

# Smithville's Recycling in the Schools (RIS) Program

## School Recycling Case Studies and Success Stories: Smithville and Cedar Creek Texas

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# **The Smithville Recycling in the Schools (RIS) Program**

## **School Recycling Case Studies and Success Stories: Smithville Elementary and Cedar Creek Middle Schools, Texas**

### **Introduction**

In January 2010, the Capital Area Council of Governments (CAPCOG) awarded \$65,983 to the City of Smithville to enhance, establish, and encourage recycling efforts in eight specific area schools and will build capacity at area recycling centers. The Smithville Elementary School program is a preliminary model to develop an Implementation Guide for other schools. These funds provided bins and lids, liners, books, and other resources needed to facilitate recycling collection and education about recycling. Program development included age-appropriate reading and craft materials, a Speakers' Bureau of area recyclers, and an incentive program that gives prizes for exceptional recyclers. The recycling centers established in Smithville and Bastrop work closely with participating schools to ensure that the programs are well maintained.

This report documents the methods, successes, needs, challenges, and course corrections of these two schools to be able to export this program to additional schools in this region as well as other small schools across the nation, especially in rural areas. This document was written to help prepare programs in other schools in Smithville, Bastrop, Elgin, and other ISDs in Caldwell County in order to develop their administrative and programmatic capacity to consider participating in this recycling program, or in developing their own. In time, the recycling programs of all participating schools will be added to this "living document," which will also provide informational resources for those seeking to institute their own recycling programs in areas that do not yet have one.

The initial partners in this program include: the City of Smithville (including the Smithville Public Library), Cooperative Teamwork & Recycling Assistance, Smithville Independent School District and Schools, Bastrop Independent School District and Cedar Creek Schools, Lockhart Independent School District, Keep Bastrop County Beautiful, Keep Smithville Beautiful, and the Smithville Chamber of Commerce. Each of these partners has made recycling an important part of how they can enhance the quality of life in this area. For example, an important goal for Keep Bastrop County Beautiful is to bring recycling programs into all schools in the district and to enhance programs that currently exist. Their partnership on this application is integral to helping make the program successful. Dedicated faculty, staff, and students will bring the energy and enthusiasm necessary to make a recycling project successful in all the targeted schools. The two case studies showcased in this document illustrate how important recycling is to the students, faculty, staff, and administrations of these schools. In addition to the school program, the Smithville Public Library introduced a component on recycling to its smallest members, the Little Bookworms, through crafts and age-appropriate reading materials.

***Goals:***

CAPCOG grant goals were:

- To teach students the value of recycling and the proper way to do it, which will both help their parents and other community members learn about recycling and will develop generations of adults who have been recycling since they were children.
- To enhance recycling programs currently in place by purchasing needed equipment, educational materials, and incentives for students and staff.
- To begin recycling programs in schools that currently do not have a recycling program.
- To develop the administrative capacity at other schools not yet ready to begin recycling programs so that they will be able to get started next year.
- To engage and educate the public about waste-related efforts, actions, drop-off locations, and activities in the Cities of Smithville, Bastrop, and Lockhart.
- To establish partnerships throughout the process that will facilitate additional activities with a more regional focus to become increasingly efficient and effective over time.

In the future, this program will continue to facilitate recycling in the schools, to increase the number of members, and to work towards additional educational efforts. Future goals include: 1) helping schools integrate the TCEQ "Take Care of Texas" curricula materials that meet TEKS curriculum requirements, 2) establishing additional partnerships and contacts to help prepare the groundwork so that other schools and communities may participate in this program in the future, and 3) continuing to reach out via city and school websites.

Student enthusiasm and energy makes many things possible, particularly in the realm of “doing the right thing in the world,” and recycling is certainly something students are interested in doing. Caring adults have helped to coordinate the program, but students have made the program successful.

## Smithville Elementary School

**Smithville, TX**

**City Population (2009): 4,408**

**Smithville Independent School District Population: 10,600**

District Enrollment (2010-2011): 1662

High School (9-12) Enrollment: 515 (AAA Classification)

Junior High School (6-8): Enrollment: 412

Elementary School (3-5): Enrollment: 345

Brown Primary School (PK-2): Enrollment: 390

Smithville Elementary began the Tutoring, Recycling, & Environmental Organization (TREO) program in the spring of 2006. The TREO program focuses on student participation.

