

Tiny Forests in Schoolyards

By Green Spaces Alliance of South Texas



Green Spaces Alliance of South Texas sustains the natural environment and enhances urban spaces through land conservation, community engagement, and education.

Critical Need in our Community and Population to Be Served by the Project:

San Antonio's elementary students in under-resourced neighborhoods face a critical environmental health crisis: limited access to green space, disproportionate exposure to urban heat island effects, and minimal opportunities for nature-based education. According to the 2025 ParkScore Index, San Antonio ranks in the 26th percentile nationally for park access, with many children lacking access to a park or natural area within a 10-minute walk of home. Our GIS analysis identifies approximately 35 elementary schools in heat-priority zones that are exposed to industrial pollution and have minimal tree canopy cover.

GSA's Tiny Forests in Schoolyards directly addresses this need by bringing nature-based education and environmental interventions to school campuses. Our existing program has served over 400 students at two sites (Promesa Academy and SAY Sí), demonstrating measurable impact: students experience reduced stress and anxiety, improved air quality, and early environmental stewardship while learning about nature in an organic and playful way. Teachers report the Tiny Forest has become a restorative space where students regain emotional balance. However, we currently reach only 6% of the identified need; 12 schools have formally expressed interest in hosting a Tiny Forest. Expanding to additional sites is essential to address this environmental health inequity and extend green space access to thousands more young San Antonians in neighborhoods that need it most.

GSA's Tiny Forests in Schoolyards currently serves elementary students at Promesa Academy Charter School and SAY Sí, providing nature connection, environmental education, and stress relief.

The expansion will serve approximately 1,000 additional elementary students (K-5) across four new school sites in San Antonio's under-resourced neighborhoods. These schools serve predominantly low-income students in communities with limited access to parks, exposure to the urban heat island, and industrial pollution. Many students lack safe, accessible green space.

By expanding to four additional campuses, GSA extends environmental health benefits and nature-based education to young people in neighborhoods with the greatest need. Students gain access to restorative green space, improved air quality, and outdoor learning that builds environmental literacy and stewardship. School communities benefit from improved campus aesthetics, cooler microclimates, and stronger connections to nature.

Description of Project and Proposed Use of Impact SA Funds:

GSA's TFiS plants Miyawaki-style micro-forests on elementary school campuses as living outdoor classrooms. These high-density forests grow 10 times faster than natural forests, become self-sustaining within years, and require minimal maintenance.

Our existing program at Promesa Academy demonstrates impact. Planted in March 2025, "Panda Paws Grove" has grown vibrantly. Students spend time in the forest; teachers report reduced stress and anxiety. The forest mitigates urban heat, improves air quality, and provides habitat.

GSA develops TEKS-aligned curricula engaging students through species identification, plant care, and forest therapy. Community volunteer planting days build neighborhood connection and stewardship.

Expanding this model to four more schools advances GSA's mission to connect people to land and nature. By embedding nature-based education and environmental restoration on school campuses, we remove barriers to access to green space and build environmental stewardship.

We will design three TEKS-aligned curricula for grades 2-4, rotated annually to create a continuum of educational experiences. A teacher workshop will prepare educators for implementation. The Tiny Forests will serve as living laboratories where students engage with nature. By integrating recreation, restoration, and education, the program supports community and ecological resilience while fostering student connection to the natural world.

Funds will establish Miyawaki-style forests at four San Antonio elementary schools and develop curricula to guide students in grades 3-5 in educational interactions with these forests. Funding covers staff salaries and benefits for coordinators managing school partnerships, site planning, planting implementation, curriculum development, and teacher trainings; contractor fees for site preparation, irrigation monitoring, and curriculum consultation; trees and plantings at all four sites; and four educational signs with donor recognition opportunities.

Impact on People to Be Served - Measurable Outcomes (Described in "S.M.A.R.T." terms):

Specific: We will establish four Tiny Forests on elementary school campuses in San Antonio, transforming underutilized schoolyards into thriving ecosystems that serve as outdoor classrooms for K-5 students and advance both environmental and educational outcomes.

We plan to engage at least 400 students, their parents, and teachers in four planting activities, and 1,000 students in TEKS-aligned educational curricula, with the outcome of cultivating an understanding of the ecological values provided by the forest within the urban environment and opening new pathways for youth engagement in nature.

