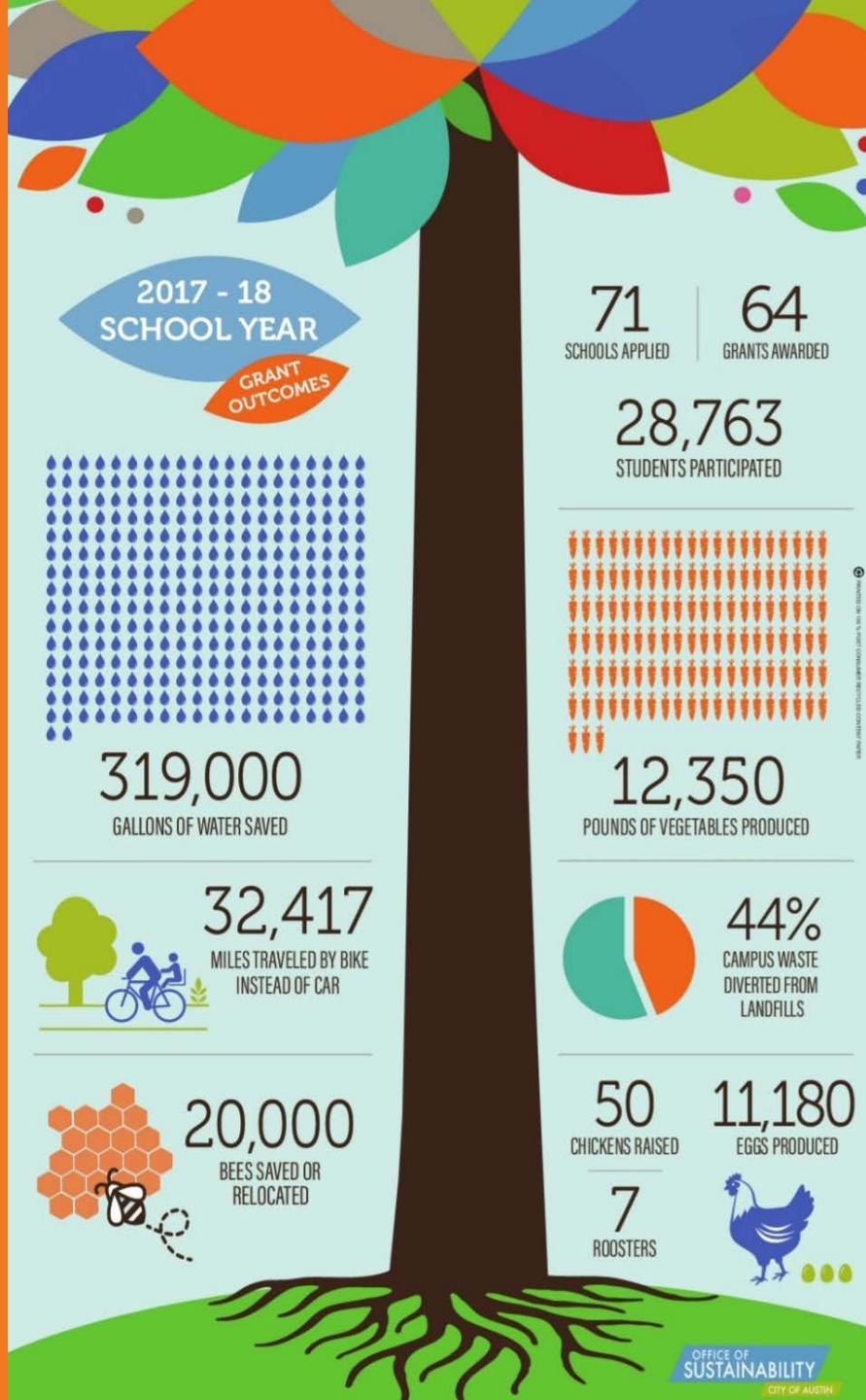




OUTCOMES REPORT

School Year 2017 - 2018

Grant Outcomes





GRANT FUNDING PROVIDED BY:

Watershed Protection Department
Austin Transportation Department
Austin Resource Recovery
Public Works Department
Office of Sustainability





Projects that protect water quality



"It's nice not stepping in puddles before you come to school."

