



# REGIONAL & NATIONAL RESOURCES for NEBRASKA SCHOOLS



NEBRASKA  
RECYCLING  
COUNCIL

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About Nebraska Recycling Council

The Nebraska Recycling Council (NRC) is a statewide, member-based, nonprofit organization headquartered in Lincoln. NRC’s mission is to maximize the economic and environmental benefits of resource recovery in Nebraska. Our great wish is to protect Nebraska’s good life for future generations.

Programming

We fulfill our mission and goals through a variety of outreach and educational programs that provide recycling and materials management education, best management practices, instructional publications, waste assessments and audits, municipal and regional recycling system design assistance, and recycling equipment grants. NRC is the only recycling organization in Nebraska that serves the entire state with on-the-ground consultation, technical assistance, and collaboration.

Waste Reduction and Recycling Grant



NRC was awarded Waste Reduction and Recycling grants from the Nebraska Department of Environment and Energy to assess recycling resources in multiple Nebraska regions and develop hub and spoke recycling systems. Through this funding, we can provide regional and national resources to schools, large businesses, and healthcare facilities at no cost to the industries.

## SUSTAINABILITY IN SCHOOLS

Schools and learning facilities are uniquely suited to support sustainability efforts and education. Sustainability and waste reduction is a communal effort and can be incorporated into every aspect of learning. When we help our youth understand the importance of sustainability, we ensure a constant awareness that what we do affects our neighbors, our world, and our future. The following information includes resources and testimony to help guide school systems.

This packet is designed to assist and guide sustainability efforts in schools and learning facilities. General topics and strategies are explained within the document and more specific resources and additional readings are located at the end. Contacts from related organizations and agencies are also included as support to take your organization further after you have determined your next steps.

## WASTE REDUCTION

Before implementing programs within your school or learning facility, assessing the waste stream is vital. There is a good chance your school can implement a few changes that will drastically reduce waste. A waste sort is an essential tool for maximizing the effectiveness of waste management programs and improving operational efficiency. It can expose wasteful practices, reveal opportunities for cost-saving improvements, or confirm the success of diversion programs. The data collected can pinpoint specific areas where actions can be taken.

### Strategies for waste reduction<sup>1</sup>

#### IN THE CLASSROOM

- Create a paper reuse center. Set up a box where people can place paper with a blank side. Reuse this paper for calculations or drafts. Encourage students to turn in homework on the back of used paper, such as notices from school or old letterhead. Allow students to submit assignments via email.
- Print double-sided.
- Use both sides of notebook pages.
- Reduce handouts by using smartboards, projectors, whiteboards, and blackboards.
- Buy classroom materials that are durable.

#### IN THE BUILDING

- Instead of using paper towels, use sponges, rags, erasers, or reusable towels to clean.
- Encourage students and staff to only use one paper towel to dry their hands.
- Send newsletters and school publications via email or post notices on the school website.
- Set double-sided printing as the default on all computers.
- Suggest all documents use 0.75 margins.
- Ask the PTA and office staff to print short notices two per page and cut sheets in half. Distribute important messages on the school/PTA website.

There are numerous other approaches to reducing waste like installing water bottle refill stations, making it easy for students and staff to use reusable beverage containers and bottles. Reusing school supplies from the previous year in the classroom and encouraging students to do so as well is another method. Most importantly, communicate with custodial staff who have valuable insight of the waste stream and potential diversion strategies.

<sup>1</sup> <http://www.hamiltoncountyrecycles.org/cms/One.aspx?portalId=6463011&pageId=6528441>

## RECYCLING

Beginning a new recycling program, or invigorating an old one, can reduce waste by 33%.