Teachers nominate fifth grade students based upon their ability to act responsibly, their good behavior, and their academic performance. With parental permission, they are able to participate. The students understand that this is a great honor, and are very conscientious about their work.

Student crews change over with every semester. The faculty managing the program trains the students prior to the start of school, and as each new crew comes on line as the semester is over, the previous crew trains them.

They pick up recycling during the “power block”—an hour of class normally reserved for intervention and tutoring for students who are falling behind or need help. These students, having been nominated because they are diligent in their studies, need this extra help less than other students might; those who do need help on any given subject come to school early rather than use the power block. Crews of three to four students are responsible for each hallway in school and the portable buildings. They take the recycling from the hallway bins, the portables, the special center, and the classrooms on the elementary campus, as well as from the Central Administration offices.

Students wear black vests with the TREO insignia while they recycle paper, plastic, aluminum, and cardboard from designated bins on the school campus. The “Tiger Grounds Crew” program (students pick up trash around campus, wearing orange vests and helmets) and the “Watt Watchers” program (students turn off lights in any empty classroom they come across in green vests) compliment the TREO program. These activities help students become more aware of their ability to make positive changes for the environment, and they take these lessons home with them, influencing their families.



*Principal Ana Murray shows off an orange vest Tiger Grounds Crew students use as they pick up trash around the campus.*

The recycling program has greatly reduced the amount of recyclable goods that go to landfills from the school. The trailer, filled weekly, has helped students become more aware of how much trash can be recycled and what happens to garbage. The program has engendered a sense of pride in and protection of the community and the environment in these students.

The items that were used for recycling before receiving the funds for recycling bins were basic containers used for household trash and storage—none were specifically designed for recycling. Although stickers designated the bins for recycling, they were not initially designed for it, and some students had a difficult time handling them.

The initial budget (below) shows that a small school district can begin a recycling program at very little cost. Having the support of the school administration and staff, the city, and of course, the parents and students are what really matters in making a recycling program successful.

#### 2006 Initial Budget

Item	Total Cost
8 – Student size vests	\$45
10 – 8" x 12" recycling bins	\$30
40 – 8" x 12" recycling bins	(donated) \$00
3 – 30 gallon bins	\$30
1 – hand truck	\$100
4 – 15 gallon garbage bins – hinged lids	\$25
<b>TOTAL</b>	<b>\$230</b>

The bins that were purchased with the CAPCOG grant have been very helpful in making students feel more “official” and showing them how much of a priority these efforts are to school administration and to the City of Smithville.

In December 2010, the four-bin recycling trailer was upgraded to an eight-bin recycling trailer for the elementary campus. In addition, to help with all the recycling generated by the cafeteria alone, the campus will receive a second trailer to handle the weekly amount of cardboard, plastic, and tin that they need to recycle.



*The TREO Locker outside the Principal's Office. Plaques show off the participating students with pride.*



*Inside the TREO Locker: Vests, Hard Hats, and a Work Schedule*



## Description of what is recycled and how

**Paper:** Students pick up recycling from classrooms, hallways, workrooms, and offices. The students then take the recycling to designated areas. Smithville Elementary began with a four bin trailer on loan from the City of Smithville where paper is collected. Once the paper bins are full, the SISD maintenance crew hauls the trailer to the city recycling center, unloads the bins, and reloads empty bins before returning the trailer to the Elementary campus.

**Cardboard:** Students take cardboard to the back porch of the cafeteria where the maintenance crew picks up the cardboard from the cafeteria and delivers it to the recycling center daily.

**Cans:** Cans are collected, bagged, and delivered to the back porch of the cafeteria where maintenance crew members take over the process of delivering the goods to the recycling center.

**Plastic bottles:** Plastics are bagged and delivered to the back porch of the cafeteria. The cafeteria has begun a plastic recycling program for the current year. The elementary was responsible for recycling plastic bottles from the cafeteria from 2006 – 2008. As of 2009, cafeteria staff members are recycling tin and aluminum, cardboard, and plastic using their own system that maintenance takes to the trailer to haul to the city recycling center.