– Cole, a student at Linder Elementary School

Project Name: Rainwater Distribution Project

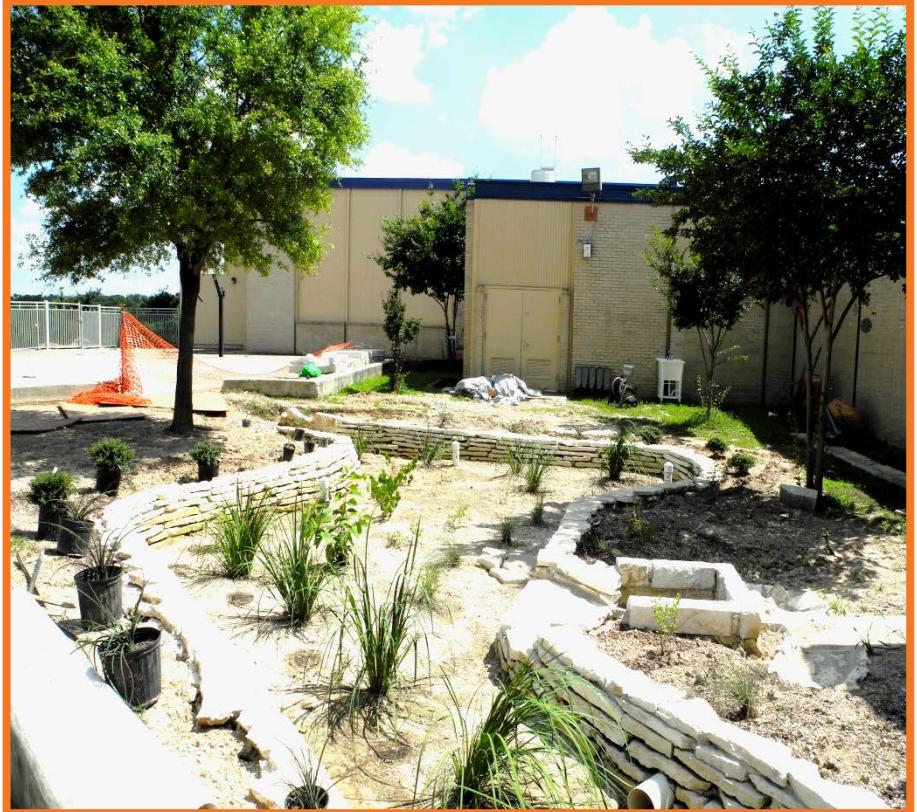
School: Linder Elementary School

Funded By: Watershed Protection Department

Project Description:

With Linder sitting on a high, rocky site, runoff is a serious concern for both students and the environment. In a truly collaborative effort between Linder Elementary School and community partners, the installation of a rainwater distribution system solved the drainage problem and helped students understand the need to control water runoff.

Working with University of Texas design students, volunteers helped design the system for the main courtyard, built garden beds, and planted native plants. In addition to mitigating flooding in the area, students also use the area as an outdoor learning space.



The rain garden at Linder Elementary also doubles as an outdoor learning space.



"I'm excited to see what kind of flowers and plants we can grow."

– River, a student at Joslin Elementary School

Project Name: Water Wise Garden

School: Joslin Elementary School

Funded By: Watershed Protection Department

Project Description:

The design of the Water Wise Garden at Joslin called for the installation of two cisterns that would catch not only rainwater, but also HVAC condensation. The garden addresses the water that was previously wasted from runoff and uses the captured water to support native flora and wildlife habitat in the heart of the city.

Students are learning about how rain gardens and water conservation can serve the needs of native plants at their school. Students use Science Journals to record their observations about the ecosystem they have created.



Joslin students make signs reminding everyone about the importance of water conservation.



*"It was really hard work, but it was so worth it
after seeing how cool the pond is."*
— Carolyn, a student at Austin Discovery School

Project Name: Discovery Eco-Pond

School: Austin Discovery School

Funded By: Watershed Protection Department

The new Eco Pond at Austin Discovery School provides students with a natural learning space that will foster inquiry-based interactions and research with native plants and wildlife.

To instill a sense of pride and ownership in the project, students participated in design of this natural habitat, helped mark the outline of the pond, and assisted in excavating rocks during Eco Wellness classes.

The addition of a wind powered aerator pump was the final touch to assure the Eco Pond is as sustainable as possible!



Austin Discovery students prepare to stock the Eco-Pond with fish.