### Some recommended first steps:

1. Contact local waste haulers and municipalities to find out what recycling options exist.
2. Monitor current waste levels and, after implementation, reduce trash service (fewer collection days and/or smaller dumpsters). Savings in trash service will help fund recycling.
3. Establish consistent signage, colors, and containers to make recycling recognizable throughout the building.
4. Include ongoing education of teachers, students, custodians, and administration.<sup>2</sup>



*Ogallala Public Schools Student*

### Regional Successes



PepsiCo Recycle Rally is a program that offers a plethora of free resources and tools specifically geared towards enhancing recycling in schools, which includes activities, lessons, event guides, promotional materials, and recognition materials. This helps teach K-12 students valuable lessons about the importance of recycling and improving our environment while providing

the opportunity for valuable rewards and prizes to green their schools. The program is very user friendly and walks you step by step from the beginning. Over 125 million bottles and cans have been collected through this program. Chris Vail, the Keep Keith County Beautiful executive director in Western Nebraska, has successfully implemented the rally in multiple schools and is an advocate for the program.

"Keep Keith County Beautiful has been involved with PepsiCo Recycling for over 8 years. The Recycle Rally is set up to enable schools to earn points that can be redeemed for recycling plastic and aluminum. It is a fun and exciting way to start recycling in your schools. We have added many new schools in Western Nebraska to the Recycle Rally with positive results. The best part of this proven program is that every student can participate. And...they do!"

Chris Vail, Executive Director  
Keep Keith County Beautiful

<sup>2</sup> <https://greenschoolsnationalnetwork.org/zero-waste-for-schools/>



## ENERGY SAVINGS

Not only does energy saving reduce a school's carbon footprint but it also reduces cost. Spending less on utility bills will free up money that can be used in other, more positive ways.

### Energy Star recommends these low-cost initial measures:<sup>3</sup>

- Measure and track energy performance
- Turn off lights when not in use or when natural daylight can be used
- Set back the thermostat in the evening and other times when a building is unoccupied
- Perform monthly maintenance of heating and cooling equipment to guarantee efficient operation throughout the year
- Educate students and staff about how their behaviors affect energy use



Further measures can be located under Additional Reading.



### Leadership in Energy and Environmental Design (LEED)

Leadership in Energy and Environmental Design or LEED is a certification that is widely recognized and respected. LEED certified schools hold a prestigious ranking and prove their commitment to the wellbeing of the students and planet. Energy Star and LEED go hand in hand and offer resources that are intended to meet schools wherever they are on the sustainability journey.

## ENVIRONMENTALLY PREFERABLE PURCHASING

(EPP) is defined as the procurement of items that have minimized or reduced environmental effects. This idea directs us to choices that are less harmful to the environment and safer to human health. EPP considers criteria like postconsumer recycled content, energy efficiency, durability, air emissions, hazardous substances, the management after the product is used, water efficiency, packaging, responsible manufacturing, and many more.

It is vital to investigate the credibility of certain green labeling. "Greenwashing" is a marketing strategy that overstates the mitigated environmental impact of the product design or use. To counter this, the Environmental Protection Agency (EPA) offers a comprehensive recommendation guide so purchasers can efficiently and effectively identify and procure environmentally sustainable products and services. See Additional Reading for more information.