## Brief summary of items recycled by specific area

### Elementary

- Classrooms: paper, plastic, aluminum in one bin
- Offices: paper, plastic, aluminum, cardboard, catalogs
- Workrooms: paper, plastic, aluminum, cardboard, catalogs
- Library: paper, plastic, aluminum
- Cafeteria: plastic, aluminum

### Central Administration Building

- Offices: paper, plastic, aluminum
- Workroom: paper, plastic, aluminum, cardboard, catalogs

### Jr. High Campus

- Paper collection through Student Council
- With the addition of bins through the CAPCOG grant, more recycled materials have been collected in 2010 than ever before.



*Bins at the Teacher's Lounge*

**2009 Fall Semester  
TREO Team**

Monday	Tuesday	Wednesday	Thursday	Friday
7:30 - 8:00 a.m.	7:30 - 8:00 a.m.	7:30 - 8:00 a.m.	7:30 - 8:00 a.m.	7:30 - 8:00 a.m.
Office/Library/Nurse/Counselor			Workroom/Hallways	
Monday	Tuesday	Wednesday	Thursday	Friday
1:45 - 2:45 p.m.	1:45 - 2:45 p.m.	1:45 - 2:45 p.m.	1:45 - 2:45 p.m.	1:45 - 2:45 p.m.
Workroom/Hallways		Fourth Grade Hallway		Fifth Grade/Other
Monday	Tuesday	Wednesday	Thursday	Friday
2:45 - 3:45 p.m.	2:45 - 3:45 p.m.	2:45 - 3:45 p.m.	2:45 - 3:45 p.m.	2:45 - 3:45 p.m.
Specials Building	Central Office	Third Grade Hallway	Office/Library/Nurse/Counselor	Central Office

*Excel spreadsheet that helps coordinate TREO students and their duties*



*TREO students doing a great job!*



# **Cedar Creek Middle School**

## **Part of Bastrop Independent School District**

**Cedar Creek, TX**

**City of Bastrop population (2009): 7,834**

**Bastrop Independent School District-Cedar Creek Schools Population:** (not available at time of printing)

Cedar Creek Enrollment (2009-2010): 2,828

High School (9-12) Enrollment: 565

Middle School (7-8): Enrollment: 692

Intermediate School (5-6): Enrollment: 739

Elementary School (PK-4): Enrollment: 832

Two years ago (fall semester 2008), Cedar Creek Middle School (CCMS) initiated a program to beautify the campus. This effort included installing an outdoor learning center, planting 40 trees, landscaping the front entryway of the school, and recycling paper. CCMS partnered with KBCB (Keep Bastrop County Beautiful) and Lone Star Disposal to increase recycling on campus, including paper recycling on a much larger scale than had previously been and the addition of plastic, metal/aluminum recycling this year. Since the start of the 2009/2010 school year, the CCMS campus has reduced paper waste by 50%.

The student council members and Peer Assistance Leadership (PAL) students lead the recycling efforts. Student council members are volunteers, but PALs have been selected specially by the teachers for their ability to help other students and to take on responsibility. Custodial and cafeteria staff members have limited involvement in the program. Custodians help with recycling during the summer when most students involved in the program are on summer break. Cafeteria staff helps recycle paper and plastic generated in the cafeteria area (including breaking down cardboard boxes and throwing large cans and other recyclables into recycling bins). Students are not allowed in the cooking/food preparation area, making cafeteria staff an important element in recycling at the schools. The students are very serious about their responsibilities to the school and to the environment, and have truly been leaders in the program. Additionally, since this program has been in place, one cohort has graduated to the high school. Their experience with the successful recycling program at the Middle School has encouraged them to develop their own program.

Student involvement in the program includes the following:

- Initially, these 50 individuals made recycling boxes for each room in the school. This included school office, all staff, gym, cafeteria, and fine arts areas.
- The students are responsible for emptying the recycle boxes weekly and taking them to the pickup point.