"It is so much easier using rainwater to water the gardens instead of carrying heavy buckets. Thank you for the money to make it easier."

— David, a student at Webb Middle School

Project Name: Water Wise Garden

School: Webb Middle School

Funded By: Watershed Protection Department

Project Description:

Webb is an older school that has significant drainage problems. The Water Wise Garden project created rainwater catchment that prevents runoff into the watershed and provides watering management for the school's vegetable gardens. The project also serves as a butterfly garden.

Design students from the University of Texas, as well as volunteers from Keep Texas Beautiful and the National Wildlife Federation, helped students and staff engineer the project.

A volunteer schedule is used to maintain the gardens. Webb's Green Team meets each Thursday in the garden, so the area also serves as an outdoor learning space!



Students and parents constructed garden beds that are watered from rain cisterns.



"This area used to look like a swamp, but now it is a place we can visit and learn about plants."

– Alex, a student at Ortega Elementary School

Project Name: Water Wise Garden at Blair Woods

School: Sims & Ortega Elementary Schools

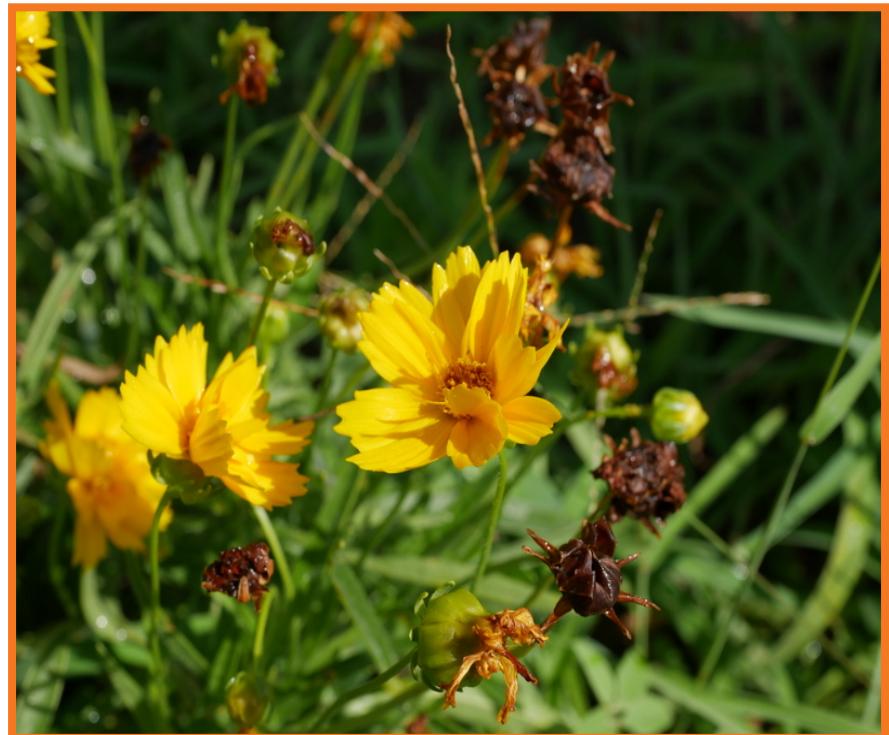
Funded By: Watershed Protection Department

Project Description:

To connect more children and families to nature, Travis Audubon launched a new after-school, family-focused program for hands-on learning with a focus on water conservation. Located in East Austin, Blair Woods will introduce underserved youth to the wonders of nature and inspire conservation of Austin's natural heritage.

Rain barrels were located near areas being replanted with native plants. Students and their families helped with construction of water barns on the weekends, as well as seeding and planting restored areas that will be maintaining throughout the year by volunteers. Interpretive signage will be designed and installed at each water barn.

Students from the participating schools will visit the sanctuary 32 times during the year for science-based learning and nature discovery. Families will also be invited to return to the sanctuary on weekends for Family Nature Days to explore topics such as native trees, wildlife migration, and biodiversity.



Native plants in Blair Woods will help restore the area and educate visitors.



"It was rewarding to see an area everyone described as an eyesore, transformed into something useful and sustainable."

– Jessica, a student at Huntington-Surrey High School

Project Name: Rainwater Collection & Food Garden

School: Huntington-Surrey High School

Funded By: Watershed Protection Department

Project Description:

Responding to the requests of students, Huntington-Surrey used Bright Green Future Grant funds to create a sustainable garden and water collection system.