## COMPOSTING AND REDUCING FOOD WASTE

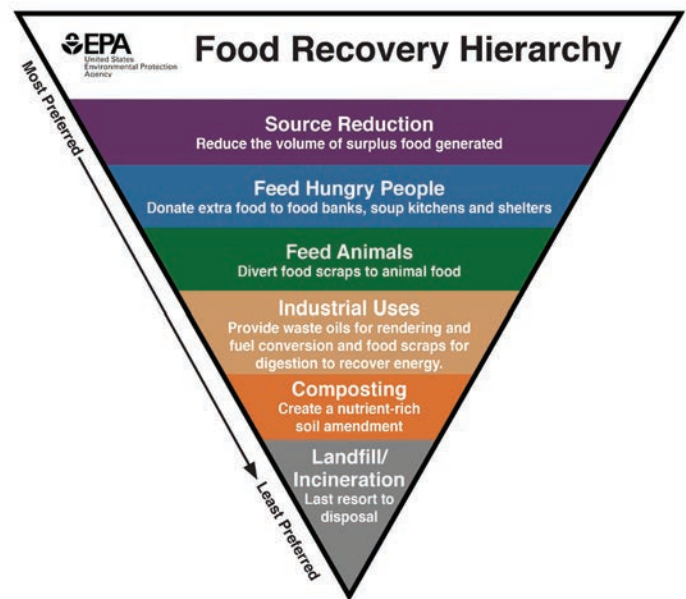
Composting can be incorporated into a school's curriculum, as it gives students understanding of concepts such as decomposition and energy cycles as well as reduces the amount of organic waste that the school is sending to the landfill. But before considering composting, a school should investigate ways to minimize food waste. The best way to minimize food waste is to prevent it! Conducting a food waste audit shows you what is being wasted in the cafeteria and what needs to be addressed.

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3 <https://www.energystar.gov/sites/default/files/buildings/tools/SPP%20Sales%20Flyer%20for%20Schools.pdf>

## Reducing Food Waste<sup>4</sup>

- Have recess before lunch to eliminate students' desire to rush through lunch for more recess time. Playing stimulates students' appetites and thirst, encouraging them to consume instead of wasting food.
- Set up a food share table and donate what is not taken at the end of the lunch period. School Food Share is a simple program that allows schools and food banks to work together to collect whole, packaged, and/or uneaten cafeteria leftovers and share it within their community. An average school throws away over 100 lbs. of recoverable food per week. This program helps schools use the food to 1) feed their own students or 2) donate the food to their local food bank to fight hunger in the community.
- Encourage students to pack a waste-free lunch: print and pass out Waste Free Lunch Guides for students to take home to their lunch packer. According to the EPA, the typical American school kid creates 67 pounds of discarded lunch packaging waste per school year. That is more than 18,000 pounds of plastic, paper, and other non-food materials for just one average-sized elementary school. You can research these guidelines or print the one we have included.
- Use reusable trays and silverware instead of disposables.
- Put food directly on trays instead of using disposable polystyrene bowls, plates, etc.
- Allow time before lunch for students to review the menu and decide what they want to select.
- Set up an "offer versus serve" cafeteria, so students can choose the foods they want to eat.
- Recycle milk cartons.



From August to December, LPS composted over 887,800 pounds of organic material, which saved the equivalent greenhouse gas emissions from:



162 passenger vehicles driven for one year



1,898,704 miles driven by an average passenger vehicle



130 homes' electricity use for one year



97,584,833 smartphones charged

And the equivalent environmental impact of carbon sequestered by:



999 acres of U.S. forests in one year

## Composting

If your school still has food waste from lunch time and you would like to begin composting, there are grants and toolkits available for you, including the NRC equipment grant. There are options ranging from building your own small-scale composting bin to contracting with an industrial composting company, as Lincoln Public Schools does.

## Lincoln Public Schools

The LPS compost program went district-wide at the beginning of the 2019-20 school year, a major accomplishment. This means every standard LPS cafeteria collects food scraps and organic material during lunch, leading to an average district diversion rate of 50% through both the composting and recycling programs. LPS is proud to put forth effort to create a more sustainable future for many generations to come.<sup>5</sup>

<sup>4</sup> <https://nrcne.org/wp-content/uploads/2019/12/WA-School-Food-Share.pdf>

<sup>5</sup> <https://home.lps.org/sustainability/2020/01/17/district-wide-composting-program-having-big-environmental-savings/>

## GREEN TEAMS

A green team is a general term that applies to a collection of leaders who collaborate to raise awareness regarding environmental issues around a school community and take the initiative to promote sustainable programs.