- Students designed signs and displays that were posted throughout the campus to encourage and educate the student body as well as visitors, about recycling procedures and the importance of the cause.
- Students meet with Lone Star Disposal personnel to transfer the items.
- Community members (i.e., teaching staff, parent volunteers, and regular, authorized visitors to the school—not members of the general community) have started to bring in recyclable plastics and metals. Recyclables are also being collected at sporting events and other school activities.
- Student & teacher awareness has more than doubled and the amount of participants is increasing every day.
- Students made & decorated cardboard boxes for their paper bin collections.
- Student Council has developed a long range plan to increase the participation of the cafeteria to recycle all of its plastic and metal containers. The cafeteria plan will include composting food scraps and eventually the addition of a green house. The Student Council is also planning to request that the school district consider using a vendor that would supply milk in plastic (recyclable) containers instead of the currently used waxed paper (non-recyclable) containers.

CCMS student organizations have generated enthusiasm and created interest from other schools and the outside community.

Keep Bastrop County Beautiful (KBCB) is working with our BISD schools to expand the beautification and recycling programs. We believe that the education of these programs is best met in our schools. We provide small incentives for our student participants and work on a county level to gain support of our county commissioners and businesses. With the support of BISD, all of our county schools will initiate a recycling and beautification program over the next several years.

#### **Description of what is recycled and how:**

Students go through the hallways in seven groups to collect the recycling that teachers have left outside their doors to keep disruptions to the classroom at a minimum. Students collect 85 of the green ALCOA bins once a week and sort the materials. Student Council members put the bins on the sidewalk after school starts and Lone Star Waste comes by to empty them.

In the afternoon, a second group of students picks up the empty bins from the curb and distributes them to the classroom doorways.

They mainly collect paper and cardboard, and all students have been trained to take care of their recyclables at lunch time, a goal that is especially designed to target an increase in recycling plastic. They are also interested in providing a lunch-time composting program that would be run through Student Council and PALS.

## *Cedar Creek Middle School 2009-2010 Activities*



*Recycling Awareness*



*Planting Wildflowers*



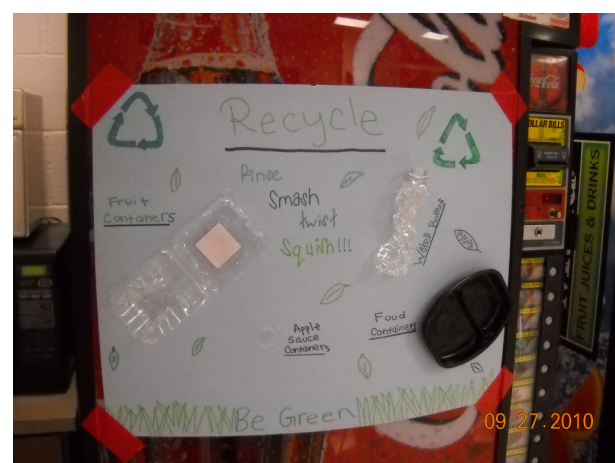
*Planting Trees*



*Cedar Creek Middle School promotes beautification.*



*Signs made for the faculty lounge*



*Signs show examples of what can be recycled*

## Other Resources

This document will be updated periodically, and the lists below will grow based on continuing efforts to make connections and research additional opportunities for education on this important issue.

### *Speaker's Bureau*

The following companies and individuals have agreed to speak if the schools would like to arrange to bring them to campus.

Organization	Contact	Email Address	Telephone
Lone Star Waste	Jason Rowe	<a href="mailto:lonestarwaste@yahoo.com">lonestarwaste@yahoo.com</a>	512 718 3801
Balcones Recycling	Bob Fernandez	<a href="mailto:BFernandez@balconesresources.com">BFernandez@balconesresources.com</a>	512 472 6200 x 36
Ecology Action	Karly Jo Dixon	<a href="mailto:joaquin@ecology-action.org">joaquin@ecology-action.org</a>	512 921 5269
Compost It	Rebecca Ponder	<a href="mailto:rponder@compost-it-usa.com">rponder@compost-it-usa.com</a>	512 623 9658
Alliance for Climate Education	David Burks	<a href="mailto:David.burks@climateeducation.org">David.burks@climateeducation.org</a>	832 615 4786
ecoGrun	Jean Riemenschneider	<a href="mailto:jeanr@ecogrun.com">jeanr@ecogrun.com</a>	512 415 3584 512 814 7861
Waste Management	Daniel Rumsey	<a href="mailto:drumsey@wm.com">drumsey@wm.com</a>	512 272 6252
Organics by Gosh	Jason Sanders	<a href="mailto:Jason@organicsbygosh.com">Jason@organicsbygosh.com</a>	512 228 0874

### *Organizations involved in Recycling Efforts*

Many other organizations can be contacted for help in beginning or maintaining a recycling program, for educational materials, for inspiration, and for other resources.