The system was constructed to collect rainwater runoff from an existing building. Updating the existing garden with concrete borders and additional top soil ensures minimal runoff from that area. Students share responsibility for watering the garden on a rotating schedule.

The garden is expected to produce vegetables that will be used in the church for Wednesday meals and other functions.



Rainwater collected in this cistern will be used to water the vegetable garden.



"This project has helped bring a sense of pride and accomplishment to the students."

– Lisa, a student at Eastside Memorial High School

Project Name: Band/Gym Outdoor Erosion Solution

School: Eastside Memorial High School

Funded By: Watershed Protection Department

Project Description:

Even though the area adjacent to the gym and band hall at Eastside Memorial had been redesigned over the past three years, it still experienced significant erosion and caused safety issues for anyone entering these structures.

Working with Engineers Without Borders, students designed and built a rain garden that provided real world experience in solving an environmental issue that directly impacts a space they use.

Students from Environmental Systems and Engineering classes will work with community volunteers this fall to install native plants in the garden.



The rain garden at Eastside Memorial will help with erosion.



"It was cool that lots of people helped us build our models and told us what to say so our project might win."

– Gilbert, a student at Brooks Elementary School

Project Name: Watering System for Garden-to-Cafe

School: Brooks Elementary School

Funded By: Watershed Protection Department

Project Description:

Proving teachers are some of the most resourceful people on the planet, Brooks turned an in-kind donation of a rain barrel into a design contest to create the most effective water filtration system for their food garden.

The donation of a rain barrel by Water Works Storage solved one problem, but created another. The school could now easily water the garden, but a water filtration system was needed for the vegetables it produced.

Working with students from the University of Texas Engineering School and Austin Water Utility employees, students researched the most effective filtering systems, built models, and presented their systems to a panel of judges. The winning system was purchased and installed with Bright Green Future Grant funding.



Brooks students draw their plans for the watering system.



Cycling programs



"Thank you for the cycling initiatives you have brought to our schools. I am confident they are better off because of this program and that you are helping kids grow to be safety conscious riders."

— Megan Tunningley, Principal at Perez Elementary School

Project Name: Cycle Academies

Funded By: Austin Transportation Department

Project Description:

The mission of the cycle academies developed at eight area schools is to foster a culture of bicycle ridership so that students not only use bikes for fun and recreation, but also develop the qualities needed to bike safely and teach others to do so as well. In addition to the health benefits for students, encouraging bicycle transportation reduces carbon emissions produced by motor vehicles and improves air quality.

The program provides an introduction to cycling through bike rodeos, clinics, and community nights. Instruction is paired with group rides where learned skills can be further refined and reinforced. The rides also provide opportunities for students to explore and experience Austin's parks firsthand.

This year, cycle academies provided by the Ghisallo Cycling Initiative were funded by Bright Green Future Grants at Langford, Sanchez, Zavala, Hart, Perez, Houston, Kealing, and Austin Achieve schools.



Students from Langford prepare for their school's rodeo.



*"We got to ride to parks
I never knew the city had."*

– Diego, a student at Sanchez Elementary School



*"There are a lot of rules
if you want to be a good bicycle rider."*
– David, a student at Langford Elementary School



*"Because of this,
I ride my bike all the time now."*

– Bobby, a student at Zavala Elementary School



*"The rodeo was fun.
We got to see if we are better bike riders
than our friends."*

– Alex, a student at Hart Elementary School



*"Now me and my dad
go on bike rides together."*

– Angel, a student at Perez Elementary School



*"My sister and I now ride our bikes
to school when the weather is good!"*

– Matt, a student at Houston Elementary School



"I am a lot more alert when I ride."

– Ricky, a student at Kealing Middle School



***"Riding your bike is good for you
and good for the Earth."***

– Debbie, a student at the Austin Achieve School



Projects that minimize waste



"I love that I can take what I learned in the program home and teach my family about why it's important to be more sustainable."

– Madison, a student at Foundation Communities

Project Name: Green Teen After School Program

School: Foundation Communities

Funded By: Austin Resource Recovery

Foundation Communities used their Bright Green Future Grant to expand their most successful green living engagement program to include teenage students, which will allow over 100 students to take a deeper dive into environmentally-based learning.