The group oversees coordinating functions and activities that will help the school reduce its environmental impact. Green teams also provide an opportunity for the members to learn about and engage in environmental actions and discover the importance of being an environmental steward. The group has the power to create and modify sustainability programs to fit the needs of their school and the responsibility of growing these programs to attain schoolwide buy-in.

### Why Are Green Teams Important?

The green team serves as the central leader in creating a sustainable school community that takes action to reduce the school's negative impact on the environment. Individual green teams have the responsibility of organizing projects throughout their building that encourage behavioral changes in the attempt of becoming an environmental model in the community. Passionate and creative green teams will also develop their own projects that address environmental concerns unique to their individual schools. Once a project is implemented, it becomes part of the green team's duty to help grow the program and encourage participation from all students and staff.<sup>6</sup>



Passionate and creative green teams develop their own projects that address environmental concerns unique to their schools.

### Engaging Your Green Team

Green teams may come up with their own ideas or need help from the team supervisor. It is important to create structure within the green team and identify goals and strategies to ensure a lasting program within the school. Some initiatives that green teams can enact include:

- Create signs for bathrooms to remind students to not waste paper towels.
- Introduce composting containers in the cafeteria.
- Start or become more involved in the school garden/outdoor classroom.
- Create a donation station where students can drop off or pick up used items
- Enhance the recycling program to separately collect various recyclable materials such as batteries, plastic bags, wrappers, printer cartridges, etc.

A successful green team program will be recognized throughout the school and community and can have a serious positive impact. PepsiCo Recycling offers a Playbook for Building a Team, and Harvard University has created tips on how to maintain a successful green team.

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<sup>6</sup> <https://docushare.lps.org/docushare/dsweb/Get/Document-2241844/Final%20-%20GreenTeamHandbook.pdf>

## FUNDING ASSISTANCE<sup>7</sup>

NRC offers grant funds of up to \$20,000 for the purchase of recycling equipment.



Funding for these grants is provided by the Nebraska Environmental Trust. The Trust is funded by proceeds from the Nebraska Lottery and has awarded more than \$265 million to over 2,000 natural resource projects in Nebraska since 1993. Schools, municipalities, other government entities, nonprofit organizations, and recycling companies are eligible. The equipment purchased through these grants has proven to be especially useful. For example, in 2012 Amherst Public School was awarded a grant for a recycling trailer.

"The recycling program was set up for an amazing young man with Down Syndrome as part of a life skills curriculum. He helped create an entire school-wide recycle program within our district. When he left the district in 2016, the Amherst National Honor Society continued the program of recycling to this current date. This has been a very good program for everyone involved to make a conscious effort to recycle in our school district."

Roger Thomsen, *Principal*  
Amherst Public School



### Equipment Eligible for Grant Funds

- Forklifts, skid loaders, balers, recycling trailers, recycling carts, indoor and outdoor recycling bins, cargo trailers, semi-trailers, lift-gates, can crushers, dumpsters, trucks, portable loading ramps, approved recycling labels, and more.
- A fabric structure (rated highly to withstand straight-winds and hail) is fundable if additional storage is needed for recyclables.
- Equipment may be new, used, or in need of refurbishing. In some cases, applicant's existing equipment can be refurbished or rebuilt with grant funds.

### In-kind Match

In-kind contributions are encouraged and will result in more points in the application review; however, "using" or "maintaining" the equipment is not a suitable in-kind contribution. It must be related to the purchase of the equipment.

