ul style="list-style-type: none"> <li>• Reese Baker (Owner and Founder, The Raincatcher, Inc)</li> </ul>
Wednesday, May 21	Building Resilience – Communication and Advocacy	<ul style="list-style-type: none"> <li>• Mollie Parsons (Cerise Consulting)</li> <li>• Camilla Feibelman (Director, Rio Grande Chapter of the Sierra Club)</li> </ul>