The Green Teen program offers students project-based learning and environmental entrepreneurship opportunities. The program is a natural continuation of the Green and Healthy Kids curriculum and enhances Foundation Communities multi-faceted approach to creating a family culture of sustainability.

In addition to supporting curriculum development for the Green Teen program, this year's Bright Green Future Grant also promoted Earth Day activities for families and added green features in classrooms.



Foundation Communities students participate in filming Stop & Go sustainability activities.



"It is my belief that the center will not only cut down on materials purchased, but will encourage reuse and build a stronger community."

– Jennifer, a parent at Brentwood Elementary

Project Name: Reuse Exchange Center

School: Brentwood Elementary School

Funded By: Austin Resource Recovery

Project Description:

Brentwood used their Bright Green Future Grant to establish a Reuse Exchange Center, which allows teachers, students, and parents to share materials and supplies for everyday learning and student projects.

Instead of relying solely on teachers and parents to provide new supplies for each assignment, the exchange creates a feeling of abundance and helps build community. It also discourages excess consumption and encourages creative reuse ideas for materials.

Parents are encouraged to contribute materials to the exchange center and reach out to teachers to understand upcoming needs.



Teachers, students, and parents will be able to use supplies from Brentwood's Reuse Exchange Center.



"Each eco-brick will keep approximately 1 pound of plastic waste out of the landfills."

— Lauren Maples, PEAS Director

Project Name: Trash to Treasure After School Camp

Funded By: Austin Resource Recovery

Project Description:

The Trash to Treasure After School Camp teaches students about composting and how to use repurposed materials for garden maintenance, signage, and art.

Students also created eco-bricks to use for garden construction. An eco-brick is a two liter bottle filled with compacted, unrecyclable inorganic material that would have ended up in a landfill. These "bricks" are used to build garden beds, benches, and planters at schools. Creating the eco-bricks teaches students to take recycling one step further and shows that zero waste is possible.

Bright Green Future Grants funded four after school camps at Blanton, Oak Hill, Pease, and Rodriguez Elementary Schools. PEAS (Partners for Education Agriculture and Sustainability) developed and manages the program for the schools.



Students collected trash for Eco-bricks, which were used to build garden beds.



"It was fun building a garden."

– Karen, a student at Pease Elementary School



"The playground looked so much better after we picked up the trash."

– Emmitt, a student at Blanton Elementary School



*"It was cool filling the bottles
with trash we picked up."*

– Randy, a student at Oak Hill Elementary



*"I would have never thought of something
like this to do with trash."*

– Amanda, a student at Rodriguez Elementary School



*"I use the refilling station everyday.
The water tastes so much better than the old water fountains!"*

– Andrew, a student at Crockett High School

Project Name: Refillable Water Bottle Fountain

School: Crockett High School

Funded By: Austin Resource Recovery

Project Description:

After replacing standard water fountains with filtered refilling stations, Crockett has seen a sharp decline in the number of water bottles in the school's waste stream.

Students made posters informing everyone at the school where the stations are located and how they help reduce plastic waste. The fountains have also been used in lesson plans to help promote environmental awareness for the campus.

School pride is also benefitting from the program, as students buy Crockett-themed reusable water bottles.



Crockett students are able to track the number of plastic bottles saved using the Refillable Water Bottle Fountain.



"I look forward to my Science class now that we have this space."

– Sam, a student at NYOS High School

Project Name: Outdoor Learning Center

School: NYOS High School

Funded By: Austin Resource Recovery

Project Description:

Looking to create more life-long environmental stewards, NYOS used their Bright Green Future Grant funds to build an Outdoor Learning Center.

This project improved an existing outdoor learning space by adding shade and plants. Another space was created with seating for lessons that support deeper understanding of the environment, reading, writing, science, and math.

Students and volunteers from the community will maintain the trees and garden year round.



NYOS students learn about the life cycle of plants in the Outdoor Learning Center.



*"This is a great project.
Especially for our special needs and impoverished families."*

– Gordon, a teacher at Oak Hill Elementary School

Project Name: Garden Education

School: Oak Hill Elementary School

Funded By: Austin Resource Recovery

Project Description:

For several years, Oak Hill has worked to raise funds to create over 60 garden beds for community and classroom use. The teachers were excited, but intimidated, and they requested formal training on how to efficiently use the garden beds year-round as part of their classroom's Edible Education.