### Cash Match Requirement

A cash match is required from all grantees. In general, these minimum match amounts are required:

- 20% – Nonprofit organizations
- 20% – Communities with pop. 5,000 or under
- 25% – Communities with pop. 5,000 to 10,000
- 30% – Communities with pop. 10,000 and above
- 50% – For-profit businesses

<sup>7</sup> <https://nrcne.org/recycling-equipment-grants/>



## TECHNICAL ASSISTANCE

### Sustainability Training and Consultation

**Verdis Group:** Kim Morrow | [kim@verdisgroup.com](mailto:kim@verdisgroup.com) | (402) 405-9425

*Verdis Group helps organizations identify and implement sustainable solutions. They offer services pertaining to Waste Reduction and Recycling, Transportation Demand Management, Sustainable Behavior Change Programs, and Sustainability & Climate Resiliency Planning.*

**Nebraska Recycling Council:** [info@nrcne.org](mailto:info@nrcne.org) | (402) 432-2384

*NRC can provide additional consult through a one-hour general consultation, zero waste consultation, green team training, waste reviews & waste audits, and train the trainer.*

**EPA:** <https://www.epa.gov/>

*Please visit the website for EPA related questions or further reading on the information mentioned within the document.*

### Keep America Beautiful

**Keep Nebraska Beautiful:** Meagan Deichert | [mdeichert@knb.org](mailto:mdeichert@knb.org) | (402) 486-4562

#### [Litter Free School Zones](#)

*Litter Free School Zones encourages students to keep their school grounds litter free and to raise public awareness of litter. Litter Free School Zone signs are placed outside of participating schools.*

#### [School Chemical Cleanout](#)

*Since 2008, Keep Nebraska Beautiful has been assisting schools in identifying and inventorying hazardous chemicals and safely disposing of any hazardous chemicals which are outdated, unneeded, or potentially dangerous.*

**Keep Keith County Beautiful:** Chris Vail | [cvail@keepkeithcountybeautiful.com](mailto:cvail@keepkeithcountybeautiful.com) | (308) 289-0130

#### [PepsiCo Recycle Rally](#)

*Ogallala Public Schools has participated in the Recycle Rally for multiple years under the supervision of Chris Vail, Keep Keith County Beautiful Executive Director. She is happy to help you get started!*

### Public Schools Programming

**Lincoln Public Schools Sustainability:** Brittney Albin | [balbin@lps.org](mailto:balbin@lps.org) | (402) 436-1072

**Nebraska Green Schools:** Hanna Pinneo | [hpinneo2@unl.edu](mailto:hpinneo2@unl.edu)

#### [Nebraska Green Schools](#)

*This is a joint initiative between the NE Forest Service and the NE Department of Education. Students and teachers assess impacts, implement programs, and earn badges focused on energy, water, school site, environmental quality, waste & recycling.*

## **ADDITIONAL READING**

[Healthy Sustainable Schools: Guide for Change](#)

### **The Importance of School Gardens and the School Gardens of Lincoln Public Schools**

[Why School Gardens?](#)

[School Gardens of Lincoln Nebraska](#)

### **Waste**

[How to Conduct a Waste Sort – A Step-By-Step Guide](#)

### **Energy**

[The National Energy Education Development Project NEED](#)

[LEED Schools Guide](#)

[Schools: An Overview of Energy Use and Energy Efficient Opportunities](#)

[Center for Green Schools](#)

### **PepsiCo Recycle Rally**

[Reasons to Rally and Free Resources](#)

### **Food Waste and Composting Resources**

[Composting Onsite at Schools with 2 and 3 Bin Systems](#)

[Lincoln Public Schools Composting Program](#)

[Guide to Conducting Student Food Waste Audits](#)

[Washington School Food Share Program Toolkit](#)

[Lincoln Public Schools Food Waste Diversion Report](#)

[Eco-cycle School Compost Programs and Things to Consider](#)

[EPA Pack a Waste Free Lunch](#)

[Carton Recycling in Schools](#)

### **Environmentally Preferable Purchasing**

[NERC EPP of Paper](#)

[EPA Think Green Before You Shop](#)

[EPA Make Sense of Eco-Labels and Marketing Claims](#)

[NERC Office Supply Specifications and Purchasing Guidelines](#)

### **Green Teams**

[PepsiCo Playbook for Building a Team](#)

[Harvard – 10 Tips for a Successful Green Team](#)