Organization	Website	Contact	Email/Phone
Capitol Area Council of Governments	<a href="http://www.capcog.org/">http://www.capcog.org/</a>	Kelly Freeman	<a href="mailto:kfreeman@capcog.org">kfreeman@capcog.org</a> 512 916 6040
Texas Commission on Environmental Quality	<a href="http://www.tceq.state.tx.us/">http://www.tceq.state.tx.us/</a>	Cynthia Carter	<a href="mailto:CCarter@tceq.state.tx.us">CCarter@tceq.state.tx.us</a>
Keep Texas Beautiful	<a href="http://www.ktb.org/">http://www.ktb.org/</a> and <a href="http://www.ktb.org/programs/youth-and-educational-programs/waste-in-place.aspx">http://www.ktb.org/programs/youth-and-educational-programs/waste-in-place.aspx</a>	Christine Chute Canul	1-800-CLEAN-TX.
Central Texas Zero Waste Alliance	<a href="http://www.ctzwa.org">www.ctzwa.org</a>	J.D. Porter	<a href="mailto:jdporter@tpoint.net">jdporter@tpoint.net</a> 512 708 9872
Envision Central Texas	<a href="http://www.envisioncentraltexas.org">www.envisioncentraltexas.org</a>	Diane Miller	<a href="mailto:dmiller@envisioncentraltexas.org">dmiller@envisioncentraltexas.org</a> / 512 916 6037
Restaurant Recyclers	<a href="http://www.restaurantrecyclers.com">www.restaurantrecyclers.com</a>	Jimmy Mitchell	<a href="mailto:chefjimmy@gmail.com">chefjimmy@gmail.com</a> 512 466 0575
Earth 911	<a href="http://earth911.com/recycling/paper/paper-recycling-at-school/">http://earth911.com/recycling/paper/paper-recycling-at-school/</a>		

## ***Recycling Programs at Other Schools***

Other schools have award-winning and otherwise very effective recycling programs. Below is a partial list of a few noteworthy schools.

<b>Organization</b>	<b>Program</b>	<b>Website</b>
City of Denton	Sustainable Schools Program	<a href="http://cityofdenton.com/index.aspx?page=323">http://cityofdenton.com/index.aspx?page=323</a>
Parkway School District	Recycling Program	<a href="http://www.pkwy.k12.mo.us/">http://www.pkwy.k12.mo.us/</a>
Wake County, North Carolina	"Feed the Bin"	<a href="http://www.wakegov.com/recycling/schools/default.htm">http://www.wakegov.com/recycling/schools/default.htm</a>
Award Winners of TCEQ Environmental Program	Various	<a href="http://www.tceq.state.tx.us/publications/pd/020/10-04/2010-environmental-excellence-award-winners-demonstrate-take-care-of-texas-spirit">http://www.tceq.state.tx.us/publications/pd/020/10-04/2010-environmental-excellence-award-winners-demonstrate-take-care-of-texas-spirit</a>

## ***Apply for Awards for School Recycle Programs***

These organizations provide awards for schools that recycle.

<b>Organization</b>	<b>Website</b>	<b>Deadline</b>
American Forest and Paper Association	<a href="http://www.paperrecyclingawards.com/school.php">http://www.paperrecyclingawards.com/school.php</a>	February 10, 2011
Keep Texas Beautiful: Youth and Educator Awards	<a href="http://www.ktb.org/programs/awards/youth-and-educator-awards.aspx">http://www.ktb.org/programs/awards/youth-and-educator-awards.aspx</a>	May 10, 2011
TCEQ: Environmental Excellence	<a href="http://www.teea.org/">http://www.teea.org/</a>	October 11, 2011