Funding from a Bright Green Futures Grant allowed the school to bring in Partners for Education Agriculture and Sustainability (PEAS) to train teachers and community members on maintaining vegetable gardens at the school.

In the past, the garden program was run by volunteers. But with teachers now using the gardens as classrooms, students take care of the gardens throughout the year.



The community garden at Oak Hill is bringing the community together.



"I never knew bees were this important to growing things."

– Dylan, a student at Kiker Elementary School

Project Name: Pollinator Garden and Greenhouse

School: Kiker Elementary School

Funded By: Austin Resource Recovery

Project Description:

With the goal of increasing the number of honey bees and Monarch butterflies on campus, students and parents at Kiker constructed a Pollinator Garden and Greenhouse.

Built over a span of four class days, the garden also acts as an outdoor classroom, allowing nature to teach the value of pollinators for the health of our community and food supply.

A greenhouse was also built to store tools and provide a place to grow future seedlings for the garden. These tools and resources will continue to be used by future classes.



Students at Kiker hope the addition of a pollinator garden will increase the number of bees and butterflies on campus.



"It used to be a bunch of ugly weeds, but look at it now!"

– Devlin, a student at Davis Elementary School

Project Name: Pocket Prairie

School: Davis Elementary School

Funded By: Public Works Department

Project Description:

Davis teachers and students began carving out a pocket prairie in a field of Bermuda grass and weeds a few years ago, and used their Bright Green Future Grant funds this year to expand the project.

Using layers of recycled cardboard to suppress invasive vegetation, students topped it with new dirt and wildflower seeds. The site has already attracted butterflies, pollinators, and even hummingbirds!

Classes in every grade use the pocket prairie to learn about the life cycle of plants, the roles played by pollinators and other insects, and wildlife. Students are also learning about changes in plant life during different seasons and conserving resources by gardening with native plants that require less water.



Students at Davis have converted a neglected patch of land into a classroom.



"They come for the eggs, and go home with a tree."

– Stewart, a student at Bailey Middle School

Project Name: Gateway Livestock Project

School: Bailey Middle School

Funded By: Public Works Department

Project Description:

The Gateway Livestock Project hopes to attract people to Bailey Middle School with the allure of fresh eggs from chickens in the recently completed chicken coop – a coop built following the design plans of Small Middle School.

The attraction of fresh eggs is key to gaining exposure to the school's gardening activities. Egg buyers are greeted with free coffee on weekends and have the opportunity to purchase goods from all the student projects, such as the vegetable garden, greenhouse, and tree farm.

Sales from the projects are put back into care of the chickens, as well as the purchase of needed materials for the garden and tree farm. PTA members care for the birds and oversee egg sales during school breaks.



Egg sales will sustain several garden-related projects at Bailey.

EcoAudit projects





The Office of Sustainability partnered with EcoRise Youth Innovations to provide funding for EcoAudit projects.

35 projects

1,188 students directly engaged
38,608 students indirectly engaged

Project themes:

Water Conservation
Waste Reduction
Energy Conservation
Food Production
Public Space Improvements
Alternative Transportation
Air Quality

Eco-Audit projects saved an estimated:

2,644 gallons of water

23,289 KWH of energy

86,000 pounds of waste from landfills





EcoAudit Projects

Akins High School: Nutritional Impact, Plastic Reduction, Share Table, Water Bottle Waste

Austin High School: Outdoor Classroom Commons

Austin Discovery School: Grow More Food, Quack Quack, Students of the Round Table, Wildlife Garden, Project Chicken Fence, Playground Improvements, Happy Healthy Races, The Fountain of Peace, Project Food Forest, Project Chicken Coop

Boone Elementary School: A Plant for Every Space

Brooke Elementary School: We Want More Lettuce, We Want More Lettuce Year Round

Highland Park Elementary School: Power Strip Project, Reusable Snack Bag

Hill Elementary School: No Idling Campaign

Inside Outside School: Solar Bus Nook

Integrity Academy: Solar Charging Stations, Bus Passes For All, Cleaning Up Our Trash

Lamar Middle School: Hummingbird Feeders, Butterfly Garden, Butterfly Garden Pond, Butterfly Garden Archway, Garden Tools Tables and More

St. Louis Catholic School: Fixing Forks, Going Green

Whole Life Learning Center: Waste Busters Indoor System, Waste Busters Outdoor System



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