Measurable: We will measure the success of the initial planting and the survival of each Tiny Forest (quantitative data), aiming for an 85-90% survival rate in the first three years through twice-yearly monitoring. Schools will help track growth and biodiversity using photo-monitoring stations, thereby fostering ecological learning.

We will evaluate the impact of the educational programming through qualitative measures such as teacher surveys, pre- and post-tests, and engagement in on-site forest research activities. Stories and photos will be collected to document students' personal experiences.

Achievable: Tiny Forests are a proven model developed by botanist Akira Miyawaki and successfully implemented worldwide. GSA has already established its first two Tiny Forests at Promesa Academy and Say Si. Only a year after its implementation, the Panda Paws Grove at Promesa has flourished as a respite for students. With this tested method and community support, establishing four additional schoolyard Tiny Forests is both realistic and achievable within the grant period. Our long-standing youth educational programming demonstrates the benefits of engagement of young people in nature-based experiences.

Relevant: TFiS directly advances GSA's mission to connect people to land, nature, and one another by removing barriers to access to green space in San Antonio's underserved neighborhoods. By planting forests on elementary school campuses, we address the environmental health crisis identified in our grant opening: children lack access to nature, face exposure to the urban heat island, and experience higher levels of stress and depression. This program embeds nature-based solutions into students' daily lives, building environmental stewardship while mitigating urban environmental challenges.

Time-Bound: Within the two-year grant period, we will establish four Tiny Forests in schoolyards, develop three place-based curricula to guide student engagement, and hold four teacher workshops to implement educational content. While early use and benefits will begin immediately, the greatest impact will emerge over the next three years as the forests become fully established. Schools will continue using the forests as educational and ecological assets well beyond the grant timeline, supporting ongoing learning and stewardship.

Project Budget:

Funding Source	Amount	Narrative
Foundations/Corporations	\$46,000.00	CPS Energy and Roy W & Ellen S Quillin Foundation
Total Other Revenue	\$46,000.00	

CPS Energy has made a 3-year commitment of \$36,000 each year for the installation of two Tiny Forests per year for a total of six sites. We anticipate to place two of the Tiny Forests in School Yards sites with this funding. The Quillen Foundation has committed \$20,000 toward our Tiny Forest program to include staff, site plantings, and outreach and education events. We anticipate \$10k of this funding to be directed to the Tiny Forests in Schoolyards project.

Expense Category	ISA Exp	ISA Narrative	Other Exp	Other Exp Narrative
Indirect Costs	\$10,000.00	N/A	N/A	N/A
Agency Personnel (Salaries, Wages, Benefits)	\$45,900.00	14% FTE of ULW Director (8,467); 10%FTE of ULW Coordinator (4,500); 10% FTE Community Engagement Director (6,000); 21% benefit rate x 2 years = \$45,900	\$26,800.00	14% FTE of ULW Director (8,467); 10%FTE of ULW Coordinator (4,500); 10% FTE Community Engagement Director (6,000); 21% benefit rate x 2 years = \$45,900
Consultant and Professional Fees	\$11,100.00	\$6,600 Landscape soil and irrigation X 2 sites; Curriculum development at 3 units x \$1,500 each	\$6,600.00	\$6,600 landscape soil preparation and irrigaton at 2 sites
Program Supplies and Expenses	\$33,000.00	Curriculum materials: 2000 student copies at \$10/copy = \$20,000 Student tools for planting days: 100 sets at \$8/each = \$800 Plants: 250 per 2 sites x \$20/plant = \$10,000 Supplies and student/community volunteer meals at 2 planting days x \$500/day = \$1,000 Educational/donor signage at 2 sites x \$600/sign = \$1,200Staff Wages and Benefits: 11% FTE of ULW Director (6,532); 10%FTE of ULW Coordinator (4,500); 21% benefit rate x 2 years = \$26,800	\$12,600.00	Student tools for planting days: 50 sets at \$8/each = \$400 Plants: 250 per 4 sites x \$20/plant = \$10,000 Supplies and student/community volunteer meals at 2 planting days x \$500/day = \$1,000 Educational/donor signage at 2 sites x \$600/sign = \$1,200
Total Expenses	\$100,000.00		\$46,000.00	